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Undergraduate
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Advertising	International Studies
Anthropology	Kinesiology
Art	Latin American Studies
Asian Studies	Liberal Studies
Biological Science	Library
Business Administration	Marine Science
California Studies	Mathematics
Chemistry and Biochemistry	Modern Languages and Literatures
Communication (Mass Communication and Speech Communication)	Music
Computer Science	Nursing
Creative Video	PACE
Criminal Justice Administration	Philosophy
Economics	Physics
Educational Psychology	Political Science
Engineering	Preprofessional Programs (Medical Sciences; Pre-Physical Therapy; Pre-Law; Natural Resources; Pre-

Graduate Programs

English	Theological Studies)
Environmental Science	Psychology
Environmental Studies	Public Administration
Ethnic Studies	Recreation
Filipino and Filipino American Studies	Science
General Studies	Single Subject Matter Preparation Programs
Geography	Sociology
	Special Majors and Certificates
Geology	Speech Pathology and Audiology
	Statistics
Health Care Administration	Teacher Education
Health Sciences	Theatre Arts
History	Undeclared Major
Human Development	University Honors Program
Humanities	Urban Studies
Interdisciplinary Studies	Women's Studies
International Business	Youth Services Administration
International Programs of the CSU	

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- [Graduate Degree Information](#)
 - [List of Graduate Programs of Study](#)
 - [Course Number and Description Key](#)

Anthropology	Kinesiology
Biological Science	Marine Science
Business Administration	Mathematics
Chemistry	Multimedia
Computer Science	Music
Economics	Public Administration
Education: Interdisciplinary	Social Work
Educational Leadership	Sociology
Educational Psychology	Special Majors and Certificates
Engineering	Speech Communication
English	Speech Pathology and Audiology
	Statistics
Geography	Teacher Education
Geology	Telecommunication Systems
Health Care Administration	
History	

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California State University, Hayward

Hayward Campus
25800 Carlos Bee Blvd.
Hayward, CA 94542-3000
(510) 885-3000

Contra Costa Campus
4700 Ygnacio Valley Road
Concord, CA 94521-4525
(925) 602-6700

Effective Dates:
Fall Quarter 2005 through Summer Quarter 2006



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The World Wide Web

Catalog Buttons

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If you've reached this page, you probably know a bit about the World Wide Web, but here are a few basic guidelines:

The program you are using to view Web pages is called a browser. To make sure you're seeing the Online Catalog correctly, you should be using a browser like Netscape or Microsoft Internet Explorer (latest versions are highly recommended).

Throughout the Catalog, you will find words that are underlined like [this](#). These are called links. Clicking on a link will take you to another page, or another section of the page you're reading.

If you find yourself lost after doing a lot of clicking, you can always hit the browser's Back button to return to your previous location. This button is usually located in the top left of the browser window, just below the File menu. The button will say "Back," or it will look like a left arrow, or both. You can keep hitting the Back button as many times as you need to return to your desired location.

Clicking the Catalog's Home button from anywhere in the Catalog will return you to the Table of Contents. This is the Home button located on the top left of any Catalog page.

You'll find four buttons on the top left (and bottom left) of every page of the Catalog. These buttons are:

Home

Clicking this button returns you to the Table of Contents. If you're already at the Table of Contents, clicking this button will return you to the front page of the CSU Hayward site.

Find

Clicking this button takes you to the Find page, where you can search the Catalog for text.

Mail

Clicking this button takes you to an information request form where you can send comments and questions.

Help

Clicking this button takes you to the Help page, which you are

Finding Information

currently reading.

To find a certain Catalog page, use the Table of Contents, which lists every page in the Catalog. (To get to the Table of Contents, click the Home button just below the Cal State Hayward 2005-2006 icon.) Look through the list and click on the name of the page you want.

You will find a section list at the top of most pages. This is a list of all the section headings featured in a given page. Clicking on any section name in this list takes you directly to that section.

If you don't know what page you want (for example, if you have a professor's name or a course title in mind, but you don't know what department they're in), you can use the Catalog's Find page. (To get to the Find page, click the Find button on the top left of any Catalog page.)

To use the Find page simply type the words or phrases you want to find, and hit the Do It button. A list of pages containing your search words comes up. Click on any of the pages in the list. You will be taken to that page.

Once you are at a page containing your search words, you can use the browser's Find feature to find those words in the page. Choose Find from your browser's Edit menu, type your search words, and hit Enter. You will be taken to the next occurrence of your search words in the page.

If the page you chose is not the one you want, you can hit the browser's Back button to go back to the list of Find results.

Clicking on the Mail Button on the top left of any Catalog page will take you to a page to fill out an [information request form](#).



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President's Message

Welcome to California State University, Hayward. This catalog was prepared to inform you about the University and its academic programs and is a reference to which you will refer continually.



A catalog, however comprehensive, cannot fully describe the experiences you will have here at Cal State Hayward and the University's commitment to its students. We are very proud of our mission of excellence in education for a diverse society, and believe that our students, faculty, and staff together form the team that lives that mission each and every day.

Our student body is international and diverse in age, ethnicity, and culture. It matches the diversity of our geographical service area. Our faculty are outstanding teachers and scholars.

Cal State Hayward is a quality university committed to student success. Excellence in teaching and a wide range of support services are the means through which we address that goal. We also believe that the University can learn from its students.

It is with great pleasure that I welcome you to our beautiful campus and wish you every success as a Cal State Hayward student.

Norma S. Rees
President





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Academic Calendar 2004-2006

Please check the current Class Schedule for any calendar updates. This calendar is not an employee work calendar. Note: the final examination period extends through the final weekend of the quarter for classes meeting only on weekends.

Fall Quarter 2004

- Sept. 21-22 Opening of fall quarter, faculty meetings, late advising
- Sept. 23 Classes begin
- Nov. 4 Last day to withdraw without administrative approval
- Nov. 12 Last day to submit thesis to Academic Programs and Graduate Studies Office
- Nov. 25-28 Thanksgiving recess (University closed)
- Dec. 5 Last day of classes
- Dec. 6-12 Final examinations
- Dec. 12 End of quarter
- Dec. 13-Jan. 2 Academic recess

Winter Quarter 2005

- Jan. 3 Opening of winter quarter; Classes begin
- Jan. 17 Martin Luther King, Jr. Day (University closed)
- Feb. 15 Last day to withdraw without administrative approval
- Feb. 18 Last day to submit thesis to Academic Programs and Graduate Studies Office
- Mar. 13 Last day of classes
- Mar. 14-20 Final examinations
- Mar. 20 End of quarter
- Mar. 21-27 Academic recess

August 2004							September 2004						
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7	8	9	10	11	12	13	14
15	16	17	18	19	20	21	12	13	14	15	16	17	18
22	23	24	25	26	27	28	19	20	21	22	23	24	25
29	30	31					26	27	28	29	30		
October 2004							November 2004						
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2	1	2	3	4	5	6	7
3	4	5	6	7	8	9	7	8	9	10	11	12	13
10	11	12	13	14	15	16	14	15	16	17	18	19	20
17	18	19	20	21	22	23	21	22	23	24	25	26	27
24	25	26	27	28	29	30	28	29	30				
31													
December 2004							January 2005						
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4	1	2	3	4	5	6	7
5	6	7	8	9	10	11	2	3	4	5	6	7	8
12	13	14	15	16	17	18	9	10	11	12	13	14	15
19	20	21	22	23	24	25	16	17	18	19	20	21	22
26	27	28	29	30	31		23	24	25	26	27	28	29
							30	31					
February 2005							March 2005						
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat

		1	2	3	4	5		1	2	3	4	5	
6	7	8	9	10	11	12	6	7	8	9	10	11	12
13	14	15	16	17	18	19	13	14	15	16	17	18	19
20	21	22	23	24	25	26	20	21	22	23	24	25	26
27	28						27	28	29	30	31		

Spring Quarter 2005

- Mar. 28 Opening of spring quarter; Classes begin
- Mar. 31 César Chavez Day (University closed)
- May 9 Last day to withdraw without administrative approval
- May 13 Last day to submit thesis to Academic Programs and Graduate Studies Office
- May 30 Memorial Day observed (University closed)
- June 5 Last day of classes
- June 6-12 Final examinations
- June 11 Commencement
- June 12 End of quarter
- June 13-19 Academic recess

Summer Quarter 2005

- June 20 Opening of summer quarter; Classes begin
- July 4 Independence Day (University closed)
- Aug. 2 Last day to withdraw without administrative approval
- Aug. 5 Last day to submit thesis to Academic Programs and Graduate Studies Office
- Aug. 28 Last day of classes
- Aug. 29-Sept. 4 Final examinations
- Sept. 4 End of quarter
- Sept. 5 Labor Day (University closed)
- Sept. 5-19 Academic recess

April 2005					May 2005								
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2	1	2	3	4	5	6	7
3	4	5	6	7	8	9	8	9	10	11	12	13	14
10	11	12	13	14	15	16	15	16	17	18	19	20	21
17	18	19	20	21	22	23	22	23	24	25	26	27	28
24	25	26	27	28	29	30	29	30	31				
June 2005					July 2005								
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4						1	2
5	6	7	8	9	10	11	3	4	5	6	7	8	9
12	13	14	15	16	17	18	10	11	12	13	14	15	16
19	20	21	22	23	24	25	17	18	19	20	21	22	23
26	27	28	29	30		24	25	26	27	28	29	30	
						31							
August 2005					September 2005								
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6					1	2	3
7	8	9	10	11	12	13	4	5	6	7	8	9	10
14	15	16	17	18	19	20	11	12	13	14	15	16	17
21	22	23	24	25	26	27	18	19	20	21	22	23	24
28	29	30	31			25	26	27	28	29	30		

Fall Quarter 2005

- Sept. 20-21 Opening of fall quarter; faculty meetings, late advising
- Sept. 22 Classes begin
- Nov. 3 Last day to withdraw without administrative approval

Nov. 11 Last day to submit thesis to Academic Programs and Graduate Studies Office
 Nov. 24-27 Thanksgiving recess (University closed)
 Dec. 4 Last day of classes
 Dec. 5-11 Final examinations
 Dec. 11 End of quarter
 Dec. 12-Jan. 2 Academic recess

Winter Quarter 2006

Jan. 3 Opening of winter quarter; Classes begin
 Jan. 16 Martin Luther King, Jr. Day (University closed)
 Feb. 15 Last day to withdraw without administrative approval
 Feb. 17 Last day to submit thesis to Academic Programs and Graduate Studies Office
 Mar. 12 Last day of classes
 Mar. 13-19 Final examinations
 Mar. 19 End of quarter
 Mar. 20-26 Academic recess

October 2005							November 2005						
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1					1	2	3
2	3	4	5	6	7	8	6	7	8	9	10	11	12
9	10	11	12	13	14	15	13	14	15	16	17	18	19
16	17	18	19	20	21	22	20	21	22	23	24	25	26
23	24	25	26	27	28	29	27	28	29	30			
30	31												
December 2005							January 2006						
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3	1	2	3	4	5	6	7
4	5	6	7	8	9	10	8	9	10	11	12	13	14
11	12	13	14	15	16	17	15	16	17	18	19	20	21
18	19	20	21	22	23	24	22	23	24	25	26	27	28
25	26	27	28	29	30	31	29	30	31				
February 2006							March 2006						
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4				1	2	3	4
5	6	7	8	9	10	11	5	6	7	8	9	10	11
12	13	14	15	16	17	18	12	13	14	15	16	17	18
19	20	21	22	23	24	25	19	20	21	22	23	24	25
26	27	28					26	27	28	29	30	31	
April 2006							May 2006						
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1			1	2	3	4	5
2	3	4	5	6	7	8	7	8	9	10	11	12	13
9	10	11	12	13	14	15	14	15	16	17	18	19	20
16	17	18	19	20	21	22	21	22	23	24	25	26	27
23	24	25	26	27	28	29	28	29	30	31			
30													

Spring Quarter 2006

Mar. 27 Opening of spring quarter; Classes begin
 Mar. 31 César Chavez Day (University closed)
 May 8 Last day to withdraw without administrative approval
 May 12 Last day to submit thesis to Academic Programs and Graduate Studies Office
 May 29 Memorial Day observed (University closed)
 June 4 Last day of classes
 June 5-11 Final examinations
 June 10 Commencement
 June 11 End of quarter
 June 12-18 Academic recess

Summer Quarter 2006

June 19	Opening of summer quarter; Classes begin
July 4	Independence Day (University closed)
Aug. 1	Last day to withdraw without administrative approval
Aug. 4	Last day to submit thesis to Academic Programs and Graduate Studies Office
Aug. 27	Last day of classes
Aug. 28-Sept. 3	Final examinations
Sept. 3	End of quarter
Sept. 4-25	Academic recess

June 2006							July 2006						
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3							1
4	5	6	7	8	9	10	2	3	4	5	6	7	8
11	12	13	14	15	16	17	9	10	11	12	13	14	15
18	19	20	21	22	23	24	16	17	18	19	20	21	22
25	26	27	28	29	30		23	24	25	26	27	28	29
							30	31					

August 2006							September 2006						
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5						1	2
6	7	8	9	10	11	12	3	4	5	6	7	8	9
13	14	15	16	17	18	19	10	11	12	13	14	15	16
20	21	22	23	24	25	26	17	18	19	20	21	22	23
27	28	29	30	31			24	25	26	27	28	29	30



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A Bay Area Campus

Welcome to Cal State Hayward

- ▶ [A Bay Area Campus](#)
- ▶ [Contra Costa Campus](#)

California State University, Hayward is a four-year institution which enrolls approximately 13,000 students, and offers undergraduate and graduate programs in a wide range of disciplines. Perched upon 342 park-like acres in the Hayward hills, Cal State Hayward boasts a panoramic view of almost the entire San Francisco Bay Area. The campus, with its wide expanses of well-kept lawns, clean, tree-lined walkways, fountains, and beds of native California plants is one of the most beautiful in the CSU system.

Facilities

Outstanding instructional facilities include 170 classrooms and teaching laboratories and 192 specialized instruction rooms. Discipline-specific computer labs and seven general



access labs with IBM compatible PC's and Macintosh computers are available for student use. The University Library has a collection of over one million items accessible through its on-line catalog. The Library also provides numerous individual and group study areas.

The University Union, a popular student gathering-place, includes food services, lounges, and meeting rooms. It also offers specialized services such as photoprocessing and an automatic teller machine.

Other campus facilities include a 500-seat state-of-the-art theater with computerized lighting and sound equipment, a 8,400 square-foot television studio complex which is one of the largest on the West Coast, a bookstore, a student health center, and Pioneer Heights, a large 404-student apartment complex.

Cal State Hayward also operates the Contra Costa Campus, in Concord, which provides full instructional and student-life support for over 1,500 upper division and graduate students.

In addition, the university maintains the Hayward marsh field

station as well as access to marine laboratories on Monterey Bay.

Location

- San Francisco Bay--campus overlooks the Bay Area from the East Bay hills
- Pacific Coast--45 minutes west
- San Francisco, Berkeley, Oakland, Walnut Creek, and Concord--30 to 45 minutes northeast and northwest via BART (Bay Area Rapid Transit) trains and freeways
- Lake Tahoe and Yosemite Valley--four hours northeast and east
- Napa and Sonoma Valleys--one hour north
- Sacramento, the State capital--one and one-half hours northeast
- Santa Cruz beaches and Monterey Peninsula--two hours south
- San Jose and the Silicon Valley--30 to 45 minutes south via freeways

Recreation

On-campus recreational facilities include a 20,000 foot main gymnasium, auxiliary gyms, a dance studio, weight room, swimming pools, racquetball/tennis/volleyball courts, several playing fields, a full-size track, and a par course.

In addition to its own facilities and activities, Cal State Hayward's proximity to San Francisco and other Bay Area cities provides unique cultural opportunities including museums, libraries, art galleries, aquariums, planetariums, theater, sports events, and concerts.

Hiking trails are nearby, and the extensive Garin and Dry Creek-Pioneer East Bay Regional Parks are located immediately southeast of the campus. In addition, proximity to the Pacific Ocean and Sierra Nevada mountains offers recreational diversion as well as excellent laboratories for educational studies.

Transportation

Commuting is convenient with three nearby BART (Bay Area Rapid Transit) train stations. The Hayward and South Hayward stations are within three miles of campus, and the Castro Valley station is four miles away. The university provides free shuttle bus service from the Hayward station to the campus. The AC Transit bus #92 runs between campus and the Hayward BART station. Fares are \$1.35 each way and monthly passes are available. The university is a short distance from Interstate 880 (via Santa Clara St. and Harder Road) and Interstate 580 (via Foothill and Mission Boulevards).

University Mission, Values and Vision

Mission

To provide an academically rich, multicultural learning experience that prepares all its students to realize their goals, pursue meaningful lifework, and to be socially responsible contributors to their communities, locally and globally.

Values

The university

values learning in an academic environment that is inclusive and student-centered. We value engagement in the civic, cultural and economic life of the



communities we serve--locally, regionally, and globally. We value critical and creative thinking, effective communication, ethical decision-making, and multi-cultural competence. We value the open exchange of ideas and viewpoints.

Vision

We strive to be known for:

- Outstanding academic programs, recognized for their excellence
- Curricula that foster active student participation through applied learning, research, and community service
- High academic standards along with services and support that ensure each student the opportunity for success
- A learning-centered experience where teaching is lively and engaging and individual differences are appreciated
- Dedication to open-minded inquiry, especially with regard to major social and global issues
- A welcoming campus atmosphere that is responsive to the unique needs of its campus community
- An inclusive campus community where students, faculty, and staff from vastly different backgrounds collaborate--creating and sustaining a vibrant learning community
- An array of activities that promote students' enjoyment and well-being
- Graduates who are innovative and effective problem solvers, skilled in organizing and expressing their ideas
- Engagement in, and essential contributions to, the civic, cultural, and economic well-being of its region and communities

Quarter System

Cal State Hayward operates on the quarter system. Each quarter (fall, winter, spring, summer) is approximately 11 weeks in length (10 weeks of instruction, plus 1 week of final exams). Enrollment in a quarter after admission to the university constitutes matriculation, including enrollment in all Special Session courses. (Special Session courses are groups of Continuing Education courses which have been approved to confer residence credit, with the exception of Open University courses.) Enrollment in Open University courses, as well as in Continuing Education Division courses does not constitute matriculation.

The four quarters, including summer, are largely supported by state funds, while Continuing Education Division, Open University, and Special Session are supported by student fees.

One (1) semester unit is equivalent to one and one-half (1 1/2) quarter units of credit. One (1) quarter unit is equivalent to two-thirds (2/3) of a semester unit.

Accreditation

Cal State Hayward is accredited by the Accrediting Commission for Senior Colleges and Universities of the Western Association of Schools and Colleges (WASC), 985 Atlantic Avenue, Suite 100, Alameda, CA 94501; phone: (510) 748-9001. The Accrediting Commission is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Commission on Recognition of Postsecondary Accreditation.

The Department of Art has accredited membership in the National Association of Schools of Art and Design.

The B.A. and M.A. in Music are accredited by the National Association of Schools of Music.

The Master of Public Administration degree is accredited by the National Association of Schools of Public Affairs and Administration.

The programs in Speech Pathology and Audiology are accredited by the American Speech-Language-Hearing Association.

The undergraduate and graduate programs in the College of Business and Economics are accredited by the American Assembly of Collegiate Schools of Business.

All of the university's programs for teaching and services credentials are approved by the California State Commission for Teacher Credentialing.

The professional preparation programs of the College of Education are accredited by the National Council for Accreditation of Teacher Education.

The School Psychology credential program has received full approval from the National Association of School Psychologists.

The B.S. in Chemistry is accredited by the American Chemical Society.

The B.S. in Nursing is accredited by the National League for Nursing Accrediting Commission and the California State Board of Registered Nursing. The address and phone number of the National League for Nursing Accrediting Commission are: 61 Broadway, New York, N.Y., 10006; (212) 363-5555.

The Continuing Education certificate programs in Paralegal Studies and Legal Nurse Consultant are accredited by the American Bar Association (ABA).

The Continuing Education certificate program in Chemical Dependency is accredited by the California Association of Alcoholism and Drug Abuse Counselors (CAADAC).

Division of Continuing and International Education

Cal State Hayward's Division of Continuing and International Education sponsors a broad spectrum of courses and programs. The educational opportunities provided by Continuing and International Education complement the university's degree programs for matriculated students.

Programs

The Division of Continuing and International Education offers a variety of programs to meet the educational demands of a broad audience. These professional development programs are designed for teachers, educators, administrators, and others interested in strengthening their professional preparation. If you are interested in investigating or pursuing a new career, career exploration and certificate programs are available. Personal enrichment courses are also offered which develop skills and behaviors which may contribute to success at work or at home.

The programs of Continuing and International Education are designed to meet your educational needs. You may take one or more individual courses, enroll in a certificate program, or choose to attend a seminar or conference. In some cases, academic credit is awarded, while in others, Continuing Education Units (CEU) are available. In programs designed specifically for personal enrichment, no credit is awarded.

American Language Program

The university's American Language Program provides instruction for international students in English speaking and writing skills and introduces them to American culture. Each year, students from more than 25 countries enroll in the program. After graduating from the American Language Program, international students often enroll as matriculated students in the university.

Open University Concurrent Enrollment

The "Open University" program allows members of the community to enroll in regular university classes without being formally admitted to the university. For a nominal fee, a *resident* student who has completed the course prerequisites may enroll in the course if space is available (see [Fees and Expenses](#) chapter).

Open University students will be granted "Open University" extension credit for coursework; therefore, it will not count towards the coursework which must be completed in residence for regular university degrees. There are limits on the number of Open University extension units that may be applied toward university degrees. These limits are 36 units for a baccalaureate degree and 13 units for a master's degree.

Note: As of winter quarter 2003, non-resident students (international and out-of-state) who have been admitted to the university (matriculated) and are currently eligible to register as matriculated students will not be permitted to register for any units through Open University. The Registrar's Office will check the eligibility of all students who attempt to register for Open

Contra Costa Campus

University courses. If you have any questions regarding this policy, you may contact the Registrar's Office.

Restrictions

Registration in most courses or programs sponsored by the Division of Continuing and International Education does not require formal admission to the university. For some programs, however, students may be required to meet certain requirements prior to being eligible to register. Only registration in Continuing and International Education Special Session classes provides "continuing student" status to admitted, matriculated students.

General Information

Information on courses, programs, and enrollment procedures is available through the Division's quarterly bulletin on the university website (www.extension.csu Hayward.edu), by phone (510-885-3605), and by e-mail (extension@csu Hayward.edu).

The Contra Costa Campus is a branch campus of Cal State Hayward located in the heart of Contra Costa County. It is one of the largest branch campuses within the CSU system and was the first with a permanent location. At 4700 Ygnacio Valley Road, in Concord, the campus is uniquely positioned to serve the educational needs of county residents. Founded in 1981, the Contra Costa Campus has provided quality education and services for more than two decades. Many residents have benefited from Cal State Hayward's educational presence and have enjoyed the small class size and intimate educational experience that the Contra Costa Campus provides.

Degree Programs

Functioning as an upper division and graduate campus in a thriving, suburban region, the Contra Costa campus offers varied curriculum taught by Cal State Hayward faculty and provides quality educational programs while making use of modern educational technologies to deliver state-of-the-art programs.

Academic degree and credential programs currently offered at the Contra Costa Campus are:

- Bachelor's Degree Majors
- Business Administration, B.S.
- Criminal Justice Administration, B.S.
- English, B.A.
- Human Development, B.A.
- Liberal Studies, B.A.
- Liberal Studies, B.A. (Fast Track
Teacher Prep Program)
- Nursing, B.S. (Advanced
Placement Track)



Psychology, B.S.
Recreation, B.S.
Sociology, B.A.

Master's Degrees

Business Administration, M.B.A.
Counseling, M.S.
Education, M.S.
Educational Leadership, M.S.
Public Administration, M.P.A.
Social Work, M.S.W.
(Special Session)

Credentials

Multiple Subject
Single Subject
Preliminary and Professional
Administrative Services

Application and/or registration through either the Hayward campus or Contra Costa Campus qualifies a student to enroll in courses at both sites. Academic expectations and standards, as well as university policies, are the same at both locations.

Services and Facilities

The Contra Costa Campus promotes student success through a variety of services. These include complete academic advising for programs offered at the campus, as well as administrative and instructional support services. Instructional support services include advanced computer laboratories, distance learning and smart classrooms, and a branch of the university's library. There is also an on-site University Union containing a cafeteria, student lounge, and bookstore.



HOME



HELP



Student Services

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Cal State Hayward provides a variety of services to students under the direction of the Vice President for Student Affairs, the Assistant Vice President for Enrollment Services, and the Associated Students. These services offer a number of special programs

Academic Assistance

which help students derive the maximum benefit from their university experience.

Several sources for advising services exist on campus. For detailed information, see "[Advising](#)" in the Orientation and Advising chapter. The quarterly Class Schedule (available at the Bookstore) also includes information regarding advisement services.

Disability Services for Students

The Student Disability Resource Center (SDRC) provides academic accommodations and support services to address the individual needs of students with permanent disabilities or temporary disabling conditions. Students with documented disabilities and functional limitations are eligible for services designed to provide equivalent access to general campus and classroom programs and activities. The SDRC also offers campus referrals for advising, counseling, transportation, and employment needs.

At the Hayward campus, the Student Disability Resource Center is located in the Library Complex (LI 2400) and can be reached by phone or TDD at (510) 885-3868. At the Contra Costa campus, it is located in the Student Affairs Office, Academic Services Building, room 113 (Tel. 925-602-6716; TDD 925-602-8616). The staff of the SDRC is committed to ensuring the rights and promoting the dignity, self-awareness and self-advocacy of students with disabilities throughout the university. They value the diversity of the Cal State Hayward student body and work with the faculty, staff, and administration to create and maintain an inclusive environment where individuals with disabilities have full and equal access to all university programs.

To learn more about the Student Disability Resource Center, including information about their services, policies, resources and the ADA faculty handbook, visit the SDRC website at: <http://wwwsa.csuhayward.edu/~sdrweb/>

Educational Opportunity Program

Established in 1969, the Educational Opportunity Program (EOP) provides admission and retention support services to low-income and educationally disadvantaged California residents who demonstrate the motivation and potential to succeed in college. Although 80% of EOP students entering Cal State Hayward meet the CSU eligibility for regular admission, the program also provides access for a limited number of first-time freshmen who do not qualify for regular admission. EOP provides its participants with a broad range of support services during their undergraduate studies, as long as they maintain full-time status, make satisfactory progress, and fulfill program requirements.

Student services provided by EOP include recruitment, preadmission counseling, special admissions, specialized orientation sessions, academic advisement, personal counseling, skill-enhancement workshops, career guidance, peer advising, support groups, social/cultural activities, referral services, and EOP grants for eligible students.

To apply for admission to the program, you must complete the CSU Application for Admission and check the appropriate box for EOP. EOP applications are available at: <http://www.csumentor.edu>. Download and print the EOP application forms and mail to EOP.

EOP is a high-demand program with space available for only a limited number of students. Applicants who submit all required documents will be reviewed and if qualified, will be admitted on a first-come, first-serve basis. For assistance in filling out the application forms, or for further information about the program, please contact the EOP Admissions Office at (510) 885-4683 or visit our website at <http://wwwsa.csu Hayward.edu/sas/>.

The EXCEL Program

The EXCEL program is a federally funded TRIO program which provides a variety of educational services for Cal State Hayward undergraduates who are low-income and first-generation college or disabled. The major goals of the program are to increase the retention and graduation rates of program participants and to create a supportive environment that encourages academic success.

EXCEL academic/life planning counselors assist students in developing academic plans to complete their undergraduate degrees and solve academically related problems. They also provide advising in the areas of general education requirements, career development, and graduate school admission.

Learning skills improvement is provided by the Learning Resources Counselor. Assistance includes diagnosing academic weaknesses in learning and language skills and providing support in test-taking, reading textbooks, taking lecture notes, study skills, time management, and offering tutoring in basic academic subjects.

EXCEL students also have access to a variety of scholarship reference books listing non-federal financial assistance available to women, minorities, and people with disabilities in California and throughout the United States. Information about summer programs and internships is also available.

To apply to EXCEL or to find out more about its services, call or visit the main office located in the Library Complex (LI 2450): Tel. 510-885-3722.

Student Center for Academic Achievement

The Student Center for Academic Achievement (the Center) provides learning assistance such as individual and group tutoring, problem-solving sessions, and online resources for regularly enrolled students of the university. Students can receive tutoring in English, math, or statistics. Workshops are conducted each quarter to improve students' academic skills, such as preparing for the WST, taking notes, studying for exams, managing time, and reading textbooks. Cal State Hayward students are encouraged to use the Center regularly to improve their academic performance no matter what their skill level or class standing. Students are also encouraged to attend events sponsored by the Center, such as poetry readings and presentations by artists from the community.

The Center is located in LI 2550, across from the University Library and hours vary. Call 510-885-3674 for information on hours the Center is open, specific tutoring times, workshop dates, event information, or to schedule an appointment.

Summer Bridge Program

Summer Bridge is an intensive five-week academic program designed to help a select group of newly admitted Educational Opportunity Program (EOP) freshmen make a smooth transition from high school to college. The Summer Bridge Program combines academic coursework with an introduction to the campus community.

The Summer Bridge Program offers courses that help sharpen skills in writing, reading and math. In addition tutorials, workshops, and other activities are included in the Summer Bridge experience. Students participating in the program receive academic advising, registration assistance, and opportunities to socialize and network with other students and campus administrators. There are no direct costs to eligible students or to their families. Summer Bridge is fun and gives new students a definite advantage as they begin their university career.

The program is held annually during the months of July and August. All EOP first-time freshman receiving special admission are required to successfully complete the Summer Bridge Program. For further information about the program, please contact the EOP Admissions Office at (510) 885-4683 or visit our website at <http://wwwsa.csuhayward.edu/sas/>.

University Advisement Center

The University Advisement Center (UAC) provides a full range of quality services to all undergraduate students. Services include academic advising; official updates on general education and graduation requirements (other than major requirements); general information and assistance with understanding academic policies and procedures; and referral services within our campus community.

The UAC offers specialized assistance and serves as the "home department" for undeclared students as they explore various majors. The UAC also provides advising on General Education learning communities/clusters and course selections for registration.

In addition, the University Advisement Center provides advising and support services for undergraduates who are experiencing academic difficulties such as those on academic probation or those who have been recently disqualified. Students (non-EOP) on academic probation are encouraged to meet with an academic advisor to discuss strategies for improving their grades and academic standing.

For additional information about UAC services and hours call (510) 885-4682 or go to the University Advisement Center in the Student Services Hub, Upper Level Lobby. You may also send an e-mail to the UAC at uacadvisor@bay.csuhayward.edu.

Admission

Enrollment Services receives admission applications and coordinates the evaluation and notification process. Applicants and current students can use the Web to check application and financial aid status, grades, holds, account status, and to update information. Go to <https://myinfo.csu Hayward.edu> and select "Your Personal Student Information."

Enrollment Services also processes forms for change of residency, dual matriculation, concurrent enrollment, dual admission, and provides information on residency, foreign/international student admission, and advanced placement. For complete information, see the [Admissions chapter](#).

International Student Information

Students from other countries should consult with Enrollment Services regarding their visas, eligibility for employment, and any special academic requirements.

All matters pertaining to applications and admissions for international students are handled by Enrollment Services. (See "[Are there special admission and eligibility requirements for international students?](#)" in the Admissions chapter.) International students interested in attending Cal State Hayward are also urged to contact the Center for International Education (see the "International Education and Student Exchange Programs" section later in this chapter).

Career Preparation

Career Development Center

The Career Development Center (CDC) in WA 509 provides counseling, information and employment services to assist students in the transition from the university to the professional workplace or graduate school. These services include career advising and coaching, career exploration/assessment, occupational information, job search assistance, and employment information and referral. The office maintains a comprehensive Career Library with books, periodicals, videos and online resources pertaining to job search, career guidance and current information on job trends, job descriptions, and salaries. Searchable online listings of all books (with descriptions) in the CDC Library can be found on the CDC website.

The CDC offers regularly scheduled drop-in hours for resume critiques and questions. Drop-in sessions can assist you with career decisions and can provide general, as well as specific information about career development and the world of work. The professional staff can assist you with questions ranging from "what kinds of careers are compatible with my interests, abilities, and values?," "what can I do with my major?" or "which websites are the best to use when searching for jobs and internships?" Appointments are also available for longer sessions.

Career assessments are available in the Career Development Center and on the CDC website to provide personal assessment and occupational information.

The Center offers workshops throughout the year, at both the Hayward and Contra Costa Campuses. Subjects include resume

writing, interview techniques, using the Internet in a job search, finding and making the most of an internship, and personal skill assessments. Workshop and event schedules are listed on the CDC website and in the CDC Events Calendars. The CDC Events Calendar is available in the CDC and at eight "Career Corner" locations throughout the campus.

Employers conduct on-campus interviews for graduating seniors and alumni in the fall, winter, and spring quarters. Participants are encouraged to attend an orientation session before registering and signing up through the CDC website for interviews.

The Career Development Center hosts a number of job fairs throughout the academic year for all Cal State Hayward undergraduates and graduates to explore the diversity of career options and to focus on potential or immediate employment opportunities. CDC job fairs feature from 50 to 130 employers per event, from local, national, and worldwide organizations. The CDC also sponsors targeted recruitment events with a specific career or employment focus.

The Career Development Center maintains two job databases listing hundreds of part-time, full-time, temporary, and seasonal jobs and internships. These listings can be found on the CDC website and in the CDC. The CDC has several internship agreements with Bay Area companies and strives to develop new internships for students on a continuing basis. The CDC also produces a weekly "Hot Jobs" and "Sizzling Internships" bulletin, available in the CDC, through the Career E-Minder Service, and at Career Corner locations throughout the campus.

Cal State Hayward alumni and other working professionals in a variety of career fields provide CSUH students with valuable career exploration information by telephone, e-mail, or in person. These "Career Contacts" can offer valuable information on their career fields and experiences. Explore the Career Contact program on the CDC website.

The Career Development Center's website (www.csuhayward.edu/cdc) provides 24-hour daily access to information about CDC's services, workshops and events, major and career information, job listings, resume and interviewing guidelines, and other career resources. On the CDC's website, you can: (1) search for jobs; (2) obtain detailed information about occupations and career fields; (3) sign-up for the On-Campus Interview program; (4) get a "Job Agent" (job listings in your e-mail); (5) subscribe to the Career E-Minder Service and get a weekly e-mail about upcoming events, job fairs, and workshops; (6) view the calendar of upcoming career workshops and job fairs.

Cooperative Education

The goal of the Cooperative Education program is to enrich the educational experience by demonstrating the relevance of university study to the world of work and by providing on-the-job experience that will make interns attractive to future employers after the degree is completed.

Students have completed internships in private businesses and public and non-profit agencies, including I.R.S./C.I.D., Shaw Environmental, Mervyn's, P.G. & E., and many more.

Contra Costa Campus Student Services

Counseling

Normally, a co-op experience should begin during the sophomore year or later. The work schedule varies depending on the needs of the employer. Some students are offered permanent employment with their co-op employer when they graduate.

To participate in the program, you must have at least a 2.0 GPA, be in good academic standing, and be enrolled as a regular student in the university. To register in a Co-op Ed course, you must meet the requirements of the Cooperative Education program, and academic department. The courses are numbered 3898 for undergraduate students and 6898 for graduate students. Check the *Class Schedule* to determine if a Co-Op Ed course is available. Sign up in the CDC, WA 509.

In addition to Co-op Ed courses, many departments offer regular courses in internships or field practice in which students may enroll to receive academic credit for their work.

Note: International students on F-1 visas who are interested in registering for Co-op, internship, or field practice courses should contact the Center for International Education (510-885-2880) to discuss employment authorization for such courses.

The Contra Costa Campus offers a full range of supportive services designed to enhance students' abilities to succeed in their academic endeavors.

The Academic Services Office provides comprehensive advising on major degree requirements, non-major degree requirements, general education, and course selection for registration. Financial aid services are provided by the Financial Aid Office in coordination with the Academic Services staff. For further information or assistance, students should inquire at the Academic Services Lobby or call (925) 602-6700.

The Division of Student Affairs coordinates services involving the Career Development Center, Student Disability Resource Center, Student Life programs, Writing Skills Tutoring Program, and Student Health Services. For assistance, or information on any of these services, call (925) 602-6713.

In addition, the University Union provides a lounge area for students and daily food service offering both hot and cold menu items.

Counseling and Psychological Services

Counseling and Psychological Services (CaPS) provides personal counseling services to all registered students at Cal State Hayward. The professional staff provides a range of counseling, outreach, emergency and wellness services.

CaPS offers you culturally sensitive support in dealing with many issues and concerns that may interfere with your ability to perform at your best while studying at CSUH. These may include a death

in the family, relationship difficulties, alcohol or drug abuse, a physical illness, sexuality issues, depression, anxiety, family difficulties, cultural/intergenerational concerns, study problems, eating concerns or other challenges.

Counseling Services

All currently registered students at Cal State Hayward are eligible to receive up to ten (10) FREE personal counseling sessions at Counseling and Psychological Services (CaPS) during their time at CSUH. Individual, couples, and group counseling are available. Group counseling does not count against your ten-session limit. To make an appointment, call CaPS at 510-885-3690.

Outreach Services

Staff members provide outreach programs to university classes and other groups on various topics such as stress management, time management, test anxiety, depression, grief and loss, anger and violence, rape education, self-esteem, assertiveness, and others. A staff member can also give a presentation to your group on the counseling services that are available. To schedule an outreach program, call (510) 885-3690.

Emergency Services

A walk-in service is available Monday through Friday for those who require immediate care. It is helpful if you call ahead to let the staff know that you are coming. You will be seen as promptly as possible. For assistance with emergencies when CaPS is closed, contact the Department of Public Safety at 9-1-1 on campus or call the 24-hour Crisis Support Services of Alameda County at (510) 889-1333, off campus.

Confidentiality

The counselors will not disclose any information about you to others without your written permission, except as required by law. This means that your family, professors, administrators, or classmates do not have access to records of your CaPS counseling sessions. Sometimes, however, you may decide to sign a release of information for the purpose of coordinating your care with specific individuals. To assure the privacy of client information, our counselors do not use e-mail to communicate with clients.

CaPS Staff Credentials and Office Location

All counselors have earned master's degrees in counseling or clinical psychology. Licensed professionals supervise them. A full-time licensed psychologist coordinates the services provided by CaPS. CaPS is located in the Student Health Services building (the red brick building between the library and the gym).

Evening Offices

The Student Information Lobby is located in Warren Hall. It provides general information and forms related to admission, registration, refunds, financial aid, transcript requests, and records discrepancies. The Student Information Lobby is open Monday, Thursday and Friday from 8:30 a.m. to 5:00 p.m.; Tuesday from 8:30 a.m. to 6:30 p.m.; Wednesday from 9:30 a.m. to 5:30 p.m. The Contra Costa Campus Academic Services Lobby provides the same services and is open on Fridays until 1:00 p.m. The

telephone number is (925) 602-6700. The Cashier's office is open three nights during the first two weeks of every quarter until 6:30 p.m. (see the quarterly Class Schedule). Students seeking service from departments should contact those offices for their hours.

The University Advisement Center (UAC) reception is open 9:00 a.m. to 6:00 p.m. Monday through Thursday, and until 5:00 p.m. on Friday for general campus information and to schedule advising appointments. Academic advising is available for students regarding their non-major degree requirements. Drop-in advising is available Monday through Friday, 11:00 a.m. to 1:00 p.m., and Monday, Tuesday, Wednesday, 4:00 p.m. to 6:00 p.m. Students should bring their most recent general education evaluation or Degree Works Audit when they come for drop-in advising. Appointments may also be scheduled in advance. Please call ahead (510-885-4682) for any current changes to advising hours. The UAC is located in the Student Services Hub, Upper Level Lobby. The Contra Costa Campus Academic Services Office also provides academic advising. Please call 510-602-6706 for an appointment or visit the Contra Costa Campus website at: www.ccc.csu Hayward.edu.

Most Division of Student Affairs' offices are open from 8:00 a.m. to 5:00 p.m., Monday through Friday. Some offices are also open in the evenings and/or weekends. For a list of Student Affairs' offices, please consult the *Class Schedule* or visit wwwsa.ccsu Hayward.edu/campus hours.shtml.

Financial Aid Services

Enrollment Services coordinates all university-administered financial aid programs. Students may obtain applications and general assistance in the Student Information Lobby (1st floor of Warren Hall).

Loans and Grants: If you have demonstrated financial aid eligibility, you may be considered for one or more of the following aid programs: Federal Perkins Loan, Federal Stafford Loan, Federal Supplemental Educational Opportunity Grant, Educational Opportunity Program Grant, State University Grant, or Federal Pell Grant. In addition, if you do not demonstrate financial aid eligibility, you may be considered for the federal Parent Loan for Undergraduate Students and/or the federal Unsubsidized Stafford Loan Program.

Work-Study Program: If you have demonstrated financial aid eligibility as determined by Enrollment Services, you may be eligible to participate in the Federal Work-Study Program. Work-Study funds are earned through part-time employment, on or off campus (in approved agencies), and enable you to meet your educational expenses without incurring an unduly heavy burden of indebtedness.

Financial Aid Applications: Information and applications for financial aid (loans, grants, and work-study) may be obtained from Enrollment Services. You are advised to file for financial assistance early as funding for some programs is limited. (Applications for the following academic year are available during the month of January.)

Note: The federal Military Selective Service Act (the "Act") requires that most males between the ages of 18 and 25 who reside in the United States to register with the Selective Service system. In California, students subject to the Act who fail to register are also ineligible to receive any need-based student grants funded by the state or a public postsecondary institution. See "Military Selective Service Act" in the Appendix for additional information.

Scholarships: You may obtain information on scholarship opportunities and scholarship applications from Enrollment Services. Many scholarships have specific criteria which limit eligibility so be certain you read the materials before applying.

Enrollment Services also administers the university's short-term (30 day) emergency loans and intermediate term (9 month) foreign student loans. A maximum of \$300 may be awarded from the emergency loan fund with repayment within 30 days with no interest charges. A maximum of \$200 may be awarded from the Foreign Student Loan Fund with repayment within 9 months with no interest charges.

(Also see "[Fee Waivers for Senior Citizens](#)" in the Fees and Expenses chapter.)

Additional information on student eligibility requirements for financial assistance, and the criteria used in determining how financial assistance is distributed among eligible applicants who *enroll at Cal State Hayward*, can be obtained from Enrollment Services.

Graduation Check

Seniors who have 150 units can apply for graduation, which automatically triggers a graduation check. Contact your major department (or Curriculum and Academic Programs if a Special Major) for information about procedures and forms. After all supporting documents and the graduation filing fee have been submitted, you are notified by mail regarding remaining degree requirements. You must apply for graduation by the end of the Add/Drop period of the quarter prior to your final quarter. (Late filing causes graduation to be delayed.) For complete information see the [B.A./B.S. Degree Requirements chapter](#).

Health Services

Student Health Services (SHS) offers affordable, convenient, high-quality health care to all Cal State Hayward students. Its goal is to assist you in achieving and maintaining optimal health while pursuing your academic and career goals. The SHS staff is committed to the promotion of healthy behaviors and the prevention of illnesses within the campus community.

Student Health Services is located between the Library and the P.E. building and is open five days a week to serve you. The current hours (while classes are in session) are Monday and Thursday from 8:30 a.m. to 6:30 p.m.; Tuesday, Wednesday, and Friday from 8:30 a.m. to 5:00 p.m. Students can be seen on a walk-in or appointment basis. Limited services are also offered during quarter breaks. Some services are available at the Contra

Costa Campus on Mondays from 3:30. to 7:00 p.m.

Funded in part by a student health fee, SHS provides an extensive array of outpatient health care services at no or low cost to students. These services include appointments with a physician, nurse practitioner, or nurse; routine x-ray procedures; allergy injections; EKG's; immunizations; and physical exams. Specialty services are also provided such as free and anonymous HIV Testing, massage therapy, physical therapy, dermatology, sports medicine, podiatry, optometry, and internal medicine. SHS houses a full-service pharmacy where registered students may purchase a wide variety of prescription and non-prescription medications at much reduced prices.

To cover health services not provided by Student Health Services, all students are encouraged to purchase their own supplemental health insurance available through Associated Students.

The Student Health Services is fully accredited by the Accreditation Association for Ambulatory Health Care, Inc. (AAHC) and by the California Medical Association (CMA).

How Can I Get Involved?

Student Health Services has an active Student Health Advisory Committee (SHAC) which is made up of Cal State Hayward students, staff, and faculty. If you are interested in becoming a member, contact Cathleen Coulman, M.D., Director, Student Health Services, at 885-3639. There are many other exciting opportunities available for you at SHS. Come in and get to know the staff! If you would like more information about SHS services or about getting involved, please call 885-3735.

Important Telephone Numbers

Appointments and information: 885-3735. On-campus medical emergency: dial 911 and Public Safety will notify Student Health Services. Information concerning the prevention of drug and alcohol abuse and other wellness concerns may be obtained from the Health Promotions Department in Student Health Services at 885-2356.

Housing And Residential Life

Enrolled students have the option of living on campus in the Pioneer Heights Student Apartments. First-time freshmen meeting the established criteria are guaranteed housing. (See below.) All other space reservations are provided on a first-come, first-served basis. Students may also choose to make use of the off campus listing service, located in the Housing and Residential Life Office, to locate off-campus housing.

On-Campus Housing (Pioneer Heights)

Located conveniently on campus, the Cal State Hayward Student Apartments are comfortable and affordable. Living in a community designed to meet the needs of students can help you in gaining the most from your university experience.

Each fully furnished and carpeted two-bedroom apartment accommodates four students and includes a full sized kitchen with major appliances, dining area, living room, bathroom and storage area. Computer jacks in each apartment provide access to the

campus computing system and the internet.

The Housing and Residential Office is located in El Dorado Hall along with a laundry and study room, a community room with a T.V., billiards table, ping-pong table, and kitchen. Barbecue and picnic areas are located on the grounds along with volleyball and basketball courts.

The Residential Life Program was developed as an integral part of your educational experience and provides a climate where the living atmosphere complements the educational mission of the university. Professional staff and trained student assistants work together to develop educational, cultural, social, leisure, and personal development programs that serve to enhance academic learning.

Housing applications are accepted December 1 to May 1, for the academic year beginning each September. Applications received after May 1 are responded to on a space-available basis. It is important to note that the university's admission application is separate from the housing application.

Housing is guaranteed to first-time freshmen admitted to the university who submit a housing application by the May 1 deadline. Additional information regarding First-Time Freshmen Guaranteed Housing, payment plans, and financial aid assistance is provided in the Student Housing Information Packet.

Off-Campus Housing

The Housing Office maintains a listing of places to rent and students looking for roommates. The rental listings include apartments, houses, and rooms. It is necessary that you visit the Housing Office to view the listings. There is also a private dormitory, Carlos Bee, adjacent to campus.

To tour the Cal State Hayward Student Apartments or receive more information regarding on- or off-campus housing, call Housing and Residential Life at (510) 885-7444.

International Education and Student Exchange Programs

Center for International Education

The Center for International Education (CIE) provides a range of services to international students and scholars that is designed to facilitate their transition to a new environment and to optimize their educational opportunities while at Cal State Hayward. These services include: pre-departure advising; orientation program for new students; assistance in understanding and complying with university rules and regulations; counseling designed to help students adjust to life in the USA; advice on relevant immigration regulations; guidance to students regarding legal employment while in student status; referrals for on-campus support services; and workshops on topics of special interest to international students.

For additional information, stop by the Center for International Education in the Student Services Hub, room 1325 or call the Center at 885-2880. Information is also available online at www.csuhayward.edu/CIE/ or you may send an e-mail to the Center at: cie@csuhayward.edu. (FAX: 510-885-2787)

Student Exchange Programs

Student Exchange programs add a unique dimension to education by providing exposure to different educational systems, often in an unfamiliar cultural setting. Cal State Hayward offers three options for student exchange: (1) the CSU-sponsored International Programs (IP) which are based on an academic year of study at a distinguished foreign university or special program center (see the [International Programs of the CSU](#) chapter in the undergraduate programs section of this catalog); (2) the Bilateral Exchange Program, which is either a semester or a year-long exchange with students from universities in Dresden (Germany), London (England), Manila (Philippines), and Okayama (Japan); and (3) the National Student Exchange (NSE), which offers students the opportunity to study at another university in the U.S., Puerto Rico, Guam, or Canada. Eligible students may use their financial aid on any of these programs, and all credit earned is counted towards the student's Cal State Hayward degree. Additional information on all these options can be obtained from the Center for International Education in the Student Services Hub, room 1325, or online at www.csuhayward.edu/cie.

Media Services

See "[Computing, Communication, and Media Support](#)" in the Facilities chapter.

Faculty/Student Mentoring Program

The Faculty/Student Mentoring Program is designed to assist undergraduate students with their transition to campus life and to help them achieve their academic goals. The faculty and student mentors serve as advisors, friends, guides and role models while helping students address problems in formal and informal ways. The program is a collaborative partnership which involves the University Advisement Center, Student Academic Services, the Student Center for Academic Achievement, faculty, students and staff.

The goal of the Faculty/Student Mentoring Program is to provide students with the support they need to be successful at Cal State Hayward and throughout their college career. If you are interested in serving as a mentor, or if you are a student interested in finding a mentor, please call (510) 885-2460. You may also send an e-mail to mentoring@bay.csuhayward, or go to the Student Services Hub, Upper Level Lobby.

Mission Possible

Through the Mission Possible program, Cal State Hayward faculty offer college courses to students in local high schools. Contact the director at (510) 885-3520 or the Office of Instructional Services at (510) 885-4637.

Orientation

Orientation and advisement programs offered prior to registration each quarter insure that entering students are provided with the information and resources needed to promote their successful

Outreach

transition into, and success at, Cal State Hayward. Orientation provides you with essential information about academic requirements, campus services, registration procedures, and academic advising. The Student Life Programs Office recognizes that students enter the university from a variety of backgrounds. As a result, special orientation activities are offered to address the concerns of freshmen, transfer, reentry, and graduate students. First time freshmen who attend Orientation for fall quarter are allowed to register ahead of all other students.

Specific information about Orientation is mailed directly to all new students and is included in the quarterly Class Schedule. Additional information about orientation programs is available through Student Life Programs, Student Services Hub 1351, (510) 885-3657. Also see the Orientation and Advising chapter in this catalog.

Outreach services to students in middle schools, high schools, community colleges, and community educational support agencies are provided through Enrollment Services.

Enrollment Services coordinates outreach activities throughout California, with a special focus on Alameda and Contra Costa Counties. In addition to on-campus tours and events, pre-admission advising at high schools and community colleges, attendance at college fairs, and other efforts, Enrollment Services has a comprehensive communications program geared toward prospective students.

All programs and activities are designed to promote interest in Cal State Hayward and to encourage application and matriculation to the university. For more information about outreach programs, call 510-885-CSUH or send an e-mail to: askES@csuhayward.edu.

Transfer Admission Guarantee

Cal State Hayward's Transfer Admission Guarantee (TAG) program is designed to assist students with baccalaureate degree objectives who plan to begin their college education at a community college before entering the university.

The TAG agreement outlines the community college coursework necessary to guarantee later entry into Cal State Hayward. Combined with early advising, the program helps to ensure the completion of the necessary and recommended coursework for admission, and general education and lower division major requirements. Other program benefits include waiver of the \$55 CSU admission application fee and a pre-admission advising session with a Cal State Hayward counselor prior to submitting the CSU application to ensure a seamless transfer process. A dual admission component to the TAG program allows participants to obtain a Cal State Hayward photo identification card which permits access to the university library and other facilities.

TAG agreements must be completed no later than one year prior to intended entry into Cal State Hayward. Once a TAG agreement is completed, students are ready to apply and be admitted to Cal State Hayward for a pre-selected term of entry.

Students are eligible to participate in the TAG program if they have completed a minimum of 12 units at another university or community college, are a California resident, are a first-time undergraduate student, and if they will have earned a cumulative GPA of 2.0 with at least 60 semester or 90 quarter transferable units by the time they transfer. Students must also be in good standing at the time of transfer, and must have completed transferable General Education (G.E.) courses in English composition, speech, critical thinking, and mathematics with a grade of "C" or better. Although not a requirement of the program, students who have decided on a major are encouraged to complete the lower division requirements while attending the community college.

TAG is not available for students on F1 or H visas, second bachelor's degree or impacted program applicants, or for students with coursework from other countries.

Students who do not transfer within four years, or those who transfer before the completion of 60 semester or 90 quarter units, lose their TAG status.

Upward Bound

Upward Bound is a federally funded program designed to assist high school students of low-income backgrounds who are potential first-generation college students to gain access to a college education. The central idea behind Upward Bound is that high school students from traditionally under-represented groups can be prepared to successfully compete in post-secondary institutions if they are provided with a simulated college experience rich in academic and motivational support.

By providing tutoring, counseling, and individualized instruction during the academic year and summer, Upward Bound helps students bridge the gap between their performance and their potential, thus increasing the likelihood of being admitted to college.

Students are selected from the Hayward, San Lorenzo, and New Haven Unified School Districts. To qualify, a student must be in the process of completing the eighth or ninth grade at entry, come from a low-income or first-generation college family, and have the desire and commitment to pursue a college education.

Upward Bound at Cal State Hayward is made possible by a grant from the U.S. Department of Education. For more information contact Upward Bound at (510) 885-2960 or stop by the Student Services Hub 1161.

Registration Assistance

Students at Cal State Hayward can register for classes prior to each quarter using a touchtone telephone or via the Web. The telephone registration system is known as SAILOR (Student Administrative Information Link Online Registration) and the Web registration system is known as e-SAILOR. Complete, easy-to-follow SAILOR instructions are included in each quarterly *Class Schedule* (available at the Bookstore), and can also be found on the University's website. Students requiring assistance may call

Safety Programs

Enrollment Services at 510-885-CSUH or visit the Student Information Lobby of Warren Hall.

Cal State Hayward enjoys low crime statistics due to an on-campus, professionally trained police department which delivers public safety services to the campus community. The University Police Department programs such as the Bicycle Patrol and Escort Service provide Cal State Hayward with a community-oriented form of police services, which allows for personal interaction between police personnel and members of the university community while providing an increased level of crime prevention patrol on campus grounds.

The department also has parking officers and student services interns who, in addition to enforcing state and campus parking regulations, assist in emergency situations (such as traffic control), and provide general information and assistance to all members of the campus community upon request.

The department offers several on-going programs available to staff, faculty, and students on the following topics: alcohol and drug awareness, acquaintance rape and awareness, and self-protection for women. The department also distributes a wide variety of crime prevention materials and offers vehicle lockout, battery failure, fingerprinting, and lost and found assistance.

The following information may be obtained from the University Police Department, (510) 885-3791:

- Information concerning Cal State Hayward policies, procedures, and facilities for students and others to report criminal actions or other emergencies occurring on campus.
- Information concerning Cal State Hayward's annual campus security report.
- Information concerning the prevention of drug and alcohol abuse.

Servicemember's Opportunity College

Cal State Hayward is a Servicemember's Opportunity College (SOC) and provides educational assistance for active duty servicemembers. SOC institutions offer the following benefits to servicemembers:

1. Admission procedures which insure access to higher education for academically qualified military personnel;
2. Credit awarded for knowledge acquired through military experiences, if applicable to the servicemember's program of study;
3. Credit awarded for non-traditional learning, if applicable to the servicemember's program of study;
4. Acceptance of inter-institutional transfer credits, if they are appropriate for the servicemember's program and are

Special Services

consistent with the university's curriculum;

5. Residence requirements may be adjusted for military students who transfer, when there are other assurances of program balance;
6. Personnel with appropriate academic qualifications and experience administer and supervise SOC-related activities;
7. Educational services for veterans.

For information about the SOC program, contact Enrollment Services.

Cashier Services

The Cashier in the Lobby of Warren Hall (1st floor) accepts in-person cash or check payments for all fees due to the university, such as registration fees, lab fees, encumbrances, and parking fees. (Most payments can also be mailed.)

Commuter Services

Cal State Hayward offers several commuter services via the Alternative Transportation Office, (510) 885-4638.

A free shuttle service is available between the Hayward campus and the Hayward BART station for students, staff, and faculty. The shuttle bus schedule is available on the Web at: www.aba.csuhayward.edu/alt_Trans/hillhop.htm. Call the Alternative Transportation Office for any other questions concerning the current service or for more information on possible shuttle service expansion.

If you are interested in sharing a ride to Cal State Hayward, a student carpool database and a staff/faculty carpool database are available. Free carpool matching is available by logging on to: www.rides.org. (Click on "commute options," then choose "carpool partners".) You may also call the Alternative Transportation Office. (Home addresses are kept confidential and all other information will be used for carpool purposes only.) Carpool matching is available for both Hayward and Contra Costa campuses.

The Commute Information Center (CIC) sells passes for AC Transit and has detailed schedules of the campus shuttle, BART, and AC Transit bus #92. The CIC is sponsored by the Associated Students and the Alternative Transportation Office.

Legal Referral Service

Although no on-campus legal assistance is available, there is a legal service that can refer Cal State Hayward students to a practicing attorney in the local area. You may seek advice or assistance without any charge for the first visit. For most legal issues, one visit is enough; however, if legal representation or other legal assistance is needed beyond the first visit, there will be a minimum charge for the service. The attorneys participating in this program have agreed to charge you a fee that is substantially less than the going rate. Further, there is no obligation on your part to employ the attorney first contacted. For more information and/or referral assistance, contact Student

Testing Services

Judicial Services, WA 465 or call (510) 885-3741.

Assessment and Testing is located in WA 438, (510) 885-3661, and provides standardized testing, scoring, and consultation on research and assessment projects for students, faculty, and administration. The office administers a variety of tests including placement and proficiency tests for Cal State Hayward and other CSU campuses and national admission and matriculation tests for undergraduates and graduates.

There are two test requirements of which all students should be aware:

1. *The EPT and ELM (English Placement Test and Entry Level Math Test) are required of all new undergraduates before enrollment except for a few categories of exemptions. You may be exempt from the EPT/ELM requirements if you can meet the waiver requirements. (See "[Which undergraduate placement examinations do I need to take?](#)" in the Registration chapter.)* You will be mailed an EPT/ELM test application upon admission to Cal State Hayward. Contact the Admissions Office, the University Advisement Center, or Assessment and Testing for further information regarding the EPT/ELM.
2. The Writing Skills Test (WST) must be taken by all undergraduate students at the beginning of the junior year, and by all graduate students upon admission to a program. Contact Assessment and Testing for test dates and registration information. (See "[What is the University Writing Skills Requirement?](#)" in the B.A./B.S. Degree Requirements chapter, and in the [Graduate and Post-baccalaureate Studies](#) chapter).

Other tests for Cal State Hayward students to be aware of include the following:

The MPT (Math Placement Test), in conjunction with the ELM, helps place students in appropriate college level mathematics classes. The MPT is given on an appointment basis; contact Assessment and Testing for details.

The SBPT (School of Business Proficiency Tests) in mathematics and statistics may be taken by students admitted to Business Administration graduate (MBA) programs. See the [Business Administration](#) department chapters for detailed information on these requirements. Contact Assessment and Testing for test dates and registration information.

The State Education Code State Education requirements in U.S. History, the U.S. Constitution, and California State and Local Government in may be met by coursework or a special set of tests developed by Cal State Hayward academic departments. See the [B.A./B.S. Degree Requirements chapter](#) for detailed information regarding Code requirements. Code examinations are given once each quarter; contact Assessment and Testing for additional information and registration.

Other tests administered by Assessment and Testing: The ACT (American College Test) and the SAT (Scholastic Aptitude Test), one of which is required for entering freshmen and

transfer students with less than 84 acceptable quarter units. Test results are not required of students earning high school grade point averages above 3.00.

The MAT (Miller Analogies Test) is required by some graduate departments. See graduate program chapters in this catalog for further information. The MAT is administered by Assessment and Testing at least once per month. Students may contact the office for test dates and registration information.

For information about the CBEST (California Basic Educational Skills Test), CLEP (College-Level Examination Program), GMAT (Graduate Management Admission Test), GRE (Graduate Record Examinations), LSAT (Law School Admissions Test), MCAT (Medical College Admission Test), TOEFL (Test of English as a Foreign Language), CLAD/BCLAD (Bilingual Crosscultural Language and Academic Development Examinations), RICA (Reading Instruction Competence Assessment), and PRAXIS (Professional Assessments for Beginning Teachers), inquire at the Assessment and Testing Office, WA 438.

Transcripts

Students may obtain official transcripts of coursework taken at Cal State Hayward (including extension and special session courses) from Enrollment Services. Refer to Enrollment Services information on the university website for current costs and telephone and Internet ordering procedures and costs.

For transcript requests that arrive via the mail, the request should include: name, other name(s) which may appear on records, social security number, address, dates of attendance, and the complete address to which the transcript is to be sent. The university cannot be responsible for the consequences of failure to supply any of the above information. Mailed requests must also include a check (payable to Cal State Hayward) for the current fee. Please do not send cash with mailed requests. Address the request to Enrollment Services, Transcript Request.

For in-person transcript requests, visit the Student Information Lobby of Warren Hall with payment for the current fee.

Any transcript issued to a student will be marked "Issued to Student." Transcripts bearing the embossed University Seal are official even though they bear this notation.

Students with financial holds placed by the university, or with academic, document, library, equipment, or other obligations to Cal State Hayward, are not permitted to receive transcripts or to request transcripts to be sent to other institutions.

Transfer Information

See "Academic Assistance" and "Orientation," and "University Advisement Center" sections in this chapter. Also see the chapters on [Orientation and Advising](#), and [Admission/Undergraduate](#).

Veterans' Services

Educational allowances, benefit counseling, advocacy, discharge upgrading assistance, tutorial assistance, and social service referrals are available to veterans attending Cal State Hayward under the Veterans' Administration or Cal-Vet programs and to dependents of service-connected disabled and deceased veterans.

A permanent GI bill providing college educational allowances and other benefits for veterans is now in effect. For information on eligibility and procedures, contact Enrollment Services at 510-885-CSUH or the Veterans' Administration at 800-827-1000.

Each quarter veterans and eligible dependents should come to Enrollment Services before the first day of classes and submit their forms requesting certification of enrollment for V.A. benefits. You are also responsible for reporting any changes in enrollment to Enrollment Services and the V.A. as they occur. See "[What Determines My Classification at Cal State Hayward?](#)" in the Registration chapter for additional information.



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Art Galleries

The Hayward campus enjoys two exhibition spaces (the University Art Gallery and the Student Gallery) which make it possible to mount shows of varying size and significance.

The University Art Gallery is 2820 square feet of exhibition space. Located in AE 106, the Gallery has one person shows, group shows and student shows in a variety of media. An adjoining courtyard is available to display outdoor sculpture. Admission to the University Art Gallery is free. The student gallery, located in AE 274, is a more intimate space. Throughout the year, students present their works for short exhibitions. The days and hours of these shows vary and are also admission free.

Bookstore

The Pioneer Bookstore at California State University Hayward is located between the Library and the University Union, across the street from Warren Hall. The Bookstore's mission is to provide course materials required and recommended by CSUH instructors, and other products to support and enhance students' academic endeavors.

Course materials are on the second floor. On the first floor, the store offers CSUH logo clothing and gifts, electronics, educationally-discounted computer software, computer supplies, school and office supplies, testing materials and study guides, general books, greeting cards, used-book buyback services, *University Catalogs* and *Class Schedules*, art supplies, a convenience store, a full-service U.S. Post Office, and a branch of Cal State 9 Credit Union.

See the Pioneer Bookstore's website for current hours and general information at: www.bookstore.csuhayward.edu. You may also call the Bookstore at 510-885-3507 for information on special hours and holidays, or if you have other questions.

Business and Economics Special Facilities

The College of Business and Economics offers tutorial assistance for Accounting classes. There is also a Student Learning Center and Video Lab in MB 2505, a Student Computer Center in MB 2515, and an administrative Student Service Center in MB 2525.

Computing, Communication, and Media Support

The university provides support for the technology needs of the campus community primarily through the Media and Technology Services Division (MATS) of Information and Computing Services (ICS). This unit provides support and facilities to faculty, staff, and students through specific Service Centers.

The *Administrative Service Center (ATSC)*, located in Warren Hall 363, provides desktop support and workshops and/or training for staff and administrators in selected university-specific enterprise computer applications.

The *Classroom Service Center (CSC)*, located in the Library, room 1105, provides support for faculty classroom presentation needs and includes: two-way compressed video distance learning support; video-conferencing; classroom equipment delivery and maintenance; engineering and installation; analog and digital video distribution systems; consultation on equipment purchases; satellite teleconferencing; and Smart Classroom and multimedia classroom design and maintenance.

The *Instructional Technology Service Center (ITSC)*, in the Library, room 2196, provides support for faculty presentation needs and facilitates their use of all forms of instructional technology in the classroom and on the Internet. Some of the services provided by the ITSC are multimedia production, consultation with individual faculty on computer applications and presentation equipment, coordination of campus-wide technology funding initiatives and software distribution programs, online education (Blackboard) and internet delivered instruction, curriculum server and streaming media technologies, and digital video and television editing and production.

The *Student Technology Service Center (STSC)*, located in the basement of Warren Hall, B53, provides and maintains student accessed central computing labs, media production facilities, and a laptop loaner program for financially eligible students.

A central *Help Desk* is available to all members of the campus community who have questions regarding computing software, hardware and network communications and can be reached by calling 885-H-E-L-P (4357).

Early Childhood Education Center

The Early Childhood Education Center (ECEC) is located on-campus, next to the Art and Education Building, and provides child care for infants, toddlers, and preschool children of students, faculty, staff, and the community. The ECEC is funded through a

Language Laboratory

partnership between the Associated Students, Inc. (a non-profit auxiliary of Cal State Hayward); Child, Family and Community Services, Inc. (the grantee agency for the Southern Alameda Head Start program); and Cal State Hayward's College of Education and Allied Studies.

The ECEC is a state-of-the-art facility with high quality innovative programs and developmentally appropriate activities provided in a safe, nurturing, and supportive environment. This State-licensed center offers both a relaxed family atmosphere and a stimulating educational program under the supervision of a paid professional staff supplemented by volunteers from many departments on campus. Some parental participation is required.

Services provided by the ECEC are free to children and parents who meet the eligibility criteria established by Head Start and State Preschool regulations. A current fee schedule is available for parents who do not meet federal or state eligibility requirements.

For additional information and registration procedures, call the Early Childhood Education Center at (510) 885-2480. Space is limited and early inquiry is recommended.

The Language Laboratory is a facility of the Department of Modern Languages and Literatures. It presently consists of a single room with 30 student carrels equipped with audiocassette recorders connected to a Tandberg IS-10 control console. The control console has a programmable remote control that allows faculty to run as many as four taped programs simultaneously and to monitor and intercommunicate with individual students. The system can transfer programs to student cassette recorders at high speed. Students can interact with the audio program, recording responses and playing them back for comparison and correction. The lab also has several computer workstations as well as VCRs and TV monitors for viewing videotapes.

The Language Laboratory has audio-and videotape collections of instructional programs in the languages currently taught, including American Sign Language. The Lab is located in ST 100 directly opposite the University Union.

Library

The library holds over 915,000 items of print materials, including books, journals, scores, maps, and U.S. federal and California state government documents. In addition, there are 880,000 microform items and 30,000 media resources. The library maintains over 2,500 print serials subscriptions, some of which offer free on-line access to electronic versions. This electronic information supplements the library's many electronic databases that provide access to over 4,400 full-text journals online, as well as electronic books. General access to electronic information is available to all users within the building; remote access is available to CSUH faculty, registered students, and staff at <http://www.library.csuhayward.edu>. The university also maintains a branch library at its Contra Costa Campus. The branch has full access to the main library's resources.

Library materials are arranged on open shelves, except for Special Collections, Archives, reserves, and media, which can be requested through the library's services desks. Individual carrels, tables, lounge furniture, and group study rooms are available for study. To check out library materials, borrowers must present a current, valid Cal State Hayward photo ID at the Circulation Desk. The photo ID serves as the user's library card and is non-transferable.

Other facilities include photocopiers, the library/GIS laboratory classroom, and several rooms for the use of students with disabilities. These rooms contain special equipment for the visually impaired. The library's Upper Mall houses group and individual listening and viewing stations along with videos, music books, scores, and sound recordings. In the Reference area on the Lower Mall, as well as on the Upper Mall, microcomputer workstations provide electronic access to bibliographic, statistical, and full-text databases in business, psychology, medicine, education, public affairs, science, ethnic studies, current news and events, and the humanities and social sciences.

The library's web page (<http://www.library.csuhayward.edu>) provides a link to HAYSTAC, the Hayward State Automated Catalog, which itemizes the library's collection. The library's website is the portal for the library's many electronic resources and also serves as a gateway to remote electronic catalogs, including MELVYL (the catalog of the University of California libraries). Instructions for connecting may be obtained in the Reference area of the library or on the library's web page under "off-campus library resources."

Information, reference assistance, and instruction in the use of library resources and services are available from library faculty at the Reference Desk in the Lower Mall. Librarians are also available by appointment and during scheduled office hours for individual help with library research. Also available through the website are chat and e-mail reference services. Chat reference, known as 24/7, is available round-the-clock and provides interactive reference assistance with a librarian from a participating library.

To acquaint users with the library, a self-guided walking tour is available at the Circulation Desk. The library also offers LIBY 1010 "Fundamentals of Information Literacy," a course which satisfies the General Education Information Literacy requirement. In addition, the library offers LIBY 1551 "Information Skills in the Electronic Age," LIBY 2000 "Interdisciplinary Applications of Geographic Information Systems," and LIBY 3200 "Discipline Based Information Research." (See the Library chapter in the undergraduate programs section of this catalog for course descriptions and further information.) Subject-oriented lectures and demonstrations are given to classes at faculty request, and Internet and research skills workshops are scheduled every quarter. The library's website also lists a full range of services for students enrolled in online/distance education classes.

A mutual use agreement covering all CSU libraries enables Cal State Hayward students to borrow materials from any of the libraries within the CSU system by using their current Cal State

Marine Laboratories

Hayward photo ID card. Faculty, students, and staff may also use the Cal State Hayward library's interlibrary loan and document delivery services (ILL) to obtain materials which are not owned by this library.

Instruction in marine biology, geology, oceanography, and other marine sciences is offered at the Moss Landing Marine Laboratories in conjunction with five other cooperating California State Universities. Full-time course offerings are available for resident credit and the facilities are used to supplement courses taught on the Cal State Hayward campus. The laboratories are located 82 miles south of Hayward on Monterey Bay, and some classes are taught in Salinas. See the Marine Sciences chapters in this catalog for further details and for courses offered at Moss Landing, as well as information on the [M.S. program in Marine Science](#).

Museum of Anthropology

The Clarence E. Smith Museum of Anthropology was established in 1974 and opened its exhibition gallery in 1979. Chartered as a teaching museum for the instruction of museology in an anthropological context, the Museum is named in honor of the late Professor Clarence Smith of the Department of Anthropology. Professor Smith recognized the advantage of demonstrating tangibly, in art and artifact, both human diversity and the range of human achievement throughout the world. Efforts are made to represent both traditional cultural forms and their contemporary expressions and influences. In the forefront of the Museum's repertory are exhibits designed to illustrate all aspects of human culture from around the world, features of culture change, and technological as well as biological evolution.

The exhibition galleries of the Museum are located in the southeast corner of the fourth floor of Meiklejohn Hall on the Cal State Hayward campus. They are open to the public, Monday through Friday, and by appointment; admission is free. Access to the collections is limited to qualified professionals and students whose scholarly research requires direct examination of the Museum's holdings. Consult with the Museum's collection manager for a current list of artifacts held. The staff and director's office is located on the first floor (1017) of Meiklejohn Hall. Consultations are given by appointment. For information on exhibits and appointments, call the Museum at (510) 885-3104 or (510) 885-3168, Monday through Friday, 8:00 a.m. to 5:00 p.m.

Parking Facilities

Campus parking facilities are available to students who have purchased parking permits. Quarterly permits may be purchased by mail during the registration process, on-campus at the Cashier's Office in the lobby of Warren Hall, and in the Contra Costa Campus Academic Services lobby. Several parking lots contain parking permit dispensers from which a "Day Permit" may be purchased. In addition, there are a several metered spaces available on campus. See [campus map](#) inside back cover for location of parking facilities.

Science Facilities

The College of Science is housed in a modern 201,000-square-foot science building which includes many specialized teaching laboratories, general purpose personal computers, and specialized computing facilities.

The Departments of Biological Sciences, Chemistry, Engineering, Geological Sciences, Nursing/Health Sciences, Physics, and Psychology each maintain a number of well-equipped laboratories for undergraduate instruction. Laboratory classes are limited to 24, 20, 16, or 12 students, depending on the subject matter.

In addition to the normal complement of laboratory equipment, students in the Biological Sciences have access to a cell culture facility, light and electron microscopes equipped with digital image capture, an array of electronic equipment for recording quantitative data, microcomputers, and field equipment, including boats. Other special facilities include a radiation lab; temperature controlled plant growth chambers; an herbarium; a greenhouse; an insectory; two animal rooms for housing animals; an aquatic animal room for keeping live fish, amphibians, and invertebrates; and museums of vertebrate, invertebrate, and entomological specimens. The wetlands field station is located on southern San Francisco Bay on part of the National Wildlife Refuge.

The Department of Chemistry maintains laboratory equipment and instruments typical of comparable institutions. These include UV, infrared and visible (diode array) and atomic absorption (AA: flame, graphite furnace and cold vapor) spectrophotometers; high performance liquid chromatograph (HPLC) and ion chromatograph (IC); NMR and FTIR spectrometers; and capillary gas chromatograph/mass spectrometer (GC/MS). Other specialized equipment includes a research-grade dry box, growth chamber, anaerobic chamber, and environmental field sampling equipment. There are PC-controlled and various desktop versions of the HPLC and visible spectrometers; all other instruments besides the NMR are PC-controlled. The AA, HPLC, IC and GC/MS are all available online so that students can spend extensive one-on-one time with the instruments. A molecular modeling facility is also available for instruction and research.

The Department of Engineering maintains a laboratory with 24 state-of-the-art computers equipped with the latest industrial engineering software such as Pro-Model simulation software, and AUTOCAD for computer-aided design. Equipment includes a computer-controlled turning center and machining center, two robotics arms, a hardness tester, an engineering microscope, a tensile testing machine, a torsion testing machine, a specimen grinder/polisher, a plastics processing machine, and MTS material testing equipment. The laboratory is used in a variety of courses such as systems simulation, manufacturing automation, facilities planning, and computer graphics. In the laboratory, students also receive training in various manufacturing processes for metals and plastics.

The Department of Geological Sciences is equipped with modern research and field instruments including an atomic absorption spectrophotometer; gas chromatograph; X-ray fluorescence

spectroscope; cathodoluminescence; X-ray diffractometer; petrographic and ore microscopes; geophysical apparatus for seismic refraction, ground penetrating radar, resistivity, magnetic, and gravity surveys. Field equipment includes a portable kitchen and other supplies necessary for the summer field camp and a small power boat with sampling equipment for shallow water studies. Laboratories are equipped for sediment analysis, thin-section preparation, and photomicrography. The department also has large collections of minerals, rocks, fossils, and maps.

Students in the Department of Mathematics and Computer Science have access to a wide variety of modern computing equipment. This includes networks of Sun Ultra Sparc workstations, Linux workstations, and computers with Intel architectures. Many computers have multiple operating systems. Departmental resources include classrooms and labs for demonstrations equipped with computer projection devices. Computer labs are staffed to provide helpful productive student access; the general access lab is ADA compliant. The university provides an advanced ethernet network backbone connecting hundreds of computers to the Internet.

In the Nursing Skills Lab, nursing students practice in a simulated health care setting under the guidance of the Skills Lab Coordinator. This prepares them to move into local hospitals and community health agencies for their clinical patient/client experience.

Students in Physics have access to instruments appropriate to the discipline, including a 2m-Ebert mound spectrograph, electron-spin-resonance apparatus, a multi-channel analyzer for nuclear radiation studies, equipment for projects that require lasers or holography, a very high resolution Doppler-free saturated absorption spectrometer, and an optic fiber transmission line. Instruments can be fabricated for students with other areas of interest.

The Department of Psychology maintains laboratories and equipment for conducting student research in development, personality, social psychology, industrial psychology, physiological psychology, perception, conditioning, and cognition. These laboratories include facilities for the study of humans and small animals. The Psychology department also maintains a computer lab for use by students and faculty.

A computer lab, funded originally by the National Science Foundation, is equipped primarily for instruction of Statistics majors and minors, but is available for use by students in other areas as well. The laboratory has 20 personal computers networked to servers with professional statistical software and data sets. Both hardware and software are state-of-the-art. Applied and theoretical statistics classes use the lab for demonstrations of statistical computing and for class projects in which students learn practical data analytic skills that aid them in the transition from school to work.

Some rooms in the science building have also been set aside to function as computer centers. The Science Computer Lab is a 36 station lab with all the software needed by science students to do their homework. The flex classroom, Science South 149, is wired

for students to bring laptops to use in the classroom.

The University Union is the community center for Cal State Hayward providing services, facilities, and programs to meet the various social, recreational, and cultural needs of the students, faculty, staff, and community.

Campus food service, a game room, lounges, Automatic Teller Machine (ATM) service, meeting rooms, a television lounge, a Sundries/Information center, Copy Center, UU Exhibit Area, multipurpose rooms, and offices of the student government (Associated Students) are some of the service facilities housed in the modern and fully-furnished building. The Pioneer Chuckwagon (located at the PE Building Snack Bar) offers additional food service on campus. Food service and a student lounge are provided at the Contra Costa Campus.

A variety of programs is planned by the AS/UU Programs Department throughout the year to meet the cultural, social, and entertainment needs of the Cal State Hayward community.

All policies and procedures of the University Union are determined by a 10-member board of directors.

Reservation Procedures

Reservations may be made by telephone (510-885-3902) or in person at the University Union Office, Monday through Friday, 8 a.m. to 5 p.m. Organizations that have access to the University Union facilities include university-recognized student organizations, academic and administrative departments, Cal State Hayward-affiliated groups, and off-campus groups.

All recognized Cal State Hayward student organizations may make tentative reservations directly, with confirmation pending approval obtained through the Student Life Programs Office. Academic/administrative/service departments can make reservations directly. The Union facilities shall not be used for regular academic classes. Deviation from this policy requires approval from the dean of the college concerned and the University Union Board of Directors.

Groups not directly affiliated with the university should make reservations directly with the Building Operations Coordinator and will be required to pay all charges and fees associated with their planned event prior to the event.

Room Rental Fees

Rental fees will be levied according to the University Union room rental fee structure. If special services (i.e., technical support, catering, special equipment) are requested, the University Union will levy the charge appropriate for the service requested. Set-up fees may be assessed for use of the University Union when the sponsor requires set-ups beyond those normally provided.

A-V Equipment

Audio-visual equipment is available upon request at the time of reservation. Slide projectors, screens, overhead projectors, a cassette player, P.A. systems, and VCR monitors are available.

Catering

All food and beverages served in the University Union must be provided through the University Union Food Service. Catering arrangements can be made directly through the Food Service Office (510-885-2510). Refer to a catering brochure for menu selection, prices, and procedures. Menus and estimated group size must be submitted within two weeks of the event with final guest count within 48 hours of the event.

Cancellations

The policy of notifying the University Union Scheduling Coordinator of cancellations enables the Union to meet the growing demand for space. Organizations are encouraged to make reservations as early as possible. Groups that frequently violate the cancellation policy will not have the opportunity to continue reserving space. Appeals can be directed to the University Union Executive Director.

Banners/Posters

Recognized Student Organizations, Associated Students, and university departments may place banners announcing events on one of four (4) designated banner spaces on the South balcony. Banner space is available for a maximum of one week on a first-come, first-served basis and must be reserved through the University Union Building Operations Coordinator at 885-3902.

Posting flyers and posters is limited to bulletin board space. For specific poster policy, contact the University Union Administrative Office at University Union 301.



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Activities

Cultural Activities

Art, music, and theatre and dance engage, enrich and vitalize society. They are natural outgrowths of the educational mission of the university. The university's calendar includes world-class gallery exhibitions, performances and exhibits by our distinguished faculty, and a wide variety of student productions and events, as well as visiting artists, performers, and speakers of note.

For a copy of Cal State Hayward's music or theatre calendars, contact the university's Arts Marketing Coordinator at 885-4299.

Intercollegiate Athletics, Instructional and Recreational Programs

Cal State Hayward sponsors intercollegiate athletic programs for both men and women through the Department of Kinesiology and Physical Education. The university is a member of both the NCAA and the NAIA. Teams compete in the California Pacific Conference (NAIA) and as Division III independents (NCAA). The sports offered include basketball, soccer, cross country, and golf for men and women, plus baseball, softball, women's swimming, women's volleyball and women's water polo.

The university encourages you to participate in some form of physical activity. In addition to the program of intercollegiate athletics, opportunities exist for you to participate in instructional and recreational programs. The Department of Kinesiology and Physical Education offers for credit numerous instructional programs in sports, games, and exercise. The Department of Recreation and Community Services offers instructional programs in outdoor activities. The Recreational Activities Program, sponsored by the Associated Students, provides competitive and recreational opportunities during fall, winter, spring, and summer quarters.

The university has two swimming pools, two racquetball courts, a martial arts facility, a basketball/multipurpose gymnasium, a dance studio, a stadium, a track, a baseball diamond, a softball diamond, a soccer field, and a multipurpose practice field. Information regarding programs should be obtained from the Department of Kinesiology and Physical Education (885-3061). Groups interested in renting the facilities should contact the Office of Facility Reservations (885-3548). Student clubs or organizations interested in reserving facilities should contact the office of Student Life (885-3657).

Student Organizations

The California State University is committed to providing equal opportunities to men and women CSU students in all campus programs, including intercollegiate athletics. Information concerning athletic opportunities available to male and female students and the financial resources and personnel that Cal State Hayward dedicates to the men's and women's teams may be obtained from the Athletic Director, Department of Kinesiology and Physical Education, PE 130, 885-3038.

Volunteer Services

Through the Office of Instructional Services (Volunteer Services Programs), the university makes available to Cal State Hayward students a wide variety of volunteer service opportunities. Among the new opportunities available are the America Reads Challenge Literacy Corps, the Precollegiate Academic Development Program, and several programs that promote Service Learning and leadership development. If you are interested in any of these opportunities, please contact the office at (510) 885-4637.

More than 90 student organizations are active at Cal State Hayward. They encompass a broad range, including academic, cultural, professional, recreational, community service, religious, and political interests. They also offer you important opportunities for personal growth and friendship, as well as valuable educational experiences beyond the traditional classroom setting. Student organizations sponsor many special events-lectures, films, music, and dance events each quarter.

The Student Life Programs staff provides support and consultation to student organizations in planning programs and events; fund raising, publicity and promotion; and developing service projects and cultural programs. The staff also assists students interested in forming new student organizations.



Fraternalities and sororities are also active at Cal State Hayward. The Greek system includes eight sororities and seven fraternities. In addition to offering friendship and social activities, fraternities and sororities encourage scholarship, leadership and community service, and affiliation to national organizations that last a lifetime. Student Life Programs provides support and assistance to individual chapters, as well as to the Greek governing councils.

Getting involved in student organizations is an excellent way to meet other students, develop leadership skills, and pursue special interests. The university encourages you to become active and involved in student organizations. More information is available from Student Life Programs in the Student Services Hub 1351, (510) 885-3657.

Alumni Association

"Keep the Link" is the motto of Cal State Hayward's Alumni Association. In existence since 1961, the Association's purpose is

to reach out, connect with, and engage the more than 85,000 alumni who remain an active and vital part of the university's growth. Building on more than 40 years of participation in campus activities, the Association continues to play an important and increasing role in the present and future viability of the university.

In addition to promoting the reputation of Cal State Hayward, the Association has funds derived from alumni memberships which support scholarships, student programs, the university library, cultural events, and special campus programs. The Association works closely with the Office of University Advancement and the Office of the President to increase alumni involvement.

Efforts to strengthen bonds among alumni and with the university include the publication of the Association's newsletter (the Haywire), support of alumni chapter social or career-oriented events, co-hosting an annual golf tournament in the fall, and an annual gala each year to honor the "Alum of the Year." The Association also publishes an electronic newsletter and maintains a comprehensive website at: www.csuhalumni.org.

Anyone who has attended the university is eligible for membership in the Alumni Association. If you are interested in joining, membership applications are available in the Alumni Office, Warren Hall Lobby, or by calling (510) 885-3724.

Leadership Institute

Student Life Programs and the Division of Student Affairs offer students the opportunity to enhance their leadership skills through a variety of seminars, classes and conferences presented by campus and community leaders. Through these leadership programs, students gain the insight and skill to assume a leadership role on campus, in their career or in the community; build alliances with faculty, staff, alumni and community leaders; and enhance their future leadership potential.

Various leadership programs, depending on the student's class level and interest, are offered fall, winter, and spring quarters and are open and free of charge to all Cal State Hayward students. For additional information, contact Student Life Programs in the Student Services Hub 1351, (510) 885-3657.

Student Government

Associated Students (A.S.): The Associated Students, Inc., is a non-profit corporation whose membership consists of all students enrolled at Cal State Hayward. Members are entitled to, and encouraged to participate in A.S. activities, and to vote in all student elections.

Board of Directors: The A.S. Board of Directors is composed of fifteen members: five directors-at-large, two directors from each of the academic colleges, and two directors from the Contra Costa Campus. The Chair and Vice Chair are elected by, and from, the Board of Directors. The Board establishes student government policies, appoints members of all committees, prepares and supervises the budget of the Associated Students, and works with the university in the planning, execution, and evaluation of many programs and projects.

The Board also appoints student members to university boards

which include administrative, faculty, and student representation. These include the Cal State Hayward Foundation Board and the Instructionally Related Activities Board. All vacant student government positions, including committees, are appointed by the Board of Directors.

A.S. Committees: The Associated Students' structure includes several standing and ad hoc committees. Membership in these committees offers experience in organizational and decision-making processes. The standing committees include executive, finance/personnel, colleges, and elections. The regular ad hoc committees include student organizations, program advisory, and Children's Center Advisory Roundtable.

Colleges Committee: The Colleges committee plans and sponsors activities of interest to undergraduate and graduate students in each academic college at Cal State Hayward and at the Contra Costa Campus. Sponsored programs may be educational, social, professional, and cultural in nature, and must always be open to all students.

Academic Senate/Committees--Student Representatives: Student senators are elected in the spring quarter and may serve on senate committees except the Faculty Affairs and Promotion and Tenure Committees. Contact the Chair of Associated Students at (510) 885-4843 for more information.

Administrative Offices: The administrative offices for the Associated Students and University Union, located on the third floor of the University Union, house the management and staff for both organizations. These offices offer many services to the campus community including University Union room reservations, check cashing, and fax services. Students may purchase health insurance, AC Transit tickets, discounted movie tickets, and copy cards. Associated Students provides banking services for clubs and organizations as well as mailboxes. For more information, call (510) 885-4843.

Recreational Activities: The Associated Students Recreational Activities Program offers activities designed for personal recreation and fitness. Activities include sports leagues and tournaments, fitness classes, and outdoor recreation adventures. All activities which are discounted for students are open to the public. For a current schedule of events, call (510) 885-4843 or stop by the University Union Room 314.

Programs: The Associated Students/University Union joint Program Department coordinates a wide variety of cocurricular activities designed to enhance the college experience. Programs are divided into four areas: social, recreational, cultural, and educational. They include films, comedy shows, musical performances, lecture programs, and special events. For more information on upcoming events or how to join the program board, call (510) 885-4843.

Student Media

The university newspaper, *The Pioneer*, is produced in the Department of Communication. Student involvement in production of *The Pioneer* includes writing, editing, graphics, photography and advertising. *The Pioneer* is also published on the Internet. For

more information about *The Pioneer*, call *The Pioneer* office at (510) 885-3175. For more information about the advertising agency which sells ads in *The Pioneer*, call the agency office at (510) 885-3526.

Student broadcast KSUH-TV, operates under the Department of Communication. Students participate in both programming and production. For more information on KSUH-TV, call (510) 885-7533.



HOME



HELP

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Admission/Undergraduate

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Cal State Hayward welcomes your application to study at our university. There are three steps to the application process:

1. You send a completed application to Enrollment Services at Cal State Hayward.
2. We determine your eligibility based on criteria discussed in this chapter.
3. We notify you of the university's decision.

1. How do I become a Cal State Hayward student?

- Prospective students, applying for part-time or full-time undergraduate programs of study, in day or evening classes,

must file a complete undergraduate application and pay a \$55 application fee. The \$55 nonrefundable application fee should be in the form of a check or money order payable to "The California State University" or you may use a credit card if you are submitting an online application. The application fee may not be transferred or used to apply to another term. An alternate campus and major may be indicated on the application, but all applicants should list as an alternate campus only a CSU campus that also offers the major. Generally, an alternate major will be considered at the first choice campus before an application is redirected to an alternate choice campus.

- Application packets are available at most high schools and community college counseling offices. In addition, packets are available at Cal State Hayward in the 1st floor Lobby of Warren Hall. An electronic version of the California State University Application is available on the World Wide Web at: <http://www.csumentor.edu>; or you can send an e-mail request for an application to Enrollment Services (Cal State Hayward) at: askES@csuhayward.edu.
- There are separate applications for baccalaureate degrees and master's degrees/post-baccalaureate programs. Be sure you obtain the correct one.
- Designate Cal State Hayward campus on your application as your first choice.
- Fill in all the required information, including your social security number. The university uses this number to identify student records and evaluate financial aid applications. Because evaluating applications requires time, incorrect information will delay or invalidate your application.
- After you have sent all application materials and fees, you can check the status of your Cal State Hayward application at <https://myinfo.csuhayward.edu>.
- Cal State Hayward corresponds with each student by mail--so be sure the address on your application is complete and accurate.
- The B.S. degree major in Nursing also requires a departmental application. If you want to pursue a major in nursing, see the [Nursing chapter](#) for special admission requirements.
- Take time to read this catalog and become familiar with the specific policies and procedures of Cal State Hayward and the CSU system. This will help you to understand your rights and responsibilities, as well as the rights and responsibilities of the university.

2.

Who must complete an application?

All students in the following categories must complete an undergraduate admission application:

High school graduates

Community college transfer students

Cal State Hayward students who have not been enrolled for three consecutive quarters

Students who have a degree from a college or university and want a second baccalaureate degree

Students who have been enrolled only in Special Sessions, Extension, and Open University

Students who have attended Cal State Hayward as visiting students from another university

Students who want to audit classes¹

Students who were admitted to Cal State Hayward for a particular quarter but did not enroll

If you are uncertain whether you are required to apply, you can contact Enrollment Services at (510) 885-CSUH.

If you have a baccalaureate degree and wish to pursue post-baccalaureate study or a graduate degree, you must submit an application and application fee, even if you are a Cal State Hayward graduate.

Electronic versions of the CSU undergraduate and graduate applications are accessible on the World Wide Web at <http://www.csumentor.edu/>. The CSUMentor system allows students to browse through general information about CSU's twenty-three campuses, view multimedia campus presentations, send and receive electronic responses to specific questions, and apply for admission and financial aid.

Applications may be obtained online. They are also available at any California high school or community college, or from the Admissions Office at any of the California State University campuses.

The following regulations and procedures govern admission to both the Hayward and Contra Costa campuses. They are subject to change without prior notice if necessary so that university policies are consistent with those established by the Trustees of The California State University.

3.

What are Cal State Hayward's admission procedures and policies?

Requirements for admission to California State University, Hayward are in accordance with Title 5, Chapter 1, Subchapter 3, of the *California Code of Regulations*. For information on Cal State Hayward admission requirements, contact your high school or community college counselor or Enrollment Services at (510) 885-CSUH.

We advise all prospective students to supply complete and accurate information on the admission application, residence questionnaire, and financial aid forms. In addition, you must submit authentic and official transcripts of all previous academic work attempted. Failure to file complete, accurate, and authentic application documents may result in denial of admission, cancellation of academic credit, suspension, or expulsion (Section 41301, Article 1.1 of Title 5, *California Code of Regulations*).

Declaration of Objective

When you apply for undergraduate admission you can state an objective (major and degree) to be pursued. You may also be admitted as an "Undeclared Student." In addition, once you have been enrolled at the university, faculty and staff of the University Advisement Center (UAC) are available to assist you in selecting a major and degree program. The responsibility for meeting the specific requirements of a program or major rests with you, but your advisor or the department chair of your selected major will help you determine the courses remaining for completion of major requirements. The University Advisement Center may also assist you in determining your General Education requirements.

Impacted Programs

The California State University system will announce during the fall filing period the programs that are impacted (programs which receive more applications in the initial filing period than can be accommodated) and the supplementary criteria campuses will use. That announcement will be published in the *CSU Review* and distributed to high school and college counselors. It will also be available online at <http://www.calstate.edu/AR/csureview/>. The initial filing periods are October and November for fall terms, June for winter terms, August for spring terms, February for summer terms. If you are applying for admission to an impacted program, you must also meet supplementary admission criteria. Information about the supplementary criteria is sent to program applicants. Some programs are impacted at every campus where they are offered; others are impacted only at some campuses. If you are applying for admission to an impacted program you must file your application during the initial filing period. If you wish to be considered for admission to impacted programs at more than one campus, you must file an application at each campus.

The Nursing major (Clinical portion) is the only impacted program at Cal State Hayward. Supplementary admission criteria are listed in the undergraduate Nursing chapter.

Supplementary Admission Criteria

Each campus with impacted programs uses supplementary admission criteria in screening applicants. Supplementary criteria may include ranking on the freshman Eligibility Index Table (see "Eligibility Index" later in this chapter), the overall transfer grade point average, completion of specified prerequisite courses, and a combination of campus-developed criteria. If you are required to submit scores on either the SAT I or the ACT, you should take the test as early as possible and no later than October if applying for fall admission.

The supplementary admission criteria used by the individual campuses to screen applicants to impacted programs appear

periodically in the *CSU Review* and are sent by the campuses to all applicants seeking admission to an impacted program.

If you cannot be accommodated in a locally impacted program, you may be redirected to another campus in the same major. Unaccommodated applicants to system-wide impacted programs may not be redirected to another campus in the same major, but may be requested to choose an alternate major either at the first choice campus or another campus.

Use of Social Security Number

You are required to include your correct social security number in designated places on your application for admission pursuant to the authority contained in Section 41201, Title 5, *California Code of Regulations*, and Section 6109 of the Internal Revenue Code (26 U.S.C. 6109). The university uses social security numbers to identify students and their records for purposes of financial aid eligibility and disbursement and repayment of financial aid and other debts payable to the institution. Also, the Internal Revenue Service requires the university to file information that includes your social security number and other information such as the amount paid for qualified tuition, related expenses, and interest on educational loans. That information is used by the IRS to help determine whether you, or a person claiming you as a dependent, may take a credit or deduction to reduce federal income taxes.

If you are a taxpayer who claims Hope Scholarship or Lifetime Learning tax credit, you are required to provide Cal State Hayward with your name, address, and Taxpayer Identification Number.

4.

When should I apply?

The application filing periods for undergraduate, graduate, and unclassified post-baccalaureate applicants are listed below. (Graduate and unclassified post-baccalaureate applicants should see the [Graduate Studies](#) chapter in this catalog for additional information on admission procedures.)

Application Filing Periods

Terms in 2004-2005	Applications First Accepted	Initial Filing Period
SUMMER 2004	Feb. 1, 2004	Feb. 1-28, 2004
FALL 2004	Oct. 1, 2003	Oct.1-Nov. 30, 2003
WINTER 2005	June 1, 2004	June 1-30, 2004
SPRING 2005	Aug. 1, 2004	Aug.1-31, 2003

You should also contact Enrollment Services at 510-885-CSUH or check the university website (enter "Application and Document Timelines" in the Search box) for up-to-date information on application filing periods and deadlines for the term of entry you are considering.

Cal State Hayward accepts applications until its capacity is reached. (Many campuses limit undergraduate admission in an enrollment category because of overall enrollment limits. If applying after the initial filing period, consult the campus admission office for current information.)

5.

Does the university have any special provisions for enrollment and admission?

High School Students

If you are a high school student, you can be considered for admission in certain special university programs if you are recommended by your high school principal and the appropriate campus department chair. You can be considered only if your preparation is equivalent to that required of eligible California high school graduates. Admission to a special program is valid for the program only; it does not allow continued enrollment.

Non-Matriculated Enrollment

If you wish to enroll only for Special Session, Extension, or regular quarter courses available through the Open University Program of Continuing and International Education, you are not required to file a formal application for admission to the university or to file transcripts. You must register through the Division of Continuing and International Education.

Hardship Petitions

Cal State Hayward has established procedures for consideration of qualified applicants who would be faced with extreme hardship if not admitted. Contact Enrollment Services for information on policies governing hardship admission. See also the "Admissions Appeals" section under "How will I be informed of the admission decision?" in this chapter.

Educational Opportunity Program

The Educational Opportunity Program (EOP) offers a variety of support services designed to ensure student success at Cal State Hayward. These services include admission assistance, Summer Bridge, an EOP orientation, academic advisement, personal and career counseling, referral services, and an EOP grant for eligible students.

EOP accepts students who qualify for regular admission, as well as a limited number of students who do not meet regular admission criteria. Only low-income and educationally disadvantaged undergraduate students who need admission assistance and support services to succeed at CSUH are admitted to EOP. They must demonstrate academic potential and motivation to succeed, be California residents, and meet the income eligibility criteria.

To apply for the program, prospective students must complete the CSU Application for Admission and check the appropriate box for EOP (answer "Yes" to question 14a). In addition, they must submit the forms included in the EOP information and supplementary application booklet. EOP applications are available at <http://www.csumentor.edu>. Download and print the EOP application forms and mail to EOP. Cal State Hayward's EOP accepts applications from prospective students for fall quarter only.

For assistance in filling out the application forms, or for further information about the program, please contact the EOP Admissions Office at (510) 885-4683 or visit the Student Academic Services website at <http://wwwsa.csuhayward.edu/sas/>.

All freshmen receiving special admission are required to attend the EOP Summer Bridge Program as a condition of their admission for fall.

Veterans

Veterans who meet the admission requirements may attend under full veterans' benefits. Information concerning veterans' programs can be obtained from Enrollment Services.

First-time freshmen and lower division applicants who are California resident veterans of the U.S. Armed Forces, but who do not meet regular entrance requirements may be considered for undergraduate admission if, in our judgment, the veteran has the potential to perform satisfactorily at the collegiate level. To be considered under this provision, you must have served 181 days active duty since 1955 with a discharge or separation under conditions other than dishonorable.

If you wish to be considered under this provision, your application for admission must include supporting documents, including separation papers (DD 214), and a letter petitioning special consideration. Transcripts and test scores are also required.

Adult Students

If you are twenty-five years of age or older, you *may* also be considered for admission as an adult student if you meet the following conditions:

1. You possess a high school diploma (or the equivalent as demonstrated on the Tests of General Educational Development or the California High School Proficiency Examination).
2. You have not enrolled in college as a full-time student for more than one term during the past five years. Part-time enrollment is permissible.
3. If you have attended college in the last five years, you have earned a "C" average or better in all college work attempted.

Your admission will be based upon a judgment as to whether or not you are as likely to succeed as a regularly admitted freshman or transfer student. An assessment of basic skills in the English language and mathematical computation will also be considered in

the admission decision. If you are seeking enrollment as an adult student, you must submit a statement to Enrollment Services outlining the factors and experiences which you feel indicate your probable academic success.

6. How will I be notified that my application has been received?

Cal State Hayward will notify you by mail that your application has been received within two weeks after you file the application. This notice may also include a request that you submit additional records necessary for the campus to evaluate your qualifications. You should be offered admission if the evaluation of your qualifications indicates that you meet CSU admission requirements, and campus requirements for admission to an impacted program. An offer of admission is not transferable to another term or to another campus.

The university reserves the right, however, to select its students and to deny admission to the university, or to any of its programs, based upon the university's determination, at its sole discretion, of an applicant's suitability and the best interests of the university.

7. What information is necessary for evaluation of admission eligibility?

Once you receive an acknowledgment from Cal State Hayward that your application has been received, you will be requested to submit required documents (i.e., transcripts, test scores, etc.), if you have not previously done so. It is your responsibility to see that all official transcripts are sent directly to Enrollment Services from each previous institution attended. Neither evaluation nor determination of eligibility is possible until all required documents have been received.

1. First-time freshmen must submit transcripts of high school work (grades 9-12). Scores from the ACT or SAT examinations are required, unless exempt (see next paragraph). If you are still in high school you must submit transcripts of work as instructed and a final transcript after graduation.

First-time freshmen or lower division transfer applicants, whose high school grade point average is at least 3.00 (3.61 for nonresidents) have the test score requirement waived. Your high school grade point average calculation will include only those grades earned in approved college preparatory courses taken during the 10th, 11th, and 12th grades.

2. If you are applying for undergraduate transfer, graduate, or post-baccalaureate admission, you must submit an official transcript from each college or university previously attended, regardless of length of attendance, even if no work was completed.

3. If you are a transfer student with fewer than 90 transferable quarter units (60 semester units) you must, in addition to item #2 above, file one official transcript showing courses and grades earned during high school (grades 9-12), as well as scores from the ACT or SAT examinations. If your high school grade point average is at least 3.00 (3.60 for nonresidents) the test score requirement will be waived.
4. If you are an international student or non-U.S. citizen, you may be required to submit additional records. See "[Are there special admission and eligibility requirements for international students?](#)" in this chapter.

Note: The university has the obligation to determine whether a transcript will be accepted as official. All transcripts and records submitted for admission or readmission become the property of the university. Students may access their academic records according to policies and procedures established by the campus. You must submit transcripts from all colleges and universities you have attended so that your entire academic experience can be evaluated. Failure to do so will be grounds for denial of admission or readmission or for dismissal from the university.

8.

How will I be informed of the admission decision?

After eligibility has been established, you will receive a letter of admission to the university for the term indicated. This notice will inform you of residence status.

Redirection

If you cannot be accommodated at Cal State Hayward, your application will be automatically redirected to your second choice unless you are seeking admission to a system-wide impacted program or the alternate campus has reached its capacity in your chosen program of study.

Admissions Appeals

If you do not meet published admission eligibility standards, you may petition the Admissions Appeals Committee for reconsideration. The petition may be by form or letter and must include a statement of extenuating factors which includes the potential hardship to be incurred if admission is denied, as well as the reason your past record is not indicative of present capabilities. There is a limit on the number of exceptions to published admission criteria which the campus may grant. The Committee, therefore, considers a number of factors, normally favoring applicants who are close to qualifying and upper division students. Freshmen and lower division students receiving special admission may be required to attend a four- to five-week residential program emphasizing enhancement of academic skills as a condition of admission.

If you come from a disadvantaged background or are a veteran, you may be considered under other criteria.

What are the minimum admission requirements for freshmen?

You will qualify for regular admission as a first-time freshman if you--

- graduated from high school,
- have a qualifiable eligibility index (see the Eligibility Index Table in this section), and
- have completed, with grades of "C" or better, each of the courses in the comprehensive pattern of college preparatory subject requirements. (See "Subject Requirements" later in this section.) Courses must be completed prior to your enrollment in The California State University (special high school programs are exempted from this rule).

Eligibility Index

The eligibility index is the combination of your high school grade point average and your score on either the American College Test (ACT) or the SAT. Your grade point average is based on grades earned in courses taken during your final three years of high school that satisfy the comprehensive pattern of college preparatory subject requirements, and bonus points for approved honors courses (excluding physical education and military science).

Up to eight semesters of honors courses taken in the last two years of high school (including up to two approved courses taken in the tenth grade) can be accepted. Each unit of "A" in an honors course will receive a total of 5 points; "B," 4 points; and "C," 3 points. Up to two 11th grade IB, AP or honors courses with 11th or 12th grade course content taken in 10th grade may also receive bonus points.

You can calculate the index by multiplying your grade point average by 800 and adding your total score on the SAT I. If you took the ACT, multiply your grade point average by 200 and add ten times the ACT composite score. If you are a California high school graduate (or a resident of California for tuition purposes), you need a minimum index of 2900 using the SAT I or 694 using the ACT. The Eligibility Index Table illustrates several combinations of required test scores and averages. If you apply for admission before you graduate from high school, you should compute your GPA using grades earned in courses completed after the 9th grade. Do not include grades you expect to earn in courses during the remainder of the 12th grade.

If you neither graduated from a California high school nor are a resident of California for tuition purposes, you need a minimum index of 3502 (SAT I) or 842 (ACT). Graduates of secondary schools in foreign countries must be judged to have academic preparation and abilities equivalent to applicants eligible under this section. (See "Are there special admission and eligibility requirements for international students?" in this chapter.)

If your grade point average is 3.00 or above (3.61 for nonresidents), you do not have to submit test scores. However,

you are urged to take the SAT I or ACT because campuses use test results for advising and placement purposes and may require them for admission to impacted majors or programs.

You will qualify for regular admission when the university verifies that you have graduated from high school, have a qualifiable eligibility index and have completed the comprehensive pattern of college preparatory subjects. If you are applying to an impacted program, you must also meet all supplementary criteria.

Eligibility Index Table for California High School Graduates or Residents of California

GPA	ACT Score	SAT I Score
2.99	10	510
2.98	10	520
2.97	10	530
2.96	11	540
2.95	11	540
2.94	11	550
2.93	11	560
2.92	11	570
2.91	12	580
2.90	12	580
2.89	12	590
2.88	12	600
2.87	12	610
2.86	13	620
2.85	13	620
2.84	13	630
2.83	13	640
2.82	13	650
2.81	14	660
2.80	14	660
2.79	14	670
2.78	14	680
2.77	14	690
2.76	15	700
2.75	15	700
2.74	15	710
2.73	15	720
2.72	15	730
2.71	16	740
2.70	16	740
2.69	16	750
2.68	16	760
2.67	16	770
2.66	17	780
2.65	17	780
2.64	17	790
2.63	17	800
2.62	17	810
2.61	18	820
2.60	18	820
2.59	18	830
2.58	18	840
2.57	18	850

2.56	19	860
2.55	19	860
2.54	19	870
2.53	19	880
2.52	19	890
2.51	20	900
2.50	20	900
2.49	20	910
2.48	20	920
2.47	20	930
2.46	21	940
2.45	21	940
2.44	21	950
2.43	21	960
2.42	21	970
2.41	22	980
2.40	22	980
2.39	22	990
2.38	22	1000
2.37	22	1010
2.36	23	1020
2.35	23	1020
2.34	23	1030
2.33	23	1040
2.32	23	1050
2.31	24	1060
2.30	24	1060
2.29	24	1070
2.28	24	1080
2.27	24	1090
2.26	25	1100
2.25	25	1100
2.24	25	1110
2.23	25	1120
2.22	25	1130
2.21	26	1140
2.20	26	1140
2.19	26	1150
2.18	26	1160
2.17	26	1170
2.16	27	1180
2.15	27	1180
2.14	27	1190
2.13	27	1200
2.12	27	1210
2.11	28	1220
2.10	28	1220
2.09	28	1230
2.08	28	1240
2.07	28	1250
2.06	29	1260
2.05	29	1260
2.04	29	1270
2.03	29	1280
2.02	29	1290
2.01	30	1300
2.00	30	1300

Below 2.00 does not qualify for regular admission

Subject Requirements

The California State University requires that first-time freshmen applicants complete, with grades of "C" or better, a comprehensive pattern of college preparatory study totaling 15 units. A "unit" is one year of study in high school.

- English: four years
- Mathematics: three years (algebra, geometry, and intermediate algebra)
- Social Science: two years, including one year of U.S. history or U.S. history and government
- Laboratory Science: two years (one year of biological and one year of physical science, both with labs)
- Foreign Language: two years in the same foreign language (subject to waiver for applicants demonstrating equivalent competence)
- Visual and Performing Arts: one year in the same discipline (art, dance, drama/theater, or music)
- Electives: one year (selected from English, advanced mathematics, social science, history, laboratory science, foreign language, and visual and performing arts)

Foreign Language Subject Requirement

The foreign language subject requirement may be satisfied by demonstrating competence in a language other than English at a level equivalent to, or higher than, that expected of students who complete two years of foreign language study. Consult your school counselor, or Enrollment Services for more information.

Test Requirements

Prospective freshman and transfer students who have fewer than 60 semester or 90 quarter units of transferable college credit must submit scores, unless exempt, (see Eligibility Index Table) from either the SAT I of the College Board or the ACT. If you are required to submit test scores, you should take the test no later than early December if applying for fall admission. If you are applying to our impacted program (Nursing, Clinical portion), check with the department for further requirements. Test scores are also used for advising and placement purposes. Registration forms and dates for the SAT or ACT are available from school or college counselors, or from Cal State Hayward's Assessment and Testing Office (510) 885-3661. You may also write or call:

The College Board (SAT I)
Registration Unit, Box 6200
Princeton, New Jersey 08541-6200
(609) 771-7588
www.collegeboard.org

ACT
Registration Unit, P.O. Box 414
Iowa City, Iowa 52240
(319) 337-1270

Honors Courses

Grades, in up to eight semester courses designated as honors courses in approved subjects (taken in the last two years of high school), receive additional points in grade point average calculations. Each unit of "A" in approved courses will receive a total of 5 points; "B," 4 points; "C," 3 points; "D," 1 point; and none for "F" grades. (Beginning fall 2003, up to two 11th grade IB, AP, or honors courses with 11th or 12th grade course content taken in 10th grade may also receive bonus points.)

Provisional Admission

Cal State Hayward may provisionally admit first-time freshmen applicants based on their academic preparation as demonstrated by their work through the junior year of high school and their planned academic program for the senior year. The university will monitor the senior year of study to ensure that those admitted complete their senior year of studies satisfactorily, including the required college preparatory subjects and graduation from high school. Students are required to submit an official transcript after graduation to certify that all coursework has been satisfactorily completed. The university may rescind admission decisions for students who are found not to be eligible after the final transcript has been evaluated.

Admission with Honors

To qualify for admission with Honors, you must also fully satisfy the Subject Requirements for admission to Cal State Hayward. Students admitted with Honors are eligible for the CSUH Honors Program (see the Honors Program chapter in the undergraduate programs section of this catalog).

First-Time Freshmen. Admission with Honors is conferred on a student whose high school GPA is at least 3.50, counting all subjects used to determine admissibility beginning with the tenth grade.

Lower Division Transfers. Admission with Honors is conferred on a student whose high school record is at least equivalent to that of a first-time freshman receiving honors. In addition, the student must have a combined all-college GPA in transferable courses of at least 3.50, based on work completed.

Upper Division Transfers. Admission with Honors is conferred on a student whose combined all-college GPA is at least 3.50 based on transferable work completed.

10.

What are the minimum admission standards for transfer students?

Students who have completed fewer than 60 transferable semester college units (or fewer than 90 quarter units) are considered lower division transfer students. Students who have completed 60 or more transferable semester college units (90 or more quarter units) are considered upper division transfer students. Students who complete college units during high school

or during the summer immediately following high school graduation are considered first-time freshmen and must meet those admission requirements. Transferable courses are those designated for baccalaureate credit by the college or university offering the courses.

Lower Division Transfer Requirements

Generally, you will qualify for admission as a lower division transfer student if you have a grade point average of at least 2.0 ("C" or better) in all transferable units attempted, are in good standing at the last college or university attended, and meet any of the following standards:

1. You meet the freshman admission requirements (grade point and subject requirements) in effect for the term to which you are applying (see "What are the minimum admission requirements for freshmen?")

or

2. You were eligible for admission as a freshman at the time of high school graduation (except for the subject requirements), have been in continuous attendance at an accredited college since high school graduation, and have made up the missing subjects.

Applicants who graduated from high school prior to 1988 should contact Enrollment Services to inquire about alternative admission programs.

Making Up Missing College Preparatory Subject Requirements

Lower division applicants who did not complete the subject requirements while in high school may make up missing subjects in any of the following ways.

1. You may complete appropriate courses with a "C" or better in adult school or high school summer sessions.
2. You may complete appropriate college courses with a "C" or better. (One college course of at least three semester or four quarter units is considered equivalent to one year of high school study.)
3. You may earn acceptable scores on specified examinations.

Contact Enrollment Services for further information about alternative ways to satisfy the subject requirements.

Upper Division Transfer Requirements

Generally, you will qualify for admission as an upper division transfer student if:

1. You have a grade point average of at least 2.0 ("C" or better) in all transferable units attempted;
2. You are in good standing at the last college or university attended and you have completed at least 30 semester units of college coursework with a grade of "C" or better in each course. The 30 semester units must be selected from courses

in English, arts and humanities, social science, science and mathematics at a level at least equivalent to courses that meet general education requirements. The 30 units must also include all of the general education requirements in communication in the English language and critical thinking (at least 9 semester units) and the requirement in mathematics/quantitative reasoning (usually 3 semester units) or the Intersegmental General Education Transfer Curriculum (IGETC) requirements in English communication and mathematical concepts and quantitative reasoning.

Provisional Admission

Cal State Hayward may provisionally admit transfer applicants based on their academic preparation and courses in progress. The campus will monitor the final terms to ensure that those admitted complete all required courses satisfactorily. All accepted applicants are required to submit an official transcript of all college-level work completed. The university will rescind admission for all students who are found not to be eligible after the final transcript has been evaluated.

11.

How will my transfer units be evaluated?

Credits earned in accredited community colleges will be evaluated by Enrollment Services in accordance with the following provisions:

1. Not more than 105 quarter (70 semester) units of credit may be allowed for community college work; community college credit earned after the student has earned 105 quarter units at one or more community colleges will be used for determining grade point averages and may be used to satisfy subject requirements, but may not be applied toward the total units required for the bachelor's degree.
2. No credit may be allowed for professional courses in education taken in a community college, other than an introduction to education course.
3. Cal State Hayward and California community colleges have articulation agreements regarding course equivalencies. If you are planning to transfer to Cal State Hayward you should consult with your community college counselors as to whether or not particular courses meet specific requirements.
4. Certification of part or all of the lower division General Education-Breadth Requirements completed may be submitted by the California community college from which the student is transferring. You should request a G.E. certification at the time you request a transcript to be sent to Cal State Hayward. If you complete the A.A. degree in University Studies from Chabot or Ohlone Colleges, you will have automatic certification of all the 60-unit lower division General Education-Breadth Requirements. Twelve upper division G.E. units must be completed at Cal State Hayward.

5. Certification of the completion of the Cal State Hayward requirements in U.S. History and Institutions will also be accepted from your community college.

Credit from institutions not regionally accredited will not be used in determining admission eligibility, nor will it normally be used to meet graduation requirements. However, after completing 30 quarter units in residence, you may petition Enrollment Services to have such units accepted for baccalaureate credit. Course content, the quality of performance, the nature of the institution, and the appropriateness of the courses to the Cal State Hayward curriculum will be considered in evaluating your petition.

Note: Not more than 141⁶ quarter units of transfer credit may be applied toward a baccalaureate degree.

University Advisement Center (UAC)

The UAC is located in the Student Services Hub 1131. Academic advisors are available to discuss and explain your transfer evaluation or the degree audit you will receive from Enrollment Services. An official evaluation or an update of a prior evaluation is available by appointment. (See the [Student Services chapter](#) in this catalog for additional information on the UAC.)

Credit for Extension and Correspondence School Work

You may count a maximum of 36 quarter (24 semester) units of extension and correspondence school work toward a baccalaureate degree at Cal State Hayward. Any such units not earned at Cal State Hayward must be earned in courses which would be acceptable for Cal State Hayward degrees and must come from accredited institutions which would accept the units toward their own degrees.

No extension or correspondence school credit may be applied toward the residency requirement for undergraduates or graduates. All transferable extension and correspondence work will be used for determination of the undergraduate grade point average.

Credit for Experience and Prior Learning

No unit credit is allowed toward the bachelor's or master's degrees for practical experience. An exemption allowed for experience will not carry units of advanced standing or diminish the number of units required for graduation.

Credit for Military Training and USAFI

Cal State Hayward grants credit for military training in accordance with the recommendation of the American Council on Education. If you entered military service before meeting the usual requirements for graduation, you may receive nine units of elective credit toward the baccalaureate degree based upon the completion of a minimum of one year of uninterrupted active service. Commissioned officers may receive an additional nine units, which may be considered upper division credit. In order to receive such credit you must present written certification from a recognized military authority, such as papers from a military separation center or an official copy of a diploma from a service school or USAFI transcript. Cal State Hayward is a Serviceman's Opportunity College (SOC).

Credit for Noncollegiate Instruction

Cal State Hayward grants undergraduate degree credit for successful completion of noncollegiate instruction, either military or civilian, appropriate to the baccalaureate, that has been recommended by the American Council on Education (ACE) College Credit Recommendation Service or by the National Program on Non-Collegiate Sponsored Instruction (NCSI). The number of units allowed are those recommended in the national guides published by these organizations.

Lower division, occupationally-oriented courses designed to train technicians are not acceptable for university credit. Credit granted for noncollegiate instruction is not generally applied to general education or major requirements.

Advanced Placement

Cal State Hayward grants credit toward its undergraduate degrees for successful completion of examinations of the Advanced Placement Program of the College Board. Scores of three or better will be accepted; you will be granted 4-12 quarter units of college credit for each test completed, depending upon the specific discipline. (See the [Registration chapter](#) for additional information.)

12.

Are there special admission and eligibility requirements for international students?

Admission Requirements

Cal State Hayward must assess the academic preparation of international students. For this purpose, "international students" include those who hold U.S. visas as students, exchange visitors, or in other nonimmigrant classifications. California residents and U.S. citizens with international transcripts are also classified as "international students" for admission evaluation purposes.

Cal State Hayward uses separate requirements and application filing dates in the admission of international students. Verification of English proficiency (see "TOEFL Requirement" in this section), financial resources, and academic performance are all important considerations for admission.

Priority in admission is given to residents of California. There is little likelihood of nonresident applicants, including international students, being admitted either to impacted majors or to those with limited openings.

First-time Freshmen

If you received your preparatory education outside the U.S., you must have completed the equivalent of 12 years of elementary and secondary schooling with the equivalent of a "B" average or higher. ACT or SAT test scores are not required of international students who completed their secondary schooling outside the U.S. International students who graduated from a U.S. high school must meet the same requirements as U.S. citizens.

Transfer students

1. If you are a transfer applicant with fewer than 60 semester (90 quarter) units of transferable work completed at the time of planned enrollment, you must have a 2.0 GPA or higher in all transferable units attempted. You must also meet the eligibility requirements for first-time freshmen applicants. (See "What Are the Minimum Admission Requirements for Freshmen?" earlier in this chapter.)
2. If you are a transfer applicant with 60 semester (90 quarter) units or more, you must have a 2.4 GPA or higher in all transferable units attempted.
3. All transfer students must have completed a comprehensive pattern of college preparatory subject requirements. (See "What Are the Minimum Admission Requirements for Freshmen?")

Transfer students with university-level work earned outside the U.S., will be accepted if the overall grade point average of that work is equivalent to minimum grade point average requirements for admission. If a numerical grade point average cannot be determined by Admissions, at least a "B" average will be required.

Academic Records

Certificates, diplomas, mark sheets, transcripts, and test scores normally must be sent directly from the issuing institution to Enrollment Services to be considered official. Enrollment Services reserves the right to determine what constitutes an official document. Certified English translations must accompany all non-English original documents. Academic records from international institutions must be on file at Cal State Hayward at least eight weeks before registration for the first term.

Proof of English Proficiency

If you are an undergraduate applicant whose native language is not English and you have not attended schools at the secondary level, or above, for at least three years full-time where English is the principal language of instruction, you must present one of the following:

TOEFL (Test of English as a Foreign Language)

Undergraduate: 525 (written); 197 (computer-based)

Graduate: 550 (written); 213 (computer-based)

IELTS (International English Language Testing System)

Undergraduate: 6.5

Graduate: 7.0

APIEL (Advanced Placement International English Test)

Undergraduate only: 3

ELPT (English Language Proficiency Test, part of the SAT II)

Only undergraduates and only U.S. citizens or permanent residents of the U.S. may use this test.

Financial Certification

A financial certification form will be sent to international applicants upon receipt of the application for admission. You must make satisfactory arrangements for your entire stay at Cal State Hayward and must return the completed financial certification

form, together with verification of your sources of financial support, before a letter of admission or an "I-20" form will be issued. Cal State Hayward currently has no scholarships or other financial aid for international students. Tuition waivers are available for a limited number of students. For information, contact the Director of the Center for International Education (Student Services Hub 1325; E-mail: cie@csuhayward.edu).

The commitment of the sponsor for full financial support for the entire period of proposed study must be given the most serious consideration. Immigration and Naturalization Service restrictions prohibit international students from obtaining work permits, except in extreme emergencies, and for a limited period only.

Certification of International Students

If you are an undergraduate on a student visa, you are required by the Immigration Service to take a minimum study load of 12 units per quarter.

When enrolled at Cal State Hayward, international students are expected to comply with all regulations of the Immigration Service as well as those of the university.

You should contact the Center for International Education for information on matters affecting visas, eligibility for employment, and any special academic requirements for international students.

Other Non-U.S. Citizens

Admission eligibility for students who are not U.S. citizens, and are not on student visas, will be based upon the same standards applied to international students who are on student visas. You are expected to have proficiency in the English language sufficient to meet the academic standards of individual courses and the University English proficiency requirements. Evidence of proficiency in English is the same as for international students. (See "Proof of English Proficiency" section above.)

13.

What are the enrollment requirements for transitory (visiting) students?

High School Students

See "Does the university have any special provisions for enrollment and admission?" in this chapter.

Intrasystem and Intersystem Enrollment Programs

If you are a student enrolled at any CSU campus, you have access to courses at other CSU campuses on a space-available basis unless those campuses or programs are impacted. This access is offered without your being required to be formally admitted to the host campus and sometimes without paying additional fees. Although courses taken on any CSU campus will transfer to your home CSU campus as at least elective credit, you should consult your home campus academic advisor to determine how such courses may apply to your degree program before enrolling at the host campus.

There are two programs for enrollment with the CSU, and one for

enrollment between the CSU and the University of California or California community colleges. Additional information about these programs is available from Enrollment Services.

CSU Concurrent Enrollment: matriculated students in good standing may enroll at both their home CSU campus and a host CSU campus during the same term. Credit earned at the host campus is automatically reported to the home campus and included on the student's transcript at the home campus.

CSU Visitor Enrollment: matriculated students in good standing enrolled at one CSU campus may enroll at another CSU campus for one term. Credit earned at the host campus is reported automatically to the home campus and included on the student's transcript at the home campus.

Intersystem Cross-Enrollment: matriculated CSU, UC, or community college students may enroll for one course per term at another CSU, UC, or community college and request that a transcript of record be sent to the home campus.

Cross-Registration Program with the University of California, Berkeley (UCB)

The purpose of this program is to increase your educational opportunities by maximizing the use of existing programs and courses available in the East Bay region. The following conditions apply:

1. No course of instruction available to you at Cal State Hayward may be taken in the other system. Enrollment is limited to one course per term.
2. You may seek to enroll in a course offered at UCB upon the recommendation of your academic advisor and department chair. These advisors should insure the completion of any prerequisites before application is made. (Forms are available from Enrollment Services.)
3. You may seek to enroll in a course offered at UCB only with the permission of the course instructor, and the approval of the appropriate department chair and school/college dean. Each university gives first registration priority to its own students; therefore, concurrent enrollment may not be available in courses with limited spaces. A Cal State Hayward student should return the completed form and card to 120 Sproul Hall at UCB.
4. You must be in good standing, be matriculated in a degree program (undergraduate or graduate) and have a full-time schedule (12 quarter units for undergraduates and 8 units of graduate level courses for graduate status) at Cal State Hayward in order to participate in the program. Cross-registration with UCB is normally not permitted during your first term of enrollment at Cal State Hayward. (Note that UCB is on the early Semester Calendar and Cal State Hayward is on the Quarter Calendar.)
5. Each campus has appointed a coordinator of the cooperative program who verifies the satisfaction of conditions 1-4 for each prospective participating student. Enrollment Services

coordinates the program at Cal State Hayward.

6. Under this agreement, coursework successfully completed by Cal State Hayward students at UCB is considered as if taken in residence. No additional costs are charged to the student at Cal State Hayward. However, you will be billed the Cal State Hayward rates for the total academic load in the combined registrations. Because of the interval involved in sending transcripts, there will be a time lag in the appearance of grades on Cal State Hayward's permanent records.
7. Cross-registration is only possible in the fall and winter quarters because UCB is on the semester system.
8. Cross-registration will be cancelled at any time if the student becomes ineligible for participation.

Cross-Registration with Other Bay Area Two-Year and Four-Year Institutions

Programs have also been established to permit students from Cal State Hayward and those from Chabot College, Cogswell College, College of Alameda, Contra Costa College, Diablo Valley College, Holy Names College, John F. Kennedy University, Laney College, Las Positas College, Los Medanos College, Merritt College, Mills College, The National Hispanic University, Ohlone College, and Solano College to take coursework at another school which is not available at their home campus. Contact the Counseling Center or Registrar at the host campus (or Enrollment Services at Cal State Hayward) for information on eligibility requirements, limitations and other privileges or restrictions.

14.

How is residence for tuition purposes determined?

Enrollment Services determines residence status of all new and returning students for nonresident tuition purposes. Information on the "Application for Admission," "Residency Questionnaire," and "Reclassification Request Form," and, if necessary, other evidence furnished by the student are used in making this determination. A student who fails to submit adequate information to establish eligibility for resident classification will be classified as a nonresident.

The following statement of the rules regarding residency determination for nonresident tuition purposes is not a complete discussion of the law, but a summary of the principal rules and their exceptions. The law governing residence determination for tuition purposes by the California State University is found in California Education Code Sections 68000-68090, 68120-68134, and 89705-89707.5, and in Title 5 of *The California Code of Regulations*, Sections 41900-41916. This material can be viewed on the Internet by accessing the California State University's website at www.calstate.edu.

Generally, establishing California residence for tuition purposes requires a combination of physical presence and intent to remain indefinitely. An adult who, at least one full year prior to the

residence determination date for the term in which enrollment is contemplated, has been both physically present in the state and has evidence of intent to remain in California indefinitely, may establish California residence for tuition purposes. Evidence demonstrating intent can vary from case to case and may include, but is not limited to, the absence of residential ties to any other state, California voter registration and voting in California elections, maintaining California registration and driver's license, maintaining active California bank accounts, filing California income tax returns, owning residential property or occupying or renting an apartment where permanent belongings are kept, maintaining active memberships in California professional or social organizations, and maintaining a permanent military address and home of record in California.

Adult noncitizens establish residence in the same manner as citizens, unless precluded by the Immigration and Nationality Act from establishing domicile in the United States. Unmarried minor noncitizens derive their residence in the same manner as unmarried minor citizens except that both parent and minor must have an immigration status consistent with establishing domicile in the United States.

Nonresident Tuition Exceptions

Exceptions to the general residence requirements are contained in California Education Code, Sections 68070-68084 and Title 5 of the *California Code of Regulations*, Sections 41900-41916, and include, but are not limited to, some members of the military and their dependents, certain credentialed employees of school districts and students who have attended high school in California and graduated or attained the equivalent of a high school diploma. Whether an exception applies to a particular student cannot be determined before the submission of an application for admission and, as necessary, additional supporting documentation. Because neither campus nor Chancellor's Office staff may give advice on the application of these laws, applicants are strongly urged to review the material for themselves and consult with a legal advisor.

Nonresident students seeking reclassification are required to complete and submit to Enrollment Services a supplemental questionnaire including questions concerning their financial dependence status, which will be considered along with physical presence and intent in determining reclassification.

The general rule is that a student must have been a California resident for at least one year immediately preceding the residence determination date in order to qualify as a "resident student" for tuition purposes. A residence determination date is set for each academic term and is the date from which residence is determined for that term.

The residence determination dates for quarter term campuses (Cal State Hayward) are:

Fall: September 20
Spring: April 1

Winter: January 5
Summer: July 1

The residence determination dates for the four stages

of CalStateTEACH are as follows:

Stage 1: September 20 Stage 2: January 5
Stage 3: June 1 Stage 4: September 20

Questions regarding residence determination dates should be directed to Cal State Hayward's Student Information Lobby in Warren Hall.

A campus residence classification appeal must be in writing and submitted to:

The California State University
Office of General Counsel
401 Golden Shore, 4th Floor
Long Beach, California 90802-4210

The appeal must be submitted within 120 days of notification of the final campus decision. The Office of General Counsel can either make a decision on the appeal or send the matter back to the campus for further review.

Students classified incorrectly as residents or incorrectly granted an exception from nonresident tuition are subject to reclassification as nonresidents and payment of nonresident tuition in arrears. If incorrect classification results from false or concealed facts, the student is subject to discipline pursuant to Section 41301 of Title 5 of the *California Code of Regulations*. Resident students who become nonresidents, or who no longer meet the criteria for an exception, must immediately notify Enrollment Services.

Changes may have been made in the rate of nonresident tuition and in the statutes and regulations governing residence for tuition purposes in California between the time this information is published and the relevant residence determination date. Students are urged to review the statutes and regulations stated above.

Footnotes

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- 1** Complete the "Application for Registration as an Auditor Only" available from the Cal State Hayward Student Information Lobby (first floor) of Warren Hall.
 - 2** Reflects re-centering (recalibration) of SAT I tests taken in April 1995 and thereafter. Qualifying scores for SAT I tests taken prior to April 1995 that have not been recentered can be determined by subtracting 100 from the SAT I scores shown in the table.
 - 3** Veterans' Administration benefits will not cover transferable units in excess of transfer unit restrictions (even if these units are potentially applicable to the veteran's objective).



HOME



HELP



Orientation and Advising

- ▶ [What orientation programs are offered at Cal State Hayward?](#)
- ▶ [What academic advising is available to me?](#)
- ▶ [How do I receive course requirement information?](#)
- ▶ [What honors programs does the university offer?](#)
- ▶ [Where can I get additional information on Cal State Hayward's academic programs?](#)

1.

What orientation programs are offered at Cal State Hayward?

Cal State Hayward offers orientation and advisement programs prior to each quarter to introduce new students to the university and to prepare students for registration. Through special programs planned for freshmen, transfer, and graduate students, Orientation provides essential information about degree requirements, campus resources, and registration. During Orientation, new students receive academic advising and learn about the campus from current students. Tours of the campus are also available.

Both the Hayward campus and the Contra Costa Campus offer orientation programs. Detailed information about orientation is mailed to all individuals who have been admitted. Students awaiting final notice of admission may attend orientation, although attendance does not constitute admission by the university.

In addition to the information mailed directly to applicants, the *Class Schedule* published each quarter provides specific information regarding the dates and locations of orientation programs. For additional information, contact Student Life Programs, (510) 885-3657. (You can purchase copies of the quarterly *Class Schedule* from the Pioneer Bookstore, either in person, by mail, or through the Bookstore's website at: www.bookstore.csuhayward.edu. The *Class Schedule* may also be viewed online at: www.csuhayward.edu/schedule.)

2.

What academic advising is available to me?

Consulting with an Advisor

Every student who enters Cal State Hayward is entitled to receive academic advising from a faculty member in the department or committee housing his or her major. Undeclared students are advised by the University Advisement Center in the Student Services Hub 1131. (See the "[Academic Assistance](#)" section of

the Student Services chapter for information on the University Advisement Center.) All new students must see their advisors at least once each quarter during their first year at Cal State Hayward.

First-time freshmen, during their first quarter at Cal State Hayward, should develop a program with their advisor which will satisfy all requirements (general education, major, and minor or option if required) for the degree. Undergraduate transfer students, following receipt of the university's evaluation of previous college credit, should develop with their advisor a complete program of courses leading to the baccalaureate degree. This program should serve as a guide to the student throughout his or her university career, and changes in program should not be made without the approval of the advisor.

For information on the catalog requirements under which a student may graduate, see the [B.A./B.S Degree Requirements chapter](#).

Faculty Office Hours

The faculty of the university is available to you for consultation during regularly scheduled office hours, which are at times other than scheduled classes. The times of the office hours are posted outside each faculty office and are also available in the faculty member's department office. The faculty member informs the department of his/her office hours the first day of classes each quarter. Full-time faculty members maintain a minimum of three office hours per week and also make provision for meeting with students by appointment at a mutually convenient time beyond the stated office hours. The full-time faculty member's office hours are held over a period of at least two days and each office-hour block must be one-half hour or longer. Part-time lecturers maintain the equivalent of one office hour per week for each 4-unit class of their teaching load.

If for any reason a faculty member cannot meet the posted office hours, (s)he informs the department chair. If possible, the department notes the absence on the faculty office door.

Normal office hours are maintained during the Final Examination period. If a final examination conflicts with a posted office hour, the faculty member posts an alternative hour for that week.

3.

How do I receive course requirement information?

Faculty shall provide you with a written statement containing the following information: (1) office number, office hours, and office telephone number; (2) required texts and any other required and/or recommended material; (3) specific course requirements, such as exams, quizzes, papers, field trips, labs, and so on; (4) grading policy (the relative weight of examinations, quizzes, papers, class participation, and other factors); (5) approximate due dates for assignments and exams; (6) attendance requirements (if any); (7) policy on makeup work.

The faculty is also encouraged to include items such as: (a) daily and/or weekly assignments, (b) type of quizzes and exams (subjective, objective, etc.), and (c) description of the course (format, objectives, etc.).

Furthermore, faculty should advise you of their expectations for you in the course no later than the end of the second class. Any changes in course requirements should be communicated to you in a timely manner. It is your responsibility to read the course statement and to request any clarification of course policies. If you add the course after the first week of class, you must seek course information in a timely manner.

This policy is to be implemented by each department.

4. What honors programs does the university offer?

There is a University Honors Program open to any student who meets the criteria for admission. See the [University Honors Program](#) chapter in the undergraduate section of this catalog. Individual departments may also develop honors programs. Departmental Honors Programs are upper division programs designed to provide special courses and advanced, independent reading and research for superior students in the individual majors. Contact the chair of the department for additional information.

5. Where can I get additional information on Cal State Hayward's academic programs?

Data regarding student retention and graduation at Cal State Hayward and the number and percentage of students completing the program in which the student is enrolled or has expressed interest is available on the World Wide Web at: www.aba.csuhayward.edu/ira. You may also contact the Assistant Vice President, Institutional Research and Assessment, WA 743 (Tel. 510-885-3483).



HOME



HELP



Fees and Expenses

- ▶ [What undergraduate fees do I pay when I register at Cal State Hayward?](#)
- ▶ [How should I pay my fees?](#)
- ▶ [What is Nonresident Tuition?](#)
- ▶ [Am I responsible for other fees?](#)
- ▶ [What are the fees for Continuing and International Education courses?](#)
- ▶ [Where can I get information on financial assistance?](#)
- ▶ [What is the average annual cost of education for the California State University?](#)
- ▶ [Who qualifies for fee waivers?](#)
- ▶ [What are Cal State Hayward's refund policies?](#)
- ▶ [What is Cal State Hayward's policy regarding fees or debts owed to the institution?](#)
- ▶ [What is the procedure for the establishment or abolishment of a student body fee?](#)
- ▶ [Footnote](#)

1.

What undergraduate fees do I pay when I register at Cal State Hayward?

Schedule of Undergraduate Registration Fees, 2005-2006

For post-baccalaureate, teacher credential, and graduate student registration fees, see the Graduate Studies chapter.

The California State University is one of the most economical public universities in the nation and Cal State Hayward's fees are among the lowest in the California State University system. Resident students currently pay only 22% of the total cost of their education. All fees are subject to revision by the Board of Trustees without notice. If revisions occur, they will be published in the *Class Schedule*. Legal residents of California are not charged tuition, only fees.

The following "Undergraduate Registration Fees" schedule reflects applicable systemwide fees and applies only to students who do not hold a bachelor's degree. If you already hold a bachelor's degree, regardless of your current educational objective, you will pay the fees listed in the Graduate Studies chapter in the section "Graduate and Postbaccalaureate Registration Fees."

Undergraduate Registration Fees

	<i>0.1 to 6.0 Units</i>	<i>6.1 or More Units</i>
State University Fee	*\$488	*\$840
Student Body Fee	15	15
Facilities Fee	2	2
University Union Fee	55	55
Instructionally Related Activities Fee	16	16
Health Services Fee	35	35
Photo I.D. (quarterly fee)	1	1
Total	\$612	\$964

*Note: The State University Fee for the academic year (three quarters) is \$1,464 for 0.1 to 6.0 units a quarter and \$2,520 for 6.1 or more units a quarter. The total fees paid per quarter will be determined by the number of units taken, including those in excess of fifteen.

Mandatory systemwide fees are waived for individuals who qualify for such exemption under the provisions of the California Education Code. (See "Who qualifies for fee waivers?" in this chapter.)

2.

How should I pay my fees?

Credit Cards, Cash, Check

You may use credit cards (American Express, Discover, and MasterCard), cash, or check for payment of registration fees. See the current *Class Schedule* for additional information.

Installment Payment Plans

Installment Payment Plans have been authorized if you are assessed Nonresident Tuition or State University Fees. See the current *Class Schedule* for additional information about payment plans.

Payment of Special Fees

The Cashier in the Lobby of Warren Hall accepts in-person cash, credit card, or check payments for all fees due to Cal State Hayward, such as registration, lab, breakage, test, library, and parking fees. (Most payments can also be mailed.)

3.

What is Nonresident Tuition?

Nonresident Tuition (in addition to other fees charged to all students) per unit or fraction thereof is \$226.

Note: The total nonresident tuition paid per quarter will be determined by the number of units taken. The maximum nonresident tuition per academic year (as of 2005-2006) is \$10,170. Fees are subject to change without advance notice.

4.

Am I responsible for other fees?

In addition to the fees required of all students, you may have to pay fees for the following items:

Library Fees for Overdue, Lost, or Damaged Materials
Fees are computed on a per transaction basis for library materials. Each department within the library has its own fee rate. For example, Main Circulation has a 21-day loan period, and fines after the due date are \$.25 per day, per book (starting at \$1.75). The maximum fine for a main circulation item is \$10. Reserve items have a higher fine rate, depending on the loan period. The wireless laptop computers have a \$2.50 per hour fine and a \$25 fee for laptops returned late during the hour before closing.

Charges for lost or damaged material are based on an average replacement cost of \$60 plus a processing fee of \$10.

Failure to pay accrued fees will result in a hold on your university records, delays in registration, and denial of other university services. For a complete explanation of library fees and policies, call the Library at 510-885-3612.

Miscellaneous Course Fees

You may have to pay a miscellaneous course fee for instructional materials and field trips for some courses. If courses have such fees, it is noted in their course descriptions in this catalog. Also refer to the *Class Schedule* for additional information and specific fee schedules for these courses.

Other Fees (payable when service is rendered)

Late registration fee	\$25
Failure to meet administratively-required time limit	\$20
Graduation and diploma fee	\$30
Returned check	\$25
Parking fee per quarter	\$36
Official transcript of record (single)	\$4
Additional transcripts prepared at same time up to ten	(\$2 each)
Additional transcripts prepared	(\$1 each)

at same time after first ten

Unofficial transcript of record	(\$2 each)
Items lost or broken	Cost
Test fees	Cost
Laboratory and/or activity fee	Cost
Certificate program fee	\$40
Entry Level Math (ELM) Exam	\$18 or \$24
English Placement Test (EPT)	\$18 or \$24
Writing Skills Test (WST)	\$25
Miscellaneous Course fee	\$5-\$500

(Notes: The graduation fee does not include the cost of cap and gown rental. The parking fee for 2-wheel vehicles is \$9.)

5.

What are the fees for Continuing and International Education courses?

Nonresident Tuition is not charged for Continuing and International Education or Special Session classes. Extension fees are as follows (unless stated otherwise in the Continuing and International Education Bulletin):

Extension Classes	\$132/unit
Open University	\$169/unit
Special Session Classes	\$169/unit

6.

Where can I get information on financial assistance?

Enrollment Services (Executive Director, Jeffrey D. Cook) coordinates financial assistance for students at Cal State Hayward. The following information is available from Enrollment Services in the Student Information Lobby, first floor of Warren Hall. You may also call Enrollment Services at (510) 885-CSUH.

- Student financial assistance programs, including state grants, available to students who enroll at Cal State Hayward
- The student eligibility requirements for financial assistance and the criteria used in determining how financial assistance is distributed among eligible applicants who enroll at Cal State

Hayward

- The means, including forms, by which you apply for student financial assistance and requirements for accurately preparing such applications
- The availability of federal financial aid funds for study-abroad programs. You may also contact the Center for International Education for information on financial aid for study abroad programs (SSH 1325, 885-2880).
- The rights and responsibilities of students receiving financial assistance including aid provided under federal Title IV student assistance programs
- The terms and conditions of any employment offered as financial aid
- The availability of community-service Federal Work-Study jobs
- The terms of, schedules for, and necessity of loan repayment
- The standards you must maintain to be considered to be making satisfactory academic progress for the purpose of establishing and maintaining eligibility for financial assistance, and the procedures to be followed to regain eligibility

Information concerning the cost of attending Cal State Hayward is available by calling Enrollment Services at (510) 885-CSUH, and includes fees and tuition (where applicable); estimated costs of books and supplies; estimates of typical student room and board costs and typical commuting costs; and, if requested, additional costs for specific programs.

7. What is the average annual cost of education for the California State University?

Average Annual Cost of Education and Sources of Funds per Full-Time Equivalent Student

The 23 campuses and the Chancellor's Office of the California State University are financed primarily through funding provided by the taxpayers of California. The systemwide cost of education is defined as total support expenditures (State University Fee revenue and General Fund support appropriations) divided by the number of full-time equivalent students.

The total 2002-2003 state General Fund appropriation to the CSU (not including capital outlay funding in the amount of \$481,178,000) is \$2,680,280,000 and campus budgeted State University Fee Revenue is \$533,430,000 for a total of \$3,213,710,000. The \$3,213,710,000 total cost of education for the CSU must provide support for a projected 321,132 full-time equivalent students (FTES). The number of full-time equivalent students is determined by dividing the total academic student load by 15 units per term (the figure used here to define a full-time student's academic load). The 2002-2003 systemwide cost of

education per full-time equivalent student is \$10,007. Of this amount, the average student fee support per FTE is \$1,926. (The State University Fee and campus fees that must be paid to apply to, enroll in, or attend the university are included in the average costs paid by the students. Individual students may pay less or more than \$1,926, depending on the campus and whether the student is attending part-time, full-time, or is a resident or nonresident. Also, other campus fees may be charged that are not required of all enrolled students, which include user and penalty/deposit fees.

Sources of Funds and Average Costs for CSU Budget

<i>2002-2003</i>	<i>Amount</i>	<i>Average Cost per FTE Student</i>	<i>Percentage</i>
Total Cost of Education	\$3,213,710,000	\$10,007	100.0
State Appropriation	2,680,280,000	8,346	83.0
Student Fee Support	533,430,000	1,661	17.0

8.

Who qualifies for fee waivers?

Alan Pattee Scholarships

Children of deceased public law enforcement or fire suppression employees who were California residents and who were killed in the course of law enforcement or fire suppression duties are not charged mandatory systemwide fees or tuition of any kind at any California State University campus, under the provisions of the Alan Pattee Scholarship Act, California Education Code Section 68120. Systemwide mandatory fees are also waived for children of deceased disabled veterans who qualify for such exemption, under the provision of the California Education Code, Section 32320. Students who may qualify for these benefits should contact the Student Information Lobby, Warren Hall, (510) 885-2624, for determination of eligibility.

Fee Waivers for Senior Citizens

If you are a California resident 60 years of age or older, and you have applied for regular admission and established your eligibility prior to the start of classes, you may have your application fee and State University fee waived. To qualify, you must register for classes during the Late Registration Period. (Admission to classes is on a space available basis under this program.) For procedures to qualify for fee waiver eligibility, contact the Student Information Lobby (Warren Hall, or call 510-885-2624).

Fee Exemptions: Dependents of Deceased or Disabled

Military Veterans

California Education Code Section 32320 provides that "No state-owned college, community college, or other school shall charge any mandatory systemwide tuition and fees, including application and State University Fees, to any of the following:

- (a) Any dependent eligible to receive assistance under Article 2 of Chapter 4 of the Military and Veterans Code.
- (b) Any child of any veteran of the United States military who has a service-connected disability, has been killed in service, or has died of a service-related disability, where the annual income of the child, including the value of support received from a parent, does not exceed seven thousand dollars.
- (c) Notwithstanding Section 893 of the Military and Veterans Code, the Department of Veteran Affairs may determine the eligibility for fee waivers for a child described in subdivision (b).
- (d) Any dependent, or surviving spouse who has not remarried, of any member of the California National Guard who, in the line of duty, and while in the active service of the state, was killed, died of a disability resulting from an event that occurred while in the active service of the state, or is permanently disabled as a result of an event that occurred while in the active service of the state."

For further information, contact the Veteran's Affairs Office at (510) 885-2314.

9.

What are Cal State Hayward's refund policies?

Refund of Fees including Nonresident Tuition
Regulations governing the refund of mandatory fees, including nonresident tuition, for students enrolling at the California State University are included in §41802 of Title 5, *California Code of Regulations*. For purposes of the refund policy, mandatory fees are defined as those systemwide fees and campus fees that are required to be paid in order to enroll in state-supported academic programs at the California State University. Refunds of fees and tuition charges for self-support programs at the California State University (courses offered through extended education) are governed by a separate policy established by the University.

In order to receive a full refund of mandatory fees, including nonresident tuition, you must cancel registration or drop all courses prior to the first day of instruction for the term. Information on procedures and deadlines for canceling registration and dropping classes is available in the *Class Schedule*.

For state-supported quarters and non-standard terms or courses of four weeks or more: If you withdraw during the term in accordance with the university's established procedures, you will receive a refund of mandatory fees, including nonresident tuition, based on the portion of the term during which you were enrolled.

No student withdrawing after the 60 percent point in the term will be entitled to a refund of any mandatory fees or nonresident tuition.

For state-supported quarters and non-standard terms or courses of less than four weeks: No refunds of mandatory fees and nonresident tuition will be made unless you cancel your registration or drop all classes prior to the first day in accordance with the university's established procedures and deadlines.

You will also receive a refund of mandatory fees, including nonresident tuition under the following circumstances:

- The tuition and mandatory fees were assessed or collected in error;
- The course for which the tuition and mandatory fees were assessed or collected was cancelled by the university;
- The university makes a delayed decision that you were not eligible to enroll in the term for which mandatory fees were assessed and collected, and the delayed decision was not due to incomplete or inaccurate information provided by you;
- You were called for compulsory military service.

Students who are not entitled to a refund as described above may petition the university for a refund demonstrating exceptional circumstances. The chief financial officer of the university or his/her designee may authorize a refund if he or she determines that the fees and tuition were not earned by the university.

Information concerning any aspect of the refund of fees may be obtained from the Accounting and Fiscal Services Office, WA 645, (510) 885-3642.

Refund Regulations

Refund disbursements are not made automatically. If you request a refund check (see below) and it is approved, it will be available in approximately four to six weeks.

If you are eligible for a refund of Registration fees (including nonresident tuition) because you withdrew or reduced units before the published deadlines, the amount of the refund will automatically be credited to your university account. If you take no action, the university will leave the balance on your account to apply toward future charges.

A few refund situations are listed below for your information.

- (a) If you find it necessary to withdraw officially from Cal State Hayward, you may be eligible for a partial refund of your Registration fees. Also, see (c) below. A "Refund Request" form is available at the Admissions and Records Information Counter in the first floor Lobby of Warren Hall and in the Contra Costa Campus Academic Services Lobby. The form can also be downloaded at www.aba.csuhayward.edu. (Under "Quicklinks," click on "ABA Forms Page," then "Student Financial Services" and select the "Refund Request" form.)

- (b) If you withdraw before the first day of instruction for the term, all quarterly fees, including the Facilities fee, Instructionally Related Activities fee, Associated Students fee, Health Services fee and University Union fee are refunded in full. A \$5.00 processing fee will be assessed if a refund check is generated. Information on procedures and deadlines for canceling registration and dropping classes is available in *the Class Schedule*. The Late Registration fee is not refundable except when due to university error.
- (c) If you have been called to active military duty and, as a result, find it necessary to withdraw from Cal State Hayward, you are eligible for a refund of fees. You must file a "Refund Request" form available at the Admissions and Records Information Counter (first floor Lobby of Warren Hall) with a copy of the orders. The form can also be downloaded at www.aba.csuhayward.edu. (Under "Quicklinks," click on "ABA Forms Page," then "Student Financial Services" and select the "Refund Request" form.)
- (d) Apply for parking fee refund at the Cashier's office in the first floor Lobby of Warren Hall. Upon application, parking fees are refunded according to the following schedule:
- For 1-25 calendar days of the quarter:
Automobiles, \$24; Motorcycles, \$6
- For 26-50 calendar days of the quarter:
Automobiles, \$12
- After 51 calendar days of the quarter: None
- (e) Refunds owed to financial aid recipients will be used to repay the funds from which the student has received financial aid.

Information concerning the refund policy of Cal State Hayward for the return of unearned tuition and fees or other refundable portions of costs is available from the Accounting and Fiscal Services Office, WA 645, (510) 885-3642.

10.

What is Cal State Hayward's policy regarding fees or debts owed to the institution?

Should a student or former student fail to pay a fee or a debt owed to Cal State Hayward, the institution may "withhold permission to register, to use facilities for which a fee is authorized to be charged, to receive services, materials, food or merchandise or any combination of the above from any person owing a debt" until the debt is paid (see Title 5, *California Code of Regulations*, Sections 42380 and 42381).

Prospective students who register for courses offered by the university are obligated for the payment of fees associated with registration for those courses. Failure to cancel registration in any course for an academic term prior to the first day of the academic term gives rise to an obligation to pay student fees, including any

tuition, for the reservation of space in the course.

Cal State Hayward may withhold permission to register or to receive official transcripts of grades or other services offered by the institution from anyone owing fees or another debt to the institution. If you believe you do not owe all or part of an asserted unpaid obligation, you may contact the Accounting and Fiscal Services Office. The Accounting and Fiscal Services Office, or another office on campus to which the Accounting Office may refer you, will review all pertinent information provided by you and available to the campus and advise you of its conclusions.

11.

What is the procedure for the establishment or abolishment of a student body fee?

The law governing The California State University provides that fees defined as mandatory, such as a *student body association fee* and a *student body center fee*, may be established. A *student body association fee* must be established upon a favorable vote of two-thirds of the students voting in an election held for this purpose (Education Code, Section 89300). A *student body center fee* may be established only after a fee referendum is held which approves by a two-thirds favorable vote the establishment of the fee (Education Code, Section 89304). (The *student body fee* was established at Cal State Hayward by student referendum in the 1960-61 academic year.) The campus president may adjust the *student body association fee* only after the fee adjustment has been approved by a majority of students voting in a referendum established for that purpose (Education Code, Section 89300). The required fee shall be subject to referendum at any time upon the presentation of a petition to the campus president containing the signatures of 10% of the regularly enrolled students at the university. Once bonds are issued, authority to set and adjust *student body center fees* is governed by provisions of the State University Revenue Bond Act of 1947 including, but not limited to, Education Code, Sections 90012, 90027, and 90068. *Student body association fees* support a variety of cultural and recreational programs, childcare centers, and special student support programs.

The process to establish and adjust other campus-based mandatory fees requires consideration by the campus fee advisory committee and sometimes a student referendum. The campus resident may use alternate consultation mechanisms if he/she determines that a referendum is not the best mechanism to achieve appropriate and meaningful consultation. Results of the referendum and the fee committee review are advisory to the campus president. The president may also request the chancellor to establish the mandatory fee. Authority to adjust fees after consideration by the campus fee advisory committee and the completion of a student referendum is delegated to the president.

Footnote

- Fee adjustments subject to the policies established in Executive Order 661.



HOME



HELP

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Registration

- ▶ [What general policies affect my registration at Cal State Hayward?](#)
- ▶ [What information do I need to register for, and enroll in classes?](#)
- ▶ [What determines my classification?](#)
- ▶ [How do I register for classes?](#)
- ▶ [What changes can I make in my enrollment status?](#)
- ▶ [Which undergraduate placement examinations do I need to take?](#)
- ▶ [How may I obtain credit by examination as an undergraduate student?](#)

1.

What general policies affect my registration at Cal State Hayward?

1. To register at Cal State Hayward, you must be admitted to the university.
2. Registration is complete only when all your registration requests have been properly recorded and you have paid all fees, deposits, and charges. Instructions and dates for using e-SAILOR/SAILOR, the Cal State Hayward registration system, are published quarterly in the online [Class Schedule](http://www.csuhayward.edu/schedule) (<http://www.csuhayward.edu/schedule>).
3. You are given credit only for those courses in which you are officially registered at the conclusion of the Add/Drop period, except when you have officially filed a Withdrawal form(s) in the Student Information Lobby in Warren Hall.
4. You will be held responsible for completing all courses for which you initially register, except for changes in registration which you have officially filed in the Student Information Lobby in Warren Hall.
5. If you enrolled in a course and do not attend initial class meetings, you may be dropped from the class if demand for the course exceeds capacity. Departments following this practice will make reasonable efforts to inform students of this action. You should not assume, however, that nonattendance will result in your being automatically dropped.
6. The university does not guarantee the availability of particular courses or sections because admission to classes is authorized only until the maximum number of students allowable in any section has been reached.

7. The priority for registration is as follows:
 - a. Graduating undergraduate seniors and graduating graduate students
 - b. Freshmen
 - c. Graduate
 - d. Seniors and unclassified post-baccalaureates
 - e. Juniors
 - f. Sophomores
8. The priority for registration for students enrolling in 6000-level courses is as follows:
 - a. All graduate students
 - b. Undergraduate students majoring in the department concerned
 - c. All other students
9. If a student or former student fails to pay a debt owed to Cal State Hayward, the university may "withhold permission to register, to use facilities for which a fee is authorized to be charged, to receive services, materials, food or merchandise or any combination of the above from any person owing a debt" until the debt is paid (see Sections 42380 and 42381 of Title 5, *California Code of Regulations*). For example, Cal State Hayward may withhold permission to provide official transcripts of grades to any person owing a debt. If you believe that you do not owe all or part of an unpaid obligation, contact the encumbering campus department listed on the back of the Invitation to Register. The office which placed the hold will review the pertinent information, including information you may wish to present, and will advise you of its conclusions with respect to the debt. Check MyInfo (<http://myinfo.csuhayward.edu>) on the university website to verify whether any holds exist that will block your registration for the next or subsequent term.
10. *Health Requirements*

The following health requirements are not admission requirements, but are required of students as conditions of enrollment in the California State University.

 - a. *Measles and Rubella Immunization.* In order to register, all new and readmitted students born after January 1, 1957 must provide written proof of full immunization against measles and rubella. In addition to the general requirement, proof of measles and rubella immunization may be required for certain groups of enrolled students who may have increased exposure to these diseases. These groups include students who reside in campus residence halls, students whose primary and secondary schooling were obtained outside the United States, and students enrolled in dietetics, medical technology, nursing, physical therapy and

any practicum, student teaching, or field work involving preschool-age children or taking place in a hospital or health care setting. Failure to comply with this requirement will result in a hold being placed on your registration.

- b. *Tuberculin Skin Test or Chest X-Ray.* International students must provide written proof of a Tuberculin Skin Test or chest x-ray performed in the U.S.A. within the past 12 months. Failure to comply with this requirement will result in a hold being placed on your registration.
- c. *Hepatitis B.* All new students who will be 18 years of age or younger at the start of their first term at a CSU campus must provide proof of full immunization against Hepatitis B before enrolling. Full immunization against Hepatitis B consists of three timed doses of vaccine over a minimum four- to six-month period. If you have not already completed this requirement, you must receive the first dose (of the series of three) during your first quarter or your enrollment will be blocked for the second quarter. The full series must then be completed within your first year of enrollment. Even if you turn 19 years of age during your first year of enrollment at the university, you are responsible for completing the hepatitis B immunization requirement. Failure to comply with this requirement will result in a hold being placed on your registration. Hepatitis B immunization is available at Student Health Services for no, or low cost. Call Student Health Services at (510) 885-3735 for more information or to make an appointment. For your convenience, a form is available online for you to download and complete. See the Student Health Services website for this form or for additional information at:
<http://wwwsa.csuhayward.edu/~shsweb>.
- d. *Meningococcal Disease.* Meningococcal disease is a potentially life-threatening bacterial infection known to occur more frequently among students living in residence halls. It is recommended that all incoming residential students *consider* the Meningococcal Vaccine as a way to reduce their risk for this potentially fatal disease. Each incoming freshman who is residing in on-campus housing is required to return a form indicating that he/she has received information about meningococcal disease and the availability of the vaccine to prevent contraction of the disease, and to indicate on the form whether or not he/she has chosen to receive the vaccination. The vaccine is available at Student Health Services.

Student Health Services at Cal State Hayward provides immunizations, tuberculin skin tests, laboratory and chest x-ray exams for students at low cost by appointment. For more information, call Student Health Services at (510) 885-3735 or visit the Student Health Services website at:
<http://wwwsa.csuhayward.edu/~shsweb>. (*Note: To remove a registration hold for measles/rubella, tuberculin tests, or hepatitis B, bring written proof to the Reception Desk at the Student Health Center.*)

What information do I need to register for, and enroll in classes?

To begin, view the *Class Schedule* online (<http://www.csuhayward.edu/schedule>) or purchase it at the Pioneer Bookstore on campus. Consult with a faculty advisor to decide what courses you need and read the following information.

Class Schedule

A *Class Schedule*, prepared each quarter, lists general information, courses offered, hours, rooms, instructor names, and final examination times. It also includes the quarterly calendar, orientation and registration information, fees, General Education requirements information, a summary of the writing and mathematics requirements, descriptions of new courses, student services contact information, and bookstore and library hours. The online *Class Schedule* is available before e-SAILOR/SAILOR registration each quarter and may be viewed at: <http://www.csuhayward.edu/schedule/>

Registration Appointment Times

Students register during two registration time blocks, as well as during Open Registration. This process is designed to allow more students the opportunity to attain full-time status. Existing registration priorities will be kept based on class levels, with graduating seniors having highest priority.

A "Registration Invitation" will be sent to continuing students through their Horizon email account. The invitation will have your assigned registration times. New students will be mailed a postcard. Students may also check MyInfo on the University website for Registration information.

Units

All college courses at Cal State Hayward have unit values based on the number of 50-minute hours they meet each week. In most lecture, lecture-discussion, and seminar courses, each hour/week is a unit, but in laboratories, activities, and performances, you may put in two or more hours per week for each unit of credit. Courses meeting for more hours per week than their units have the amount of weekly class time noted in their course descriptions.

Academic Load

1. Undergraduate Students. The normal academic load for full-time undergraduate students is 15-16 units of coursework (12 units is the minimum for full-time status) per quarter. Students on the Four-year Degree Pledge Program must enroll in 15-16 units per quarter. Generally, you can expect two hours of preparation for each hour of classroom work.
2. Graduate Students. A graduate student who wishes to receive a 45-unit master's degree in one year needs to enroll in 15 units for three quarters or 11-12 units for four quarters. (Eight units a quarter is the minimum for full-time status.)

Prerequisites

A prerequisite is another course or group of courses containing necessary background material for full understanding of the course content. Prerequisites, if any, are noted in course descriptions.

Auditing Courses

An auditor pays the same fees and enjoys the same instructional privileges as a student enrolled for credit, but is not held responsible for examinations or term papers. Regular class attendance is expected, and enrollment as an auditor may be deleted if the expected attendance is not observed. If you wish to enroll in a course as an auditor, you must obtain permission from the instructor of the course. Enrollment as an auditor is permitted only after students otherwise eligible to enroll on a credit basis have had an opportunity to do so. Once enrolled in a course as an auditor, students may not change their enrollment to a credit basis unless such a change is requested no later than the last day to add classes. Students who are enrolled in a course for credit, may not change to an audit basis after the second week of instruction.

Maximum Units for Registration

You are allowed to register for a maximum of 22 units during Registration using e-SAILOR/SAILOR. On e-SAILOR/SAILOR, you may register for a maximum of 14 units during the first registration period. During the second registration period and scheduled open registration times, you will then be permitted to register for up to the maximum of 22 units.

The normal academic load for full-time undergraduate students who expect to graduate by enrolling for three quarters per year for four years is 15-16 units per quarter. Because each classroom hour normally requires two hours of outside study per week, working students should carefully balance the time required for academic preparation with outside commitments.

California Articulation Number (CAN) System

The California Articulation Number (CAN) System provides a cross-reference course identification number for many lower division, major preparation courses commonly taught on college campuses. The CAN System includes 36 sequence designations, 198 semester courses, and 52 quarter courses which are transferable. The basic premise of CAN is that identically numbered CAN courses are acceptable "in lieu of" each other. While the courses are comparable, they are not necessarily identical. The CAN System eliminates the necessity for every four-year campus to negotiate with every two-year campus.

Each CAN course is given a number within each discipline, e.g., CAN ART 8, CAN GEOG 2. Some CAN numbers are used exclusively for quarter courses, but CAN numbers may apply to both semester and quarter courses. Semester courses are assigned EVEN numbers. An EVEN number is also assigned to a quarter course if it is accepted "in lieu of" a semester course. Other quarter-unit courses are assigned ODD numbers.

CAN numbers for articulated courses appear after the unit value in the individual course listings in this Catalog. For online information on the CAN System, go to: <http://www.cansystem.org>

Course Numbers

The course numbering system indicates the level at which courses are offered. Generally, 1000 courses are freshman level, 2000 courses are sophomore level, 3000 courses are junior level, and 4000 courses are senior level. If you have completed the prerequisites, you may enroll for undergraduate courses irrespective of numbers.

English 1001 and Math Requirements

If you have earned 90 or more baccalaureate-level quarter units without having passed English 1001, Expository Writing, or an equivalent course, you will not be permitted to register for additional coursework at Cal State Hayward. In addition, if you have earned 90 or more baccalaureate-level quarter units without having passed a course satisfying the General Education, Area B4 requirement in Quantitative Reasoning, you will not be permitted to register for additional coursework at Cal State Hayward.

Additional Credit Request

If you wish credit for work taken at another institution while in continuing student status at Cal State Hayward, you must, upon completing the work, have an official transcript sent to Enrollment Services. You must also complete a "Request for Additional Credit" form available in the Student Information Lobby in Warren Hall.

Individual Study Courses

An Individual Study course is a course which is listed in the Cal State Hayward Catalog, but is not being offered during the term in which a student must gain course credit to complete a specified objective. Permission to take such a course may be granted only in cases of necessity, and arrangements must be made to determine how the faculty teaching overload (if any) will be made up. You may obtain applications for Individual Study (Special Registration Petition) in departmental offices. You then return the application, with signatures of approval, to the departmental office during the first week of classes.

Independent Study Courses

An Independent Study course is a program of study which is above and beyond the regular offerings of a department. The number of such a course is 4900, 5900, or 6900, depending on the level and content of the work. Such a course is considered as elective credit in the program of a student working for a specified objective. You may apply no more than 12 units of independent study in the major department and 8 units in other departments to a baccalaureate degree.

The privilege of Independent Study is limited to undergraduate students who have at least a 2.0 (C) grade point average and graduate students with at least a 3.0 (B) grade point average in all courses in the field or department in which the Independent Study is to be taken, both at this institution and in any work attempted at other institutions. If you are on academic probation, you are ineligible for Independent Study. Independent Study is restricted to students who are able to work with minimal supervision. No faculty member is required to teach an Independent Study course, and arrangements must be made to

determine how the faculty teaching overload (if any) will be made up.

You may obtain applications for Independent Study (Special Registration Petition) in departmental offices. The application, with signatures of approval, is to be returned to the department office during the first week of classes.

A course offered by Independent (or Individual) Study shall be taught only by a professor in the department offering the credit or by a professor the department judges to be competent to teach the particular course.

Non-catalog Courses

Each quarter, Cal State Hayward offers a variety of new courses whose descriptions are not yet in the catalog. Such courses carry full credit and fulfill the same requirements as regular courses in the curriculum. Students, therefore, should not hesitate to take them. (Remedial courses, whose numbers begin with "0," are not applicable to the baccalaureate degree, but are applicable to the student's class load for that term.)

Descriptions of new, non-catalog courses appear in the *Class Schedule* each quarter. A new course may be passed by examination or challenged only after it has been listed in the *Class Schedule* and has been or is being taught.

Dual Matriculation/Cross Registration

Information pertaining to dual matriculation and cross registration is available in the Student Information Lobby in Warren Hall. Under these programs, eligible high school and college students may enroll for university credit if they satisfy the requirements for admission to this status.

Late Registration

A Late Registration period of the first fifteen or sixteen calendar days of the quarter is available to previously admitted and continuing students who were unable to schedule courses and pay fees during the Registration period. If you complete the registration process during this Late Registration period, you are assessed a nonrefundable Late Registration fee.

Cancellation of Enrollment

If you fail to fulfill enrollment or matriculation requirements, or otherwise fail to adhere to academic or Cal State Hayward regulations, you are subject to immediate administrative action which may result in your being placed on Administrative Probation, or having enrollment for that term cancelled.

3.

What determines my classification?

In general, you are classified as a full- or as a part-time student, and you are classified by your grade level.

Classification of Students as Full- or Part-Time

The following classifications apply to students enrolled in the fall, winter, spring, and summer quarters (not extension and summer sessions):

1. Full-time undergraduate students (including students seeking a second baccalaureate) are those enrolled in 12 or more units in a regular quarter. Part-time undergraduate students are those enrolled in fewer than 12 units. (Note that in order to graduate in 4 years or 12 quarters, you must complete 15-16 units per quarter.)
2. Full-time enrollment for "Unclassified Post-baccalaureate" students not enrolled in a graduate degree program is 12 or more units in a regular quarter.
3. Full-time enrollment for "Graduate" students and "Classified Post-baccalaureate" students is 8 or more units.
4. Full-time enrollment for veterans (or dependents of disabled or deceased veterans), or reservists under Chapter 30, 31, 34, 35, or 106 is 12 or more units, according to V.A. regulations. Each quarter, veterans and eligible dependents should come to Enrollment Services before the first day of classes and submit their forms requesting certification of enrollment for V.A. benefits.

Note: Undergraduate and graduate students who apply for veterans' benefits (or for benefits as dependents of disabled or deceased veterans), international students wishing INS certification, student athletes wishing to compete in intercollegiate sports, and students on most types of financial aid must be enrolled in courses that apply to a definite program (baccalaureate or master's degree and/or credential).

Classification of Undergraduates by Grade Level
Undergraduates are assigned a class level according to the following plan:

	<i>Quarter Units Earned Toward the Degree</i>
1. Lower Division	
Freshmen	Fewer than 45
Sophomores	45 but fewer than 90
2. Upper Division	
Juniors	90 but fewer than 135
Seniors	135 or more
Graduating Seniors	150 or more, filed, and paid fee

International Student Enrollment Policies

The U.S. Immigration and Naturalization Service requires students on non-immigrant F-1 and J-1 visas to pursue a full course of study in a specific program. Therefore undergraduate students are expected to complete a minimum of 12 units per quarter for three consecutive quarters. Graduate and second baccalaureate students must complete a minimum of 8 units per quarter for three consecutive quarters.

How do I register for classes?

You register for most classes late in the preceding quarter using e-SAILOR, an automated online registration system, or SAILOR, a system accessible via touchtone telephone. A "Registration Invitation" is e-mailed to the CSUH Horizon email account of all eligible students approximately one week before registration begins.

The *Class Schedule* is generally available online around the same time as you receive your "Invitation to Register." Read the *Class Schedule*, and then meet with your academic advisor to plan your program of classes. The *Class Schedule* contains a list of the registration times. Your registration time is determined by your class level and the first two or three letters of your last name. Each student has one 24-hour period in which to register and several Open Registration periods. During the Open Registration periods, you may also change your schedule if you have previously registered. See the *Class Schedule* for additional information. If you have any difficulties registering, call the Registration Assistance Center at (510) 885-2200.

Cooperative Education, Independent Study, Individual Study, Project, Thesis Courses

To register for a Cooperative Education course, you must complete a "Cooperative Education Agreement" form available from the Cooperative Education Office, Warren Hall 509. After obtaining the necessary approvals, you may then register through e-SAILOR/SAILOR. [Note: International students on F-1 visas should contact the Center for International Education (tel. 510-885-2880) to discuss employment authorization for a Cooperative Education course before registering for the course.]

You will not be able to register for Independent Study, Individual Study, Project, Departmental Thesis, or University Thesis courses using e-SAILOR/SAILOR. You must complete a "Special Registration Petition" available from the department which offers the course.

Schedule Changes

In addition to the Open Registration periods mentioned above, you may also adjust your schedule using e-SAILOR/SAILOR during the Add/Drop period. If you are on a Wait list and wish to add a class, it is important that you attend the first class meeting. See the *Class Schedule* for specific instructions. Although departments may drop you from a class if you fail to attend the first meeting, they do not have to do so. Therefore, if you wish to drop a class, be sure to do so using e-SAILOR/SAILOR during the first two weeks of the quarter.

Fee Refunds

Refund policies changed effective fall 2002. If you are eligible for a fee refund, see the current *Class Schedule* for information. The new refund policies are also available in the Fees and Expenses chapter of this online catalog under the section "What are Cal State Hayward's refund policies."

What changes can I make in my enrollment status?

You may add other classes, drop or withdraw from classes, and make a few other changes as discussed below.

Adding Courses

You may add courses during the first two weeks of instruction (Add period) either by (a) using the e-SAILOR/SAILOR registration system, or (b) reporting to the departmental office for Independent Study, Individual Study, Project, and/or Thesis courses. You have the right to add classes during the Add period, subject to your having successfully completed the prerequisites (coursework and/or consent of instructor as stated in the Catalog) and to the availability of sufficient capacity in the class to accommodate you.

Dropping and Withdrawing from Individual Courses

If you cannot continue enrollment in a course for which you registered that particular quarter, you must officially drop or withdraw from the course. (See the next section "Withdrawing from the University" if you plan to drop all the courses for which you registered.)

Dropping a Course

You may drop a course by using e-SAILOR/SAILOR through the second week of instruction without the course appearing on your permanent record. The word "drop" refers to official deletion of a course from your record during the first two weeks of a term (Add/Drop period).

Departments offering a class may drop you if you don't attend the first class meeting or if you have not met the course prerequisites that are published in the University Catalog. Some departments may call you as a matter of courtesy when they are dropping you, but other departments may not. There is no university policy and this will vary by department. Do not assume that you will be dropped automatically if you do not attend class.

Withdrawing from a Course

You can not "drop" after the end of the Add/Drop period, but you can "withdraw." The word "withdrawal" refers to official termination of enrollment in a class after the Add/Drop period. You can withdraw from a class only for serious health or personal problems beyond your control. If you withdraw from a class, the class will appear on your record with a grade of "W." The administrative symbol "W" indicates that a student was permitted to withdraw from a course after the Add/Drop period with the approval of the instructor and appropriate campus officials. It carries no connotation of quality of student performance and is not used in calculating grade point average. Beginning the third week of classes, you will be permitted to withdraw from individual courses by obtaining a "Withdrawal" form from the Student Information Lobby in Warren Hall or at the Contra Costa Campus Academic Services Office. On the form, state the reason, obtain approvals of the instructor and department chair and return the completed form to the Student Information Lobby or the Academic Services Office.

Withdrawals from individual courses are normally not permitted after the seventh week of the quarter. Students who have completed work up to that point and cannot continue should normally be assigned an "I" (Incomplete) grade. If you have serious and compelling non-academic reasons for withdrawal from a class after the seventh week you must obtain written documentation of the circumstances from an impartial third party such as a doctor or lawyer. It should be an original document (not a copy) on letterhead; then complete the procedures outlined above. You must submit the form and documentation to the Student Information Lobby in Warren Hall or the Contra Costa Campus Academic Services Lobby for approval of the Registrar. Approval of the withdrawal is not automatic. Withdrawal from any class in which the final examination was taken is not permitted, regardless of circumstances or documentation.

If you register for a course and fail to attend, but do not officially drop or withdraw, you will receive an appropriate administrative grade indicating failure ("WU" or "NC" depending on the grading pattern in which you enrolled). Refer to the [Grading and Academic Standards](#) chapter of this catalog.

Withdrawing from the University

If you find it necessary to cancel your registration or to withdraw from all classes after enrolling for any academic term, you are required to follow the university's official withdrawal procedures described below. Failure to follow formal university procedures may result in an obligation to pay fees, as well as the assignment of failing grades in all courses. You may also need to apply for readmission before being permitted to enroll in another academic term. Additional information on canceling registration and withdrawal procedures is available from the Student Information Lobby in Warren Hall (510-885-2624).

If you receive financial aid funds, you must consult with a financial aid counselor in Enrollment Services prior to withdrawing from the university regarding any required return or repayment of grant or loan assistance received for that academic term or payment period. If a recipient of student financial aid funds withdraws from the institution during an academic term or a payment period, the amount of grant or loan assistance received may be subject to return and/or repayment provisions.

Submitting a "Withdrawal" form is not required if you find it necessary to cancel all courses in which you registered that particular quarter and you drop the courses by using e-SAILOR/SAILOR during the Add/Drop period. For refund information, refer to the "[Refund of Fees](#)" section in the Fees and Expenses chapter.

If you find it necessary to withdraw from the university after the Add/Drop period has ended (during the third through the seventh week of instruction), you must complete a "Withdrawal" form, obtain approval signatures from each instructor and department chair, and return it to the Student Information Lobby. Withdrawal at this time can be only for serious health or personal problems beyond your control. Normally withdrawal is not permitted beyond the seventh week of the quarter. If you have attended classes up to that time, you should discuss with the instructor the possibility of receiving an "I" (Incomplete) grade if circumstances prevent

completion at the time. Withdrawals after the seventh week of instruction must have the reason substantiated in writing by an impartial third party and require the approval signature of an associate director in Enrollment Services, in addition to the signatures stated above. A quarter from which you withdraw is not counted as an interruption of enrollment for continuing student status.

A Withdrawal (W) will be recorded for each course in the term on your permanent record if you withdraw from the university after the end of the second week of instruction. The administrative symbol "W" indicates that a student was permitted to withdraw from a course(s) after the Add/Drop period with the approval of the instructor and appropriate campus officials. It carries no connotation of quality of student performance and is not used in calculating grade point average. If you withdraw from the university, but do not file an official "Withdrawal" form, you will receive appropriate administrative grade(s) indicating failure ("WU" or "NC" depending on the grading pattern in which you are enrolled).

Change of Major, Degree, Minor, or Credential Objective

Undergraduate or post-baccalaureate students who wish to change their baccalaureate major or degree objective or declare a minor and graduate students who wish to change to unclassified or second baccalaureate status, must obtain the required form in the Student Information Lobby (Warren Hall). A change is not official until the form has been signed and returned to Enrollment Services. You should be aware that you will be responsible for the major or minor requirements in the Catalog in effect at the time you file the form.

Change of Address

Currently enrolled students may change their address via the World Wide Web by logging-on to their personal student information at: <https://myinfo.csu Hayward.edu>. Students must officially notify the university of an address change in order to ensure that all correspondence (e.g., change of grade, transcripts, enrollment verification, and information pertaining to graduation requirements) is sent to the correct address. The university is not responsible for mailing correspondence to the incorrect address unless the student has formally made an address change.

Change of Name

Currently enrolled students should notify the Student Information Lobby in Warren Hall in writing of their change in name and attach a copy of a government-issued document which reflects this change, such as a marriage certificate, driver's license, or passport.

Planned Educational Leave

You may petition for a Planned Educational Leave to pursue educationally related activities which will enhance the prospect of successful completion of your academic program, but which do not require enrollment at Cal State Hayward or any other institution of higher education. Students who are unable to enroll due to compulsory military service or because of a documented disability or because of pregnancy may apply for a leave of absence.

A Planned Educational Leave may be for a period of up to a total of two years if you are enrolled in a program leading to a degree. If the leave is approved, you will retain graduation catalog rights and may register as a continuing student, provided you return and register in the same major for the quarter indicated. Students returning from a leave of absence of more than two quarters must file for readmission to the university but will retain catalog rights. Failure to return from a planned educational leave by the quarter indicated means loss of catalog rights and you will be required to apply for readmission and pay an application fee.

6.

Which undergraduate placement examinations do I need to take?

Placement examinations are given in Chemistry, English, Mathematics, and Music. These are not admission tests, but a way to determine what courses best match your level of preparation. *We strongly recommend completion of these tests before your first quarter of registration.* Four-Year Pledge students must complete any necessary placement examinations prior to their first enrollment.

Systemwide Placement Test Requirements

The California State University requires each entering undergraduate, except those who qualify for an exemption, to take the CSU Entry Level Mathematics (ELM) examination and the CSU English Placement Test (EPT) prior to enrollment. These placement tests are not a condition for admission to the CSU, but they are a condition of enrollment. They are designed to identify entering students who may need additional support in acquiring basic English and mathematics skills necessary to succeed in CSU baccalaureate-level courses. Undergraduate students who do not demonstrate college-level skills in both English and mathematics will be placed in appropriate remedial programs and activities during the first term of their enrollment. Students placed in remedial programs in either English or mathematics must complete all remediation in their first year of enrollment. Failure to complete remediation by the end of the first year may result in denial of enrollment for future terms.

Students register for the EPT and/or ELM at their local CSU campus. For test dates and registration materials, as well as other information, see the Assessment and Testing (Cal State Hayward) website at: <http://www.testing.csuhayward.edu>. You may also visit Assessment and Testing in Warren Hall 438 (Director, Michael Strait) or call (510) 885-3661.

English Placement Test (EPT)

The English Placement Test, developed by the CSU faculty and Educational Testing Service (ETS), is designed to assess the level of reading and writing skills of undergraduate students entering the California State University so they can be placed in the appropriate baccalaureate-level courses. It enables advisors to identify students who need special help in reading and writing to prepare them for college-level work. In addition, the test results allow advisors to select the appropriate coursework in writing skills

which will prepare students to meet the graduation writing skills requirement. The test is offered only to admitted students and has no effect on admission decisions or admission eligibility. Undergraduates admitted with 60 or more transferable semester units (90 quarter units) who are subject to a campus catalog or bulletin earlier than 1986-87 are not required to complete the EPT. *All other entering undergraduate students must complete the CSU English Placement Test prior to enrollment in any course, including remedial courses, except those who present proof of one of the following:*

- A score of 550 or above on the Verbal section of the College Board SAT I Reasoning Test taken April 1995 or later.
- A score of 24 or above on the enhanced ACT English Test taken October 1989 or later.
- A score of 680 or above on the re-centered and adjusted College Board SAT II: Writing Test taken May 1998 or later.
- A score of 3, 4, or 5 on either the Language and Composition or the Composition and Literature examination of the College Board Scholastic Advanced Placement program.
- Completion and transfer of a course that satisfies the General Education-Breadth or Intersegmental General Education Transfer Curriculum (IGETC) written communication requirement, provided such course was completed with a grade of "C" or better.

If special circumstances make it impossible for you to take the test at the first available administration following admission, you must plan to meet the requirement at the next scheduled opportunity. *Failure to take the English Placement Test as required, at the earliest opportunity after admission and before initial enrollment, will lead to a hold on the student's registration.* Each test administration requires a separate registration form. If your religious convictions prevent you from taking the EPT on the scheduled test dates, you must request special arrangements by including a letter, from an appropriate religious authority, when you send your registration forms to the campus Assessment and Testing Office. Persons with verified disabilities should consult the Student Disability Resource Center about possible alternative arrangements for meeting the EPT requirement.

Information bulletins and registration materials for the EPT will be mailed to all students subject to the requirements. The materials may also be obtained from the Office of Assessment and Testing.

Appropriate Coursework Based on EPT Results
Cal State Hayward requires that the following courses be taken by students on the basis of their Total ("T") scores on the English Placement Test. *Students whose T score is below 151 must register for one of the remedial courses (ENGL 0801-2-3, 0804-5-6, 0910, 0989) as listed below in their first quarter of attendance.*

- T score of 151 or higher: register for ENGL 1001. Expository Writing I, the introductory, college-level English composition class.

- T score of 147-150: register for ENGL 1001 Expository Writing I, and ENGL 0989 Tutoring Support for ENGL 1001.
- T score of 142-146: register for ENGL 0910 Developmental Writing I.
- For native speakers of English, T score of 141 or lower: register for ENGL 0801 ILE Writing I, and complete the entire ILE sequence of ENGL 0801, -2, -3.
- For non-native speakers of English, T score of 141 or lower: register for ENGL 0804, (ILE English for Non-Native Speakers), and complete the entire ILE sequence of ENGL 0804-5-6.

Students who successfully complete ENGL 0803, 0806, or 0910 shall enroll in ENGL 1001 at the earliest opportunity.

If this advice proves inappropriate for a particular student, the Department of English will advise him or her to change enrollment to a more appropriate course during the Add/Drop period.

Students who are required to enroll in remedial English coursework must enroll in such coursework in their first quarter and every quarter thereafter, including summer, until remediation is completed. A student who fails the same remedial course twice or does not complete remediation in six consecutive quarters (including summer) has a hold placed on future registration (and is disenrolled if already registered). The hold can only be removed by 1) completing the remedial course which was failed, or 2) completing all remedial courses (if six quarters have expired), or 3) completing the baccalaureate level English course satisfying G.E. Area A2, Written Communication, (if 84 quarter units have been completed). Students who have completed more than 84 quarter units must complete the G.E. course before reentry. A student who wishes to transfer any baccalaureate-level units must reapply and pay the \$55 application fee.

Remedial courses are not applicable to the baccalaureate degree requirements. However, they do generate enrollment units which can be used by students required to carry a minimum course load.

You may take the EPT only once. Students whose EPT scores require them to complete remedial English coursework can gain admission to freshman English composition (ENGL 1001) only upon recommendation of the instructor of their last remedial course (ENGL 0803, 0806, or 0910).

Entry-Level Mathematics (ELM) Exam

The Entry-Level Mathematics placement examination is designed to assess the skill levels of entering CSU students in the areas of mathematics typically covered in three years of rigorous college preparatory mathematics courses in high school (Algebra I, Algebra II, and Geometry). *All new undergraduate students must take the CSU ELM or be exempted from it before their first enrollment.* Students may retake the ELM test. Exemptions from the test are given only to those students who can present proof of one of the following:

- A score of 550 or above on the mathematics section of the

College Board SAT I Reasoning Test or on the College Board SAT II Mathematics Tests Level I, IC (Calculator), II, or IIC (Calculator).

- A score of 23 or above on the American College Testing (ACT) Mathematics Test.
- A score of 3 or above on the College Board Advanced Placement Mathematics examination (AB or BC) or Statistics examination.
- Completion and transfer of a course that satisfies the General Education-Breadth or Intersegmental General Education Transfer Curriculum (IGETC) quantitative reasoning requirement, provided such course was completed with a grade of "C" or better.

Students required to take this examination must do so as soon as possible after admission and before their first enrollment. (The results of this examination do not affect admission.) Failure to take this test, as required, before initial enrollment will lead to disenrollment.

Students who cannot demonstrate basic competence at the level of intermediate algebra on the examination must take steps to overcome deficiencies in their first quarter of enrollment.

Depending on the ELM test score, students will be required to enroll in MATH 0801 and 0802 (Elementary Algebra A and B), MATH 0900 (Elementary Algebra) and MATH 0950 (Intermediate Algebra). Courses beginning with zero are not applicable to the baccalaureate degree. Contact Assessment and Testing (510-885-3661) or the Mathematics and Computer Science Student Center (510-881-0411) for additional information.

Students who are required to enroll in remedial math coursework must enroll in such coursework in their first quarter and every quarter thereafter, including summer, until remediation is completed. A student who fails the same remedial course twice or does not complete remediation in six consecutive quarters (including summer) has a hold placed on future registration (and is disenrolled if already registered). The hold can only be removed by 1) completing the remedial course failed, or 2) completing all remedial courses (if six quarters have expired), or 3) completing a baccalaureate level mathematics course satisfying G.E. Area B4, Quantitative Reasoning, (if 84 quarter units have been completed). Students who have completed more than 84 quarter units must complete the G.E. course before reentry. A student who wishes to transfer any baccalaureate-level units must reapply and pay the \$55 application fee.

Information bulletins and registration materials for the ELM examination will be mailed to all students who may be subject to the requirements. The materials may be obtained from the Office of Assessment and Testing. There is a fee for the ELM.

Implementation of the EPT and ELM Exams

After admission, each undergraduate student is sent a packet which indicates that taking the EPT and ELM exams are requirements which should be fulfilled at the next offering of the test. If you fail to take the EPT and/or the ELM tests before your

first term of enrollment, a hold will be placed on your registration until you do take the test(s).

Other Placement Examinations

Placement examinations are given to place students at appropriate levels of achievement as follows. Check the *Class Schedule* each quarter for specific details.

Chemistry 1101

A 50-minute placement examination covering basic chemical concepts and problem-solving skills may be given during the first laboratory meeting of CHEM 1101 in fall and winter quarters. If you receive a low score, you are advised to withdraw from CHEM 1101 and enroll in CHEM 1100 Introductory Chemistry. In subsequent quarters, you should plan to take CHEM 1101, 1102 and 1103. If you receive a low score on the algebra portions of the placement examination, you are advised to enroll in an algebra course. The most appropriate mathematics course can be determined with the assistance of the Mathematics department.

Modern Languages and Literatures

Placement exams in French and Spanish languages are offered on a continuing basis through the Department of Modern Languages and Literatures. If you have prior language experience but are uncertain of your level of ability (elementary, intermediate, or advanced), you are encouraged to consult with a faculty advisor before enrolling in a French or Spanish language course. Placement exams are given only on the recommendation of faculty.

Mathematics Placement Tests

It is important that you choose mathematics courses at Cal State Hayward carefully. Satisfying the ELM requirement is prerequisite to all baccalaureate-level mathematics courses. If you were exempt from, or have passed the ELM exam, you should call the Mathematics and Computer Science Student Service Center (510-885-4011), for advice about which course to take. This will depend on what mathematics courses you have had, and what you remember from these courses. You should talk to a mathematics advisor. Diagnostic information from the Mathematics Placement Test (or other mathematics placement exams) is also useful. See the Office of Assessment and Testing website for details at: <http://www.testing.csu Hayward.edu/>.

Music Auditions and Proficiency Examinations

Students who declare a major in music must complete examinations and auditions to determine: (1) theory placement, (2) level of applied study, (3) piano proficiency, and (4) major performance ensemble. These examinations are not a substitute for the Advanced Placement Test in Music and should not be confused with the Advanced Placement Program. Auditions and examinations are scheduled prior to the first week of each quarter. For additional information and specific appointment times, contact the Department of Music, MB 1501, or telephone 885-3135.

student?

Cal State Hayward grants credit to those students who pass examinations that have been approved for credit systemwide. These include the Advanced Placement Examinations and some CLEP examinations.

Also see "Challenging Courses" in this section.

Credit by Examination Policy

The award of credit for successfully passing any approved examination is subject to the following conditions:

1. Credit shall not be awarded for successful passage of any examination if the student previously took that examination during the past quarter.
2. Credit shall not be awarded when equivalent degree credit has been granted for regular coursework, credit-by evaluation, or other instructional processes such as correspondence.
3. Credit shall not be awarded when credit has been granted at a level represented by the examination in question.
4. Duplicate credit shall not be awarded where there are overlapping tests, university level work, or both. Where there is partial overlap, the amount of examination credit shall be reduced accordingly.
5. The total amount of credit earned on the basis of externally developed tests which may be applied to a baccalaureate degree shall not exceed 45 quarter units. Advanced Placement credit is excluded from this limit.

Challenging Courses

Students may challenge courses by taking examinations developed at Cal State Hayward. Credit shall be awarded to those who pass them successfully. No instructor is obliged to offer credit-by-examination for a course.

The university recognizes that exceptional students, by reason of special studies or experiences, may already have achieved the objectives of certain courses in the basic program; therefore, students with this background may petition to receive credit in selected courses by special examination. Such an examination is normally from three to six hours in length and may be oral as well as written. Each course may be challenged only once.

If you wish credit under this plan, you must register during registration for the units to be earned by the examination. The class being challenged for credit must be listed in the *Class Schedule* for the particular quarter. Obtain a petition for credit by examination from the office of the department offering the course, and get the permission of both the instructor and department chair. The examination must be administered during the first two weeks of the quarter and the results, in grade form, must be submitted to the Records Office by the end of the fifth week. The instructor is responsible for notifying you of the results of the examination.

If the exam is passed with a grade of "C-" or higher, the letter grade and credit by examination will be indicated on your permanent record. If you receive a grade of "D+," "D," or "F" on the examination, you must either continue taking the course formally or officially withdraw from it within one week after completing the examination. (*Note:* The instructor need not inform the Records Office of the grades "D+," "D" or "F.") Some departments (e.g., Modern Languages and Literatures) only allow their courses to be challenged for a "CR" grade.

No more than 36 quarter units of credit obtained by challenging courses may be applied toward the baccalaureate degree. No credit earned by examination may be used to satisfy the requirement of 45 quarter units in residence at Cal State Hayward.

Advanced Placement

Cal State Hayward grants credit toward its undergraduate degrees for successful completion of examinations of the Advanced Placement Program of The College Board. Students who present scores of 3 or better will be granted 4-12 quarter units of transfer college credit, as indicated below.

The Advanced Placement Examinations referred to below are prepared and offered by the College Board. Unit credit will be granted to those passing the exams, but no letter grade will be assigned or computed in a student's grade point average.

If you have Advanced Placement credit, request the College Board to send your test score(s) to Enrollment Services at Cal State Hayward.

Normally, if Advanced Placement course credits satisfy G.E. Area B, C, and/or D requirements, they will apply to sophomore year general education requirements and not frosh clusters because the university wants all first-time frosh to participate in these learning communities. Only if the amount of Advanced Placement credit exceeds what can be applied to the second year will it be applied to frosh clusters.

College of Science

Biology. If you successfully complete an advanced placement course in biology in high school and have a score of 3 or better on the Advanced Placement Examination, you will receive 9 units of credit in place of BIOL 1001, 1002 and 2040. If you are a biology major you will receive 10 units in place of BIOL 1401 and 1403.

Chemistry. If you have successfully completed the advanced placement course in chemistry in high school, and you have a score of 3 or better on the Advanced Placement Examination, you will receive 10 units of credit equivalent to CHEM 1101 and 1102.

Computer Science. If you have successfully completed an advanced placement course in computer science in high school, and have a score of 3 or better on the Advanced Placement Computer Science A Examination, you will receive 4 units of

credit equivalent to CS 1160. If you earned a 3 or better on the Computer Science AB Examination, you will receive 8 units of credit equivalent to CS 1160 and CS 2360. *Note:* University courses in Computer Science may require knowledge of computer languages not used on the AP Computer Science examinations. You should consult the Chair of the Department of Mathematics and Computer Science about additional preparation you may need if you plan to take university-level courses in Computer Science.

Environmental Studies. If you have successfully completed an advanced placement course in environmental studies or environmental science, and you have a score of 3 or better on the Advanced Placement Examination in Environmental Science, you will receive 5 units of credit equivalent to BIOL 1002 and ENVT 2000.

Mathematics.

If you have successfully completed an advanced placement course in calculus in high school and you have a score of 3 or better on the Advanced Placement Calculus AB Examination or a grade of 3 on the Advanced Placement Calculus BC Examination, you will receive 8 units of credit equivalent to MATH 1300 and 1304. If you have a score of 4 or 5 on the Advanced Placement Calculus BC Examination, you will receive 12 units of credit equivalent to MATH 1300, 1304, and 1305.

Physics. Passing the examination Type B with a score of 3, 4, or 5 will give you 8 units of credit equivalent to PHYS 2701 and 2702. Passing the examination Type C with a score of 3, or better will give you 10 units of credit equivalent to PHYS 1001 and 1002.

Psychology. Passing the examination with a score of 3 or better will give you 5 units of credit equivalent to PSYC 1000.

Statistics. Passing the examination with a score of 3 or better will give you 5 units of credit equivalent to STAT 1000.

College of Business and Economics

Economics. If you have a score of 3 or better on the Advanced Placement Test in Microeconomics in high school, you will be granted 4 units of credit equivalent to ECON 2301. If you have a score of 3 or better on the Advanced Placement Test in Macroeconomics in high school, you will receive 4 units of credit equivalent to ECON 2302.

College of Arts, Letters, and Social Sciences

Art. If you have successfully completed an advanced placement course in Studio Art in high school, and you have a score of 3 or better on the Advanced Placement Examination in 2D Design or 3D Design, you will receive 8 units of credit equivalent to two of the following courses: ART 1020, 1112, 1113, 1114, 1115, 1116. The specific equivalence will be determined by portfolio review upon your entrance into the university. If you have successfully completed an advanced

placement course in Drawing in high school and have a score of 3 or better on the Advanced Placement Examination in Studio Art: Drawing, you will receive 8 units of credit equivalent to ART 1113 and 3141.

If you have successfully completed an advanced placement course in Art History in high school, and you have earned a score of 3 or better on the Advanced Placement Examination in Art History, you will receive 4 units of credit equivalent to ART 3411.

English. If you have successfully completed the advanced placement course in either English literature/composition or English language/composition in high school, and have a score of 3 on the Advanced Placement Examination, you will receive 4 units of credit equivalent to ENGL 1001.

If you have a score of 4 or 5 on the English language/composition test, you will be given credit for ENGL 1001 and 1002. If you have a score of 4 or 5 on the English literature/composition test, you will be given credit for ENGL 1001 and 2030.

If you have a successfully completed both advanced placement exams with a score of 3 on each, you will be given credit for ENGL 1001 and 2030.

If you have completed both English tests with a combined score of 7 or higher and neither individual score lower than 3, you will be given credit for ENGL 1001, 1002, and 2030.

Environmental Studies. If you have successfully completed an advanced placement course in environmental studies or environmental science, and you have a score of 3 or better on the Advanced Placement Examination in Environmental Science, you will receive 5 units of credit equivalent to BIOL 1002 and ENVT 2000.

History. If you have successfully completed the advanced placement course in U.S. history in high school, and you have a score of 3 or better on the Advanced Placement Examination, you will receive 8 units of credit equivalent to HIST 1101 and 1102. (Credit will apply to the U.S. history and U.S. Constitution requirements for graduation, but not to the California state and local government requirement.)

If you have completed the advanced placement course in either European history or world history in high school, and you have a score of 3 or better on the Advanced Placement Examination, you will receive 8 units of credit equivalent to: HIST 1015 and 1016. The specific equivalence will be determined by review upon your entrance into the university.

Modern Languages and Literatures. A student who has successfully completed the advanced placement course in a foreign language or literature in high school and has a score of 3 or better on the Advanced Placement Examination will receive 8-12 units of credit equivalent to two or three courses of a foreign language as listed below.

If you have completed the *French* Language examination with a score of 3 or better, you will receive 12 units of credit equivalent to MLL 2101, 2102, and 2103. If you have completed the *German* Language examination with a score of 3 or better, you will receive 12 units of credit equivalent to MLL 2201, 2202, and 2203. If you have completed the *Spanish* Language examination with a score of 3 or better, you will receive 12 units of credit equivalent to MLL 2401, 2402, and 2403. If you have completed the *Spanish* Literature examination with a score of 3 or better, you will receive 8 units of credit equivalent to MLL 3400 and 4455.

Music. If you have a score of 3 on the Advanced Placement Test in Music Theory, you will receive 8 units of credit equivalent to MUS 1031 and 1032. A score of 4 will earn 10 units of credit equivalent to MUS 1027, 1028, 1031, and 1032. A score of 5 will earn 15 units of credit equivalent to MUS 1027, 1028, 1029, 1031, 1032, and 1033.

Political Science. If you have a score of 3 or better on the Advanced Placement Test in American Government and Politics, you will receive 4 units of credit equivalent to POSC 1201.

International Baccalaureate Program

Cal State Hayward recognizes the International Baccalaureate (IB) as a challenging college-preparatory program. Four (4) to fifteen (15) units of college credit will be awarded for each IB Higher Level Examination passed with a score of 4, 5, 6, or 7. (No credit will be awarded for IB Subsidiary Level passes.) A copy of the official IB transcript must be supplied to the university when credit is requested. All credit is granted in terms of existing Cal State Hayward courses with equivalent subject matter determined by the department. The IB Higher Level Examinations and the Cal State Hayward credit awarded is listed below.

IB Higher Level Examinations and Credit Awarded.
Art/Design Higher Level Exam: 4 units of credit for ART 1020 and 4 units of ART elective credit; *Biology Higher Level Exam, Non-Major*: 13 units credit for BIOL 1001, 1002, 2030, 2040; *Biology Higher Level Exam, Major*: 15 units of credit for BIOL 1301, 1302, 1303; *Business and Organization Higher Level Exam*: 8 units of MGMT elective credit; *Chemistry Higher Level Exam*: 10 units of credit for CHEM 1101, 1102; *Computer Science Higher Level Exam*: 8 units of credit for CS 1160, 2360; *Design Technology Higher Level Exam*: 8 units of ENGR elective credit; *Economics Higher Level Exam*: 8 units of credit for ECON 2301, 2302; *Environmental Systems Higher Level Exam*: 8 units of ENVT elective credit;

Geography Higher Level Exam: 8 units of GEOG elective credit (see Department of Geography and Environmental Studies if you are majoring in geography); *History Higher Level Exam (American)*: 8 units of credit for HIST 1101, 1102 (credit does not apply to California State and Local Government requirement); *History of Islamic World Higher Level Exam*: 8 units of HIST elective credit (see Department of History if you are majoring in history); *Language A1 Higher Level Exam (English)*: 8 units of credit for ENGL 1001, 1002; *Language A1 and A2 Higher Level Exam (English)*: 12 units of credit for ENGL 1001, 1002, 2030; *Language B Higher Level Exam (French)*: 12

units of credit for MLL 2101, 2102, 2103; *Language B Higher Level Exam (Spanish)*: 12 units of credit for MLL 2401, 2402, 2403;

Mathematics Higher Level Exam: 8 units of credit for MATH 1300, 1304; *Music Higher Level Exam (scores of 4-5)*: 8 units of credit for MUS 1000, 1004; *Music Higher Level Exam (scores of 6-7)*: 12 units of credit for MUS 1000, 1004, 1008; *Physics Higher Level Exam*: 8 units of credit for PHYS 3101, 3250; *Philosophy Higher Level Exam*: 8 units of credit for PHIL 1600, 2300; *Psychology Higher Level Exam*: 5 units of credit for PSYC 1000 and 4 units of PSYC elective credit; *Social Anthropology Higher Level Exam*: 4 units of credit for ANTH 1300 or ANTH 3000 and 4 units of ANTH elective credit; *Theatre Arts Higher Level Exam*: 11 units of credit for THEA 1010, 1020, 1111.

College Level Examination Program

The following College Level Examination Program (CLEP) tests are acceptable for the amount of credit indicated, subject to the achievement of the scores indicated and the conditions stated in the "Credit by Examination Policy" section. (At present, Cal State Hayward grants no credit for completion of the ACT Credit by Examination Program.)

<i>Examination</i>	<i>Passing Score</i>	<i>Credit</i>
College Algebra-Trigonometry	50	4 units
Calculus with Elementary Functions	50	4 units
English Composition with Essay	50	4 units
General Chemistry	50	4 units
Introductory Business Law	50	4 units
Principles of Management	50	4 units

There are no specific course equivalencies for the examinations and, hence, only transfer unit credit toward graduation may be granted.

Science Equivalency Test Program

Students who pass the American Chemistry Society Cooperative Examination in General Chemistry at or above the 50th percentile will receive 4 units of credit.

Credit for Non-Collegiate Instruction

Cal State Hayward grants undergraduate degree credit for successful completion of non-collegiate instruction (either military or civilian) appropriate to the baccalaureate degree that has been recommended by the Commission on Educational Credit and Credentials of the American Council on Education. Military courses and schools must be documented by forms DD214 or

DD295. Such credit shall be clearly identified on your permanent record.

Credit for the following types of courses may be granted:

- Lower division baccalaureate/associate degree credit courses which are comparable to courses offered on most CSU campuses. (Credit is not allowed for occupationally oriented courses designed to enable a student to function only as a technician.)
- Upper division baccalaureate degree credit courses.
- Graduate degree credit courses.

The number of units allowed are those recommended in *the Guide to the Evaluation of Educational Experience in the Armed Services and the National Guide to Educational Credit for Training Programs*.

Cal State Hayward shall determine which units shall be applied as general education, major, or elective credit.



HOME



HELP



Grading/Academic Standards

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1.

What is the grading policy at Cal State Hayward?

It is an integral part of the teaching responsibility of the faculty to provide careful evaluation and timely assignment of an appropriate grade to each enrolled student. There is a presumption that grades assigned are correct. It is the responsibility of anyone appealing an assigned grade to demonstrate otherwise. In the absence of compelling reasons, such as instructor or clerical error, prejudice, or capriciousness, the grade determined by the instructor of record is to be considered final. Final course grades must be submitted by the faculty to Enrollment Services no later than noon of the second academic day after the end of the Final Examination Period. Also see "[What are the policies which affect my registration, grades, and academic status](#)" in the Graduate and Post-Baccalaureate Studies chapter.

If you believe that an appropriate grade has not been assigned, and you cannot resolve the matter informally with the instructor, department chair, and/or college dean/associate dean, you should present your case to the President's appointee to the Fairness Committee, the Assistant Vice President, Instructional Services no later than one quarter after you received the grade. The Fairness Committee may authorize a change of grade under certain circumstances (see "What recourse do I have if I believe I have

received a grade that is inappropriate?" in this chapter.). If the instructor of record does not assign a grade to an individual student, the appropriate failing grade for nonattendance ("WU" or "NC") is automatically recorded by Enrollment Services. You have one quarter to petition the Fairness Committee if you believe the instructor should have assigned an academic grade. If the instructor of record is unable to assign course grades, the Fairness Committee is authorized to ensure that other qualified faculty assign grades.

For purposes of correcting an error, an instructor may change a grade with approval of his/her department chair and college dean. No grade may be changed once graduation has been recorded. The administrative symbol for withdrawal cannot be assigned by a faculty member. See the [Registration chapter](#) for the description of withdrawal policies and procedures.

2.

What are the academic grading symbols for undergraduates, and what do they signify?

<i>Academic Symbols</i>	<i>Definitions</i>	<i>Grading (Quality) Points Earned</i>
A	Excellent	4.0
A-	Excellent	3.7
B+	Good	3.3
B	Good	3.0
B-	Good	2.7
C+	Satisfactory	2.3
C	Satisfactory	2.0
C-	Satisfactory	1.7
D+	Poor	1.3
D	Poor	1.0
F	Failing	0.0
CR	Credit	0.0
NC	No Credit	0.0

"A-F" Grading Pattern

Courses required for your major in your major department are taken in this pattern. Specific department exemptions are noted in the course description. Faculty use of "+" or "-" is optional.

Credit/No Credit and A/B/C/No Credit Grading Patterns (CR/NC and A/B/C/NC)

You may enroll in up to 60 units in credit/no credit patterns as an undergraduate. There are two credit/no credit patterns: (1) "CR/NC," and (2) "A/B/C/NC." Some courses are only offered in the "CR/NC" or "A/B/C/NC" patterns. You can select the "CR/NC" pattern for most other courses subject to certain restrictions. You can choose the "CR/NC" pattern during Registration and Add/Drop. No changes to, or from, the credit/no credit pattern are permitted after the Add/Drop period. There are no exceptions to

this rule. No course in your major department may be taken "CR/NC," unless that is the only grading pattern in the course. Courses in your major which are offered by other departments may be taken "CR/NC" with the permission of your major department. Be certain to check with your advisor before taking any course in your major on a "CR/NC" basis.

Units that you earn in courses taken under these grading patterns will apply to your degree requirements as long as they are not remedial courses (courses numbered 0800 - 0999). "CR" signifies you mastered the material at the level of "C-" or higher. "NC" signifies a work level of "D+" or lower. Faculty use of "+" or "-" is optional.

3. What are the administrative grading symbols, and what do they signify?

<i>Administrative Grading Symbols</i>	<i>Definitions</i>	<i>Grade (Quality Points Earned)</i>
RP	Report in Progress	0.0
I	Incomplete (Authorized)	0.0
IC	Incomplete Charged	0.0
RD	Report Delayed	0.0
W	Withdrawal	0.0
WU	Withdrawal Unauthorized	0.0
AU	Audit	0.0

Report in Progress (RP)

The symbol "RP," Report in Progress, is used in connection with courses that extend beyond an academic term. It indicates that work is in progress, but that a final grade cannot be assigned until additional work is completed. The work is to be completed within one year, except in the case of graduate theses. A graduate thesis must be completed and approved within five years of the student's initial enrollment in a thesis course. If the work is not completed within the established time limit (one year, and for graduate theses, five years), the "RP" grade will be changed to an "F" or "NC," depending on the grading pattern of the course.

Incomplete (I)

The symbol "I", Incomplete (Authorized), indicates that a portion of required coursework has not been completed and evaluated in the prescribed time period due to unforeseen, but fully justified, reasons and that there is still a possibility of earning credit. It is your responsibility to bring pertinent information to the attention of the instructor and to determine from the instructor the remaining course requirements that must be satisfied to remove the Incomplete. A final grade is assigned when the work agreed upon has been completed and evaluated. Your instructor will specify the work needed for completion and will communicate the requirements to you in writing with a copy to the department or program chair.

An "I" must normally be made up within one calendar year immediately following the end of the term during which it was assigned. This limitation prevails whether or not you maintain continuous enrollment.

When you complete the required work and it has been evaluated, your instructor will submit a change of grade form and the academic grade will be recorded. If you do not complete your work within the allowed time limit, the grade will be recorded as an "IC" (Incomplete Charged).

Incomplete Charged (IC)

The symbol "IC," Incomplete Charged, is used if you received an authorized incomplete ("I"), but did not complete the required coursework within the allowed time limit, and the original grading pattern of the course was "A-F." The "IC" replaces the "I" and is counted as a failing grade for computing your grade point average. You may be able to receive up to two one-quarter extensions from the instructor. These extensions are for cause and must be approved by both your instructor and department chair. (Examples of cause include military service, serious health or personal problems, or instructor's leave of absence.) If you want credit for a course after an "I" has been converted to an "IC," you must reregister and pass the course. Do not reregister while the grade is still recorded as "I," for you would then be responsible for completing both enrollments.

You can graduate with an "I" grade on your record if the course is not necessary for you to graduate. Remember that no grade may be changed once graduation has been posted.

Report Delayed (RD)

You will be assigned this administrative grade for a course if the instructor notifies Enrollment Services that grade reports have been delayed by circumstances beyond his or her control. An example is the illness of the instructor at the end of the quarter. Your instructor will replace the "RD" grade with an academic grade as soon as possible. If the instructor fails to replace it with an academic grade by the end of the following term, the grade "RD" will be converted to a "WU" or an "NC" depending on your grading pattern.

Withdrawal (W)

This administrative grade indicates you were permitted to withdraw from a course after the end of the Add/Drop period with the approval of the instructor and appropriate campus officials. This grade does not reflect the quality of your performance and is not used in calculating your grade point average. Your instructor is urged to provide you with a mechanism to evaluate your progress in the course during the first two weeks so that you can make an informed decision regarding your continued enrollment before the beginning of the withdrawal period.

Withdrawal after the seventh week is normally not permitted. If you have attended the class, done the work, and have a valid reason for failing to complete the course, your instructor should normally assign the "I," Incomplete (Authorized) grade.

Withdrawal from a class after the seventh week requires verification of the reason by an impartial third party, written on

letterhead stationery, and approval by the instructor, the department chair and university registrar. The requirements for withdrawal from the university from the third through the seventh weeks must also be fulfilled.

You may not withdraw if you have taken the final examination.

If you do not attend class and do not have an approved withdrawal petition, you will receive a failing grade of "WU" or "NC," depending on the grading pattern you selected for the course.

Details on the withdrawal process are documented in the Registration chapter.

Withdrawal Unauthorized (WU)

This administrative grade indicates that you enrolled in a course, but did not withdraw from the course and also failed to complete course requirements. It is used when, in the opinion of the instructor, completed assignments or course activities, or both, were insufficient to make normal evaluation of academic performance possible. The "WU" is counted in your grade point average as an "F" grade.

Audit (AU)

You may take courses for instruction only (Audit), attending class but not receiving credit. You will pay the same fees and enjoy the same instructional privileges as students enrolled for credit. You may participate in class, take examinations or complete other assignments, but you are not required to do so.

You may not petition to change your enrollment status from, or to, "Audit" after the Add/Drop period has expired.

Details on the audit process are covered in the Registration chapter.

4.

How is my grade point average (GPA) computed?

Grade Point Averages and Their Significance

You earn grade (quality) points on the following basis:

4 quality points per unit of "A," 3.7 quality points per unit of "A-," 3.3 quality points per unit of "B+," 3 quality points per unit of "B," 2.7 quality points per unit of "B-," 2.3 quality points per unit of "C+," 2 quality points per unit of "C," 1.7 quality points per unit of "C-," 1.3 quality points per unit of "D+," and 1 quality point per unit of "D." A grade of "F" or "WU" earns no quality points.

Your grade point average (GPA) is computed by dividing the total number of quality hours (units attempted), whether or not they were passed (but excluding "CR/NC" courses and those in which administrative grades were assigned except for the "WU"), into the number of quality (grade) points earned. A 2.00 (C) average in all college/university courses, all Cal State Hayward courses, and all major courses is required for a baccalaureate degree

(excluding "CR," "NC," "W," and "AU" grades). All courses required by a major, including those in other departments, must be included in the calculation of the major GPA.

"CR" and "NC" grades and units are not included in your GPA calculation.

"RP" and "I" grades and units are not included in your GPA calculation. An "RP" or "I" grade becomes an "F" if you do not complete the coursework in the specified time frame. The "F" will be included in your GPA calculation in the quarter in which the "RP" or "I" changes.

"WU" grades are regarded the same as "F's" in your GPA calculation.

"RD" grades and units are not included in your GPA.

"W" grades and units are not included in your GPA.

5. When are final examinations scheduled?

Your instructor will fully inform you of the manner of his/her evaluation as well as requirements and assignments. Typically, there will be periodic examinations, graded assignments, and a final examination. Final examinations are administered only during final exam week and only at the times scheduled by the university in the quarterly *Class Schedule*. Exceptions for compelling reasons are authorized in writing by the department chair with a copy to the college dean. The day and start time of the first lecture in the week determine the final examination time. Some courses contain a separate laboratory, activity, or discussion segment. If your instructor desires, s(he) may give a final examination on that segment during the last class meeting of that segment. You will find the final examination policy and schedule in the *Class Schedule*.

6. When will I receive my grades?

At the end of each quarter you will be notified of your academic standing and grades achieved. Grades for the current quarter are available online after the faculty submit their official grade rosters. To check your grades log-on to: <https://myinfo.csuhayward.edu>.

7. How can I qualify for the Dean's and Honors Lists?

Your name can be placed on these annual lists if you have an outstanding academic record. You must complete at least 24 units with letter grades in a four-quarter period (spring through winter).

These recognitions will be posted to your academic record at the end of each winter quarter, and students on the Dean's List are recognized at the annual Honors Convocation in the spring quarter. (Honors and Dean's Lists do not apply to graduate students.)

Dean's List: 3.80 to 4.00 GPA
Honors List: 3.60 to 3.79 GPA

If you are on the Dean's List for the year or are graduating with Honors (on the basis of your entire academic record), you will be invited to the Student Honors Convocation in May. This is a popular event, with families, friends, faculty, and staff attending.

Honors at Graduation is covered in detail in the Baccalaureate Degree Requirements chapter.

8.

What constitutes probation and disqualification?

The following policies govern undergraduate academic probation and disqualification:

Academic Probation

According to Title 5 of the *California Code of Regulations*, you must achieve at least a 2.00 grade point average (GPA) in all university work, all work at Cal State Hayward, and all work in your major to receive a baccalaureate degree. Academic probation warns you that your academic performance is below the state minimum required for graduation, and that you must improve your GPA before a degree can be granted.

There are various services to assist you in improving your academic standing. If you are an Excel or Educational Opportunity Program (EOP) student, you must contact your counselor. All other undergraduate students should contact the University Advisement Center at 510-885-4682 and make an appointment to meet with an academic advisor.

When both your cumulative higher education GPA and your Cal State Hayward GPA reach 2.00, you are removed from academic probation.

Administrative Academic Probation

As authorized by Title 5 of the *California Code of Regulations*, you may be placed on administrative academic probation for:

- withdrawal or administrative disenrollment from all or a substantial portion of a program of studies in two successive quarters or in any three quarters. (*Note: A student whose withdrawal is directly associated with a chronic or recurring medical condition or its treatment is not subject to administrative academic probation for such withdrawal*);
- repeated failure to progress toward the stated degree objective or other program objective, including that resulting from the assignment of 23 units of "NC," when such failure appears to be

due to circumstances within your control;

- failure to comply, after due notice, with an academic requirement or regulation, as defined by campus policy, which is routine for all students or a defined group of students, such as failure to complete the writing skills test, failure to complete a required practicum, failure to comply with professional standards appropriate to the field of study, or failure to complete a specified number of units as a condition for receiving student financial aid or making satisfactory progress in the academic program;
- earning only grades of "F," "NC," and/or "WU" for two consecutive quarters or any three quarters.

Academic Disqualification

As authorized by Title 5 of the *California Code of Regulations*, as an undergraduate student on academic probation you will be subject to academic disqualification when:

- as a freshman (fewer than 45 quarter hours of college work completed) you fall below a grade point average of 1.50 in all units attempted or in all units attempted at Cal State Hayward;
- as a sophomore (45 through 89 quarter hours of college work completed) you fall below a grade point average of 1.70 in all units attempted or in all units attempted at Cal State Hayward;
- as a junior (90 through 134 quarter hours of college work completed) you fall below a grade point average of 1.85 in all units attempted or in all units attempted at Cal State Hayward;
- as a senior (135 or more quarter hours of college work completed) you fall below a grade point average of 1.95 in all units attempted or in all units attempted at Cal State Hayward.

Administrative Academic Disqualification

As authorized by Title 5 of the *California Code of Regulations*, if you have been placed on administrative academic probation, you may be disqualified from further attendance if:

- the conditions for removal of administrative academic probation are not met within the period specified;
- you become subject to academic probation while on administrative academic probation;
- you become subject to administrative academic probation for the same or similar reason for which you have been placed on administrative academic probation previously, although not currently in such status.

If you are not on probation, you may be subject to administrative academic disqualification if:

- at the end of any term, you have a cumulative grade point average below 1.0;
- your cumulative grade point average is so low that in view of your overall educational record, it seems unlikely that the

deficiency will be removed within a reasonable period.

9.

How can I be readmitted after Academic Disqualification?

To be readmitted/reinstated following Academic Disqualification, you must demonstrate evidence of improved academic performance. This is usually demonstrated by earning good grades at another institution or through Open University. Typically, you will not be considered for readmission for one year, certainly not for at least a quarter. If you are not admitted within three quarters, you must reapply for admission.

If you are readmitted/reinstated following Academic Disqualification, you are placed on Academic Probation.

If you are readmitted/reinstated, you must maintain a 2.5 GPA each and every quarter until you are no longer subject to disqualification. You may be subject to application fees depending on how many quarters have elapsed since you last registered.

If you are academically disqualified a second time, you will not be readmitted/reinstated a second time.

10.

Can I qualify for Academic Renewal?

Academic Renewal is the process that matriculated students seeking a bachelor's degree follow, under limited circumstances, to remove the punitive effect of past academic failures. (A matriculated student is regularly enrolled after being admitted to the university.)

There are two ways to achieve Academic Renewal, Repetition of a Course and Forgiveness of Previous Term(s).

Repetition of Courses

You may repeat a course, which means your earlier attempts are ignored in GPA calculations, but not removed from your record, subject to the following conditions:

General Education course equivalencies:

Certain General Education courses are considered equivalent for the purposes of academic renewal. Therefore, students will receive credit for only one course in each of the following groups.

ART 1010, 1011; BIOL 1001, 1003, 1005, 2001, 2002, 2003, 2004; BIOL 1002, 1004, 2005; BIOL 2010, 2011; CHEM 1000, 2001, 2002; CHEM 1601, 1605; E S 1002, 2002; GEOL 1001, 1003, 1004; GEOL 2100, 2101; HIST 1014, 1017; HIST 1015, 2018; HIST 1016, 2019; HSC 1100, 2100; MUS 1000, 2020; MUS 1006, 2130; MUS/ANTH 1004, MUS 1014; PSYC 1000, 1001, 1005, 2004, 2009; REC 1000, 2400; SOC 1000, 1001, 1002,

2001, 2002; THEA 1010, 1011.

You must file a "Report of Academic Renewal" form if:

your original grade is an "F," "D," "D+," or "WU" and all attempts in the course are at Cal State Hayward either as a matriculated student or through Open University/Extension. After you reregister for the course, fill out the "Report of Academic Renewal" form in the Student Information Lobby, first floor of Warren Hall. You must file by the Add/Drop deadline of the quarter in which you repeat the course. (This form reports your academic renewal; it is not a petition subject to approval.) The Graduation Evaluations Office will mail you a copy at the end of the quarter in which you repeat the course. The previous attempt(s) will then be excluded from your GPA calculations. This happens after the end of that quarter and may not be reflected in that quarter's grade report.

You must file a "Petition for Academic Renewal" with the Office of Academic Programs and Graduate Studies (WA 859) if:

1. (a) the course prefix and/or number has changed, (b) the course is Independent Study, (c) the course is in the Accounting Option in Business Administration, you are a Business Administration/Accounting major, and you are taking the course for the third time.
2. your original grade is an "F," "D," "D+," or "WU" and one or more attempts were at another accredited post-secondary institution.
3. your original grades were "C-" or better, regardless of where the original grades were assigned. You may repeat a maximum of 20 units graded "C-" or better. A grade of "CR" qualifies as "C-" or better. [There is no limit on the repeatability of courses in which the original grade was an "F," "D," "D+," or "WU" except as noted in 1(c) and (d) above.]
4. you are a readmitted student who was disqualified for earning only grades of "F," "NC," and/or "WU" for three consecutive, or four total quarters.

You pick up the petition in the department offering the course at Cal State Hayward. The chair of the department must certify that the courses are equivalent. (This means the course content is substantially identical. It does not mean merely that the courses meet the same requirement.) Then the Associate Vice President, Academic Programs and Graduate Studies must approve your petition. You must file the petition with the Associate Vice President, Academic Programs and Graduate Studies, duly approved by the department chair offering the course, before the end of the Add/Drop period for that quarter. A denied petition is promptly mailed to you by the Academic Programs and Graduate Studies Office. An approved petition is sent to the Graduation Evaluations Office. The Graduation Evaluations Office will mail you a copy at the end of the quarter in which you repeat the course. The previous attempt(s) will then be excluded from your GPA calculations. This happens after the end of that quarter and

may not be reflected in that quarter's grade report.

Note: The CSU system normally forbids retroactive Academic Renewal. File your petition before reregistering for the course to give yourself time to adjust your program if your petition is denied.

If your required renewal petition is not filed or it is denied and you repeat the course:

- All grades will be used in GPA calculations if the original grades are "D+," "D," "F," or "WU," but unit credit toward graduation will be given only once if all grades are "D" or "D+."
- The second attempt may be calculated in summary statistics if the original grade is "C-" or better, until the final graduation check has been completed. At that time the second attempt will no longer be calculated in any summary statistics.

Academic Renewal is not possible in the following circumstances:

- You cannot renew an "A-F," "I," "IC," or "WU" grades with an "F," "NC," "I," "IC," or "WU."
- Business Administration will not allow a student who is a Business Administration/Accounting major to renew any course in the Accounting Option after two enrollments.
- Academic Renewal can not be approved for any grade assigned as a result of academic dishonesty.
- If the original grade(s) was assigned at Cal State Hayward, Academic Renewal by repeating a course at another institution is normally not possible. (Exceptions can be made for disqualified students who file an approved petition prior to repeating the course elsewhere, but only to the extent necessary for their readmission.)

Cal State Hayward honors the Academic Renewal policies of other institutions as stated on their transcripts.

Note: The last grade earned is the grade used in GPA calculations regardless of whether it is higher than, lower than, or identical to the earlier grade(s).

You should not file a "Petition for Academic Renewal" or a "Report of Academic Renewal" if:

1. your original grades were "NC." You may repeat the course but there is no Academic Renewal because the "NC" grade has no effect on your GPA.
2. the original grade is still an "I." You can not get Academic Renewal because the "I" does not affect your GPA. If the grade has been changed to an "IC," Academic Renewal is possible.

Forgiveness of Previous Term(s)

You can petition to exclude from degree requirements and GPA computations up to three quarters (or up to two semesters) of coursework taken at any institution. To have your petition approved, you must meet certain conditions and follow the process described below.

Approval of your petition requires satisfaction of all the following conditions:

- proof that the coursework to be excluded does not represent your scholastic ability, and that this substandard performance was due to an extenuating circumstance, and that you would be compelled to complete additional courses or enroll in additional quarters to achieve your baccalaureate degree if your petition is not approved
- five years have elapsed since the most recent coursework to be excluded was completed
- you completed at least 22 units at Cal State Hayward since the last term to be disregarded, with a 3.0 GPA, 45 units with a 2.5 GPA, or 67 units with a 2.0 GPA.

You must complete the following steps:

- complete your portion of the "Academic Renewal, Forgiveness of Previous Term(s)" petition available from the Admissions and Records Information Counter
- obtain your major advisor's approval on the petition
- file the petition in the Student Information Lobby. If you are eligible, the Graduation Evaluations Office certifies that you meet the above conditions, attaches a copy of your academic record, and forwards the package to the Academic Renewal committee in the Provost's Office. The committee acts upon all petitions by majority vote.

If the Graduation Evaluations Office determines you do not meet the conditions, you are notified and no action is taken.

Cal State Hayward honors the exclusion policies of other institutions. Each term excluded by another institution reduces by one the number of terms that Cal State Hayward will consider for exclusion.

11.

What recourse do I have if I believe I have received a grade that is inappropriate?

If you question the grade you received in a course, attempt to resolve the problem with your instructor. If you are not satisfied, discuss the issue with the chair of the department in which the course is offered. If the issue is not resolved, see the dean or associate dean of the college in which the course is offered. If all previous actions fail, contact the Presidential appointee to the

Fairness Committee through the Office of Instructional Services. If you are a candidate for a degree, notify your graduation evaluator that a question is pending resolution. Remember, once your degree has been posted, no grade changes will be recorded.

Fairness Committee

This is your recourse to resolve serious cases of alleged academic unfairness or discrimination. After every effort by all parties to resolve the dispute have been ineffective, you discuss your case with the Assistant Vice President, Instructional Services, who is the President's appointee to the Fairness Committee. S(he) will assist you in exhausting all normal channels and, if necessary, in filing a formal complaint. Submit your complaint and supporting documentation to the office of the Presidential appointee to the Fairness Committee. The Fairness Committee will review your documentation and the response(s) filed by the other parties involved in the dispute. If the committee finds possible grounds for a grievance, a Hearing Panel will be convened to hear the case. Under normal circumstances, you must file your case before the end of the quarter following the quarter in which the alleged incident took place.

The Fairness Committee is empowered to change a grade in accordance with the Fairness Document and to assign a grade in cases where the instructor may have assigned an unfair academic grade. In cases where your instructor is unable to assign course grades, the Fairness Committee is authorized to ensure the grades are assigned by other qualified faculty. The Fairness Committee is authorized to change a grade only after it has conducted a proper review of the case.

More information is available from the Office of Instructional Services (Warren Hall, Room 757; Tel. 510-885-4637).

12.

How does Cal State Hayward define and handle academic dishonesty?

Faculty members are expected to instill in their students a respect for integrity and a desire to behave honestly. Deception for individual gain is an offense against the members of the university community. To this end, faculty will take measures to discourage dishonesty, adjust grades appropriately if dishonesty is discovered, and recommend that additional administrative sanctions be considered. Grading policies are the exclusive prerogative of faculty. Non-academic administrative sanctions are the province of the Student Disciplinary Officer, the Vice President, Student Affairs (Warren Hall, Room 959, (510) 885-3646).

Academic Dishonesty includes, but is not limited to:

- cheating, which includes possessing unauthorized sources of information during examinations, copying the work of others, permitting others to copy your work, submitting work done by others, completing assignments for others, altering work after grading and subsequently submitting it for re-grading, submitting the same work for two or more classes without the permission

of all instructors involved, or retaining materials that you have been instructed to return to your instructor;

- plagiarism, which includes taking the words or substance of another and either copying or paraphrasing the work without giving credit to the source through footnotes, quotation marks, or reference citations;
- providing materials to another with knowledge they will be improperly used;
- possessing another's work without permission;
- selling, purchasing, or trading materials for class assignments (includes purchasing term papers via the World Wide Web);
- altering the work of another;
- knowingly furnishing false or incomplete academic information;
- altering documents that make up part of the student record;
- forging signatures or falsifying information on any official academic document.

If there is evidence of dishonesty:

- involving cheating, you should be privately informed, if possible; the materials should be confiscated; you should be allowed to finish the exam; and your instructor should note the names of adjacent individuals;
- involving plagiarism, your instructor should assemble documentation and notify you promptly in private.

Whenever dishonesty occurs, your instructor will take appropriate action and file an "Academic Dishonesty Incident Report" detailing the infraction and the action taken. The report will be filed in the Academic Affairs Office, and you will receive a copy. The report will remain on file for five years or until you graduate, whichever comes first. If the office receives two or more reports on an individual, the Student Disciplinary Officer is notified.

Depending on the circumstances, you may: (a) be warned; (b) be required to resubmit work or retake an exam under specified conditions and with a possible grade penalty; (c) have your grade adjusted for the assignment; or (d) have your grade adjusted in the course, including assignment of an "F" at the discretion of the faculty. If the course grade is adjusted, it is not subject to Academic Renewal.

You may appeal an instructor's action to the Fairness Committee (see above). Your appeal of an instructor's academic sanction is governed by the "Fairness Document."

Depending upon the severity of the offense or the number of offenses, the instructor may directly refer the instance of academic dishonesty to the Student Disciplinary Officer, the Vice President, Student Affairs, to determine if further action is necessary. (In any instance of academic dishonesty, however,

whereby an academic sanction is imposed, the instructor will file an "Academic Dishonesty Incident Report." See two paragraphs above.) At the discretion of the Student Disciplinary Officer, administrative sanctions such as warning, probation, suspension, or expulsion may be imposed. As prescribed in Executive Order #628, Article VI, Subsection 6, sanctions of "probation and suspension" shall be made part of the student's academic record during the term of the probation or suspension. Expulsion shall be made part of the student's permanent academic record." The Student Disciplinary Officer shall inform the instructor of the actions taken on any referral. (If an appeal to the Fairness Committee regarding an academic sanction imposed by the instructor is pending, action by the Student Disciplinary Officer will be postponed until after the adjudication of the appeal.)

Your appeal of administrative sanctions is governed by Title 5 of the *California Code of Regulations*, sections 41301 through 41304 and Chancellor's Executive Order #628 (1994). The Student Disciplinary Officer can provide you with details.



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Program Information

Certificate Programs

▶ [Program Information](#)

A certificate program is a coherent set of academic courses, considerably narrower in scope and objectives than a degree or major, which leads to a certificate. A certificate program is normally oriented toward occupations and/or career skills. It contains a minimum of 12 units of courses numbered 3000 and above and a minimum of 20 total units unless the program consists entirely of 5000- and/or 6000-level courses, in which case the required minimum is 15 units. Each certificate program contains a required core of at least three courses and 12 units.

Some certificate programs have admission requirements that are described in the appropriate catalog chapter. (See the chapter describing the major most closely associated with the certificate.) To receive a certificate, you must earn a grade of "C" or better in each course applied to the program which is numbered below 6000 and a grade of "B" or better in each course applied to the program which is numbered 6000 and above. One course numbered below 6000 may be applied to a certificate program with a "CR" grade; no course numbered 6000 or above may be applied with a "CR" grade. At least 75% of the courses in a certificate program and all 5000- and 6000-level courses must be taken at Cal State Hayward for you to receive the certificate. You may meet this requirement with coursework taken at Cal State Hayward in matriculated or extension status. Prerequisites which are part of a regular degree major or mandatory General Education-Breadth requirements need not to be included within the certificate program, but must be clearly identified. No academic certificate program can have a title that is identical or similar to that of a legal license or certificate unless it meets the requirements for that license or certificate. You may not receive a certificate with the same title as the degree major, option, or minor that you have already received.

Certificate programs are designed to serve students who have a limited time to spend at Cal State Hayward and/or who wish to learn specific subjects, concepts, skills, and competencies. Most certificate programs add a specific occupational skill to an academic major that was previously completed or is being completed concurrently. Such programs are compatible with the related major and contain no prerequisites not included in the major and/or required G.E. Some certificate programs are designed to provide the preprofessional background for students contemplating transfer to other universities offering programs not available at Hayward. These certificate programs have been made compatible with the professional program by including all prerequisite or strongly recommended preparatory courses that

are offered by Cal State Hayward. Still other certificate programs are the equivalent of minors that can be earned without a degree. These are normally completed by students who already possess a baccalaureate degree and want to add some skills in a new field without completing another entire degree. Such certificate programs meet at least the minimum requirements for an academic minor in the discipline. A Special Certificate Program is also available. See the Special Major chapters.



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B.A./B.S. Degree Requirements

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1.

What is a baccalaureate degree?

A baccalaureate degree, often called a bachelor's degree, is the academic title that the university confers upon you after you have successfully completed a minimum number of college credit units (180 quarter units at Cal State Hayward), including certain specified patterns of coursework (for example, General Education, a major) and a minimum number of advanced units (60 upper division) with a grade point average of at least 2.00 (on a 4.00 point scale), and various other requirements specified in Title 5 of the *California Code of Regulations*. Some students in higher unit majors will complete more than the minimum 180 units for their degree. Cal State Hayward offers three baccalaureate degrees, a Bachelor of Arts (B.A.) degree, a Bachelor of Fine Arts

(B.F.A.), and a Bachelor of Science (B.S.) degree. The degree awarded appears on your diploma and permanent record.

In the past, many students were able to attend school full-time (three quarters or two semesters) and earned 15-16 units a term. Now, since students have commitments other than college, they take fewer units and occasionally do not attend every quarter. Consequently they take longer to complete their degrees. Nevertheless, the university does offer a "Four-Year Degree Pledge Program" for full-time students. Contact Enrollment Services for information.

Cal State Hayward operates on a year-round, four-quarter system. Hence, by taking a full academic load of 15-16 units per quarter, four quarters a year, you could even graduate in three years. (You can complete a maximum of 105 units at a community college and transfer them to a CSU campus.)

Information concerning the graduation rates of students enrolling at Cal State Hayward may be obtained from the Institutional Research and Assessment Office, WA 743 (Tel. 510-885-3483). It is also available online at: <http://www.aba.csuhayward.edu/ira/>.

2.

What are the requirements for the baccalaureate degree?

There are three major parts of your baccalaureate degree and seven basic requirements defined in the California Code. Most of your courses will fall into one of the three major parts of the degree: (1) the General Education (G.E.) requirements for basic skills and breadth, (2) the major for depth in one field, and (3) free electives which you can use to shape your education in directions you choose. Each of these will be described in later sections.

These are the seven basic requirements for your B.A. or B.S. degree defined in the Code:

1. Complete a 72 quarter-unit program of General Education-Breadth requirements (details to follow).
2. Complete one of the majors described in this catalog.
3. Complete the U.S. history, U.S. Constitution, and California state and local government requirement through coursework or exams (details to follow).
4. Satisfy the University Writing Skills Requirement by passing two freshman-level English composition courses and the upper division University Writing Skills Requirement (details to follow).
5. Complete a minimum of 45 quarter units in residence (enrolled as an admitted student) at Cal State Hayward, including at least 36 upper division units, 18 units in your major, and 12 units of G.E. (Units you earn at other institutions, units you earn through the Cal State Hayward Continuing and

International Education Division such as Open University, and units you earn through Credit-by-Examination are not residence units.)

6. Complete at least 180 quarter units for your B.A. degree, 186 quarter units for your B.F.A. degree, or 180-198 quarter units for your B.S. degree. At least 60 of these units must be in upper division courses (courses numbered 3000 and above). No more than 60 units can be graded in the Credit/No Credit pattern (CR/NC or A/B/C/NC). No more than 36 units can be in Extension, Open University, or correspondence credit, and no more than 45 units can be earned credit-by-examination (excepting Advanced Placement).
7. Attain a grade point average of at least 2.00 on a 4.00 scale in all units you attempt at Cal State Hayward, all the units you attempt including transfer units, and all units you attempt in the major regardless of the department in which they are taught.

3.

What are my catalog rights for graduation?

To meet the seven requirements listed in the previous section, you must follow the specifics listed in this catalog. As long as you maintain attendance by enrolling in at least two quarters each calendar year, your degree requirements will remain those in this catalog. However, you may elect to meet the requirements of the catalog in effect at the time you graduate. These principles are called your "catalog rights."

If you are absent due to an approved Educational Leave or to attend another California State University and/or California Community College, you will not lose your catalog rights as long as you are not away for over two years.

If you are a transfer student who attended another CSU campus and/or California community college, you have Cal State Hayward catalog rights from the time you began at the other institution if you have maintained attendance as noted above.

Your catalog rights for your major (and minor if you pursue one) are governed by the catalog in effect at the time you declare your major (or minor). Cal State Hayward publishes an annual online Catalog, but only publishes a printed Catalog every other year. If you enter in the second year of the printed catalog, you should check the online catalog for that year to see if there are any changes affecting your major and/or minor graduation requirements. You will not lose your catalog rights for G.E. and other graduation requirements by declaring or changing your major, if you maintain attendance.

If you do break attendance by not enrolling in two quarters in a calendar year, your graduation requirements will be governed by the catalog in effect at the time you reenter.

The principle of catalog rights refers to degree requirements, not

policies, fees, services, and other matters which, when they change, apply to all students. For that reason, you should check the online catalog or purchase a new printed catalog when it is issued.

4.

What are the General Education-Breadth requirements?

The Cal State Hayward General Education (G.E.) Program is designed so that, taken with the major depth program and electives, it will assure that graduates have made measurable progress toward becoming *truly educated persons* for a diverse society. Particularly, the purpose of the General Education Program is to provide means whereby graduates:

- A. achieve the ability to think clearly and logically, to find information and examine it critically, to communicate orally and in writing, and to reason quantitatively;
- B. acquire appreciable knowledge about their own bodies and minds, about how human society has developed and how it now functions, about the physical world in which they live, about the other forms of life with which they share that world, and about the cultural endeavors and legacies of their civilizations;
- C. come to an understanding and appreciation of the principles, methodologies, value systems, and thought processes employed in human inquiries;
- D. come to understand and appreciate the contributions to knowledge and civilization that members of diverse cultural groups and women have made.

The General Education Program is planned and organized to enable students to acquire abilities, knowledge, understanding, and appreciation as interrelated elements, not as isolated fragments.

The Cal State G.E. program requires at least 72 quarter units (a minimum of 21 courses) distributed over six areas and governed by three general requirements. The lists of courses meeting the requirements change from quarter to quarter and are not included in this catalog because they rapidly become outdated. The list of courses currently meeting each requirement appears in the online **Class Schedule** each quarter or at: www.csu Hayward.edu/GED/index.htm.

The G.E. requirements are described below in two ways, a tabular summary and a text specifying the intent of each area and subarea requirement. The latter will be useful to you in attempting to decide whether to petition a course taken elsewhere for G.E. credit.

Before progressing very far into your G.E. and other degree requirements, be certain you have developed the entry-level learning skills in English composition and mathematics

necessary for collegiate success. You must take the EPT/ELM tests before your first enrollment (if not exempt by the other test scores listed in the Registration chapter). If your skills are such that you can begin taking college-level English composition math or statistics immediately, do so at your earliest opportunity, as a freshman if at all possible. (Many majors, including Business Administration and the sciences, require much more math or statistics than the single G.E. course.)

If your skills are not at the collegiate level, you must enroll in the appropriate remedial course(s) (again, described in the Registration chapter) in your first quarter and complete all remedial courses you need as soon as possible, as a freshman if at all possible. Students who fail the same remedial course twice, fail to enroll continuously in remediation as long as it is required, and/or who fail to complete remediation in six quarters will not be allowed to continue.

You will not be allowed to register once you have earned 90 units if your first freshman English composition course (ENGL 1001 or equivalent for G.E. Area A2) and your quantitative reasoning course (G.E. Area B4) have not been passed. Cal State Hayward requires that your freshman English composition course be passed before you attempt the Writing Skills Test in your first quarter in junior status (90 or more quarter units).

A word is necessary about the relationship of G.E. to your major. Normally no course in your major department, as designated by course prefix (for example, ANTH, ENGL, GEOL, MUS) can be applied to G.E., *even if not applied to your major requirements*. For Business Administration majors, courses with the prefixes ACCT, CIS, ENTR, FIN, MGMT, MKTG, and TC will not count for G.E. Courses with the COMM prefix cannot be used by either Mass Communication or Speech Communication majors; and THEA and DANC courses cannot be used by Theatre Arts majors. The only exceptions to this rule are in Area A, in Area B4, in Area C for a MLL course in another language from those in the major, in Area G4, and one course in a thematic freshman learning community (B1-3, C1-3, or D1-3).

On the other hand, courses required for your major, but offered by other departments (for example, MATH for Geology majors, MLL for English majors), can be applied to G.E. The Liberal Studies major, which offers no courses, subsumes G.E. in its major requirements.

This is why it is important to know your major before you get too far into the G.E. program. Most majors specify certain G.E. courses for their students. If you take a course other than the one specified, you will have to take the required course anyway. Also, if you don't know your major, you could take a course that subsequently ends up in your major and lose it for G.E. credit.

Narrative Description of G.E. Requirements

LOWER DIVISION G.E. REQUIREMENTS (60 Units)

Area A: Communication in the English Language (12 units)

You must complete this area of the G.E. Requirements in your freshman year unless a year or more of remediation is required. You must enroll in sections of Area A1 and A2 courses which are linked to the freshman thematic learning community you select in Area B, Area C, or Area D. You must also enroll in an activity class each of the first two quarters of the learning community (see Area G, G.E. Electives).

A1 Oral Communication (4 units)

Students who have completed general education requirements should be grounded in the rhetorical principles that govern public presentations. These principles are fundamental to sound reasoning and clear expression. The principles foster open-mindedness and information competence combined with critical thinking and analytical skills, and an awareness of, and ability to adapt to audience, context, and purpose.

Criteria: A course meeting the Oral Communication requirement is based upon communication theory presented through lecture, discussion, and reading. It must provide several opportunities for a planned sequence of speaking and listening experiences in at least two of the following modes: (a) small-group (problem-solving) discussion, (b) interpersonal communication, (c) expository discourse presented extemporaneously, (d) argumentative and persuasive discourse presented extemporaneously. The course must provide you with constructive criticism of both substance and form of communication and must reflect awareness of the cognitive and emotional conditions dealt with by people who communicate with others. You will complete at least five oral assignments demonstrating increasing skill in oral communication.

A2 Written Communication (4 units)

A course satisfying Area A2 must be passed with a grade of "A," "B," "C," or "CR."

Students who have completed general education requirements should be grounded in the rhetorical principles that govern reading and writing. These principles are fundamental to logical thinking and clear expression. For reading, they presume open-mindedness combined with critical thinking and analytical skills; and for writing, they presume an awareness of audience, context, and purpose.

Criteria: A course meeting the freshman composition requirement assumes that you should, at the time of entry, be able to write brief essays showing adequacy in (a) selection of a controlling idea appropriate to the given writing task, (b) coherent development of that idea to a reasoned conclusion, (c) use of sentences that demonstrate some structural variety and contain language appropriate to the audience and purposes, and (d) control of conventions of standard written English (relative freedom from errors such as fragments, run-together sentences, faulty agreement, and improper pronoun reference) and of mechanics (capitalization, spelling, and punctuation). The work of the freshman English course is to strengthen these skills by extensive practice in the writing of expository essays suitable for college-level credit. If you are not exempt from the EPT and do

not score 147 or higher on the test, you must pass one or more remedial English courses before enrolling in the A2 course (see Registration chapter). If you score 147-150 on the EPT, you must immediately enroll in your A2 course accompanied by the 2-unit remedial tutorial course ENGL 0989. G.E. Area A2 must be completed by the time you reach 90 quarter units or future registration will be blocked.

A3 Critical Thinking (4 units)

Students who have completed critical thinking requirements will develop clarity and rigor in reasoning and its presentation, and the ability to understand, represent, and evaluate the presentations of reasoning made by others.

Criteria: A course meeting the critical thinking G.E. requirement focuses primarily on: (a) identifying, analyzing, evaluating, and presenting arguments, (b) learning elementary inductive and deductive reasoning, and (c) recognizing formal and informal fallacies. You will complete a minimum of six assignments demonstrating critical thinking in a variety of contexts. At least four of these assignments must be written. A critical thinking textbook or its equivalent is required in all courses meeting this requirement.

Area B: Natural Sciences and Quantitative Reasoning (16 units)

Students who have completed natural science and quantitative reasoning requirements will gain basic knowledge and learn key principles in the life and physical sciences, recognize the vital role experiments play in adding to scientific knowledge, and understand modern methods and tools used in scientific inquiry.

Criteria: G.E. courses in the physical and life sciences teach the methodologies of science, including systematic observation and experimentation. The laboratory course required in this General Education Area provides firsthand experience in making observations in the natural world or laboratory, the techniques and procedures of making those observations, and techniques and procedures for organizing and analyzing observations. In addition to a working knowledge of the methods of science, you will acquire an understanding of the fundamental principles of particular disciplines.

B1-3 (12 units)

You must select at least one course in physical science and one in life science, courses in three different disciplines, and at least one of the courses must have a laboratory. You may select a freshman learning community or complete your science requirements in your second year. Sophomore courses assume a higher level of basic skills (completion of Area A and B4 requirements).

B4 One Course in Quantitative Reasoning (4 units)

A course satisfying Area B4 must be passed with a grade of "A," "B," "C," or "CR."

Criteria: G.E. courses in quantitative reasoning teach you skills and concepts that build on what you have previously mastered in intermediate algebra. Courses that satisfy Area B4 foster the development and use of formal skills and concepts appropriate to

the specific course. They emphasize problem solving, reasoning skills, and the communication of mathematical or statistical ideas. If you are not exempt from the ELM requirement and do not score 50 or higher on the test, you must pass one or more remedial Mathematics courses before enrolling in the B4 course (see Registration chapter).

You must complete your quantitative reasoning G.E. requirement in your freshman year unless three quarters of remediation are needed. In any case, G.E. Area B4 must be completed by the time you reach 90 quarter units or future registration will be blocked.

Area C: Humanities (12 units)

C1-3 (12 units)

You must select at least one course in the Fine Arts and one in Letters (see below) and courses in three different disciplines. You may select a freshman learning community or complete your Humanities requirements in your second year. Sophomore courses assume a higher level of basic skills (completion of Area A requirements). No Cal State Hayward course used to meet the U.S. history and government code requirement may be applied to Area C.

C1 Fine Arts (4 units)

Criteria: Courses meeting this requirement have as their major component the integration of evaluative and descriptive aspects of the history, theory, aesthetics, and criticism of different works, forms, styles, and schools of art.

C2 Letters (4 units)

Criteria: Courses in this area examine significant written and oral texts of the creative intellect. The major goals are: (a) to teach the critical examination of ideas and theories through the use of historical, linguistic, literary, philosophical, and rhetorical approaches and methods; and (b) to encourage understanding of enduring human concerns and the intellectual and cultural traditions within which they arise.

C3 An Additional Humanities Course in either Fine Arts or Letters

Area D: Social Sciences (12 units)

Students who have completed social science requirements will become acquainted with basic principles, methodologies, theoretical problems, and applications in those sciences whose field of study is human behavior in its social environment. No Cal State Hayward course used to meet the U.S. history and government code requirement may be applied to Area D.

D1-3 Basic Requirements (12 units)

Criteria: Courses fulfilling the Basic Social Science requirements present the fundamental principles and methods of inquiry that are grounded in social science disciplines.

You must select at least three courses in the social sciences from at least three different disciplines. You may select a freshman learning community or complete your social sciences requirements in your second year. Sophomore courses assume a higher level of basic skills (completion of Area A and B4 requirements).

Area F: Performing Arts and Activities (4 units)
Criteria: Courses in this area provide an opportunity to develop an appreciation of the visual and performing arts and activities through direct experience. Students are guided by participation toward an understanding of the techniques, processes, and possibilities inherent in such aspects of culture as art, theatre, music, creative writing, and sport. Courses in this area enhance student development through accomplishment. At least 40% of the class time in these courses must be activity or performance.

Area G: Electives (4 units)

G1-2 Activity Courses Accompanying Freshman Learning Communities (2 units)

These are one-unit activity courses (two hours of class) which accompany the freshman learning communities (Areas B1-3, C1-3, D1-3).

Criteria: They integrate the thematic and Area A course content, build learning communities, and integrate academic skill development and support services. They also include the development and honing of particular skills (e.g., writing, speaking, calculating, and reasoning) at various levels depending on the individual student's proficiency.

G4 Information Literacy (2 units)

Criteria: Courses fulfilling this G.E. requirement develop information processing and technical competencies. The former include the ability to recognize a need; find resources; access, evaluate, and organize information; understand ethical, social and legal dimensions; and communicate information. The latter include the ability to select and use the appropriate technology.

UPPER DIVISION G.E. REQUIREMENTS (12 units)

To be eligible to begin taking upper division G.E. courses, you must have completed 90 quarter (60 semester) units, your lower division G.E. requirements, including critical thinking (Area A3), ENGL 1002, and the University Writing Skills Requirement. You may complete Areas B6, C4, and D4 in your junior or senior year.

The 12-unit upper division General Education program of Cal State Hayward serves a variety of purposes. It enables students to study subjects outside their majors at a more advanced level than in lower division G.E. courses by building on the skills developed in earlier classes in English composition, oral communication, critical thinking, and information literacy. The upper division Science course (Area B6) focuses on scientific inquiry and stresses numeracy, quantitative analysis, information literacy, and critical thinking skills. The upper division Humanities course (Area C4) focuses on history, literature, and philosophy, and stresses advanced writing, speaking, and reasoning skills. The Social Sciences course (Area D4) focuses on the application of the methodologies and research findings of the social sciences to significant contemporary problems, and stresses advanced writing and information literacy skills.

Upper division G.E. courses also give students the opportunity to explore new subjects unrelated to their majors, or to complement their majors with supportive courses in departments outside their major department. Students may ask their major advisors for a list of courses that relate to, and support study in their major field.

Area B6: Upper Division Science (4 units)

A 4-unit upper division course in the sciences (life or physical science) that includes numeracy, quantitative analysis, information literacy, and critical thinking skills.

Area C4: Upper Division Humanities (4 units)

A 4-unit upper division course in the humanities (history, literature, philosophy) that includes a significant writing component and emphasizes advanced communication and critical thinking skills.

Area D4: Upper Division Social Sciences (4 units)

A 4-unit upper division course applying the research findings of the social sciences to significant contemporary problems and emphasizing advanced writing and information literacy skills.

ADDITIONAL G.E. REQUIREMENTS

These are to be satisfied simultaneously with the lower and upper division Area requirements described above.

- (a) A total of 72 quarter units of coursework are required to meet the General Education-Breadth Requirements. Normally, no course taken in the major department, as designated by course prefix, may be applied to the 72-unit G.E. program. Exceptions are: (1) in Areas A, B4, and G4 and one course in one thematic learning community (B1-3, C1-3, D1-3), unless certified by California community colleges and/or other CSU campuses; (2) Modern Language majors may use courses in another language; (3) a course required for the major, but not offered by the major department, may be applied to G.E. No course taken to satisfy the U.S. History, U.S. Constitution, and California State and Local Government requirement may be applied to G.E. unless certified by California community colleges or other CSU campuses. No cooperative education courses may be applied to G.E.
- (b) Must complete ENGL 1002 (College Writing II) or transfer equivalent before attaining 90 quarter units.
- (c) A minimum of 12 quarter units of the General Education-Breadth Requirements must be taken in residence at Cal State Hayward. (You are in residence if admitted to and regularly enrolled in the university).
- (d) A minimum of 12 quarter units of upper division (3000 and above) coursework applicable to the General Education-Breadth Requirements must be taken after you attain upper division status (90 or more quarter units). *You cannot use community college courses to satisfy this requirement.* You must take these 12 units in Areas B6, C4, and D4. No course taken in the major department, as designated by course prefix,

may be applied to the upper division G.E. requirement.

- (e) A minimum of 3 quarter units of coursework applicable to the General Education-Breadth Requirements must recognize the contributions to American civilization and knowledge that members of various cultural groups and women have made. Coursework must also be applicable to one of the G.E. Areas. The purpose of this G.E. requirement is to provide you with an introduction to the research, literature, and methodologies of the disciplines of ethnic studies and gender/women's studies from historical, cultural, social, and economic perspectives. Courses are taught by faculty committed to the four results listed below and are designed to give you a comprehensive understanding of the contributions to U.S. society made by cultural groups [African Americans, Asian Americans, Latino(a) Americans, Native Americans] women, and gays/lesbians (hereafter referred to as "groups.") Courses satisfying this requirement must lead to all the following:
1. Knowledge of, and respect for, one or more of the groups and their contributions to U.S. society, including, but not limited to, three or more of the following aspects: historical, linguistic, cultural, economic, political, literary.
 2. Ability to analyze critically the relationships between the groups and the dominant society, between the groups themselves, and between members of the same group.
 3. Working knowledge of the groups' histories and contemporary experiences as subjects (as opposed to objects or victims) and of their voices and expressions, including, but not limited to, oral traditions, writings, and art forms.
 4. Comprehension of the origins and functions of discrimination, exploitation, and oppression of the groups, both historically and in the present, and ability to identify various patterns of discrimination.
- (f) A minimum of 4 quarter units of upper division coursework that focuses on lifelong understanding and development of humans as integrated physiological and psychological beings. May also satisfy one of the Area requirements (B6, C4, or D4) in upper division General Education.

TRANSFER STUDENTS

Under Chancellor's Executive Order No. 595, up to 58 quarter (39 semester) units of the CSU General Education-Breadth Requirements may be certified by California Community Colleges and other CSU campuses. You must request the certification; it is not automatic except for the A.A. in University Studies programs. Although many certification forms may show more than the maximum number of certifiable units, you must still complete 12 upper division residence G.E. units at Cal State Hayward. If you transfer to Cal State Hayward with the Intersegmental General Education Transfer Curriculum (IGETC) certified by a community college, you

must still complete 12 upper division residence G.E. units at Cal State Hayward.

Regardless of whether you are certified for the CSU G.E. pattern or the IGETC, you must complete 12 units of specific courses at Cal State Hayward. For example, if your catalog rights for graduation are governed by this catalog, you must complete the following: (1) Area B, an upper division Science (life or physical science) course of at least 4 units selected from the Area B6 list; (2) Area C, an upper division Humanities course of at least 4 units selected from the Area C4 literature/history/philosophy list; (3) Area D, an upper division Social Science course of at least 4 units selected from the Area D4 list; (4) the Lifelong Understanding G.E. requirement may be satisfied simultaneously with one of the above upper division G.E. requirements, or as a separate course selected from Cal State Hayward's Lifelong Understanding list. If your catalog rights for graduation fall under an earlier catalog, see the General Education web page (www.csueastbay.edu/ge/transfer.htm) to identify requirements for that catalog.

The Cultural Groups/Women General G.E. requirement may be satisfied simultaneously with one of the above lower or upper division Area G.E. requirements, or as a separate course selected from Cal State Hayward's Cultural Groups/Women list. This requirement can also be satisfied by a lower division G.E. transfer course that meets the CSUH criteria.

You must complete at least 45 quarter (30 semester) units of G.E. including G.E. Areas A (Communication in the English Language) and B4 (Quantitative Reasoning) before transferring as a junior. .

5.

What is a major?

A major is a specified pattern of courses in a particular discipline or group of disciplines. (A list of Cal State Hayward undergraduate majors appears at the beginning of the programs section of this catalog.) It complements G.E. by allowing you to specialize in one area, to study it in more depth than the one or two courses taken for G.E. in other disciplines. A few majors (such as Music and Spanish) are self-contained in the major department and have no courses that can double-count in G.E. Most majors, however, require some coursework in other departments and these courses, if applicable to G.E., can be double-counted. You can design a Special Major with faculty advice and administrative support (see the Special Major chapter in the programs section of this catalog).

A major is not the same as a career, though some majors are more closely allied to specific careers than others. There are people in most careers from a wide variety of majors. Cal State Hayward majors are described in alphabetical order in the "Undergraduate Programs" section of this catalog, and career options are listed for each of them.

A B.S. degree major often requires more units than a B.A. degree major. A B.F.A. degree major requires more units than most B.S. or B.A. degree majors because it is so specialized.

You may declare your major either on your application when you apply to Cal State Hayward or by filling out a "Change of Major" form available in the Lobby of Warren Hall or in the Student Services Center at Contra Costa after you enroll.

You may complete more than one major. All majors earned as part of the same degree appear on your diploma, but majors within other degrees do not appear on the diploma, though they can be noted on the permanent record if you request it.

6. What is an option?

An option is a prescribed pathway through a major which allows for emphasis on a particular segment of the discipline (for example, the Journalism Option in the Mass Communication Major and the Dance Option in the Theatre Arts Major). Not all majors have formal options. Some majors with formal options require you to select an option (e.g., Business Administration) whereas others do not (e.g., Political Science). In some majors, different options have different unit values.

An option can appear on your diploma if you request it when filing for graduation. If you wish to complete more than one option and have the additional option(s) recorded, each must differ by at least three courses and nine units from any other option you complete.

7. What are free electives, and what can I do with them?

Every student has some units not prescribed by G.E., the major, or other graduation requirements. These range from one or two courses in a few very large, occupationally oriented majors to a dozen or more courses in some humanities and social science majors.

Free electives are courses you are free to select to complete your minimum unit requirements for the degree. Some students complete free electives with whatever looks interesting when they have free hours in their schedules, but most students have a purpose in mind. This could be taking more courses in the major to prepare for graduate school or employment, taking a minor or certificate program (defined below) to complement the major (e.g., an English major taking a Marketing minor), or simply following a special interest (e.g., dance or photography). No student is required to do any of these things, but it is important that you understand your options.

8. What is a minor?

A minor is a coherent program in some field or group of related

fields other than your major. Minors range in size from 24-48 quarter units, at least 12 of which must be upper division. No student (except those majoring in Arts Administration) is required to have a minor, so it will not appear on your record or diploma unless you request it. The minimum grade point average for a minor is 2.00, so you must take at least one course on the A-F grading pattern. At least 50% of a minor or 12 units, whichever is less, must be taken at Cal State Hayward if you want the minor recognized on your diploma and/or permanent record.

Courses in a minor may be double-counted in G.E. However, at least 18 quarter units of a minor must not be double-counted in the discipline of the major for Cal State Hayward to recognize the minor.

If you wish to complete a minor, fill out a "Declaration of Minor" form available in the Lobby of Warren Hall or the Student Services Center at Contra Costa.

You cannot get a minor in the same department as your major unless the disciplines are distinct (e.g., French and Spanish, Art History and Studio Art). A minor is recognized only when a baccalaureate degree is awarded. For freestanding programs, see the next section.

9.

What is a certificate program?

A certificate program is a coherent set of academic courses, considerably narrower in scope and objectives than a degree or major, for which you can receive a certificate upon its successful completion. Most certificate programs are oriented toward occupations and/or career skills. A certificate program must contain at least 12 units of courses numbered 3000 and above and a minimum of 20 total units (unless the certificate consists solely of 5000- and 6000-level courses in which case only 15 units are required). Each certificate program must contain a required core of at least three courses and 12 units. You can design a special certificate with faculty advice. See "Special Certificates" in the Special Major chapter (programs section) of this catalog.

Some certificate programs have admission requirements. Refer to the catalog description of the specific certificate program for more information. You must receive a grade of "C" or better in each undergraduate and 5000-level course and a "B" or better in each graduate course (6000-level) applied to the program. Only one course below the 6000-level may be taken "CR/NC" and no graduate course may be taken "CR/NC" in a certificate program unless that is the only grading pattern for the course. You must take at least 75% of the courses and all 5000- and 6000-level courses at Cal State Hayward. (For certificate programs, Cal State Hayward courses may be taken through Continuing and International Education or as a regularly admitted and enrolled student.) You may not receive a certificate if you have already received a major, option, or minor with the same title.

No student is required to complete a certificate program. Completion of a certificate program is recognized by the awarding of a certificate. There is no notation about the program on either a

diploma or permanent record. (The courses will, of course, be on your permanent record.) You may pursue a certificate program before, during, or after your baccalaureate degree. Unlike a minor, a certificate is not part of a degree.

10.

What is the U.S history and government code requirement?

CSU graduates are expected to have knowledge of: significant events in U.S. history; the role of major ethnic and social groups in these events; the political, economic, social, and geographic context of these events; the U.S. Constitution, U.S. political institutions and processes; the rights and obligations of U.S. citizens; the California Constitution; federal-state relations; and California state and local government, and political processes.

You can demonstrate your competence in these fields by either: (a) passing a set of three examinations (U.S. History, U.S. Constitution, California State and Local Government) offered each quarter by the Office of Assessment and Testing, or (b) passing two courses (one course from each of the following two categories) which cover all three topics:

First Category. HIST 1101 History of the U.S. to 1877; POSC 1201 American Political Institutions; HIST 3400 America to 1900; HIST 3540 The Making of the U.S. Constitution; POSC 3441 American Constitutional Law I; POSC 3442 American Constitutional Law II.

Second Category. HIST 1102 History of the U.S. since 1877; POSC 1202 Public Policy/California Politics; HIST 3500 History of California; POSC 3120 State and Local Politics and Government; POSC 3150 Politics of California.

Be aware that receiving credit for any courses applicable to this requirement through a national test such as Advanced Placement or at an out-of-state institution will not satisfy the California state and local government part of this requirement. You will still be required to complete a course in the second category above.

11.

What is the University Writing Skills Requirement (UWSR)?

All CSU graduates are required to demonstrate competency in writing skills for graduation. To prepare for the University Writing Skills Requirement (UWSR) you should complete two courses in freshman English composition (ENGL 1001-1002 or their equivalents). ENGL 1001 and 1002 must be completed within the first 90 quarter units. *Unless exempt by admission test scores, you must take the EPT before you first enroll so that you can complete any needed remediation as soon as possible.*

As soon as you have completed 90 quarter units, you will be required to satisfy the UWSR either by taking the Writing Skills

Test (WST) offered by Assessment and Testing, or by enrolling in the writing courses that will satisfy the requirement. You should not attempt the WST or the courses before completing 90 units or the graduation writing competency requirement will not be met. For details about the test, contact the Testing Office (WA 438; Tel. 510-885-3661). If you think your writing is competent, you should take the WST.

The Writing Skills Test consists of an analytic essay that requires you to demonstrate that you can think critically and analyze a short text. You pass the WST and satisfy the UWSR with an essay score of 8 or above. If you fail the WST, you have only one opportunity to take it again. If you fail it again, your highest score of the two will determine your placement in courses. If your score is 6 or below, you will take both first- and second-tier courses (see description below). If your score is 7, you will take only a second-tier course to satisfy the UWSR. If you choose the option of the Writing Skills Test but do not show for the exam, you will be blocked from registration in the following term until you re-register for the exam.

If you choose to enroll in courses rather than take the WST, you must complete two levels: (1) a first-tier course, ENGL 3000 or 3001 (designed to benefit ESL students), and (2) an approved second-tier writing course, normally in the college of your major, which addresses rhetorical approaches and strategies and is taken in the quarter after passing ENGL 3000 or 3001. (A list of approved second-tier writing courses appears in the online *Class Schedule* each quarter. The currently approved courses are: ENGL 3003 Discursive Writing, MKTG 3495 Business Communication, MLL 3119 French Literature in English Translation, SCI 3010 Writing in Sciences.)

If you choose the option of coursework, or are placed into a first-tier course after failing the exam, your writing will be judged by portfolio assessment at the end of the first-tier course. Portfolio evaluators (not your instructor) will give you a Credit ("CR") or No Credit ("NC") grade as defined below:

- "CR": need to take a second-tier course;
- "CR": satisfied the writing skills requirement
(a notation that reads "Graduation Writing Skills Req Completed" will be added to your transcript);
- "NC": need to take the first-tier course again.

To satisfy the UWSR with coursework, you must pass the second-tier writing course with a grade of "C-" or better or a first-tier course with a grade of "CR" and portfolio evaluator recommendation. (If you do not pass the second-tier course with a grade of "C-" or higher, you must repeat it or take a different second-tier course to satisfy the UWSR.)

You may be enrolled in a first-tier course and also take the WST offered that quarter. If you pass the WST, you will be permitted to petition to withdraw from the course.

If you have taken the first-tier course three times consecutively and have not passed, and have a letter of good faith effort from your most recent first-tier instructor, you may apply to the Associate Vice President, Academic Programs and Graduate

Studies, for a waiver of the UWSR. If a waiver is granted, your permanent record will note that you were allowed to graduate without having satisfied the UWSR. If you do not satisfy the requirement and do not have a waiver approved, you will not be allowed to graduate. Contact the Office of Academic Programs and Graduate Studies for information on waivers (WA 859; Tel. 510-885-3718).

If you fail the WST with an essay score of 6 or 7, and receive a grade of "D+" or "D" in a second-tier writing course (taken Fall 2000 or later), you may appeal to the Associate Vice President, Academic Programs and Graduate Studies, for a waiver of the UWSR. If a waiver is granted, your permanent record will note that you were allowed to graduate without having satisfied the UWSR. If you do not satisfy the requirement and do not have a waiver approved, you will not be allowed to graduate. Contact the Office of Academic Programs and Graduate Studies for information on waivers (WA 859; Tel. 510-885-3718).

If you have a verified disability that affects your ability to satisfy this requirement, there is a special appeal process facilitated by the Student Disability Resource Center. Contact that office for details (ST 140; Tel. 510-885-3868).

12.

Are requirements different for students who do their entire degree at Cal State Hayward and those who transfer?

In general, degree requirements are the same, but special provisions safeguard the programs taken by students at California community colleges and other CSU campuses. If you are a transfer student, the following provisions apply.

1. If you complete G.E. courses approved for transfer to the CSU and they are certified by that campus (or another campus accepts them and certifies them), Cal State Hayward will accept them to meet the requirements for which they are certified. (Be aware that certification is not automatic; you must request it.)

According to the Code, CSU cannot accept more than 58 quarter units or 39 semester units. In practice, Cal State Hayward accepts 60 quarter (40 semester) units because our three-course, upper division G.E. program is 12 quarter units. 60 plus 12 totals the 72 units required for G.E.

2. If you complete the Intersegmental General Education Transfer Curriculum (IGETC) and it is certified complete by your community college, you have satisfied the entire 60-unit lower division G.E. program and have only the three courses, 12-unit, upper division G.E. program to complete. (The IGETC is an all-or-nothing proposition; there is no partial certification as in #1 above.)
3. If you complete any part or all of the U.S. history, U.S. Constitution, and California state and local government requirement at a California community college or other CSU campus and have it certified, Cal State Hayward will accept

that certification for completion for all or part of the requirement.

4. If you successfully completed a course at another university or college that is not certified for the CSU G.E. program, but you believe it meets the criteria listed earlier for a specific requirement, you may request an "exception" on your DegreeWorks audit. If you believe you have a petitionable course, discuss it with your advisor or with a G.E. evaluator in the University Advisement Center. If (s)he agrees, the advisor will submit the exception request for review. After action on your request for an exception, an e-mail to your Horizon account will notify you of the decision.

Likewise, if you believe you have a petitionable course for the U.S. history and government requirement, you may request an exception. In this case, go to either the History Department or the Political Science Department, whichever is appropriate to the course, and review the issue with the department chair. (Both departments are in Meiklejohn Hall.) If the chair agrees, (s)he will approve the exception and note it on your DegreeWorks audit.

5. Cal State Hayward has articulation agreements for all of our majors with all community colleges in Alameda and Contra Costa counties and with several others from which we receive sizable numbers of students. You may view them on the World Wide Web at: www.assist.org. If you followed one of these major articulation agreements and completed all equivalent lower division work at the community college, your major department will consider your lower division major complete.

If you did not follow an articulation agreement, your major department will evaluate your transfer courses individually for equivalence.

6. The graduation writing proficiency requirement (called the University Writing Skills Requirement at Cal State Hayward) is mandatory on all CSU campuses. Cal State Hayward will accept certification of the graduation writing proficiency requirement from any CSU campus. However, we must have written documentation that the entire requirement was satisfied at the other campus where you were enrolled as a matriculated student. ("Matriculation" means regularly enrolled after being admitted to a university.) You cannot, for example, take a writing proficiency test at another campus to meet the UWSR at Hayward while you are matriculated at Hayward.

Although you can complete a sizable portion of your graduation requirements at other colleges and universities, do not forget the residence requirements previously listed. They must be satisfied while matriculated and enrolled at Cal State Hayward.

13.

Can I get credit for multiple majors or multiple degrees?

The answer to both is yes. A disadvantage of pursuing additional degrees, however, is that you must meet the G.E. requirements in

the catalog governing the second degree. If requirements have changed since your first degree was earned, you may have additional G.E. courses to take. At the very least, you will have the three G.E. residence courses to take for the additional degree. Also, if a course previously used for G.E. is in the major of your additional degree, you cannot use it for G.E. in that degree. (The U.S. history/institutions and writing skills requirements need not be satisfied again if completed for a previous CSU degree.)

The disadvantage of completing multiple majors while working on the same degree is that you have to delay graduation until you complete all requirements of all the majors. However, you are checked for completion of the G.E. requirements only once (and the only department excluded from G.E. is your first major, not any additional ones).

Because of the 45-unit residency requirement, you cannot get two degrees at once. (You cannot be in residence in two separate degrees at the same time.) This points up another advantage of multiple majors over multiple degrees. You can pursue two or more majors simultaneously, but you must separate each degree by 45 units. In other words, if you want two degrees, after you finish one degree, you have to reapply for admission and complete another 45 quarter units in residence (at least 36 of which are upper division, at least 18 units of which are in the additional major, and at least 12 of which are in G.E.). You also have to comply with CSU GPA requirements (at least a 2.00 GPA in all units, all Cal State Hayward units, and all units in the major) for the additional degree.

If you complete two majors at the same time but one falls in a B.A. degree and one falls in a B.S. degree, you must decide which degree to receive because you cannot receive two degrees at once. And your diploma, being awarded for the completion of a degree, will show only the major completed under that degree. Your permanent record and transcripts, however, will include all majors completed if requested.

You cannot get two degrees in the same field. For example, a B.A. with a major in Geology and a B.S. with a major in Geology, or a B.S. with a major in Business Administration (Option in Accounting) and a B.S. with a major in Business Administration (Option in Marketing) are not allowed.

Any options and minors completed within your degree will also be recorded on your diploma and permanent record if you request them.

14.

How do I apply for graduation?

Go to your major department (or the Office of Academic Programs and Graduate Studies, WA 859, if you are a Special Major) and complete a "Degree Candidacy" form, including department approval. Be sure to list all majors, options, and minors you plan to complete as part of your degree. You must do this no later than the end of the Late Registration Period (15 or 16 calendar days excluding weekends) of the

quarter preceding your final quarter. (The exact date is published in the quarterly *Class Schedule*.)

Next, take the form to the Cashier's Office in the Lobby of Warren Hall (or the Student Services Center at Contra Costa), and pay the graduation filing fee. The fee covers the cost of the graduation check, the diploma, and participation in the annual commencement ceremony (but not cap and gown rental/purchase, which is handled separately by the Bookstore). The Cashier's Office sends the "Degree Candidacy" form with certification of payment to Graduation Evaluations.

The fee is non-refundable, but if you don't graduate when you intended, the fee will be transferred to the subsequent quarter automatically. Your graduation quarter can be moved a maximum of three consecutive times, after which you must re-file and pay again. You must send such a request in writing, to the Office of Graduation Evaluations or file the "Notice to Graduation Evaluations" form in the Student Information Lobby of Warren Hall. This should be done no later than twenty-four hours prior to the opening of your window to register for a given quarter, and no later than the end of the Late Registration period of the quarter originally intended to be your final quarter. Changes in the information on the diploma (change of name, address to be sent, deletion of an incomplete minor) must be submitted no later than the end of the Late Registration period of the intended quarter of graduation.

After you have filed for graduation, your major department completes an official "Major Check" form showing all requirements completed for the major and those remaining to be completed for the major. (If you are a Special Major, a Major Check is not needed.) Your department must submit the form to Graduation Evaluations no later than the fifth week of the quarter preceding your final quarter if you are to graduate on time. Check with your department by the end of the fifth week of classes of your next to last quarter to be certain this has been done. If it is not submitted by this time, your graduation will be delayed a quarter, though you may request Graduation Evaluations to send a letter to, for example, an employer, certifying requirements have been met.

If you are completing a minor and want it recorded, be certain to request that a "Minor Check" form be submitted by the department offering the minor to Graduation Evaluations no later than the end of the fifth week of classes of your second to last term.

If you are completing a Single or Multiple Subject Matter Preparation Program for entry into a Teaching Credential Program, be certain that the appropriate check sheet is submitted by the department or program committee offering the program to the Credential Student Service Center in the College of Education.

After receiving your Major Check from the department and your "Degree Candidacy" form from the Cashier's Office, Graduation Evaluations will prepare a Bachelor's Degree Check Sheet (or Master's Degree Check Sheet if you are a graduate student) and mail it to you before the end of the Add/Drop Period

of your final quarter. This Check Sheet is the official statement of your status. It shows all degree requirements, in progress, and to be completed.

If you file any waiver or substitution petitions for major, G.E., or other graduation requirements, be certain they reach Graduation Evaluations at least four weeks before the end of your final quarter.

Once you have completed all degree requirements and Graduation Evaluations can verify their completion (normally this takes about two months after the end of the quarter), your diploma will be ordered. Your diploma is normally available within three months of this final clearance. It will be mailed unless you make prior arrangements with Graduation Evaluations to pick it up.

A diploma is an official document containing the embossed seals of Cal State Hayward and the CSU, your name, the degree conferred and date, major(s) completed in the degree conferred, any options or minors completed and requested, type of honors if any, and the signatures of state and university officials. It is not reproducible or available in multiple copies. You can obtain multiple copies of your record by ordering transcripts which also show degrees, majors, options, minors, and honors, as well as other information. If you need proof of completion of your degree before receiving your diploma, you may request a verification of graduation or a transcript from the Records Office. Should you change your name, you may request the Records Office to issue another diploma with your new name if 1) you return the originally issued diploma to the Records Office, 2) you provide legal documents confirming your legal name change, and 3) you pay the fee for a new diploma.

Once your degree is posted to your permanent record, your diploma and transcript cannot be altered by adding additional options and/or minors, nor by grade changes, withdrawals, and/or academic renewal. The university protects the integrity of its transcripts and will not rewrite history unless we have made a mistake.

15.

How do I qualify for academic honors at graduation?

Earlier in the catalog, in the undergraduate Grading and Academic Standards chapter, the Dean's and Honors Lists (the annual academic honors recognition) were discussed. Cal State Hayward also recognizes undergraduate students at graduation for consistently high scholarship through their entire academic careers. If you graduate from Cal State Hayward beginning fall quarter 2002 through summer quarter 2004, you will qualify for Graduation with Honors if your academic record meets the following criteria.

1. You will qualify for one of these categories of honors at graduation on the basis of the following grade point average in all college work: 3.90-4.00 summa cum laude (highest

honors); 3.80-3.89 magna cum laude (high honors); 3.60-3.79 cum laude (honors)

2. To qualify for any category of honors, you must have a minimum Cal State Hayward grade point average of 3.60, and
3. You must have completed at least 60 units graded "A-D" at Cal State Hayward (up to 15 units in Open University may be substituted).

These standards were adopted to ensure that the top 1% of those graduating in the years this catalog is in effect receive summa cum laude designations, the top 3% receive at least magna cum laude designations, and the top 8% receive at least cum laude designations. *Graduation with honors is governed by the catalog in effect at the time of the student's graduation. The GPA standards cited above are in effect for those who graduate during the two years this catalog is in effect, fall quarter 2002 through summer quarter 2004.* GPA standards will be adjusted in future catalogs, if necessary, to maintain the 1%, 3% and 8% groupings. So check the catalog in effect at the time you graduate to see if you qualify.

Note: If you break attendance (do not enroll at CSUH in at least two quarters each calendar year), you must meet the GPA standards for graduation with honors in effect at the time you return. See "What are my catalog rights for graduation?" earlier in this chapter for additional information.

16.

How can I earn graduate credit before I get my baccalaureate degree?

Many Cal State Hayward students continue their studies beyond the baccalaureate to earn a master's degree. If you are one of these students, you may find that you have only one or two courses left to complete your baccalaureate and would like to take a course for your graduate program in your final undergraduate quarter. Or perhaps you missed the graduation filing date, don't have anything to take in your last quarter as an undergraduate, and want to get started on your master's degree.

You can take up to 13 units of courses in your final undergraduate quarter (no earlier) and apply them to your master's degree if you:

1. Have at least a 2.00 grade point average at Cal State Hayward,
2. Do not need the units or grade points to complete your baccalaureate degree,
3. Do not need the units for residence credit in your master's degree, and
4. Obtain prior permission from the department chair of the graduate program in which you wish to apply the units.

While an undergraduate, obtain a "Petition for Graduate Credit"

form in the office of the graduate department. Fill out this form including all courses (for both undergraduate and graduate credit) you are taking in your final undergraduate quarter, and sign it. Obtain the signed verification from your undergraduate advisor that you do not need the courses you want to apply to your master's degree for your baccalaureate degree, and obtain the signed approval of the graduate department chair to apply the courses to your master's degree. Then file the form in the Student Information Lobby of Warren Hall. You must do this no later than the end of the Add/Drop period of your final undergraduate quarter. Once you have graduated, you cannot go back and retroactively transfer a course to your graduate degree.

You cannot be matriculated in a baccalaureate degree and a master's degree at the same time, so the units earned in your last undergraduate quarter which are applied to your master's degree are not residence credit in your graduate degree. Most Cal State Hayward master's degrees require 45 units, 32 of which must be in residence. If you take the maximum 13 units for your graduate degree in your last undergraduate quarter, you will have used up your non-residence degree credit and cannot use any transfer, extension or Open University units for your master's degree.

If you start working on a basic Teaching Credential (5000-level courses in Teacher Education) before completing your baccalaureate, you may have the units certified for application to your post-baccalaureate requirements. To qualify, the units must all be in excess of the units needed for your bachelor's degree or any requirement of that degree. Submit a written request to the Graduation Evaluations Office of Enrollment Services. Your request should cite all the courses to be certified for this type of post-baccalaureate credit and should be submitted after completing your baccalaureate degree.



HOME



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Undergraduate Programs

- ▶ [Majors and Options](#)
- ▶ [Minors](#)
- ▶ [Certificate Programs](#)
- ▶ [Single Subject Matter Preparation Programs](#)
- ▶ [Academic Organization](#)

Cal State Hayward offers major programs leading to the baccalaureate degree in 38 fields of study (in addition to the Special Major) and minors in 68 fields.

Majors and Options

Anthropology, B.A.
Archaeology and Biological Anthropology Option
Socio-Cultural Anthropology Option

Art, B.A.
Art History Option
Art Studio Option
Digital Graphics Option
Multimedia Option
Photography Option
Pictorial Arts Option
Spatial Arts Option

Art, B.F.A.
Digital Graphics Option
Multimedia Option
Photography Option
Traditional Arts Option

Biochemistry, B.S.

Biological Science, B.A.

Biological Science, B.S.
Biology (General) Option
Biomedical Laboratory Sciences Option
Cell and Molecular Biology Option
Ecology and Conservation Biology Option
Forensic Science Option
Physiology Option

Business Administration, B.S. 
Accounting Option
Advertising Option
Business Economics Option
Computer Information Systems Option
E-Commerce Marketing Management Option
Entrepreneurship Option
Finance Option
General Business Option
Human Resources Management Option
Marketing Management Option

Organizational Communication/Public Relations Option
Production and Operations Management Option
Purchasing and Materials Management Option
Real Estate Management Option
Sales Option
Telecommunications Management Option
Chemistry, B.A. ²
Biochemistry Option
Chemistry, B.S.
Forensic Science Option
Communication, B.A.
Advertising Option
Broadcasting Option
Interpersonal Communication Option
Journalism Option
Mass Communication Option
Organizational Communication Option
Photocommunication Option
Public Communication Option
Public Relations Option
Computer Science, B.S. ²
Computer Engineering Option
Networking and Data Communications Option
Software Engineering Option
Criminal Justice Administration, B.S.
Corrections Option
Law Enforcement and Administration Option
Economics, B.A.
Accounting Option
General Economics Option
Social Science Economics Option
Statistical Economics Option
Engineering, B.S.
Industrial Engineering Option
English, B.A.
British and American Literature Option
Creative Writing Option
Interdisciplinary Language and Literature Studies Option
Language and Discourse Option
New Voices in English Literature Option
Environmental Science, B.S.
Biology Option
Chemistry Option
Environmental Systems and Resource Management Option
Geology Option
Environmental Studies, B.A.
Ecology/Life Sciences Option
Environmental Health Option
Human Environment Option
Land Use Planning and Management Option
Physical Environment Option
Ethnic Studies, B.A.
African American Studies Option
Asian American Studies Option
Mexican American/Latino Studies Option
Native American Studies Option
French, B.A. ²
Geography, B.A.
Geography, B.S.
Geology, B.A.

Geology, B.S.
Health Sciences, B.S.
 Administration Option
 Health Careers/Professions Preparation Option
 Education/Training Facilitation Option
 Environmental Health and Safety Option
History, B.A.
Human Development, B.A. ² ⁴
 Adolescence Option
 Adult Development Option
 Childhood Option
 Gerontology Option
International Studies, B.A.
Kinesiology, B.S.
 Athletic Training Option
 Exercise Nutrition and Wellness Option
 Pre-Physical Therapy Option
 Physical Education Teaching Option
 Special Studies Option
Latin American Studies, B.A.
Liberal Studies, B.A. ⁴
 African American Studies Option
 Anthropology Option
 Art Option
 Bilingual/Cross Cultural Studies Option
 Business Studies Option
 Childhood Studies Option
 Dance Option
 Early Childhood Studies Option
 Economics Option
 English Option
 Environmental Studies Option
 Ethnic Studies Option
 Geography Option
 History Option
 Human Development Option
 Integrative Science Option
 Kinesiology Option
 Language Studies Option
 Latin American Studies Option
 Life Sciences Option
 Mass Communication Option
 Mathematics Option
 Modern Languages Options (French, Italian, Portuguese,
 Russian, Spanish)
 Music Option
 Philosophy Option
 Physical Sciences Option
 Political Science Option
 Psychology Option
 Recreation Option
 Sign Language Option
 Sociology Option
 Special Education Option
 Speech Communication Option
 Speech Pathology and Audiology Option
 Statistics Option
 Theatre Option
 Women's Studies Option
Mathematics, B.S.

Applied Mathematics Option
Mathematics Teaching Option
Option A
Music, B.A.
Nursing, B.S.
Prelicensure Option
RN Advanced Placement Option
Philosophy, B.A. 
Classical Philosophy Option
Law, Human Rights, and Social Justice Option
Religious Studies Option
Science, Technology and Values Option
Special Option
Physics, B.S.
Political Science, B.A. 
Pre-Law Option
Public Affairs and Administration Option
Psychology, B.A.
Psychology, B.S.
Ergonomics and Human Factors Option
Industrial/Organizational Psychology Option
Recreation, B.S. 
Environmental Recreation Option
Recreation Therapy Option
Sociology, B.A.
Social Services Option
Sociology Option
Spanish, B.A.
Special Major, B.A.
Special Major, B.S.
Speech Pathology and Audiology, B.S.
Statistics, B.S.
Theatre Arts, B.A.
Acting Option
Dance Option
Directing Option
Musical Theatre Option
Technology and Design Option
Theatre and Dance for Children Option
Theatre: History and Literature Option

Minors

Advertising
African American Studies
Anthropology
Art History
Art Studio
Asian American Studies
Asian Studies
Biological Sciences
Business Administration
Business Computer Telecommunications
California Studies
Chemistry
Children's Theatre and Dance
Cognitive Science
Communication Skills
Computer Information Systems
Computer Science

Creative Video
Creative Writing
Criminal Justice Administration
Dance
Economics
English
Environmental Recreation
Environmental Studies
Ethnic Studies
Filipino and Filipino American Studies
French
Geography
Geology
German
Health Sciences
History
Human Development
Interactive Sculpture
International Business
International Studies
Italian
Kinesiology (Physical Education)
Latin American Studies
Marketing
Mass Communication
Mathematics
Mexican American/Latino Studies
Multimedia
Music
Native American Studies
Philosophy
Photography
Physics
Political Science
Portuguese
Psychology
Recreation
Religious Studies
Russian
Sign Language
Sociology
Software Development
Spanish
Speech Communication
Speech Pathology and Audiology
Statistics
Taxation
Theatre
Urban Studies
Women's Studies
Youth Services Administration

Certificate Programs

Certificate in Applied Statistics
Certificate in Art Museum and Gallery Studies
Certificate in Cartography and GIS (see Geography chapter)
Certificate in Creative Video
Certificate in Organizational Communication (see Communication chapter)

Single Subject Matter Preparation Programs

Academic Organization

Certificate in Pre-Physical Therapy (see Pre-Professional Programs chapter)

Certificate in Youth Services Administration

Special Certificate (see Special Majors chapter)

The Single Subject Matter Preparation Programs listed below have been approved by the California Commission on Teacher Credentialing as alternatives to the subject matter examinations. See the Single Subject Matter Preparation Programs chapter in the undergraduate section of this catalog for information on these programs.

English
Mathematics
Physical Education
Science
Social Science

California State University, Hayward is organized into four colleges: Arts, Letters and Social Sciences (ALSS); Business and Economics; Education and Allied Studies; and Science. Each college has significant responsibility for its own curricula, faculties, students, and budgets. The college dean, aided by an associate dean and an administrative assistant, is the chief administrative officer of each college. (The names of these officers appear in the University Administration chapter.) The Deans' offices are located as follows: ALSS, eighth floor of Warren Hall (885-3161); Business and Economics, second floor of the Music and Business Building (885-3311); Education and Allied Studies, first floor of the Art and Education Building (885-3072); and Science, first floor of the North Science Building (885-3441). The Special Major is administered by the Associate Vice President, Academic Programs and Graduate Studies, on the eighth floor of Warren Hall (885-3716).

Academic Organization Chart

The Academic Organization chart at the beginning of the "Undergraduate Programs" section of the printed Catalog is also available as a [GIF Image](#) (60 KB) or a [PDF Document](#) suitable for printing (53 KB) in the online University Catalog. The chart indicates the departments and programs of each college and the interdisciplinary programs. [You may need a viewer, Acrobat Reader 4.0 or higher, from [Adobe](#) (www.adobe.com) in order to display the PDF document in the online Catalog.]

College of Arts, Letters and Social Sciences

The College of Arts, Letters and Social Sciences is the largest in the university and includes 18 departments in addition to several interdisciplinary programs. It embraces the creative arts, the humanities, the social and behavioral sciences, and several applied disciplines.

Baccalaureate Degree Majors
Anthropology (B.A.)

Art (B.A.)
Art (B.F.A.)
Communication (B.A.)
Criminal Justice Administration (B.S.)
English (B.A.)
Environmental Science (B.S.)
Environmental Studies (B.A.)
Ethnic Studies (B.A.)
French (B.A.)
Geography (B.A., B.S.)
History (B.A.)
Human Development (B.A.)⁵
International Studies (B.A.)
Latin American Studies (B.A.)
Liberal Studies, B.A.⁵
Music (B.A.)
Philosophy (B.A.)
Political Science (B.A.)
Sociology (B.A.)
Spanish (B.A.)
Speech Pathology and Audiology (B.S.)
Theatre Arts (B.A.)

Academic Minors

Advertising
African American Studies
Anthropology
Art History
Art Studio
Asian American Studies
Asian Studies
California Studies
Children's Theatre and Dance
Cognitive Science
Communication Skills
Creative Video
Creative Writing
Criminal Justice Administration
Dance
English
Environmental Studies
Ethnic Studies
Filipino and Filipino American Studies
French
Geography
German
History
Human Development
Interactive Sculpture
International Business
International Studies
Italian
Latin American Studies
Mass Communication
Mexican American/Latino Studies
Multimedia
Music
Native American Studies
Philosophy
Photography

Political Science
Portuguese
Religious Studies
Russian
Sign Language
Sociology
Spanish
Speech Communication
Speech Pathology and Audiology
Theatre
Urban Studies
Women's Studies

Certificate Programs

Art Museum and Gallery Studies
Cartography and GIS (see Geography chapter)
Organizational Communication (see Communication chapter)

College of Business and Economics

Mission Statement:

The College of Business and Economics provides excellence and innovation in integrating quality teaching and learning, with applied research and relevant experience to a diverse clientele from the San Francisco Bay Area to the global community.

Core Values:

- Value diversity in students, faculty, staff and other stakeholders
- Commitment to and synergy between regional and global constituencies
- Commitment to excellence in teaching, curriculum delivery, and applied research
 - Latest technology and delivery systems
 - Flexibility in program delivery
- Innovation and cooperative approach to business problems
 - Business-ready curriculum
 - Economic development initiatives
 - Team-oriented approach
 - Capitalize on opportunities
 - Entrepreneurial orientation
- Commitment to ethics, honesty and integrity
- Creating a collegial and supportive work environment
- Commitment to outstanding service to our clientele

The undergraduate programs in business administration are accredited by the Association to Advance Collegiate Schools of Business.

Baccalaureate Degree Majors

Business Administration (B.S.)
Economics (B.A.)

Academic Minors

- Advertising
- Business Administration
- Business Computer Telecommunications
- Computer Information Systems
- Communication Skills
- Economics
- International Business
- Marketing
- Taxation

College of Education and Allied Studies

The mission of the College of Education and Allied Studies is to prepare collaborative leaders, committed to social justice and democracy, who will influence a highly technological and diverse world.

The College offers programs for liberal arts instruction and professional preparation of undergraduates in the fields of kinesiology and recreation.

Baccalaureate Degree Majors

- Kinesiology (B.S.)
- Recreation (B.S.)

Minors

- Environmental Recreation
- Kinesiology
- Recreation
- Youth Services Administration

Certificate Programs

- Pre-Physical Therapy (see Pre-Professional Programs chapter)
- Youth Services Administration

College of Science

The College of Science offers programs that provide a broad education in the physical, life, and health sciences; and in mathematics, statistics, and computer science. The career flexibility available to science students is one of the main advantages of a degree in the science area. The baccalaureate programs are designed to prepare students for graduate study and for careers in industry, government, and public school teaching.

Baccalaureate Degree Majors

- Biochemistry (B.S.)
- Biological Science (B.A., B.S.)
- Chemistry (B.A., B.S.)
- Computer Science (B.S.)
- Engineering (B.S.)
- Environmental Science (B.S.)
- Geology (B.A., B.S.)
- Health Sciences (B.S.)
- Mathematics (B.S.)
- Nursing (B.S.)
- Physics (B.S.)
- Psychology (B.A., B.S.)

Statistics (B.S.)

Minors

Biological Sciences
Chemistry
Computer Science
Geology
Health Sciences
Mathematics
Physics
Psychology
Software Development
Statistics

Certificate Program
Applied Statistics

Interdisciplinary Programs

Interschool interdisciplinary programs are administered by the Associate Vice President, Curriculum and Academic Programs.

Baccalaureate Degree Majors
Special Major (B.A., B.S.)

Certificate Program
Special Certificate

Program for Accelerated College Education
Students who have completed their lower-division general education requirements may elect to earn a Bachelor of Arts degree (B.A.) in Liberal Studies or Human Development via the Program for Accelerated College Education (PACE), an upper-division program of instruction in formats convenient for working individuals. The scheduling of classes on one or two nights per week and Saturdays, and the use of audio and visual materials enable students to combine their studies with the demands of full-time employment or other daytime responsibilities. For more information, see "PACE" in the "Undergraduate Programs" section. Also, call the PACE office at (510) 885-PACE (7223).

Footnotes

❑ A minor from outside Business/Economics may be substituted for an option.

❑ It is not necessary to select an option in these majors.

❑ For the current status of this program, contact the Department of Modern Languages and Literatures.

❑ These majors are also offered through the Program for Accelerated College Education (PACE).

❑ The upper division portions of these majors can be completed via the Program for Accelerated College Education (PACE).



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Course Numbering Key

UNDERGRADUATE PROGRAMS

Course Number and Description Key

- ▶ [Course Numbering Key](#)
- ▶ [Course Units](#)
- ▶ [Class Hours per Week](#)
- ▶ [Course Offering Key](#)
- ▶ [Footnote](#)

The numbering of courses is intended to describe the level at which they are offered. Any student, however, may enroll for any course if he or she has completed the listed prerequisites, except for certain graduate courses. See "California Articulation Number (CAN) System" in the Registration chapter for an explanation of CAN numbers.

0800-0999	Remedial courses (not for baccalaureate degree credit)
1000-1999	Freshman level
2000-2999	Sophomore level
3000-3999	Junior level
4000-4999	Senior level
5000-5999	Post baccalaureate and professional level
6000-6999	Graduate level
7000-7699	Upper division level continuing education ¹
7700-7999	Graduate level continuing education ¹

Course Units

() - Unit credits appear in parentheses following title of course

Class Hours per Week

The number of class hours a course meets per week equals the number of units listed for the course, unless otherwise indicated in the course description. (A "class hour" is 50 minutes.) Supervision courses (e.g., independent study, project, thesis) have no prescribed correspondence between class hours per week and units.

Course Offering Key

Quarter of offering may be subject to change without prior notice.

- F - Fall quarter
- W - Winter quarter
- Sp - Spring quarter
- Su - Summer quarter
- A - All quarters
- Y - At least once a year
- Tent. - Tentatively (used with one of the basic symbols above)
- Alt. - Alternate (used with one of the basic symbols above)

The lack of a symbol indicates uncertainty about offering the course in 2004-2006.

Footnote

- ¹ See quarterly bulletin of Continuing and International Education for classes offered each quarter.



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Advertising

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- ▶ [Footnote](#)

Department Information

Department of Marketing and Entrepreneurship
College of Business and Economics
Office: Music and Business Bldg., Room 2587
Phone: (510) 885-4146

Department of Communication
College of Arts, Letters, and Social Sciences
Office: Meiklejohn Hall, Room 3011
Phone: (510) 885-3292

Advisors: Robert Terrell (Mass Communication, ALSS), Chong S.K. Lee (Marketing and Entrepreneurship, CBE)

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Information

The advertising minor allows students to integrate an interdisciplinary set of advertising-related courses with their own major and their general education requirements. This may be an attractive specialization for students in such majors as business, mass communication, art, or psychology.

Careers in advertising include positions with advertising agencies in account supervision, copywriting, production, traffic, marketing and media research, and media buying.

Students with advertising skills are also in demand for the advertising and public relations departments of corporations and not-for-profit organizations, in radio, television, newspapers and magazines, and in specialty firms such as direct mail, outdoor advertising, marketing research agencies, production shops, and syndicated data services.

Students in the Advertising Minor are urged to complete some of the listed elective courses and, in particular, to seek out co-op education or internship placements during their junior and senior years. Practical working experience is available through active participation in The Advertising Agency, which serves The Pioneer, Escape Magazine, and KSUH-Radio within the Department of Communication.

Advertising options are available under the Business

Minor In Advertising

Administration major (see the Business Administration chapter) and the Mass Communication major (see Mass Communication chapter in the undergraduate section). A student will not be permitted to earn both an option and a minor in advertising.

Required Courses (47 units)

(Mass Communication majors may use all 47 units for their major and/or G.E. requirements; Business Administration majors may use 39 of the 47; Sociology majors, 31 of the 47; and English and Psychology majors, 27 of the 47 units.)

COMM 3340 Graphic Communication (4)
COMM 4520 Advertising Theory and Practice (4)
COMM 4530 The Advertising-Public Relations Campaign (4)
ENGL 2005 Grammar for Writers (4) or ENGL 3005 Study of Language (4)

MKTG 3401 Marketing Principles (4)
MKTG 3410 Advertising Management (4)

MKTG 3445 Seminar in Marketing Research (4) or COMM 3800 Research Methods in Mass Communication (4) or SOC 4111 Methods of Sociological Research I (4)

MKTG 4412 Media Planning (4) or COMM 3100 Television Production/Direction (4)

PSYC 1000 General Psychology (or one of 1001, 1005, 2004, or 2009) (5)
STAT 1000 Elements of Probability and Statistics (5) or STAT 2010¹ Elements of Statistics for Business and Economics (5)

An advisor-approved Art activity course (5)

Strongly Recommended

PSYC 1100 Critical Thinking in Psychology (4)

PSYC 3510¹ Attitudes and Opinions (4) or PSYC 4740 Psycholinguistics (4)

Co-op Ed or internship experiences in advertising and/or public relations (4-8)

Additional Electives Relevant to the Minor

ACCT 2210 Accounting for Non-Business Majors (4) or 2251-52 Financial Reporting and Analysis I, II (8)

ART/COMM 3600 Intermediate Photography (5)
ART/COMM 4600 Advanced Photography (5)
COMM/ART 2700 Introduction to Photography (5)
COMM 3110 Law of Mass Communication (4)
COMM 4050 Theories of Mass Communication (4)
COMM 4510 Public Relations Theory and Practice (4)
MKTG 3425 Promotion (4)
MKTG 4415 Corporate Communications (4)
SOC 1000 Introduction to Sociology (or 1001 or 1002 or 2001 or 2002) (4)

Footnote

- Has a prerequisite that is not included in the minor.



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International Studies

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- ▶ [Program Description](#)
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- ▶ [Major Requirements \(B.A.\)](#)
- ▶ [Minor Requirements](#)
- ▶ [Undergraduate Courses](#)

Department Information

College of Arts, Letters, and Social Sciences
Office: Meiklejohn Hall 4092
Phone: (510) 885-3221

Professors Emeriti: Herbert M. Eder (Geography and Environmental Studies), Roland Heine (Modern Languages and Literatures)

Professors: Loretta Breuning (Management and Finance), Shyam J. Kamath (Economics), David J. Larson (Geography and Environmental Studies)

Associate Professors: Pablo Raul Arreola, Jr. (History), Norman Bowen (Political Science)

Director: Norman Bowen

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

The International Studies major consists of an integrated group of courses reflecting international aspects of various disciplines. It is designed to provide the student with a broad base of understanding of the interrelationship of the world community, while at the same time providing the opportunity to specialize in an area of interest. A minor in International Studies is also offered.

The International Studies major consists of a lower division requirement of twelve (12) units in Economics and Geography/Environmental Studies and, optionally, Anthropology, plus a foreign language requirement. The upper division requirements include a methods course, a twentieth century History course, and three INTS courses (an introductory upper division course, a senior seminar, and an international field experience). The student will complete the major with sixteen (16) units of international coursework with a particular emphasis and twelve (12) units selected from a list of electives.

Features

The university encourages firsthand experience abroad. INTS 4100 (International Field Work) is designed to afford such an opportunity. Optimally the student will elect to complete the internship, either paid or voluntary, in a foreign country. The University recognizes that this may not always be possible and therefore accepts the completion of the internship locally if a substantial portion of the work experience is internationally related. The student may also elect to fulfill the international work experience requirement by completing a course of study through the CSU International Programs or a recognized quarter, semester, or summer program abroad. Any such activity must be approved by an International Studies advisor before being undertaken.

Career Opportunities

International Business • International Organizations • Federal Government • Journalism • Law • Local services to foreign language speakers

Major Requirements (B.A.)

Because requirements are subject to change, consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 58-85 units; the B.A. degree requires a total of 180 units.

- I. Lower Division (12-36 units)
Select one course from each group
 - A. ANTH 1300 Introduction to Cultural Anthropology (4) or GEOG 2300 Cultural Geography (4)
 - B. ECON 1000 Economics of Public Issues (4) or ECON 2301 Principles of Microeconomics (4) or ECON 2302 Principles of Macroeconomics (4)
 - C. GEOG 2310 Economic Geography (4)
 - D. Modern Language Requirement (0-24 units)
Oral and written proficiency in a modern foreign language equivalent to two full years of university-level studies. The requirement can be fulfilled by the recent completion of the third quarter of intermediate language at Cal State, Hayward or by an examination offered by the Department of Modern Languages and Literatures measuring oral and written proficiency at that level.
- II. Upper Division Core (14-16 units)
 - A. INTS 3100 Global Systems (4), INTS 4500 Senior Seminar (4), and HIST 3017 Twentieth Century History (4)
 - B. International Field Experience (minimum 2 units) through one of the following: INTS 4100 International Field Work (2-4) or an approved course of study in a foreign country.

Note: In order to fulfill this requirement, any experiential activity or course of study must be pre-approved by an International Studies advisor.

III. Methods Course (4-5 units)

One methods course selected from the following list:

ANTH 4310 Field Course in Ethnography (5)
ECON 4400 Introduction to Econometrics (4)
HIST 3010 Historical Writing (4)
MGMT 3100 Introduction to Quantitative Methods in Business (5)
PHIL 3321 Philosophy of the Human Sciences (4)
POSC 3010 Political Inquiry: Scope and Methods (4)
PSYC 3090 Methods of Investigation in Psychology (4)
SOC 3000 Introduction to Sociological Research (4)
SOC 4111 Methods of Sociological Research (4)
STAT 3010 Statistical Methods in the Social Sciences (4)
STAT 4610 Introduction to Nonparametric Statistical Methods (4)

IV. Area of Emphasis (16 units)

Emphasis courses: 4 courses (16 units) to be chosen with the approval of an advisor in either (1) a discipline area (example: Economics, History); (2) a regional area (example: Europe, Latin America); or (3) a topic area (example: arms control, economic development, environmental issues). All courses selected should be internationally relevant.

V. Upper Division Electives (12 units)

Select from the following with no more than 2 courses in any one discipline:

ANTH 3000 Anthropology in the Modern World (4), (if ANTH 1300 has not been taken); or any upper division anthropology course with primarily international content.
COMM 4110 International Communication (4)
COMM 4830 Intercultural Communication (4)
ECON: Any upper division International Economics course
FIN 4375 International Financial Management (4)
MLL: Any upper division modern language course not primarily devoted to literature.
GEOG/ENVT: Any geography or environmental studies course with primarily international content.
HIST: Any upper division modern history course with primarily international content.
INTS: Any upper division international studies course.
MGMT 4670 Multinational Business (4)
MKTG 4470 International Marketing (4)
POSC: Any upper division political science course devoted to comparative government or international relations.
SOC 3431 Seminar in World Development (4)

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University

Minor Requirements

Writing Skills Requirement; and the residence, unit, and grade point average requirements.

The minor consists of 28-40 units.

I. Lower Division (8-20 units)

A. Twelve (12) units of a modern foreign language or the equivalent as determined by examination. The language, when possible, should be coordinated with the student's other coursework in the minor. It is strongly recommended that a student achieve a higher level of proficiency in a foreign language through courses in language, culture, or literature.

B. Eight (8) units selected from:

1. ANTH 1300 Introduction to Cultural Anthropology (4) or GEOG 2300 Cultural Geography (4)
2. ENVT 2000 Introduction to Environmental Studies (4) or GEOG 2310 Economic and Resource Geography (4)
3. POSC 1500 Conflict in World Politics (4)
4. ECON 1000 Economics of Public Issues (4) or ECON 2301 Principles of Microeconomics (4) or ECON 2302 Principles of Macroeconomics (4)

II. Upper Division (20 units)

A. INTS 3100 Global Systems (4)

B. Sixteen (16) units of upper division international coursework from the College of Arts, Letters, and Social Sciences (ALSS) or the College of Business and Economics, selected with the approval of an International Studies Minor advisor. No more than eight (8) units may be taken in any one department; a minimum of eight (8) units must be taken in ALSS.

Undergraduate Courses

The course prefix for the following courses is INTS.

3100 Global Systems (4)

The wide range of global systems which have evolved to provide a framework for international transactions and problem-solving. Focus on global systems in the areas of politics, economics, mass media, science/technology, and basic human needs. The origins, objectives, and institutional capabilities of existing global systems in each area.

3999 Issues in International Studies (4)

Readings, discussion, and research on contemporary and/or significant issues in international studies. May be repeated for credit when content varies.

- 4100** International Field Work (2-4)
Supervised field placement with a company, non-profit organization or government agency in which a substantial portion of the work experience is internationally related. Foreign placements are encouraged. CR/NC grading only. May be repeated once for credit for a maximum of 8 units.
- 4500** Senior Seminar (4)
Advanced analysis and evaluation of global systems. Study of theoretical models. Prerequisite: INTS 3100.
- 4900** Independent Study (1-4)



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Department Information

Program Description

Anthropology

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- ▶ [Anthropology Option: Liberal Studies](#)
- ▶ [Undergraduate Courses](#)

Department of Anthropology
College of Arts, Letters, and Social Sciences
Office: Meiklejohn Hall 4064
Phone: (510) 885-3168

Professors Emeriti: Peter J. Claus, H. Glynn Custred

Professors: Alan J. Almquist, George R. Miller, Laurie J. Price (Chair)

Assistant Professor: Laura C. Nelson

Lecturers: David J. Matsuda, Rita Ross

Please consult the 2006-2007 online catalog for any changes that may occur.

Anthropology is the multifaceted study of humans and their ways of life from a global and evolutionary perspective. Students in anthropology learn about the self as well as other ethnic nationalities as they are shaped by biological evolution, ecological constraints, political history, and sociological conditioning. The Department of Anthropology offers theoretical and methodological courses in the five sub-disciplines: biological anthropology, prehistory and archaeology, anthropological linguistics, sociocultural anthropology, and applied anthropology. Regional courses on major populations of the world, especially the heritage cultures of North and South America, Asia, and the Middle East, form an important component of the curriculum.

At the undergraduate level, students in the B.A. degree program may choose to focus on special interests in two combined sub-disciplines:

- Archaeology and Biological Anthropology emphasize the study of human biology, variation, evolution, and the reconstruction of past ways of life and cultural systems from material remains.

Career Opportunities

- Socio-Cultural and Applied Anthropology emphasize the study of social and cultural systems of more recent historical and contemporary populations, and the application of anthropological insights into present-day problems.

Other combinations are possible upon consultation with, and approval by, the faculty.

Anthropologist • Archaeologist • Artifacts Conservator • Curator • Ethnologist • Foreign Service Officer • Immigration Service Official • International Aid Agencies Official • International Business Employee • Multicultural Education Instructor • Museum Curator • Park Ranger • Park Service Official • Professor/Teacher • Refugee Worker • Researcher • Social Science Teacher • Social Worker • Travel Consultant • Urban Planner

Features

The Department administers the Clarence E. Smith Museum of Anthropology, located on the fourth floor of Meiklejohn Hall. The museum houses a sizable collection of archaeological artifacts recovered in Alameda and Contra Costa Counties, as well as ethnographic specimens from cultural groups throughout the world. The museum is an instructional facility for museum curating, research, design, and exhibits. Museum exhibits and special events are open to the public free of charge. For information, call (510) 885-7414 or (510) 885-3104.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation.

The major consists of 60-73 units; the B.A. requires a total of 180 units.

- I. Required Courses in Anthropology (60-61 units)
 - A. Lower Division (16 units)

ANTH 1100, 1200, 1300, 1800 (ANTH 2020 or 3000 may be substituted for ANTH 1300 on approval of an advisor and the department chair.)
 - B. Upper Division (44-45 units)
 1. ANTH 3400, one course in the 3100 series, one course in the 3200 series, and ANTH 3800
 2. One course from the following: ANTH 3500, 3510, 3520, 3545, 3550, 3560, 3580
 3. ANTH 4910 Pro-Seminar in Anthropology
 4. Five additional courses from one of the following two options:

- a. Archaeology and Biological Anthropology:
ANTH 4240 and 4250 and three of ANTH 3100, 3101, 3110, 3200, 3250, 3260, 3280, 3710, 4260
- b. Socio-Cultural Anthropology:
ANTH 4310, and one additional course from the 3500 series and three of ANTH 3110, 3410, 3710, 3720, 3730, 3740, 3745, 3750, 3760, 3840

II. Required Courses in Supporting Fields (0-12 units)

Two or three courses selected from the following list:
(Students should make their choice on the basis of discussions with a department faculty advisor.)

BIOL 1001 (or one of 1003,1005, 2001,2002, 2003 or 2004), 1002 (or 1004 or 2005), and one of 2040, 3020, 3031, 3060, or 3130 (9 units)

GEOL 2101 (or 2100) and one of 3030, 3110, or 3200 (6-10 units)

STAT 1000 and one of STAT 3010, CS 1020, or CS 1160 (9 units)

Three quarters of a Modern Language (MLL -01, -02, -03) or competence demonstrated by test in the foreign language (0-12 units)

Ethnic or Area Studies courses (Asian Studies, Latin American Studies) excluding Anthropology Department offerings in these fields (12 units)

III. Recommended Courses in Supporting Fields

Students intending to pursue graduate work are urged to elect or add Modern Language courses to satisfy the course requirements above.

When possible, students should satisfy their G.E. requirements from additional courses listed in paragraph II above.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

The minor requires thirty-six (36) units in Anthropology to be taken in approximately the following order:

- A. Two of the following:
ANTH 1100, 1200, 1300 (3000 may be substituted), 1800

Anthropology Option: Liberal Studies

- B. Two of the following: ANTH 3100 (or 3101), 3200, 3400, 3800
 - C. One course in the 3500 series (regional ethnography)
 - D. One course in the 3700 series (applied anthropology) and two additional 3000- and/or 4000-level courses (excluding 3500 series)
 - E. ANTH 4910
-

Area I (4 units)

One of the following (4 units):

- ANTH 1100 Introduction to Biological Anthropology (4), 1200 Introduction to Archaeology (4), 1800 Introduction to Anthropological Linguistics (4)

Area VII, Credential Track or Area VI, General Track (24 units)

Either ANTH 1300 Cultural Anthropology (4), or ANTH 3000 Anthropology in the Modern World (4)

Three of the following courses (12 units):

- ANTH 3500 North American Indians (4), 3505 Indians of California (4), 3510 South America (4), 3520 Contact Period California (4), 3545 China (4), 3550 Japan (4), 3560 India (4), 3580 Middle East (4)

One additional upper division Anthropology course (4 units)

ANTH 4910 Pro-Seminar in Anthropology (4)

Undergraduate Courses

The course prefix for the following courses is ANTH.

Introductory Courses

- 1000** Introduction to Anthropology (4)
The holistic study of human beings for non-majors: concepts of human evolution, prehistory, culture; comparison in human variation; structure and function in social organization; synthesis of biological, cultural, and social factors. Four hrs. lect., or 3 hrs. lect., 1 hr. disc. (A)
- 1002** Prehistory Through Popular Literature (4)
Comparison of popular novels and films concerning prehistory with traditional archaeological approaches to the same data. A survey of Old World prehistory which illustrates the relative value of fictional and scholarly reconstructions of the past. (Y)
- 1006** Viewing Diversity (4)
Basic social science approaches to the study of local, national, and global constructions and representations of cultural diversity.
- 1010** The Human Adaptation (4)

Introduction to the study of humans in the natural world, human origins, and adaptations both from a cultural and biological perspective.

- 1100** Introduction to Biological Anthropology (4)
[CAN ANTH 2]
An introduction to human biology from an evolutionary perspective. Topics include evolutionary theory, evolution of the primates based on fossil remains, behavioral studies of living primates, and modern human variability and adaptations. Four hrs. lect.; or three hrs. lect., 1 hr. disc. (F)
- 1200** Introduction to Archaeology (4)
[CAN ANTH 6]
Introduction to the techniques used in recovery and interpretation of archaeological materials. Examples of the processes of cultural reconstructions from sites in the old and new world. (F)
- 1300** Introduction to Cultural Anthropology (4)
[CAN ANTH 4]
Functional approaches to the structure and dynamics of culture and society around the world; comparative study of human behavior and value systems in varied ecological settings. (F)
- 1800** Introduction to Anthropological Linguistics (4)
An examination of the nature of language and an introduction to the principles of linguistic science. (F)
- 2020** Self, Family, Culture (4)
Anthropological approaches to the study of personhood, family, and kinship in a cross-cultural perspective. Methodologies include comparative structural analysis, genealogical research, and the use of oral tradition, family folklore, and personal experience narrative in kinship study.
- 2755** Conflict in Cross-Cultural Perspective (4)
Introduction to the anthropological approach in studies of conflict, conflict resolution and legal systems. Comparative examination of the transition from indigenous to Westernized systems and alternatives to the modern American formal legal system.
- 3000** Anthropology in the Modern World (4)
The relevance of anthropology to contemporary world problems and issues of mankind. A course for non-majors examining topics such as the social and cultural dimensions of health services, population problems, business, management, and public administration. (Y)
- 3999** Issues in Anthropology (4)
Readings, discussion, and research on contemporary and/or significant issues in anthropology. May be repeated for credit when content varies.

Biological Anthropology

- 3100**, Human Evolution I, II (4,4)
- 3101** Human and non-human primate evolutionary history. Fossil evidence, comparative anatomy and molecular systematics; 3100 Primate evolutionary history based on fossil evidence and comparative anatomy (F); 3101 The fossil evidence for human evolution. Prerequisite: ANTH 1100 or BIOL 3020 or equivalent, or consent of instructor. One course is not prerequisite to the other. (W, Sp)
- 3110** Primate Social Behavior (4)
A survey course concerned with behavior of non-human primates. Discussions of the relationships between social structure and the environment. The relevance of the study of non-human primate behavior to an understanding of human behavior will be emphasized. (Y)
- 3120** Human Bio-diversity (4)
Human genetics and genetic variability in human populations. Human growth and development, human ecology and human adaptations to changing environments. Prerequisite: ANTH 1100 or BIOL 1001 or equivalent.

Archaeology

- 3200** Science in Archaeology (4)
Introduction to the application of the physical sciences in the solutions of problems in prehistory. Emphasis on dating methods and paleoenvironmental reconstructions. Prerequisite: ANTH 1200 or consent of instructor. (Y)
- 3250** Precolumbian America: Aztec, Inca, Maya (4)
The origins, growth and interaction of the Mesoamerican and South American civilizations, with particular emphasis on the Aztecs, Incas and Mayas. Archaeological, historical and ethnographic evidence. (Y)
- 3260** Historical Archaeology (4)
Archaeology of the United States, historical period from 1500 to the present. Survey course emphasizing both native and immigrant peoples' contributions to the historical/archaeological record.

Sociocultural Anthropology

- 3400** Social Anthropology (4)
Structural-functional approach to the comparative study of human institutions, with emphasis on changing kinship, family, and social structure in various regions of the world. Critical analysis of major ethnographic works and substantial writing required. Prerequisite: ANTH 1300 or consent of instructor. (W)
- 3410** Folklore (4)
Introduction to and survey of oral literature, e.g., folktales, myths, legends, proverbs, riddles, etc., especially among non-literate peoples; methods and theories of folklore

analysis and the use of folklore in studies of diffusion, social functions, world view, and religion. (Y)

- 3430** Ethnicity and Nationalism (4)
The nature of ethnicity and nationalism, the relationship between ethnic group and nation, the ethnic origin of nations, and ethnic conflict and accommodations within nation states.

Regional Anthropology and Ethnography

- 3500** North American Indians (4)
Native peoples and cultures of present-day United States and Canada. (Y)
- 3505** Indians of California (4)
Habitat, economy, society, arts, and beliefs of the native populations of California. (Y)
- 3510** South America (4)
Peoples and cultures of South America from contact times to the present. Ecological adaptations, socioeconomic organization, kinship, religion, and culture change. (Y)
- 3520** Contact Period of California (4)
Anthropological perspective on the societies and cultures of California during the contact period from the beginning of the mission period to the end of the Gold Rush. (Y)
- 3545** China (4)
Cultural patterns, religion, social structure, ecological setting and regional variations of China, Taiwan and Hong Kong; their traditional, present and future role in the world. (Y)
- 3550** Japan (4)
Cultural patterns, religion, social structure and ecological settings of Japan. Topics will include family and kinship, gender roles, work groups, socialization, and education. (Y)
- 3560** India (4)
Development of Indian cultural traditions, with emphasis upon social organization and its relation to the social problems of the peoples inhabiting the Indian subcontinent. (Y)
- 3580** Middle East (4)
An exploration of the regional diversity of people and social institutions of the Middle East in order to understand the complexities of current social issues. (Y)

Applied Anthropology

- 3710** Anthropology and Museums (4)
The anthropologist in the museum profession; the curatorial role; acquisition, identification, recording, repair, preservation and display of anthropological materials. May

be repeated once for credit. Prerequisites: ANTH 1100, 1200, or 1300, or consent of instructor. Minimum of two field trips required. One hr. lect., 6 hrs. act. (F, W)

- 3720** Medical Anthropology (4)
The ecology of health, magical beliefs, and medicine; public health and medical problems as affected by cultural differences; the effects of acculturation upon mental and physical health. Prerequisite: Junior or senior standing or consent of instructor. (A)
- 3730** Anthropology on the Internet (4)
The Internet computer network contains many "virtual communities" representative of various international multicultural interest groups. Application of anthropological fieldwork techniques to study issues of transitional identity, communications, expressions, representation, and the concerns of geographically dispersed communities. (Y)
- 3740** Cross-Cultural Studies in Child-Rearing (4)
Cross-cultural study of infancy, childhood and adolescence; the process of enculturation, socialization and methods of child rearing. (Y)
- 3745** Human Sexuality: Anthropological Perspectives (4)
A cross-cultural and evolutionary study of human sexuality expanding the constricted perspectives of Western cultures, including a review of sexual practices and attitudes, gender roles in sensuality, and sexual orientation in both Western and non-Western societies. (A)
- 3750** Women in Cross-Cultural Perspective (4)
Similarities and differences in women's experiences in various societies around the world. Questions concerning gender identity, sexuality, marriage, the family, work, power, and intersections of gender with age, class and other inequalities. (Y)
- 3760** Media in Cross-Cultural Perspective (4)
Introduction to socio-cultural anthropology from the perspective of visual media; ethnographic and feature films, video, and slides of field work. Assigned readings and lectures parallel media presentations placing them in a broader topical and theoretical context.
- 3785** Anthropology in Action I (4)
Application of anthropological theory and methods, in combination with those in health and social services, education, economic, and community development, to the solution of selected contemporary problems. Problem areas include public health issues and policy, education, women and children, community development. A-F grading only. Prerequisite: upper division standing or consent of instructor.
- 3790** Anthropology and Genealogy (4)
Anthropology from the perspective of genealogy and the individual student's family tree. Exploration of human

diversity, both biological and cultural, through the methods of genealogical research including oral history, family folklore, DNA profiling, and Internet resources.

- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 8 units. A maximum of 4 units will be accepted toward the Anthropology major; not applicable toward the Anthropology minor, CR/NC grading only. Prerequisites: at least a 2.0 GPA; departmental approval of activity. (A)

Symbolic Anthropology and Religion

- 3800** Language and Culture (4)
The structured nature of language, linguistic classification, and the relationship of language, thought and reality viewed through the perspective of linguistic relativity.
- 3840** Magic, Witchcraft and Religion (4)
Cross-cultural comparison of the origins, development and social functions of magical, witchcraft and religious beliefs and behavior, including relevant aspects of symbolism, ritual, ceremony, spirit possession, exorcism, divination, pilgrimage, renunciation and revivalistic cult movements. (Y)

Advanced Archaeology - Biological Anthropology

- 4240** Data Analysis in Archaeology (4)
General field and laboratory techniques for retrieval and analysis of data recovered from prehistoric and/or historic sites. May be repeated once for credit. Prerequisite: ANTH 1200 or consent of instructor. One hr. lect., 6 hrs. act. (Sp)
- 4250** Field Course in Archaeology (5)
Techniques of surface survey and scientific excavation; controlled data retrieval from a variety of archaeological field situations. Aspects emphasized will depend on available opportunities. Prerequisite: ANTH 1200 or 3200 or consent of instructor. One hr. lect., 8 hrs. act. (Sp)
- 4260** Human Osteology Laboratory (3)
A laboratory course on the human skeleton. Reconstruction of individual characteristics based on metric, non-metric and statistical analysis. Topics may include analysis of human populations from archaeological contexts, paleodemography, and paleopathology. Prerequisite: ANTH 1100 or consent of instructor. Six hours lab. (Sp)

Advanced Sociocultural Anthropology

- 4310** Field Course in Ethnography (5)

Securing, recording, ordering, and analysis of cultural data; problems of participant observation and eliciting information from informants; methods of data collection. Prerequisite: one course in ANTH 1300 or 3400 or 3500 series. One hr. lect., 8 hrs. act. (field work all day Saturday or two afternoons per week).

4900 Independent Study (1-4)

4910 Pro-Seminar in Anthropology (4)
Seminar in history and philosophy of anthropological thought: its place among the sciences and the humanities, schools of thought and the respective contributions of eminent anthropologists. Prerequisites: senior standing, completion of three upper division anthropology courses or consent of instructor. (Sp)



HOME



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Kinesiology

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Department Information

Department of Kinesiology and Physical Education
College of Education and Allied Studies
Office: Physical Education Bldg. 130
Phone: (510) 885-3061

Professors Emeriti: John Z. Ostarello, Timothy Tierney

Professors: Calvin S. Caplan, Stanley J. Clark, Penny McCullagh (Chair), Donald T. Sawyer, Robert W. Zambetti

Assistant Professors: Catherine Inouye, Rita Liberti, Spiros G. Prassas, Jeffery P. Simons, Jin H. Yan

Lecturers: Will Biggs, Glen E. Borgeson, Lisa De Rossi, Amy Foreman, Jair Z. Fory, Anthony G. Garcia, Cara L. Hoyt, Sara L. Judd, Dirk L. Morrison, Greg Ryan, James Spagle

Director of Athletics: Debby De Angelis

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

Kinesiology is the study of human motor performance and those physical activities yielding exercise benefits and/or satisfying a person's competitive nature. Physical Education is one professional application of the study of Kinesiology. It is instruction that provides the individual with the skills, techniques and knowledge necessary for successful and enjoyable participation in sport and exercise. Other professional applications offered by the department include Athletic Training, Exercise Nutrition and Wellness, Physical Education Teaching, and Pre-Physical Therapy.

The purposes of the Department of Kinesiology and Physical

Career Opportunities

Education are (1) to provide opportunities for learning and participation in a wide variety of motor activities at all levels, from beginning instruction through intercollegiate competition; and (2) to provide an opportunity for students to study the discipline of kinesiology. Such study includes an investigation into the nature of motor performance, how it is assessed, what its effects are upon the rest of the system; and how motor performance is learned. It also involves an investigation of the historical, cultural, philosophical, psychological, and social factors which result from and influence play, games, and sports.

The department's program offers courses appropriate to the general education curriculum of the university. It provides the necessary foundation for students who wish to continue their own personal lifelong activities. It includes the application of knowledge acquired in the study of the discipline to such professional fields as teaching, coaching, and physical therapy, and to graduate study.

The major in Kinesiology includes both an academic as well as a performance base. Understanding and appreciation are enhanced when the student takes an active role in performance.

Athletic Trainer • Activities Director • Coach • Community College Teacher • Community Fitness Agency Director • Exercise/Nutrition Counselor • Physical Education Teacher • Physical Therapist • University Instructor • Wellness Specialist

Features

Many of the physical education facilities are open to the campus community when not being used for classes. These may include swimming pools, tennis courts, handball courts, the gymnasium, and outdoor fields.

Students enrolled in the department's thirteen intercollegiate athletic programs have the opportunity to engage in numerous field trips throughout California and, in some cases, in neighboring states. As a member of the California Pacific Conference (CPC), students travel to compete against other CPC institutions. The intercollegiate athletic program includes: basketball, cross country golf, and soccer for men and women; baseball for men; and softball, swimming, volleyball, and water polo for women.

There is one scholarship housed within the Department of Kinesiology and Physical Education. Recipients of the Joe Morgan Scholarship, named for the Hall of Fame baseball player who is a Cal State Hayward graduate, are identified each Winter with the award(s) applying to the subsequent year. The amount of the Joe Morgan award varies and multiple awards may be given.

Major Requirements (B.S.)

Because requirements are subject to change, consult your advisor for clarification and interpretation of major requirements. The major consists of 93-125 units; the B.S. degree requires a total of 180-184 units.

I. Lower Division

The lower division requirements vary depending on the option. Each student must complete one of the following options: Athletic Training, Exercise Nutrition and Wellness, Physical Education Teaching, Pre-Physical Therapy, Special Studies. The lower division requirements are listed within the option requirements.

II. Upper Division Core (46 units)

- KPE 3300 Kinesiological Measurement (5)
- KPE 3305 Structural Kinesiology (5)
- KPE 3310 Biomechanics (5)
- KPE 3320 Exercise Physiology (5)
- KPE 3330 Motor Learning and Control (5)
- KPE 3700 History of Sport and Physical Education (4)
- KPE 3740 Philosophical Foundations of Sport and Physical Education (4)
- KPE 3750 Sport in Contemporary Society (4)
- KPE 4340 Motor Development (4)
- KPE 4410 Sport and Exercise Psychology (5)

III. Option Requirements

(In addition to the upper division Core requirements listed above, students must complete one of the following options.)

A. Athletic Training Option (41 units)

The Athletic Training option provides an opportunity to specialize in prevention, management and rehabilitation of athletic injuries. The program is not accredited by the National Athletic Trainers Association so students will need to complete additional coursework to become certified. The major with this option totals 93-97 units.

1. Lower Division (18 units)

- BIOL 1001 (or one of 1003,1005, 2001, 2002, 2003, or 2004), 1002 (or 1004 or 1005) Introduction to Biology, Lab (5)
- BIOL 2010 Human Physiology and Anatomy I (or 2011) (5)
- KPE 1625 Nutrition and Performance (4)
- KPE 2600 Introduction to Athletic Training (4)

2. Upper Division (23 units)

- KPE 3600 Care and Prevention of Athletic Injuries (5)
- KPE 3601 Athletic Training: Modalities and Rehabilitation (4)
- KPE 4030 Professional Field Experience (2)
- KPE 4600 Athletic Training Practicum (2, 2)
- KPE 4610 Exercise Prescription (4)
- KPE 4650 First Aid and Safety (4)

B. Exercise Nutrition and Wellness Option (52 units)

The Exercise Nutrition and Wellness option explores the relationship between nutrition and exercise. Both metabolic and behavioral implications are investigated. The major with this option totals 104-108 units.

1. Lower Division (28 units)

BIOL 1001 (or one of 1003,1005, 2001, 2002, 2003, or 2004), 1002 (or 1004 or 1005) Introduction to Biology, Lab (5)

BIOL 2010 (or 2011) Human Physiology and Anatomy I (5)

BIOL 2020 Human Physiology and Anatomy II (5)

CHEM 1100 Introduction to College Chemistry (5), or equivalent.

KPE 1625 Nutrition and Performance (4)

KPE 2600 Introduction to Athletic Training (4)

2. Upper Division (24 units)

KPE 4005 Exercise Nutrition and Metabolism (4)

KPE 4010 Contemporary Perspectives in Exercise Nutrition (4)

KPE 4030/4031 Professional Field Experience (4)

KPE 4330 Clinical Exercise Physiology (4)

KPE 4610 Exercise Prescription (4)

KPE 4615 Exercise and Stress (4)

C. Pre-Physical Therapy Option (68-69 units)

The Pre-Physical Therapy option satisfies the majority of, if not all, prerequisite coursework needed to gain admission to various California Schools of Physical Therapy. The major with this option totals 120-125 units.

1. Lower Division (51 units)

BIOL 1401 Molecular and Cellular Biology (5)

BIOL 1403 Animal Biology (5)

BIOL 2010 Human Physiology and Anatomy I (or 2011) (5)

BIOL 2020 Human Physiology and Anatomy II (5)

CHEM 1101, 1102, 1103 General Chemistry (15)

PHYS 2701 Force, Mass and Motion (4)

PHYS 2702 Heat, Sound, Electricity and Magnetism (4)

PHYS 2703 Light, and Modern Physics (4)

KPE 2600 Introduction to Athletic Training (4)

2. Upper Division (13 units)

KPE 3600 Care and Prevention of Athletic Injuries (5)

KPE 4030/4031 Professional Field Experience (4)

PSYC 4410 Abnormal Psychology (4)

3. Elective (4-5 Units)

BIOL 2025 Introduction to Microbiology (5)

BIOL 4160 Medical Physiology (4)

CHEM 2301 Survey of Organic Chemistry (4)

KPE 4330 Clinical Exercise Physiology (4)

KPE 4615 Exercise and Stress (4)

PSYC 4420 Developmental Psychology (4)

STAT 1000 Elements of Probability and Statistics (5)

STAT 3031 Statistical Methods in Biology (4)

D. Physical Education Teaching Option (44 units)

This option is designed to prepare students for teaching physical education in grades K-12 in public and private schools. The approved curriculum meets the Standard Requirements by the California Commission on Teacher Credentialing. The major with this option totals 96-100 units.

1. Lower Division Requirements (5 units)
BIOL 2010 Human Physiology and Anatomy I (or 2011)
(5)

2. Upper Division Requirements (35 units)

Theory-Analysis-Practice Courses (15 units)

DANC 3241 The Dance Experience (3)

KPE 3072 Individual and Dual Sports (3)

KPE 3075 Aquatic and Outdoor Education (3)

KPE 3079 Combatives and Fitness Activities (3)

KPE 3080 Team Sports and Field Sports (3)

Foundation Courses (8 units)

KPE 4008 Physical Education for Exceptional
Individuals (4)

KPE 4650 First Aid and Safety (4)

Pedagogical Courses (12 units)

EDUI 5090 Computer Application in Educational
Settings (4)

KPE 4004 Elementary School Physical Education (4)

KPE 4006 Secondary School Physical Education (4)

3. Field Experience (4 units)

KPE 4031 Professional Field Experience (2, 2)

(Must be taken concurrently with KPE 4004 and 4006)

E. Special Studies Option (41 units minimum)

The Special Studies option provides students the opportunity to design an individualized course of study which focuses upon interdisciplinary topics or themes related to Kinesiology. A unique aspect of this option is the requirement of coursework outside the department which is related to sport and exercise phenomena (e.g., mass communication and sport, business management and fitness programs). The major with this option totals 93 units minimum.

1. Lower Division (5 units)

BIOL 2010 Human Physiology and Anatomy I (or 2011)
(5)

2. Upper Division (32 units minimum)

Students may design an individualized option consisting of a minimum of 32 units. Five courses (20 units) must be taken from those listed for the Exercise Nutrition and Wellness option, the Athletic Training option, and/or the Physical Education Teaching option. In addition, a minimum of three related courses (12 units) must be taken outside the department. All Special Studies option programs must receive approval from the department chair before coursework is initiated.

3. Field Experience (4 units)

KPE 4030 Professional Field Experience (1-4) and/or

KPE 4031 Professional Field Experience (1-4)

IV. Performance Requirements (6-10 units)

The skill proficiency requirement for all major students in Kinesiology, regardless of option, involves satisfactory completion of one (1) activity course in each of five categories: Swimming, Combatives, Team Sports, Individual or Dual Sports, and Fitness Activities. Therefore, the student must have completed a minimum of five different activities. At least one intermediate and one advanced-level activity course must be included.

Students possessing demonstrable skill and knowledge of sport may obtain credit in that activity by successfully challenging the appropriate course. In special circumstances, students may petition the department chair for a waiver. Students may not challenge Fitness Activities.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth Requirements; the U.S. History, U.S. Constitution, and California State and Local Government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

The minor in Kinesiology consists of 40 units.

The minor in Kinesiology serves students who wish to acquire knowledge of Kinesiology as a secondary academic focus. It also enables students who have a degree in another field to meet the prerequisite coursework requirements for the Master of Science degree in Kinesiology.

1. Lower Division Prerequisite (5 units)
BIOL 2010 Human Physiology and Anatomy I (or 2011) (5)
2. Upper Division Core (10 units)
KPE 3300 Kinesiological Measurements (5)
KPE 3305 Structural Kinesiology (5)
3. Upper Division Electives (18 units)

Complete two of the following:
KPE 3310 Biomechanics (5)
KPE 3320 Exercise Physiology (5)
KPE 3330 Motor Learning and Control (5)

Complete two of the following:
KPE 3700 History of Sport and Physical Education (4)
KPE 3740 Philosophical Foundations of Sport and Physical Education (4)
KPE 3750 Sport in Contemporary Society (4)
4. Field Experience (4 units)
KPE 4030 Professional Field Experience I (1-4) and/or KPE 4031 Professional Field Experience II (1-4)
5. Performance Requirements (3 units)

Kinesiology
Option: Liberal
Studies

Complete at least one proficiency in at least three of the designated categories: aquatics, team sports, individual or dual sports, combatives, and fitness activities.

Area VII Credential Track or Area VI General Track
(25 units)

KPE 1007 Beginning Swimming (1)
KPE 3300 Kinesiological Measurement (5)
KPE 3305 Structural Kinesiology (5)

One of the following (5 units):

KPE 3310 Biomechanics (5)
KPE 3320 Exercise Physiology (5)
KPE 3330 Motor Learning and Control (5)

One of the following (4 units):

KPE 2600 Introduction to Athletic Training (4)
KPE 3700 History of Sport and Physical Education (4)
KPE 3740 Philosophical Foundations of Sport and Physical Education (4)
KPE 3750 Sport in Contemporary Society (4)
KPE 4008 Physical Education for Exceptional Individuals (4)
KPE 4340 Motor Development (4)
KPE 4650 First Aid and Safety (4)

Other 1000-level Beginning Activities (1 each) (3 units)
2000-level Intermediate Activities (1 each) (2 units)

Certificate
Program

Pre-Physical Therapy Certificate

See description of this program in the Pre-Professional Programs section of this catalog.

Single Subject
Matter
Preparation
Program

See the Single Subject Matter Preparation Program chapter in the undergraduate section of this catalog for a description of the Single Subject Matter Preparation Program in Physical Education.

Undergraduate
Courses

The course prefix for the following courses is KPE.

Lower Division Courses

1000- Beginning Activities (1 each)
Two hrs. activity.

1052 

00 Badminton
01 Basketball
06 Softball
07 Swimming

09 Volleyball
10 Weight Training
13 Judo
16 Taekwondo Karate
17 Soccer
18 Self Defense--Women
19 African Dance
(See DANC 1019 for course description.)
21 Golf
22 Gymnastics
24 Tennis
28 Jogging
30 Aerobic Fitness: Inline Skate
32 Aerobic Fitness: Lap Swimming
33 Aerobic Fitness: Par Course
34 Yoga
38 Aerobic Fitness: Kick Box
41 Aerobic Condition
42 Ski Conditioning
47 Indoor Soccer
49 Aerobic Walking
51 Aqua Aerobics
52 Beginning Water Polo

- 1011** Beginning Circuit Training (1)
Overall basic aerobic and resistance training for toning, weight loss, and overall body conditioning. Proper warm-up and cool down techniques. Heart rate monitoring. Circuit changes throughout the quarter. May be repeated once for credit. Two hrs. act.
- 1053** Contemporary Wushu (1)
Wushu is a martial sport that combines the elements of traditional Chinese martial arts with a modern disposition towards aesthetics, grace, and performance. Two hrs. act.
- 1110** Concepts of Health (4)
Analysis of the basic concepts and principles of individual health. Investigation and evaluation of contemporary health problems and information.
- 1620** Exercise, Nutrition, and Weight Management (4)
Survey of current knowledge relating exercise and nutrition to weight control. Commercial practices and consumer protection. Development of individualized diets and activity programs. Three hrs. lect., 2 hrs. act. (W, Sp)
- 1625** Nutrition and Performance (4)
The interrelationship of nutrition and exercise capability. The effect on athletic performance of diet and food additives. (F, W, Sp)
- 1630** Coaching Young Athletes (1)
An introductory course in sport psychology, sport pedagogy, sport physiology, and sport management. Sport science research and practical knowledge with application for coaching young athletes. Designed for individuals interested in coaching. Two hrs. lect.
- 1650** Cardio-Pulmonary Resuscitation/Basic Life

Support (1)

Instruction in techniques and procedures for three areas of basic life support-artificial respiration, external cardiac massage, and airway obstruction. American Red Cross CPR certificate awarded. Must be taken credit/no credit. May be repeated once per year. Two hrs. act. (F, W, Sp)

2000- Intermediate Activities (1 each)

Two hrs. act.

2047

- 00 Badminton
- 01 Basketball
- 06 Softball
- 07 Swimming
- 09 Volleyball
- 10 Weight Training
- 16 Taekwondo
- 17 Soccer
- 21 Golf
- 24 Tennis
- 38 Kick Boxing
- 40 Varied Activities
- 41 Aerobic Conditioning
- 47 Indoor Soccer

2011 Intermediate Circuit Training (1)

Aerobic conditioning and resistance training for increased toning and overall body conditioning. Proper warm-up and cool down. Heart rate monitoring. Circuit changes throughout the quarter. May be repeated once for credit. Two hrs. act.

2030 Games for Children (2)

Games and modified sports created and played in various settings. Competitive and cooperative activities that emphasize developmental movement patterns. May be repeated once for credit. Four hrs. act.

2300 Nutrition for Healthy Bodies (4)

Basic concepts of personal nutrition and fitness in relationship to a healthy lifestyle; physical and psycho-social factors; various mind-body options. Develop individualized programs for lifelong wellness and the maintaining of healthy minds and bodies. Lecture, team, and class discussions, media aids, and active participation.

2600 Introduction to Athletic Training (4)

Beginning course in the recognition, management, reconditioning, and prevention of injuries occurring in physical activity. Recommended preparation: BIOL 2010 or equivalent. (F, Sp)

2700 Women and Sport (4)

Current scholarship and debates surrounding issues of women's participation in sport. The dynamics of gender and sporting involvement. Sport as a significant social institution. Sociological, historical, and cultural perspectives on sport from theoretical and popular sources.

Upper Division Courses

- 3072 Individual and Dual Sports (3)**
Theory, analysis, and practice of the skills, techniques, and knowledge necessary for the teaching of individual and dual sports. Participation required. Prerequisites: one college-level course in individual sports and one in dual sports, or consent of the instructor. Two hrs. lect., 2 hrs. act. (A)
- 3075 Aquatics and Outdoor Education (3)**
Theory, analysis, and practice of the skills, techniques, and knowledge necessary for the teaching of aquatics and outdoor education. Participation required. Prerequisites: one college-level course in aquatics and one in an outdoor education activity, or consent of the instructor. Two hrs. lect., 2 hrs. act. (A)
- 3079 Combatives and Fitness Activities (3)**
Theory, analysis, and practice of the skills, techniques, and knowledge necessary for the teaching of combatives and fitness activities. Participation required. Prerequisites: one college-level course in combative skills and one in fitness activities, or consent of the instructor. Two hrs. lect., 2 hrs. act. (A)
- 3080 Team Sports and Field Sports (3)**
Theory, analysis, and practice of the skills, techniques and knowledge necessary for the teaching of team sports and field sports. Participation required. Prerequisites: one college-level course in team sports and one in field sports, or consent of the instructor. Two hrs. lect., 2 hrs. act. (A)
- 3200 Sport in Film: Cultural Perspectives (4)**
Societal values, politics, mores, and individual and group behavior related to sport participation as illustrated in film.
- 3250 Kinesiological Foundations of Physical Education (4)**
Kinesiological concepts of physical performance and physical education. Anaerobic and aerobic activities; health concepts in relation to cardiovascular and other diseases; exercise and diet; principles of motor learning and development; and psychosocial dynamics of activity. Not for KPE major credit. (F, W, Sp)
- 3251 Physical Education for the Classroom Teacher: Physical Considerations (4)**
Examination of activity participation of children; particular emphasis on physical variables. Relationship of exercise physiology, biomechanics, and growth and development to physical activity. Integration of physical activity with classroom activities, in the physical and health sciences. (F, Sp)
- 3252 Physical Education for the Classroom Teacher: Psycho-Social Considerations (4)**
Examination of activity participation of children with emphasis on psycho-social variables. Topics from the sport and exercise psychology and sport humanities

literature as it relates to physical teaching. Integration of physical activity with other classroom activities emphasized. (F, W)

- 3255** Fitness and Wellness for a Lifetime (4)
Physical and psycho-social factors that contribute to lifelong wellness. Exercise, nutrition, stress and related issues from both conceptual and practical (movement and relaxation techniques) perspectives.
- 3300** Kinesiological Measurement (5)
Theory and application of measurement and assessment procedures related to sport and exercise phenomena. STAT 1000 highly recommended. Four hrs. lect., 3 hrs. lab. (F, W, Sp)
- 3305** Structural Kinesiology (5)
Anatomical structures as functional determinants of movement. Skeletal, muscular, and nervous systems and their roles in determining movement efficiency. Kinesiological application of anatomical information. Prerequisite: BIOL 2010 or 2011. Recommended preparation: BIOL 1001 and CHEM 1100 or equivalents. Four hrs. lect./disc., 3 hrs. lab. (F, W, Sp)
- 3310** Biomechanics (5)
Biomechanics of human movement and the mechanical and muscular analysis of movement patterns. Prerequisites: BIOL 2010 or 2011; KPE 3300, KPE 3305. Four hrs. lect., 3 hrs. lab. (F, W, Sp)
- 3320** Exercise Physiology (5)
The physiological parameters and mechanisms that determine adaptations of the physiological systems of human beings in response to exercise. Prerequisites: BIOL 2010 (or 2011), KPE 3300, 3305. Four hrs. lect., 3 hrs. lab. (F, W, Sp)
- 3330** Motor Learning and Control (5)
The nature of sensorimotor skills. Analysis of the motor systems and mechanisms of basic sensorimotor integration. An overview of skill acquisition related primarily to sport and exercise. Prerequisites: BIOL 2010 (or 2011); KPE 3300, 3305. Four hrs. lect., 3 hrs. lab. (F, W, Sp)
- 3500-** Advanced Activities (2 each)
Instruction at advanced level for persons with intermediate
- 3554** level skill. Each course may be repeated only once for credit. Four hrs. act.

- 00 Badminton
- 01 Basketball
- 05 Fastpitch Softball
- 06 Softball
- 07 Aquatics
- 09 Volleyball
- 10 Weight Training
- 16 Taekwondo
- 17 Soccer
- 25 Water Polo

28 Jogging
40 Club Sports
41 Aerobic Conditioning
47 Indoor Soccer
52 Track and Field
53 Baseball

- 3542** Aerobic Instructor Training (2)
Skills and knowledge necessary to teach music-based aerobics classes. Fitness assessment, choreography, routines, and music selection. Students gain experience teaching an aerobics class. Prerequisite: advanced level aerobic skills. Four hrs. act.
- 3545** Competition Conditioning (2)
Fitness instruction and activities in preparation for athletic competition. Designed for individuals who are at advanced levels of physical conditioning. Consent of instructor required. Four hrs. act.
- 3555** Tournament Volleyball (2)
Instruction and competitive play for skilled performers. Prerequisite: advanced volleyball proficiency. CR/NC grading only. May be repeated once for credit. Four hrs. act.
- 3560** Lifeguard Training (2)
Development of skills and knowledge necessary to keep patrons of aquatic facilities safe in and around the water. Prerequisites: advanced swimming proficiency, American Red Cross Community First Aid and Safety certification or equivalent. Four hrs. act.
- 3561** Water Safety Instructor (2)
Development of skills and knowledge leading to American Red Cross Water Safety Instructor certification. Prerequisites: Advanced swimming proficiency, American Red Cross Community First Aid and Safety certification or equivalent. Four hrs. act.
- 3600** Care and Prevention of Athletic Injuries (5)
Application of kinesiology in the recognition, management, reconditioning, and prevention of athletic injuries. Prerequisites: BIOL 2010 or equivalent, KPE 2600, and 3305. Four hrs. lect., 3 hrs. lab. (W)
- 3601** Athletic Training: Modalities and Rehabilitation (4)
Theory and application of therapeutic modalities; design of sports related injury rehabilitation programs. Prerequisite: KPE 2600 and 3600. (Sp)
- 3700** History of Sport and Physical Education (4)
The role of sport and physical education in ancient and medieval societies and their subsequent development. Historical development of athletics and physical education in North America. Prerequisite: junior standing. (F, W)
- 3740** Philosophical Foundations of Sport and Physical Education (4)

Philosophical movements and leaders in sport and physical education. Philosophical concepts such as axiology, ontology, and epistemology with emphasis on ethics and esthetics. (W, Sp)

- 3750** Sport in Contemporary Society (4)
Analysis of sport and physical activity as socio-cultural phenomena. Emphasis on social structures and processes related to sport, including values, education, roles of minorities and women. Impact of economics, politics and religion. Recommended preparation: SOC 1000 (or one of 1001, 1002, 2001, or 2002). (F, Sp)
- 3999** Issues in Kinesiology and Physical Education (4)
Readings, discussion, and research on contemporary and/or significant issues in kinesiology and physical education. May be repeated for credit when content varies.
- 4004** Elementary School Physical Education (4)
Planning, development, implementation and evaluation of physical education programs in culturally diverse settings in grades K-5. Emphasis on games, sports, fundamental rhythms, and dance movements as delineated for instruction by the California State Physical Education Framework. (W)
- 4005** Exercise Nutrition and Metabolism (4)
Kinesiological discussion of nutrients and ergogenic aids and their interaction within metabolic pathways. Emphasis upon the role of nutrients in bioenergetics and how manipulation of nutrient intake alters energy production during exercise. Prerequisites: CHEM 1011 or equivalent, KPE 3320. (W)
- 4006** Secondary School Physical Education (4)
Planning, development, implementation and evaluation of physical education programs in culturally diverse setting in grades 6-12 as delineated by the California State Physical Education Framework. Emphasis on games, sports, dance, fitness activities and outdoor education as delineated for instruction by the California State Physical Education Framework. (Sp)
- 4008** Physical Education for Exceptional Individuals (4)
Neurophysiological and functional aspects of psychomotor disabilities. Planning, teaching and evaluating modified physical education activities to meet the needs of exceptional students found in general physical education classes. Participation in laboratory setting required. Prerequisite: KPE 4340. (F)
- 4010** Contemporary Perspectives in Exercise Nutrition (4)
Study and application of current issues in exercise nutrition. Emphases on health and fitness program design and lifestyle management. Prerequisites: KPE 1625, 2600, 4005, 4610. (Sp)
- 4011** Youth Development through Physical Education

and Recreation (4)
(See REC 4011 for course description.)

- 4030** Professional Field Experience I (1-4)
Instruction in and practice of professional technique and methodology through supervised field work. Prerequisites: completion of skill requirements for the major or minor. (F, W, Sp)
- 4031** Professional Field Experience II (1-4)
Off campus field experience related to degree options. CR/NC grading only. May be repeated for credit. A maximum of 4 units may be counted toward degree/certificate. (F, W, Sp)
- 4050-** Intercollegiate Sports (1 each)
May be repeated according to season. Three hrs. perf.
- 4083**
- 51 Basketball (men) (F, W)
 - 53 Baseball (men) (W, Sp)
 - 54 Cross-country (F)
 - 55 Intercollegiate Outdoor Track (Sp)
 - 58 Intercollegiate Golf (F, W, Sp)
 - 62 Basketball (women) (F, W)
 - 68 Volleyball (women) (F)
 - 69 Soccer (men)(F)
 - 74 Softball (women) (W, Sp)
 - 77 Swimming (women)
 - 78 Water Polo (women) (W)
 - 83 Soccer (women) (F)
- 4090** Computer Application in Kinesiology and Physical Education (4)
Using computers as an adaptive, interactive, and exploratory tool for understanding different applications in physical education settings. Word processing, database, spread sheet, multimedia, and internet applications. Prerequisite: Junior standing.
- 4325** Neuromuscular Function in Performance (4)
Advanced study of the nature of muscle physiology and voluntary motor-sensory systems as they affect the acquisition of skill. Emphasis on the adaptations of the muscular and nervous systems centrally and peripherally affecting voluntary gross motor movements in humans. Prerequisite: KPE 3320, 3330, or equivalents. (A)
- 4330** Clinical Exercise Physiology (4)
Study and practice of techniques for administering and evaluating the results of graded exercise stress tests. Analysis of normal and abnormal cardiopulmonary response to exercise. Emphasis on exercise electrocardiography. Prerequisite: KPE 3320 or equivalent. (Sp)
- 4335** Exercise, Cardiopulmonary and Metabolic Disease (4)
The role of exercise in the detection, prognosis and management of cardiovascular, pulmonary and metabolic disease. Prerequisite: KPE 4330 or equivalent. (A)

- 4340** Motor Development (4)
Physical growth, body build and motor development through childhood, adolescence and the adult stage. Age and sex differences in typical motor performances. Prerequisite: BIOL 2010 (or 2011) or equivalent. (W)
- 4390** Senior Seminar (4)
Seminar on special topics selected from current kinesiological research literature. May be taken twice for credit with different content. Prerequisites: Senior standing or consent of instructor. (A)
- 4395** Contemporary Issues in Kinesiology (4)
Selected topics of interest and importance within the discipline of kinesiology. (A)
- 4410** Sport and Exercise Psychology (5)
Theoretical and practical applications of psychological factors in sport, exercise, and rehabilitation settings. The influence of psychological variables on participation in sport and exercise. The influence of participation on psychological factors and well-being. Such topics as motivation, anxiety, observational learning, imagery, exercise adherence, goal setting, and youth sport participation. Prerequisite: KPE 3300. Four hrs. lect., 2 hrs. lab. (W)
- 4600** Athletic Training Practicum (2)
Supervised clinical experience in techniques of athletic training. Open only to students in departmental option in athletic training/clinical exercise. Prerequisite: KPE 2600 or concurrent. May be taken up to three times for credit. (F, W, Sp)
- 4610** Exercise Prescription (4)
Application of kinesiological principles to methods of physical conditioning. Systems of progressive resistance exercise, physical fitness and training. Exercise programs for special conditions and effects. Prerequisite: KPE 3320. Three hrs. lect., 3 hrs. lab. (Sp)
- 4615** Exercise and Stress (4)
The nature of stress and its relationship to exercise. The physiology of the stress response, its role in disease, and immediate and long term interactions of exercise and stress. Prerequisite: KPE 3330. PSYC 1000 highly recommended. (F)
- 4650** First Aid and Safety (4)
Principles and procedures of first aid to maintain life in emergency situations. Meets qualifications for Red Cross and cardiopulmonary resuscitation certification. Three hrs. lect., 2 hrs. act. (F, W, Sp)
- 4900** Independent Study (1-4)
-

Footnotes

- 1 Each course may be repeated only once.
- 2 A facilities fee is required to participate in this course.
Consult the quarterly Class Schedule for the current fee.



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Art

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Department Information

Department of Art
College of Arts, Letters, and Social Sciences
Office: Art and Education Bldg. 1233
Phone: (510) 885-3111

Professors Emeriti: Lewis S. Carson, Corban LePell, Gregory MacGregor

Professors: Mark Levy, Grace Munakata, James F. Petrillo, Amy O. Rodman

Associate Professor: Michael Henninger (Chair)

Assistant Professors: Phillip Hofstetter, Scott Hopkins, Gwyn Rhabyt, Suzy Wear

Lecturers: Kristin I. Becker, F. Lanier Graham, Kirk A. Le Claire, Dickson J. Schneider

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

Courses in the Department of Art develop our students' perceptual skills, their access to the imagination, and their ability to think critically and independently. Instruction in use of art materials and specific arts processes enables students to create original artworks reflecting their evolving vision. Our program also fosters a broad cultural awareness of the visual arts in society. Graduating majors should be able to clearly express their ideas about artmaking. In addition, their grasp of historical and contemporary aesthetic issues should inform their own work. We offer excellent facilities, small classes taught by a distinguished

faculty, space to work, a guest lecturer series, and field trips to museums, galleries and artists' studios.

Seven options for the B.A. degree are offered: Art History, Art Studio (general), Digital Graphics, Multimedia, Photography (jointly offered by the Departments of Art and Communication), Pictorial Arts (Drawing/Printmaking/Painting), Spatial Arts (Ceramics/Sculpture). The major consists of 64-80 units; the B.A. requires 180 units.

The department also offers a Bachelor of Fine Arts (B.F.A.) degree. This is a professional degree offering students the opportunity to develop a higher level of expertise. It is often the degree of choice for those who intend to pursue graduate studies or attend other professional schools. It allows time for concentrated work within a specific art discipline: Digital Graphics, Multimedia, Photography, and Traditional Arts. The major consists of 102 units; the B.F.A. requires 180-183 units.

The department is also part of the interdisciplinary graduate M.A. degree program in Multimedia (see the Multimedia chapter in the graduate section of this catalog).

The Art Department offers minors in Art Studio, Art History, and Multimedia. The Departments of Art and Mass Communication offer a joint minor in Photography. In addition, the Art Department offers an option in the Liberal Studies major. A Certificate Program in Art Museum and Gallery Studies is offered through the Division of Extended and Continuing Education.

Career Possibilities

Animator • Artist • Art Critic • Art Educator • Art Historian • Arts Administrator • Ceramicist • Graphic Artist/Designer • Multimedia Developer • Museum/Gallery Curator • Painter • Photographer/Photojournalist • Printmaker • Sculptor • Video Producer • Web Developer

Features

- State of the Art Electronic Media Facilities
- 100,000 slides in the Department Slide Library
- Three fully equipped Painting and Drawing studio spaces
- 3000 square foot machine shop which is fully equipped and professionally staffed
- Sculpture and Ceramic studios and a large outdoor working space
- Printmaking facility
- Excellent Photography facilities
- 2000 square foot University Art Gallery with a year round program of changing exhibits

Preparation

Major Requirements (B.A.)

- Guest Artists Lecture Program hosts lectures and workshops by prominent artists, authors and gallery directors
- Video Art Collection of historical and contemporary art videos
- Student Art Gallery for solo or group Advanced Student Exhibitions.

For Advanced Placement course equivalents, see the Registration chapter.

Art Studio Options (72-80 units)

- I. Art Studio Option (78 units)
This option allows students to focus on more than one area.
 - A. Required Courses (32 units)
ART 1020 The Creative Process (4)
ART 1112 Ceramics I (4) or ART 1116 Introduction to Sculpture (4)
ART 1113 Drawing I (4)
ART 3035 Modern Art (4)
ART 3411 Advanced Survey of World Art (4)
ART 3430 Junior/Senior Seminar (2)
ART 3440 Visual Literacy (2)
Two additional upper division art history courses (8)
 - B. Elective Courses (40 units)
A minimum of 40 additional units taken from the Art Department listing of studio courses, no more than 20 units of which may be lower division. A minimum of 20 units must be taken in a specific option area (Pictorial Arts, Spatial Arts, Photography, Digital Graphics or Multimedia) with advisement.
 - C. Capstone Requirements (6 units)
ART 4710 Senior Thesis (2)
ART 4720 Senior Seminar (2)
ART 4730 Senior Portfolio (2)

Total for Art Major, Art Studio Option: 78 units
- II. Digital Graphics Option (Electronic Art) (80 units)
Electronic artists employ the use of rapidly evolving new media tools to express the human imagination. Computers are used to create, control and integrate images, text, graphics, video, sound, and interactivity. Courses stress the development of strong aesthetic and humanistic sensibilities combined with sophisticated technical abilities.

The Electronic Art program has two option areas: Multimedia and Digital Graphics. The Digital Graphics Option focuses on art that assumes a printed form; the Multimedia Option focuses on art that assumes an electronic form.

A. Required Courses (74 units)

ART 1020 The Creative Process (4)

ART 1113 Drawing I (4)

ART 1114 Painting I or ART 1115 Printmaking I or ART 1116 Introduction to Sculpture, or ART/COMM 2701 Introduction to Photography, or COMM/ART 2700 Introduction to Photography, or other 4-unit studio class by advisement (4)

ART 2025 Basics of New Media (4)

ART 2810 Principles of Design (4)

ART 2830 Introduction to Time-Based Media (4)

ART 3035 Modern Art (4)

ART 3144 Drawing Lab (2 units taken 3 times) (6)

ART 3400 History of Art and Technology (4)

ART 3411 Advanced Survey of World Art (4)

ART 3810 Digital Graphics I: Designing Digitally (4)

ART 3815 Typography (4)

ART 3830 Digital Graphics II: Digital Imaging (4)

ART 3860 Digital Graphics III: Advanced Graphic Design (4)

ART 3870 Art for the Web (4)

ART 4060 History of Graphic Design (4)

ART 4071 Contemporary Art (4)

ART 4210 Computers and Print (4)

B. Capstone Requirements (6 units)

ART 4230 Digital Graphics Senior Project (4)

ART 4740 Professional Practices (2)

Total for Art Major, Digital Graphics Option: 80 units

III. Multimedia Option (Electronic Art) (80 units)

A. Required Courses (74 units)

ART 1020 The Creative Process (4)

ART 1113 Drawing I (4)

ART 1114 Painting I or ART 1115 Printmaking I or ART 1116 Introduction to Sculpture, or ART/COMM 2701 Introduction to Photography, or COMM/ART 2700 Introduction to Photography, or other 4-unit studio class by advisement (4)

ART 2025 Basics of New Media (4)

ART 2810 Principles of Design (4)

ART 2830 Introduction to Time-Based Media (4)

ART 3035 Modern Art (4)

ART 3144 Drawing Lab (2 units taken 3 times) (6)

ART 3400 History of Art and Technology (4)

ART 3411 Advanced Survey of World Art (4)

ART 3800 Multimedia I: Animation (4)

ART 3820 Multimedia II: Digital Video and Audio (4)

ART 3825 Advanced Time-Based Media (4)

ART 3830 Digital Graphics II: Digital Imaging (4)

ART 3870 Art for the Web (4)

ART 4070 Currents in New Media (4)

ART 4071 Contemporary Art (4)

ART 4200 Interactive Authoring (4)

- B. Capstone Requirements (6 units)
 - ART 4220 Multimedia Senior Project (4)
 - ART 4740 Professional Practices (2)

Total for Art Major, Multimedia Option: 80 units

IV. Photography Option (72-74 units)

The Photography Option provides well-grounded studies in the aesthetic and practical areas of contemporary camera-generated imagery. Black and white, as well as color classes are taught using traditional darkroom techniques. The program also requires classes in computer-generated and manipulated images. Students can choose electives to develop skills in specialty areas such as fine art, journalism, or computer/digital photography.

A. Required Courses (52 units)

- ART 1020 The Creative Process (4)
- ART 1113 Drawing I (4)
- ART 2025 Basics of New Media (4)

- ART/COMM 2701 Introduction to Photography, or
COMM/ART 2700 Introduction to Photography (4)

- ART 2810 Principles of Design (4)
- ART 3035 Modern Art (4)
- ART 3400 History of Art and Technology (4)
- ART 3411 Advanced Survey of World Art (4)
- ART 3600 Intermediate Photography (4)
- ART 3630 Digital Photography (4)
- ART 4600 Image and Idea (4)
- COMM/ART 4620 History of Photography (4)
- One upper division art history course (4)

B. Elective courses (14-16 units)

Select 14-16 units from the following:

- ART 2830 Introduction to Time-Based Media (4), 3144 Drawing Lab (2), 3650 Color Photography (4), 3654 Landscape Photography (2), 3655 Advanced Landscape Photography (2), 3660 Portrait Photography (4), 3670 Introduction to Studio Lighting (4), 3671 Advanced Studio Lighting (4), 3820 Multimedia II: Digital Video and Audio (4), 3830 Digital Graphics II: Digital Imaging (4), 3870 Art for the Web (4), 4900 Independent Study (1-4); COMM 3700 Digital Photography and Photo Essay (4); COMM/ART 3500 Photojournalism (4)

C. Capstone Requirements (6 units)

- ART/COMM 3680 Photography Career Preparation (2)
- ART 4235 Photography Senior Project (4)

Total for Art Major, Photography Option: 72-74 units

V. Pictorial Arts Option

(Drawing/Painting/Printmaking) (78 units)

Beginning painting, printmaking and drawing courses offer traditional and nontraditional approaches to studies from life as well as more subjective approaches to imaginative work.

Intermediate and advanced courses guide students toward a personal vision.

A. Required Courses (48 units)

ART 1020 The Creative Process (4)
ART 1112 Ceramics I (4) or ART 1116 Introduction to Sculpture (4)
ART 1113 Drawing I (4)
ART 1114 Painting I (4)
ART 1115 Printmaking I (4)
ART 3035 Modern Art (4)
ART 3141 Drawing II (4)
ART 3212 Painting II (4)
ART 3411 Advanced Survey of World Art (4)
ART 3430 Junior/Senior Seminar (2)
ART 3440 Visual Literacy (2)
Two additional upper division art history courses (8)

B. Elective Courses (24 units)

ART 3141 Drawing II (4), 3142 Figure Drawing (4), 3212 Painting II (4), 3213 Painting III (4), 3215 Figure Painting (2), 4143 Advanced Drawing (4), 4857 Advanced Printmaking (4)

C. Capstone Requirements (6 units)

ART 4710 Senior Thesis (2)
ART 4720 Senior Seminar (2)
ART 4730 Senior Portfolio (2)

Total for Art Major, Pictorial Arts Option: 78 units

VI. Spatial Arts Option (Ceramics/Sculpture) (78 units)

The Spatial Arts program familiarizes students with a broad range of sculptural processes. The department has one of the best studio facilities in the Bay Area.

A. Required Courses (40 units)

ART 1020 The Creative Process (4)
ART 1113 Drawing I (4)
ART/COMM 2701 Introduction to Photography (4)
ART 3035 Modern Art (4)
ART 3144 Drawing Lab (2 units taken 3 times) or any six units of upper division drawing (6)
ART 3411 Advanced Survey of World Art (4)
ART 3440 Visual Literacy (2)
ART 4071 Contemporary Art (4)

Two additional upper division art history courses (8)
(*Note:* for students on the Interactive Sculpture track, these courses must be ART 3400 History of Art and Technology, and ART 4070 Currents in New Media)

B. Elective Tracks Requirements (32 units)

Students must choose two of the following three elective tracks:

1. Interactive Sculpture (16 units)

ART 2350 Interactive Sculpture (4)
ART 3330 Electronics for Sculpture (4)
ART 3370 Tangible Digital Environments (4)

ART 4370 Human and Machine Performance (4)

2. Traditional Sculpture (16 units)

ART 1116 Introduction to Sculpture (4)

ART 3300 Fabrication for Sculpture (4)

ART 3316 Advanced Sculpture (4)

ART 3340 Mixed Media Assemblage (4)

3. Ceramics (16 units)

ART 1112 Ceramics I (4)

ART 3311 Figure Modeling in Clay (4)

ART 3512 Ceramics II (4)

ART 3513 Ceramics III (4)

C. Capstone Requirements (6 units)

ART 4710 Senior Thesis (2)

ART 4720 Senior Seminar (2)

ART 4730 Senior Portfolio (2)

Total for Art Major, Spatial Arts Option: 78 units

Art History Option (64 units)

I. Required Courses (20 units)

ART 1020 The Creative Process (4)

ART 1113 Drawing I (4)

ART 3035 Modern Art (4)

ART 3411 Advanced Survey of World Art (4)

ART 4000 The History of Art Theory (4)

II. Modern Language Requirement (16 units)

Sixteen units of one or more foreign languages selected with an advisor; or eight units of one foreign language and eight units selected with an advisor from history, literature, anthropology or ethnic studies.

III. Elective Courses (28 units)

One additional art studio course (4)

Six upper division courses in art history selected with an advisor (24)

Total for Art Major, Art History Option: 64 units

Major Requirements (B.F.A.)

Admission and Degree Requirements

Applicants must meet university requirements for admission and must first be admitted to the B.A. degree program. In addition, they must meet the following requirements to apply for admission to the B.F.A. program:

1. Complete 30 units of Studio Art with a grade point average of 3.5 or better.
2. Submit a portfolio of work to the faculty B.F.A. committee along with a short statement summarizing their reasons for applying. Application reviews will be held once a year for admission the following year.

3. Maintain a minimum 3.5 GPA in all Art classes while in the program.
4. Prepare and install a final exhibition of their work in either the Art Department Galleries or outside exhibition spaces (or a portfolio for Electronic Art students) to be reviewed by the Art Department faculty to determine the candidate's professional competence in his/her area of concentration.

Digital Graphics Option (102 units)

I. Required Courses (78 units)

ART 1020 The Creative Process (4)

ART 1113 Drawing I (4)

ART 1114 Painting I or ART 1115 Printmaking I or ART 1116 Introduction to Sculpture, or ART/COMM 2701 Introduction to Photography, or COMM/ART 2700 Introduction to Photography, or other 4-unit studio class by advisement (4)

ART 2025 Basics of New Media (4)

ART 2810 Principles of Design (4)

ART 2830 Introduction to Time-Based Media (4)

ART 3035 Modern Art (4)

ART 3144 Drawing Lab (2 units taken 3 times) (6)

ART 3400 History of Art and Technology (4)

ART 3411 Advanced Survey of World Art (4)

ART 3810 Digital Graphics I: Designing Digitally (4)

ART 3815 Typography (4)

ART 3830 Digital Graphics II: Digital Imaging (4)

ART 3860 Digital Graphics III: Advanced Graphic Design (4)

ART 3870 Art for the Web (4)

ART 4060 History of Graphic Design (4)

ART 4071 Contemporary Art (4)

ART 4210 Computers and Print (4)

Four units of an upper-division ART course covering advanced art for the web, with consent of advisor.

II. Electives (18 units)

Eighteen (18) units of upper division studio art electives by advisement.

III. Capstone Requirements (6 units)

ART 4230 Digital Graphics Senior Project (4)

ART 4740 Professional Practices (2)

Multimedia Option (102 units)

I. Required Courses (74 units)

ART 1020 The Creative Process (4)

ART 1113 Drawing I (4)

ART 1114 Painting I or ART 1115 Printmaking I or ART 1116 Introduction to Sculpture, or ART/COMM 2701 Introduction to Photography, or COMM/ART 2700 Introduction to Photography, or other 4-unit studio class by advisement (4)

ART 2025 Basics of New Media (4)

ART 2810 Principles of Design (4)
ART 2830 Introduction to Time-Based Media (4)
ART 3035 Modern Art (4)
ART 3144 Drawing Lab (2 units taken 3 times) (6)
ART 3400 History of Art and Technology (4)
ART 3411 Advanced Survey of World Art (4)
ART 3800 Multimedia I: Animation (4)
ART 3820 Multimedia II: Digital Video and Audio (4)
ART 3825 Advanced Time-Based Media (4)
ART 3830 Digital Graphics II: Digital Imaging (4)
ART 3870 Art for the Web (4)
ART 4070 Currents in New Media (4)
ART 4071 Contemporary Art (4)
ART 4200 Interactive Authoring (4)

II. Electives (22 units)
Twenty-two (22) units of upper division studio art electives by advisement.

III. Capstone Requirements (6 units)
ART 4220 Multimedia Senior Project (4)
ART 4740 Professional Practices (2)

Photography Option (102 units)

I. Required Courses (58 units)
ART 1020 The Creative Process (4)
ART 1113 Drawing I (4)
ART 2025 Basics of New Media (4)

ART/COMM 2701 Introduction to Photography, or COMM/ART 2700 Introduction to Photography (4)

ART 2810 Principles of Design (4)
ART 3035 Modern Art (4)
ART 3400 History of Art and Technology (4)
ART 3411 Advanced Survey of World Art (4)
ART 3630 Digital Photography (4)
ART 3680 Photography Career Preparation (2)
ART 4235 Photography Senior Project (4)
ART 4600 Image and Idea (4)
COMM/ART 4620 History of Photography (4)

Two upper division art history courses (8)

II. Electives (44 units)
Students to select from the following by advisement.

ART 2830 Introduction to Time-Based Media (4), 3144 Drawing Lab (2), 3650 Color Photography (4), 3654 Landscape Photography (2), 3655 Advanced Landscape Photography (2), 3660 Portrait Photography (4), 3670 Introduction to Studio Lighting (4), 3671 Advanced Studio Lighting (4), 3810 Digital Graphics I: Designing Digitally (4), 3820 Multimedia II: Digital Video and Audio (4), 3830 Digital Graphics II: Digital Imaging (4), 3870 Art for the Web (4), 4900 Independent Study (1-4); COMM/ART 3500 Photojournalism (4); COMM 3700 Digital Photography and Photo Essay (4); Any studio art course (2-4)

Traditional Arts Option (102 units)

I. Required Courses (34 units)

ART 1020 The Creative Process (4)
ART 1113 Drawing I (4)
ART 3035 Modern Art (4)
ART 3411 Advanced Survey of World Art (4)
ART 3430 Junior/Senior Seminar (2)
ART 3440 Visual Literacy (2)
ART 4710 Senior Thesis (2)
ART 4720 Senior Seminar (2)
ART 4730 Senior Portfolio (2)
Two upper division art history courses (8)

II. Electives (68 units)

Courses selected from the following by advisement based upon student's choice of specialty area.

ART 1112 Ceramics I (4), 1114 Painting I (4), 1115 Printmaking I (4), 1116 Introduction to Sculpture (4), 3141 Drawing II (4), 3142 Figure Drawing (4), 3212 Painting II (4), 3213 Painting III (4), 3311 Figure Modeling in Clay (4), 3316 Advanced Sculpture (4), 3317 Workshop in Spatial Arts (4), 3420 Selected Topics in Studio Art (2), 3430 Junior/Senior Seminar (2), 3440 Visual Literacy (2), 3512 Ceramics II (4), 3513 Ceramics III (4), 3600 Intermediate Photography (4), 3650 Color Photography (4), 4143 Advanced Drawing (4), 4302 Spatial Arts: Advanced Project (4), 4857 Advanced Printmaking (4), 4900 Independent Study (1-4); ART/COMM 2701 Introduction to Photography (4) or COMM/ART 2700 Introduction to Photography (4)

Minor Requirements

Art Studio Minor (36 units)

ART 1020 The Creative Process (4)
ART 1113 Drawing I (4)
ART 3411 Advanced Survey of World Art (4)

Two lower division art studio courses selected with an advisor (8)

Twelve units of upper division art studio courses selected with an advisor (12)

One upper division Art History course (4)

Art History Minor (36 units)

ART 1020 The Creative Process (4)
ART 1113 Drawing I (4)
ART 3035 Modern Art (4)
ART 3411 Advanced Survey of World Art (4)
ART 4000 The History of Art Theory (4)
Four 3000/4000-level art history courses (16 total)

Interactive Sculpture Minor (28 units)

ART 1116 Introduction to Sculpture (4)
ART 2350 Interactive Sculpture (4)
ART 3300 Fabrication for Sculpture (4)
ART 3330 Electronics for Sculpture (4)

ART 3370 Tangible Digital Environments (4)
ART 3400 History of Art and Technology (4)
ART 4370 Human and Machine Performance (4)

Note: Students who have taken PHYS 3280 Electronics and Semiconductor Manufacturing, or CS 3432 Digital Design Lab, may substitute ART 4070 Currents in New Media for ART 3330.

Multimedia Minor (Electronic Art) (36 units)
ART 2025 Basics of New Media (4)

ART/COMM 2701 Introduction to Photography (4) or COMM/ART 2700 Introduction to Photography (4)

ART 2810 Principles of Design (4)
ART 2830 Introduction to Time-Based Media (4)
ART 3400 History of Art and Technology (4)
ART 3800 Multimedia I: Animation (4)
ART 3820 Multimedia II: Digital Video and Audio (4)
ART 3830 Digital Graphics II: Digital Imaging (4)
ART 3840 Multimedia III: 3D Modeling and Animation (4)

Photography Minor (32-34 units)
ART/COMM 2701 Introduction to Photography (4) or COMM/ART 2700 Introduction to Photography (4)

ART/COMM 3600 Intermediate Photography (4)
ART 4600 Image and Idea (4)
COMM/ART 4620 History of Photography (4)

Electives (16-18 units)

Selected with an advisor from the following list:

ART 2025 Basics of New Media (4), 2810 Principles of Design (4), 2830 Introduction to Time-Based Media (4), 4235 Photography Senior Project (4), 4900 Independent Study (1-4); ART/COMM 3650 Color Photography (4), 3660 Portrait Photography (4), 3670 Introduction to Studio Lighting (4), 3671 Advanced Studio Lighting (4), 3680 Photo Career Preparation (2); COMM 3100 Television Production/Direction (4), 3220 Media Workshop: Print (2), 3340 Graphic Communication (4), 3700 Digital Photography and Photo Essay (4); COMM/ART 3500 Photojournalism (4); BIOL 4630 Biological Photography (4); GEOG 3410 Air-Photo Interpretation (4)

Certificate in Art Museum/Gallery Studies

The Certificate Program in Art Museum and Gallery Studies endeavors to prepare students for graduate school and/or a career in the exhibition field.

ANTH 3710 Museum Curating (4) (must be taken twice) (8)
ART 4000 The History of Art Theory (4)
ART 4701 Internship I (3)
ART 4702 Internship II (3)

Sixteen (16) units of upper division ART courses related to museum/gallery studies, with consent of Art advisor.

Art Option: Liberal Studies

Areas I and/or V (12 units)
ART 1020 The Creative Process (4)
ART 1112 Ceramics I (4)
ART 1114 Painting I (4)

Area VII, Credential Track, or Area VI, General Track
(24 units)

ART 1113 Drawing I (4)
ART 1116 Introduction to Sculpture (4)
ART 3035 Modern Art (4)
ART 3411 Advanced Survey of World Art (4)
ART 4000 The History of Art Theory (4)
One upper division studio course (4)

Undergraduate Courses

The course prefix for the following courses is ART.

Art Studio

Auditing of Art Studio courses is not permitted.

- 1020** The Creative Process (4)
Studio practice emphasizing creativity and imagination in the realization of works of visual art. Field trips may be required. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act. (A)
- 1112** Ceramics I (4)
[CAN ART 6]
Introduction to the basic techniques of construction with clay, including basic throwing and glazing techniques. Field trips may be required. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act. (A)
- 1113** Drawing I (4)
[CAN ART 8]
Introduces varied approaches to drawing and use of materials. Projects increase perceptual and imaginative abilities. Instruction in using line, shape, and illusion of form to translate/interpret what you see or how you respond. Field trips may be required. Two hrs. lect., 4 hrs. act. (A)
- 1114** Painting I (4)
[CAN ART 10]
Provides introductory experiences in making images and using painting materials. Slides, reproductions and demonstrations accompany lectures. Projects and discussions develop students' understanding of how painting can communicate our experience and imagination. Field trips may be required. Two hrs. lect., 4 hrs. act. (A)
- 1115** Printmaking I (4)
[CAN ART 20]
An introduction to a major graphic process (such as Intaglio, Monoprint/Monotype, or Relief printing), and its

history. Repeatable twice for credit when content varies, with consent of instructor for a maximum of 12 units. Field trips may be required. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.

1116 Introduction to Sculpture (4)
[CAN ART 12]

An introduction to creating art in a 3-dimensional space, using a variety of materials for fabrication and casting. Field trips may be required. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act. (A)

1313 Visual Exploration (2)

Variety of studio art activities that enhance the student's inherent artistic ability. Students express their cultural artistic vision through hands-on activities in the studio arts. The importance of visual language as an innate human ability. No prior art experience required. May be repeated once for credit. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. One hr. lect., 2 hrs. act.

2025 Basics of New Media (4)

Fundamentals of computer technology and computers as creative tools. Digital art projects, viewing Electronic Art, and discussing related ideas. Prerequisites: declared Art major/minor or department permission required. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.

2350 Interactive Sculpture (4)

Using simple machines, basic electricity, motors, and sensors to create interactive and kinetic art in 3-dimensional space. Two hrs. lect., 4 hrs. act.

2630 Introduction to Creative Digital Photography (4)

Introduction to the use of digital cameras, digital imaging software, and output techniques with emphasis on picture quality, composition, visual aesthetics, and creativity. Students are required to provide their own digital camera. Three hrs. lect., 2 hrs. act.

2700 Introduction to Photography (4)

[CAN ART 18]
(See COMM 2700 for course description.)

2701 Introduction to Photography (4)

Fundamental theory and practice of black and white photography with emphasis on darkroom printing and developing. 35 mm camera required. Not open to students with credit for MCOM/ART 2700. Cross-listed with COMM 2701. A 35 mm camera required. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.

2810 Principles of Design (4)

Introduction to composition, color, typography, and

message in the digital environment. Prerequisite: ART 2025. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.

- 2830** Introduction to Time-Based Media (4)
Introduction to the planning, design, and production of time-based art work using computers. Field trips may be required. Prerequisite: ART 2025. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.
- 3141** Drawing II (4)
Concepts and techniques of drawing, including studies from life. Emphasis on individual expression in various drawing media. May be repeated once for credit. Prerequisite: ART 1113. Field trips may be required. Two hrs. lect., 4 hrs., act. (Y)
- 3142** Figure Drawing (4)
Principles of figure drawing. May be repeated once for credit with consent of instructor. Prerequisite: ART 1113. Field trips may be required. Two hrs. lect., 4 hrs. act. (Y)
- 3144** Drawing Lab (2)
Concepts and techniques of drawing with an emphasis on rendering and representation. Drawing with traditional and electronic media. May be repeated two times for credit. Prerequisites: ART 1113, 2025. One hr. lect., 2 hrs. act.
- 3212** Painting II (4)
Emphasis on individual expression and critical analysis. May be repeated once for credit with consent of instructor. Prerequisite: ART 1114. Field trips may be required. Two hrs. lect., 4 hrs. act. (Y)
- 3213** Painting III (4)
Advanced study in painting. Individual project with selected media. May be repeated for credit with consent of instructor when content varies. Prerequisite: ART 3212. Field trips may be required. Two hrs. lect., 4 hrs. act. (Y)
- 3215** Figure Painting (2)
Principles of figure painting, including use of two dimensional mixed media. May be repeated twice for credit with consent of instructor for a maximum of 6 units. Prerequisites: ART 1113, 1114. One hr. lect., 2 hrs. act.
- 3300** Fabrication for Sculpture (4)
Additive and subtractive methods for the construction of form using techniques for cutting, joining, and finishing metal, wood, and plastic. Skills in welding, forging, carpentry and adhesives will be mastered. Prerequisite: ART 1116. Two hrs. lect., 4 hrs. act.
- 3311** Figure Modeling in Clay (4)
Translating the act of seeing into sophisticated manipulation of clay. Understanding a variety of ways to represent human, animal, and natural forms. Prerequisites: ART 1112 and 1116. A miscellaneous course fee will be

charged. Consult the quarterly *Class Schedule* for the current fee. Field trips may be required. Two hrs. lect., 4 hrs. act. (Y)

- 3316** Advanced Sculpture (4)
Developing and building on previously acquired skills in order to achieve mastery of the materials. Planning, designing, and creating sophisticated and complex sculptural work that address significant issues in the artistic arena. May be repeated once for credit with consent of instructor, when content varies. Prerequisite: ART 3340. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.
- 3317** Workshop in Spatial Arts (4)
Focus on a particular medium, e.g. bronze, clay, steel, stone, mixed media, etc. Repeatable for credit if content varies. Prerequisite: ART 3311. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.
- 3330** Electronics for Sculpture (4)
Learning the fundamentals of light and sound as art forms in 3-dimensional space using electricity, analog and digital electronics, electro-luminescent media, and sound synthesis. Prerequisite: ART 2350. Two hrs. lect., 4 hrs. act.
- 3340** Mixed Media Assemblage (4)
Integrating found objects and media into artworks in 3-dimensional space. Advanced mold-making and experimental materials. Discussion of reproduction and simulation in contemporary art. Prerequisite: ART 3300. Two hrs. lect., 4 hrs. act.
- 3370** Tangible Digital Environments (4)
Control of electric/electronic sculpture components and integration of sensor and multimedia input using software and computers. Discussion of installation as an art form. Field trips may be required. Prerequisites: ART 3300, 3330. Two hrs. lect., 4 hrs. act.
- 3420** Selected Topics in Studio Art (2)
Intensive study of a particular art practice, its concepts and techniques. Repeatable for credit if content varies. Prerequisite: declared Art major/minor or consent of instructor. One hr. lect., 2 hrs. act.
- 3430** Junior/Senior Seminar (2)
Develops students' personal sense of aesthetics through selected reading, writing and discussion. In-depth critiques of student artwork. Repeatable twice for credit for a maximum of 6 units, with consent of instructor. Prerequisite: declared Art major/minor or Liberal Studies Art Option.
- 3440** Visual Literacy (2)
Slide lectures, writing, and discussion for the purpose of understanding the tools of visual communication and

responding clearly in oral and written formats.

- 3500** Photojournalism (4)
(See COMM 3500 for course description.)
- 3512** Ceramics II (4)
Concentration on the techniques of throwing, glazing, kiln work, and related topics. Repeatable twice for credit with consent of instructor. Prerequisite: ART 1112. Field trips may be required. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.
- 3513** Ceramics III (4)
Emphasis on personal direction in ceramics. May be repeated for credit with consent of instructor when content varies. Prerequisite: ART 3512. Field trips may be required. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act. (Y)
- 3600** Intermediate Photography (4)
Use of photography as a fine art and visual language. Technical areas include: zone system, color toning and hand painting. Cross-listed with COMM 3600. Prerequisite: COMM/ART 2700 or ART/COMM 2701. A miscellaneous course fee will be charged. Please consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.
- 3630** Digital Photography (4)
Creation of digital camera images as applied to still photography. Traditional and digital camera image scanning, editing, manipulating and printing with computer technology. Cross-listed with COMM 3630. Prerequisite: COMM/ART 2700 or ART/COMM 2701. A miscellaneous course fee will be charged. Please consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.
- 3650** Color Photography (4)
Comprehensive introduction to color photography. Emphasis on printing from negatives. History and aesthetics of color. Repeatable once for credit if content varies. Cross-listed with COMM 3650. Prerequisite: COMM/ART 2700 or ART/COMM 2701. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.
- 3654** Landscape Photography (2)
Introduction to landscape photography and its techniques applied to 35mm, large format and digital cameras. Field trips may be required. Prerequisites: ART 2025, and ART/COMM 2701 or COMM/ART 2700. One hr. lect., 2 hrs. act.
- 3655** Advanced Landscape Photography (2)
Advanced practice in landscape photography through photographic field trips. Repeatable twice for credit for a total of 6 units. Prerequisite: ART 3654. One hr. lect., 2

hrs. act.

- 3660** Portrait Photography (4)
A studio workshop approach to portrait photography. Various types of lighting such as flood, electronic flash, and natural. History of portraiture and contemporary vision. Cross-listed with COMM 3660. Prerequisite: COMM/ART 2700 or ART/COMM 2701. Field trips may be required. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.
- 3670** Introduction to Studio Lighting (4)
Introduction to studio lighting using quartz and other hot light sources. Use of digital cameras and view cameras in the creation of commercial-quality product photography for print and the web. Field trips may be required. Cross-listed with COMM 3670. Prerequisite: ART/COMM 3600. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.
- 3671** Advanced Studio Lighting (4)
The use of electronic strobe lights in a studio lighting situation to create commercial product and portrait photography. Use of view camera and medium format camera will be emphasized. Repeatable for credit if content varies. Prerequisite: ART 3670. Cross-listed with COMM 3671. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hours lect., 4 hrs. act.
- 3680** Photography Career Preparation (2)
Both fine art and professional photography career preparation. Topics include: resume creation, gallery and museum interactions, portfolio production, commercial photography practices and apprenticeship programs, and general business practices for photographers. Cross-listed with COMM 3680.
- 3800** Multimedia I: Animation (4)
Creating imaginative, computer-based animation with traditional and digital techniques. Prerequisites: ART 2025, 2810, 2830. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.
- 3810** Digital Graphics I: Designing Digitally (4)
The aesthetics of composition, color, typography, and message created in the digital environment. Prerequisites: ART 2025, 2810, 2830. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.
- 3815** Typography (4)
Fundamentals and history of letterforms used in art and design. Using digital technology to create art with type. Graphics projects, viewing Electronic Art, and discussing related ideas. Field trips may be required. Prerequisites: ART 2025, 2810, 2830. A miscellaneous course fee will be

charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs lect., 4 hrs. act.

- 3820** Multimedia II: Digital Video and Audio (4)
The creative use of video and audio for multimedia production. Students produce projects using storyboards, cameras, lighting, audio technology, and video digitizing and editing software. Prerequisites: ART 2025, 2810, 2830. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.
- 3825** Advanced Time-Based Media (4)
Advanced topics in time-based media production using computers. Aesthetics of editing, shooting for the edit, compositing, animation and audio/video editing software. Prerequisite: ART 3820. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.
- 3828** Advanced Digital Video (4)
Advanced topics in digital video production for multimedia. Video technology including formats, compression, and specifications. Motion graphics and integrating animation from non-video sources, optimizing video for the distribution channel, and interactive video. Prerequisite: ART 3825. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.
- 3830** Digital Graphics II: Digital Imaging (4)
The use of computers, scanners, digital cameras and drawing tablets with various software to produce imaginative pictures for screen and print. Prerequisites: ART 3400, and either 3800 and 3820 or 3810 and 3815. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.
- 3840** Multimedia III: 3D Modeling and Animation (4)
Introduction to creating 3D models and animations. Prerequisites: ART 3400, 3800, 3820. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.
- 3860** Digital Graphics III: Advanced Graphic Design (4)
Strengthening digital design skills through creative projects, analyzing contemporary design, and discussion. Professional practices and preparing work for commercial printing. Prerequisites: ART 3400, 3810, 3815. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.
- 3870** Art for the Web (4)
Unique characteristics of the World Wide Web as a medium for artistic creation. Explore existing Web-based artworks. Develop individual Web-based artworks of intermediate technical complexity, with emphasis on both

concept and implementation. May be repeated once for credit with consent of instructor when content varies. Prerequisites: ART 3830 and 3825 or 3860. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.

- 3890** Advanced 3D Modeling and Animation (4)
Advanced topics in 3D modeling and animation. Prerequisite: ART 3840. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.
- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 8 units, which may be applied to the major or the minor in Art. Prerequisites: at least 2.0 GPA; departmental approval of activity. (A)
- 4143** Advanced Drawing (4)
Emphasis on individual expression using traditional two-dimensional drawing media integrated with new and mixed media. May be repeated twice for credit when content varies, with consent of instructor for a total of up to 12 units. Prerequisite: ART 3141. Field trips may be required. Two hrs. lect., 4 hrs. act.
- 4200** Interactive Authoring (4)
Design and creation of interactive computer-based art. Projects utilize graphics, animation, video, audio, authoring skills. May be repeated once for credit with consent of instructor when content varies. Prerequisites: ART 3825 and 3830. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.
- 4210** Computers and Print (4)
Combining digital and traditional fine art printmaking techniques to produce prints and artist's books. Field trips may be required. May be repeated once for credit with consent of instructor when content varies. Prerequisites: ART 3830, 3860. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.
- 4220** Multimedia Senior Project (4)
Students produce large scale interactive works for public presentation. May be repeated once for credit with consent of instructor when content varies. Prerequisites: ART 3870, 4200. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.
- 4230** Digital Graphics Senior Project (4)
Students produce a personal body of graphics or web work for public presentation. May be repeated once for credit with consent of instructor when content varies. Prerequisites: ART 3870, 4210. A miscellaneous course

fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.

- 4235** Photography Senior Project (4)
Senior portfolio production and presentation for career oriented goals. Prerequisite: ART 4600. Two hrs. lect., 4 hrs. act.
- 4302** Spatial Arts: Advanced Project (4)
Emphasis on individual expression in spatial arts. Weekly group discussion of students' work. Repeatable for credit with consent of instructor when content varies.
Prerequisites: ART 3316 and 3317 or ART 3513 taken twice. A miscellaneous course fee will be charged for materials. Consult the quarterly *Class Schedule* for the current fee. Field trips may be required. Two hrs. lect., 4 hrs. act. (Y)
- 4370** Human and Machine Performance (4)
Performance as an artistic form. Integration of human and mechanical actions using microprocessor programming, robotics, and costume construction. Discussion of audience, body art, and cyborg theory. Prerequisite: ART 3370. Two hrs. lect., 4 hrs. act.
- 4450** Internship Seminar in Applied Arts Administration (2)
(See THEA 4450 for course description.)
- 4600** Image and Idea (4)
The development of each student's technical skill and personal vision. Documentary and fine art photography with the aim of producing a portfolio. Cross-listed with COMM 4600. May be repeated for credit if content varies. Prerequisites: ART/COMM 3600 or 3650. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act. (Y)
- 4710** Senior Thesis (2)
Senior exhibit of art works in appropriate department spaces. Part of a series of capstone senior courses.
- 4720** Senior Seminar (2)
Development of students' written and verbal communication skills for the purpose of presenting themselves and their work.
- 4730** Senior Portfolio (2)
Senior portfolio production and presentation for career oriented goals. Faculty participation in reviews of portfolios.
- 4740** Professional Practices (2)
Contemporary professional practices in electronic arts. Students investigate venues for electronic artists and contexts for their own work. Field trips may be required. Prerequisites: ART 3870, and either 4200 or 4210.
- 4857** Advanced Printmaking (4)
Studies in printmaking to clarify the student's direction as an artist. May be repeated for credit with consent of

instructor when content varies. Field trips may be required.
Prerequisite: upper division standing. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. act.

4900 Independent Study (1-4)

Art History

- 1007** Introduction to Asian Thought (4)
The thought of China, India, and Japan, past and present, as expressed in visual art and music.
- 1010** Introduction to World Art History (4)
An examination of style in the visual arts and factors which influence the nature of art in selected salient periods of art history. (F, W, Sp)
- 1011** Introduction to World Art History: Spirituality (4)
Style and content in the visual arts as they reflect the expression of spirituality in selected salient periods of art history. (F, W, Sp)
- 1014** Ancient Art (4)
Representative works of art of the ancient world, including the cultures of the Middle East, Mediterranean, and Asia. Field trips may be required.
- 2606** Asian Thought II (4)
(See PHIL 2606 for course description.)
- 3000** Sacred World Art (4)
A comparison of the sacred art of the East and West focusing on cross cultural themes. These include the mandala, the "axis mundi" or world axis, sacred geometry, ornamentation and ritual, sacred eros, and the icon.
- 3010** Latin American Art (4)
Art and architecture of Latin America from the conquest and colonial period to the present, including art of Mexico, Central America and South America. Field trips may be required.
- 3035** Modern Art (4)
Main topics of European art of the Modern period from the nineteenth century to the middle of the twentieth century including Impressionism, Cubism, and Surrealism.
- 3040** Art in the United States (4)
The development of art in the United States from the colonial period to the present. Individual visits to museums required. (Y)
- 3055** Ancient American Art (4)
Art of Mexico, Central America and South America from the ancient periods to the Spanish Conquest. Field trips may be required.
- 3056** Ethnic Art (4)

A survey of Ethnic Art from tribal origins to present. The history of Native American, Chicano, Latin American, African-American and Asian American Art from their origins to the present. Field trips may be required.

- 3220** Art in the Ancient World (4)
The evolution of art from the prehistoric Near East through the later Roman Empire. Individual study visits to museums and/or field trips required. (Y)
- 3224** Renaissance and Baroque Art (4)
European art and architecture of the thirteenth to eighteenth centuries in their cultural context. Individual museum and/or field trips may be required.
- 3227** Women in Art (4)
Women artists and images of women's art, including history from ancient periods to the present. Individual museum and/or field trips may be required.
- 3230** Art and Philosophy of the East (4)
(See PHIL 3230 for course description.)
- 3400** History of Art and Technology (4)
How the interaction of art and technology shaped human culture from cave paintings to computers.
- 3411** Advanced Survey of World Art (4)
In-depth survey of the major monuments of world art history. Field trips may be required. (F, W, Sp)
- 4000** The History of Art Theory (4)
Art theory emphasizing the writings of artists as well as philosophers from Plato and Aristotle to the Post-Modernists, including China and India.
- 4005** Histories of Film (4)
A thematic approach to film that analyzes the subject's history, innovative visual strategies, content and cultural context. Themes may vary and may include world cinema, past visions of the future, Hollywood/Bollywood, existentialism, spiritual representations, war, etc. Cross-listed with COMM 4005. May be repeated once for credit with consent of instructor when content varies for a maximum of 8 units.
- 4020** Shamanism and Art: A Cross-Cultural Perspective (4)
The relationship between the practice of shamanism and art from around the world. Artworks from North American Indian, Oceanic, Siberian, Aboriginal, Huichol and African cultures as well as those from Indonesia, China and Tibet. The practice of shamanic techniques by modern artists.
- 4060** History of Graphic Design (4)
The development and evolution of graphic design including its relationship to culture, influential artists, designers and studios. Field trips may be required.
- 4070** Currents in New Media (4)

Contemporary artistic developments in new media including artists, aesthetic trends, materials, and methods. Field trips may be required.

- 4071** Contemporary Art (4)
The most recent developments in art from WW II to the present with an emphasis on post-modernism. Individual study visits to museums and/or field trips required. (Y)
- 4620** History of Photography (4)
(See COMM 4620 for course description.)
- 4900** Independent Study (1-4)

Art Museum and Gallery Studies

- 4701** Internship I (3)
Internship in museums and galleries of the Bay Area. Duties involve professional exhibition and design under the direction of the museum and/or gallery staff. Prerequisites: ART 3701 (thrice for credit), and ART 3702. (Y)
- 4702** Internship II (3)
Museum and Gallery involvement with office of administration, curation, education, and public relations. Increased responsibility for exhibitions at the University Galleries. May be repeated once for credit. Prerequisites: ART 4701. (Y)
- 4900** Independent Study (1-4)

General

- 3999** Issues in Art (4)
Readings, discussion, and research on contemporary and/or significant issues in art. May be repeated for credit when content varies.



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Latin American Studies

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Department Information

Department of History
College of Arts, Letters, and Social Sciences
Office: Meiklejohn Hall 4037
Phone: (510) 885-3240, FAX: (510) 885-4791

Professors Emeriti: H. Glynn Custred (Anthropology), Roxanne Dunbar Ortiz (Ethnic Studies), Herbert M. Eder (Geography and Environmental Studies)

Professors: Loretta Breuning (Management and Finance), Richard A. Garcia (History), L. Iliana Holbrook (Modern Languages and Literatures), George R. Miller (Anthropology), Amy Rodman (Art), Noel Samaroo (Ethnic Studies)

Associate Professor: Michael Lee (Geography and Environmental Studies)

Assistant Professor: Marcelo Paz (Modern Languages and Literatures)

Director: Marcelo Paz

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

Latin America, with its rich Indigenous, African, and Iberian heritage, is a unique and extraordinarily varied region of the world about which North Americans are often very poorly informed. Yet the relationship between Latin America and the U.S. is necessarily a close one: we are bound together by history, by geography, by long-standing financial and commercial relationships, by the often-disappointed expectation on the part of the U.S. that Latin America is our natural political and military ally, and finally, by the growing number of men and women of Latin American origin and culture living in the U.S.

The Latin American Studies major draws on courses taught in the

Departments of Anthropology, Art, Economics, Ethnic Studies, Geography and Environmental Studies, History, and Modern Languages and Literatures, Philosophy and Political Science; as well as courses taught from time to time in other departments. It provides the student with an opportunity to acquire a broad and deep understanding of the richness of Latin American and Iberian civilizations. The major in Latin American Studies is a liberal arts program which is of particular interest to students planning to enter careers related to the Latin American region (teaching, business, government, or other agency service, for example.)

A minor, double major, or Liberal Studies option in Latin American Studies is appropriate for students who wish to enrich their career prospects by establishing expertise not only in their major fields and in Spanish or Portuguese, but also in Latin American culture and history. It is also desirable for students with majors in the liberal arts disciplines represented in the Latin American Studies major for whom a regional specialization adds another dimension to the mastery of the themes and methodologies of their major fields.

Features

A unique feature of the program is the possibility of concentrating on Spanish or Portuguese speaking areas of Latin American and the Iberian Peninsula.

Cal State Hayward has established study abroad and exchange programs with the Instituto Tecnológico y de Estudios Superiores de Monterrey, Queretaro Campus. Credit can be arranged for numerous other summer and academic-year programs. Majors are encouraged to spend at least one quarter studying in Latin America.

Majors may also do research on Latin America as an intern at one of the many agencies of the Bay Area which need volunteers and the occasional paid employee. Interns will help evaluate proposals for grants-in-aid submitted by Latin American communities to work with recent Latin American migrants. The Program Director maintains a file on study abroad and internship opportunities.

LAS students are expected to develop a close relationship with their advisor because of the importance placed on "extra-campus" activities and the special needs of coordination required in an interdisciplinary major. This relationship can be one of the strongest features recommending the program.

Scholarship

Helen C. Jacobsen Scholarship

One \$1,000 scholarship awarded for full-time undergraduate students. Awards are limited to students with upper division standing. A grade point average of 3.0 or higher is required.

Major Requirements

The Latin American Studies major consists of 60-84 units; the B.A. degree requires a total of 180 units.

(B.A.)

I. Lower Division Requirements (12-36 units)

Select one course from each group:

- A. ANTH 1000 Introduction to Anthropology (4), or ANTH 1300 Introduction to Cultural Anthropology (4), or SOC 1000 Introduction to Sociology (4)
- B. ECON 1000 Economics in Public Issues (4), or ECON 2302 Principles of Macroeconomics (4)
- C. GEOG 1000 Introduction to Geography (4), or GEOG 2300 Cultural Geography (4), or GEOG 2310 Economic and Resource Geography (4)
- D. Modern Language Requirement
Demonstrate proficiency in Spanish or Portuguese by completion of the third quarter of intermediate language at CSUH, or by an examination administered by the Latin American Studies Program.

II. Upper Division Core Courses (16 units)

- LAST 3000 The Latin American World (4)
- HIST 3600 Colonial Latin America (4)
- HIST 3605 Modern Latin America (4)
- INTS 3100 Global Systems (4)

III. Distribution Requirements (24 units)

A. Art and Literature (8 units)

Select two courses from two different disciplines:

ART 3010 Latin American Art (4), 3055 Ancient American Art (4); MLL 3461 Introduction to Spanish-American Literature: 1492-1900 (4), 3463 Introduction to Spanish-American Literature: 1900 to the Present (4), 3495 Spanish-American Culture and Civilization (4), 3861 Topics in Portuguese Literature (4); 3871 Topics in Brazilian Literature (4), 4495 A Single Movement, Country or Theme: Spanish-American Literature (4); PHIL 3214 Philosophy and Myth in Latin American Literature (4)

B. Society and Environments (8 units)

Select one course in Geography and another in either Anthropology or Ethnic Studies:

ANTH 3250 Precolumbian America: Aztec, Inca, Maya (4), 3510 South America (4); E S 3800 Peoples of Central America (4); GEOG 3510 Geography of Mexico, Central America, and the Caribbean Islands (4), 3515 Geography of South America (4)

C. History and Contemporary Politics (4 units)

Select at least one course:

HIST 3620 The Cuban Revolution and Latin America (4), 3622 Mexico since 1810 (4), 3632 Film and Society in Latin America (4), 3804 Topics in Latin American History (4), 6500 Conference Course in Latin American History (open to undergraduate majors and minors in

LAS) (4); POSC 3280 Political Systems of Latin America (4)

D. Latino Experience in U.S. (4 units)

Select at least one course:

E S 3202 Latino Writers (4), 3210 Latinas in the United States (4), 3805 Mexican and Latin American Immigration (4); HIST 3515 Mexican-Americans and the American Southwest (4); SOC 3416 Sociology of the Mexican American Family (4)

IV. Electives (8 units)

Any other course certified by the LAS Director to have suitable content for the program.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

The minor consists of 24 units; at least 18 must be outside major department. Students must complete 12 units of college-level Spanish or Portuguese, or pass a program-administered examination. (0-12 units)

I. Required Courses (8 units)

LAST 3000 The Latin American World (4)
HIST 3605 Modern Latin America (4)

II. Complete four additional courses (16 units) from the following lists. At least two disciplines besides History must be represented.

ANTH 3250 Pre-Columbian America: Aztec, Inca, Maya (4), 3510 South America (4); ART 3010 Latin American Art (4), 3055 Ancient American Art (4); E S 3130 Slavery in the Americas (4), 3202 Latino Writers (4), 3210 Latinas in the United States (4), 3800 Peoples of Central America (4), 3805 Mexican and Latin American Immigration (4); GEOG 3510 Geography of Mexico, Central America, and the Caribbean Islands (4), 3515 Geography of South America (4); HIST 3600 Colonial Latin America (4), 3620 The Cuban Revolution and Latin America (4), 3622 Mexico since 1810 (4), 3632 Film and Society in Latin America (4), 3804 Topics in Latin American History (4), 6500 Conference Course in Latin American History (open to undergraduate majors and minors in LAS) (4);

MLL 3461 Introduction to Spanish-American Literature: 1492-1900 (4), 3463 Introduction to Spanish-American Literature: 1900 to the Present (4), 3495 Spanish-American Culture and Civilization (4), 3861 Topics in Portuguese

Latin American Studies Option: Liberal Studies

Literature (4), 3871 Topics in Brazilian Literature (4), 4495 A Single Movement, Country or Theme: Spanish American Literature (4); PHIL 3214 Philosophy and Myth in Latin American Literature (4); POSC 3280 Political Systems of Latin America (4)

Area II. B (0-12 units)

Demonstrated reading knowledge of Spanish or Portuguese by completion of one year of college-level course work, or by program-administered examination.

Area VII, Credential Track, or Area VI, General Track (24 units)

LAST 3000 The Latin America World (4)
HIST 3605 Modern Latin America (4)

Four upper division courses selected from the following (16 units):

ANTH 3250 Precolumbian America: Aztec, Inca, Maya (4), 3510 South America (4); ART 3010 Latin American Art (4), 3055 Ancient American Art (4), E S 3800 Peoples of Central America (4), 3805 Mexican and Latin American Immigration (4); GEOG 3510 Geography of Mexico, Central America, and the Caribbean Islands (4), 3515 Geography of South America (4); HIST 3600 Colonial Latin America (4), 3620 The Cuban Revolution and Latin America (4), 3622 Mexico Since 1810 (4), 3632 Film and Society in Latin America (4), 3804 Topics in Latin American History (4); MLL 3461 Introduction to Spanish-American Literature: 1492 to 1900 (4), 3463 Introduction to Spanish-American Literature: 1900 to the Present (4), 4495 A Single Movement, Country or Theme: Spanish-American Literature (4); PHIL 3214 Philosophy and Myth in Latin American Literature (4); POSC 3280 Political Systems of Latin America (4)

Undergraduate Courses

The course prefix for the following courses is LAST.

- 3000** The Latin American World (4)
Interdisciplinary survey of Latin American civilization from pre-Columbian times to the present. Focus on social and political evolution, literature, material culture, and physical environments. Some attention to the Latino experience in the U.S.
- 3999** Issues in Latin American Studies (4)
Readings, discussion, and research on contemporary and/or significant issues in Latin American studies. May be repeated for credit when content varies.
- 4900** Independent Study (1-4)



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Department Information

Asian Studies

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Department of Sociology and Social Services
College of Arts, Letters, and Social Sciences
Office: Meiklejohn Hall 3097
Phone: (510) 885-3173

Professors Emeriti: Peter J. Claus (Anthropology), Jong S. Jun (Public Affairs and Administration), Ricardo L. Singson (Marketing and Entrepreneurship)

Professors: Jagdish Agrawal (Marketing and Entrepreneurship), Sam N. Basu (Management and Finance), Loretta Breuning (Management and Finance), Edgardo de la Cruz (Theatre and Dance), Colleen Fong (Ethnic Studies), Shyam Kamath (Economics), Chong S. K. Lee (Marketing and Entrepreneurship), Mark Levy (Art), Nancy Mangold (Accounting and CIS), Surendra Pradhan (Management and Finance), Willem W. Van Groenou (Sociology and Social Services), Robert W. Zambetti (Kinesiology and PE)

Associate Professors: Hadi M. Behzad (Management and Finance), Sophia Lee (History), Efren Padilla (Sociology and Social Services), David Woo (Geography and Environmental Studies)

Assistant Professors: Dean L. Heath (History), Meiling Woo (Modern Languages and Literatures)

Lecturers: Agha Saeed (Communication), Yoko Shioiri-Clark (Modern Languages and Literatures)

Director: Willem Van Groenou

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

All students are invited to include some courses on Asia in their programs in order to enhance their critical understanding of the West's interrelatedness with the regions where half of humanity lives. The Asian countries are steeped in traditions that have elaborated different possibilities than those with which many Americans are acquainted. The Asian peoples have liberated themselves from Western rule and they are trying to establish

equal relations with the West, while they work to come to terms with science, technology, and democracy in their own countries.

The Asian Studies faculty, in cooperation with Asian American student groups and concerned community members, attempt to encourage mutual understanding of East and West through regular courses in various departments (see following list); through new courses listed in the Class Schedule and Independent Study; through occasional workshops, lectures, and cultural events; and through outreach work in the Bay Area schools. The program is supplemented with topics such as Yoga, Judo, and Karate (Kinesiology and Physical Education). Notice also that certain general courses in the curriculum include a major Asian component: for example, Mankind and Food, Folklore (Anthropology), International Finance and Trade (Economics), Nutrition and Diet Therapy (Health Sciences), Multinational Business (Management Sciences), International Marketing (Marketing), International Relations and Contemporary World Problems (Political Science), and World Development (Sociology), among others. The Asian Studies Program faculty publicizes these and related matters. Study abroad courses, as well as short educational tours, have been offered in several Asian countries.

Minor in Asian Studies

Students with broader interests in Asia can build into their curriculum a Minor in Asian Studies consisting of eight courses (32 units). The minor is designed to complement the student's major by grouping courses taken as part of the major, courses taken to fulfill General Education requirements, and free electives into a package emphasizing Asia. A minimum of 18 units must be taken outside the student's major.

Although the Minor in Asian Studies does not include a foreign language requirement, one year of an Asian language may be counted toward fulfillment of the minor requirements. Students wishing to go on to graduate school in Asian Studies are strongly encouraged to begin their language study as part of their undergraduate training. Mandarin Chinese, Japanese, Vietnamese and Filipino are offered on campus.

It is also possible to include courses taken at the universities that are associated with the International Programs of the California State University system; these opportunities presently exist in China, India, Japan, Taiwan, and Thailand and others are being considered.

Thirty two units (eight courses) may be chosen from the following list. No more than 12 units (three courses) in one department. At least 12 upper division units are required.

ANTH 3545 China (4), 3550 Japan (4), 3560 India (4); GEOG 3540 Geography of East Asia (4), 3550 Geography of Southeast Asia (4); HIST 3301 Modern Asia (4), 3311 Traditional China (4), 3312 Modern China (4), 3313 People's Republic of China (4), 3322 Early Japan (4), 3323 Modern Japan (4), 3325 Postwar Japan (4); MLL 1601-2-3 Elementary Mandarin Chinese I, II, III (4 each), 1651-2-3 Elementary Filipino I, II, III (4 each), 1751-2-3 Elementary Vietnamese I, II, III (4 each), 1801-2-3 Elementary Japanese I, II, III (4 each), 2831 Asian Thought (4); PHIL 1401 Religions of the World (4), 2605 Asian Thought (4), 3403

Philosophies of the East (4), 3410 Comparative Themes in Eastern and Western Philosophy (4); POSC 3204 Political Systems in Asia (4)

Although not part of the courses that count in the minor, Asian courses in Kinesiology and Physical Education are a much appreciated supplement to the Asian Studies program. Yoga, Judo, and Karate combine the wisdom of the body with self-understanding, and enhance learning skills, general alertness, and fitness.

Minor in Filipino/Filipino American Studies
See Filipino/Filipino American Studies chapter.



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Liberal Studies

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Department Information

Liberal Studies Program
 College of Arts, Letters, and Social Sciences
 Office: Meiklejohn Hall 4055
 Phone: (510) 885-3852, FAX: (510) 885-2122

Professors: Gerald Henig (History), Maria Nieto (Biological Sciences), Patricia Zajac (Criminal Justice Administration)

Director: Patricia Zajac

Coordinator, Blended Program: Patricia Zajac

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

The Liberal Studies Major aims to provide a rich educational experience through coursework in a broad range of academic disciplines. There are two tracks to the B.A. degree major in Liberal Studies. The Credential Track is designed for future elementary (K-8) teachers. The General Track is intended for those with other goals who desire a broad exposure to the arts, humanities, sciences, and social science fields that comprise a true liberal education. Differences between the two tracks are small, so that it is easy to change from one to the other. In either track, the student is guaranteed a breadth of academic experience, as well as depth in a single field. The Blended Liberal Studies/Credential Program offers selected students interested in a teaching career an opportunity for concurrent subject matter and professional preparation. See the "Blended Liberal Studies/Credential Program" section later in this chapter.

The broad-based, interdisciplinary nature of Liberal Studies provides a knowledge base and the communication and analytical skills appropriate to many careers and occupations. Hence, the Liberal Studies major is excellent preparation not only for teaching, but for graduate work, for law school, and for employment in business and government.

Career Opportunities

Note: The Liberal Studies program requirements will be revised effective 2004. Contact the Liberal Studies Program office for additional information (MI 4055; 510-885-3852), or visit the Liberal Studies website at:

www.csu Hayward.edu/undergrad_majors/liberal_studies.html

Administrator • Business Executive • Civil Servant • Customer Service Representative • Foreign Service Officer • Human Resources Administrator • Journalist • Law • Manager • Personnel Representative • Salesperson • Stockbroker • Teacher (K-8) • Travel Agent • Writer

Features

Although the program is large and complex, remember that it incorporates all General Education requirements. All university graduation requirements can be completed within the structure of the Liberal Studies major.

The Credential Track is an approved Multiple Subject Matter Preparation Program. Although the Liberal Studies program is an approved multiple subject matter preparation program, there is no longer an exemption from the multiple subject test, which is now the CSET or "California Subject Exam for Teachers" (no longer the MSAT).

The primary function of the Liberal Studies Office is to provide proper advising. Friendly, experienced office staff and faculty and staff advisors are available to help at every step. Advising is available through individual appointments and on a "drop-in" basis.

The Liberal Studies major is offered both day and evening, and on both the main Hayward campus and at the Contra Costa Campus. However, Contra Costa and evening-only students will not find a full range of courses and options available to them.

Liberal Studies is also one of the majors available through the Cal State Hayward Program for Accelerated College Education (PACE). For information, call the PACE office at (510) 885-PACE (7223). Also, see information about PACE in the Welcome to Cal State Hayward chapter and in the Student Services chapter in the front of this catalog.

Credential Track students, including students in the Blended Liberal Studies/Credential Program, are subject to special requirements for field experience in the schools which include a journal of the field experience, observations and reflections. Further information on these requirements is available from the Liberal Studies Office.

Preparation

For transfer students, the best preparation for Liberal Studies is General Education coursework that may be counted in Area I, Foundations. Liberal Studies welcomes inquiries from community college counselors, and potential transfer students may call for

Major Requirements (B.A.)

informal, pre-admission advising.

The Credential Track consists of a minimum of 164-182 units; the General Track consists of a minimum of 153-166 units; the B.A. degree requires a total of 180 units. General Education-Breadth Requirements are subsumed in the Liberal Studies major. The U.S. history, U.S. Constitution, and the state and local government requirement can be satisfied by completion of the Liberal Studies major. Students must be certain to select courses satisfying this requirement which also meet major requirements or they will take extra courses. In addition, every student must satisfy the University Writing Skills requirement and the residence, upper division, and grade point average requirements. For details, see the Baccalaureate Degree Requirements chapter in the front of this Catalog. Only one course may be taken CR/NC in each of Areas I - VI and no course may be taken CR/NC in Area VII.

Area I: Foundations (48-51 units)

- A. ENGL 1001 (4)
- B. SPCH 1000 (4)
 - General Track may take SPCH 1004
- C. Critical Thinking: a course selected from the *Class Schedule* under G.E. Area A.3 of the G.E. requirements (4)
- D. One Math or Statistics course (4-5) from the *Class Schedule* under G.E. Area B.4. Credential Track students should take MATH 2011 here.
- E. One Art, Music, or Theatre course (4)
- F. Humanities (4): one Humanities course (History, Humanities, Literature, Modern Languages, or Philosophy) from the *Class Schedule* under Area C.2. May include a History course for U.S. history, U.S. Constitution, and state and local government requirement.
- G. One course in the Arts or Humanities (4)
- H. Social Science course (4)
- I. Social Science course (4)
- J. Social Science course (4)

Note: The three Social Science courses chosen to complete H, I, and J must be from at least *two* disciplines selected from Anthropology, Economics, Geography, History, Human Development, Political Science, Psychology, or Sociology. May include a Political Science course used for U.S. history, U.S. Constitution and state and local government requirement.
- K. One Biological Science course (Anatomy, Biology, Botany, Ecology, Genetics, Microbiology, Marine Science, Physiology, Zoology) from the *Class Schedule* under G.E. Area B.2. (4-5)

- L. One Physical Science course (astronomy, chemistry, geology, oceanography or physics) from the *Class Schedule* under Area B.1. (4-5)
- M. Lab for one of the courses listed in (K) or (L) from the *Class Schedule* under Area B.3. (0-2)

Area II: Language and Communication (19-20 units)

- A. ENGL 1002 (4)
- B. ENGL 2030 or 2040 or 2050 or a course from the Required Course List (RCL). See "Liberal Studies Required Course List" at the end of this section. (4)
- C. ENGL 3010 (4) for Credential Track students
 - General Track students may select from ENGL 3005, 3010, 3015, or 3040 (4)
- D. Upper division English literature (4)
- E. Language Acquisition: either a third quarter foreign language course or a course from the RCL (See "Liberal Studies Required Course List" at the end of this section.) (3-4)
 - General Track students may also select any upper division English or Speech Course.

Area III: Science and Environment (16-27 units)

- A. Biology course (4)
Lab (0-1)
- B. Physical Science course (4)
Lab (0-2)
 - Credential Track: two courses in science to include a course in biology and a course in physical science selected from the RCL (8-11). *Two labs are required.* (Courses in Areas I and III must include three labs.)
 - General Track: one course in either biological or physical science. *One lab is required.* (Courses in Areas I and III must include two labs.)
- C. Environmental Perspectives: one course from the RCL (4)
- D. Mathematics
 - Credential Track requires MATH 4012, 4013, and 4014.
 - General Track students can select any two Math, Statistics, or Computer Science courses numbered 1000 and above. (CS 1020 satisfies the G.E. requirement in Information Literacy for CSUH students.)

Area IV: Individual Development (7-12 units) (Not required for General Track)

- A. One course in Physical Development: KPE 1625, 3250, or DANC 3235 (4)
- B. Social Development: an upper division course from the RCL

(3-5)

- C. Field Experience: T ED 1500 or 3001 or documented experience (50 hours) in an elementary (K-8) school classroom with children of elementary school age in positions such as a teacher's aide, tutor, or volunteer. Students are required to submit a journal of their field experiences, observations and reflections as part of this requirement. (0-3)

Area V: The Arts (12-16 units)

- A. History, Theory, Appreciation: two courses from different departments selected from the RCL (8)
- B. Arts Activities: course(s) selected from the RCL (4)

(Courses taken for Areas I and V must include an Art and a Music course.)

- General Track Only: One additional course selected from the two categories above (4)

Area VI: The Social World (28 units)

(No more than 4 courses in any one department)

- A. History
- Credential Track students must take an upper division U.S. History course. (4) May be used to partially satisfy the U.S. history, U.S. Constitution, and state and local government requirement.
 - General Track students may use any upper division History course.
- B. Western Heritage: a course from the RCL (4)
- C. African, Asian, & Western Hemisphere Civilizations: one upper division course from the RCL (4)
- D. Ethnic Experience in America: one upper division course from the RCL (4)
- E. Women in Society: one upper division course from the RCL (4)
- F. Ethics and Social Policy: one upper division course from the RCL (4)
- G. Geography: one upper division course from the RCL (4)
- General Track may take one upper division course from any of the following social science disciplines: Anthropology, Economics, Geography, History, Human Development, Political Science, Psychology, or Sociology

Area VII: The Option (23-29 units)

The Liberal Studies major requires that each student complete an option, an area of study in some depth. All options except Childhood Studies in the Blended Program involve coursework totaling 23-28 units, similar to a minor. Liberal Studies majors may substitute any regular minor offered by the university in place of the option. However, for those on the Credential Track the choice should be made carefully, in consultation with an advisor,

to be sure that it is appropriate for future work as a teacher. An option (except Childhood Studies in the Blended Program) or a minor must include at least 23 units not counted in any other Area of the major; the same is true for additional options or minors. No course taken CR/NC may be used in the option. The following Liberal Studies options are available through the program:

African American Studies, Anthropology, Art, Bilingual/Cross Cultural Studies, Business Studies, Childhood Studies (open only to students in the Blended Liberal Studies/Credential Program), Dance, Early Childhood Studies, Economics, English, Environmental Studies, Ethnic Studies, Geography, History, Human Development, Integrative Science, Kinesiology, Language Studies, Latin American Studies, Life Sciences, Mass Communication, Mathematics, Modern Languages, Music, Philosophy, Physical Sciences, Political Science, Psychology, Recreation, Sign Language, Sociology, Special Education, Speech Communication, Speech Pathology and Audiology, Statistics, Theatre, Women's Studies

Other Graduation Requirements

- A. G.E. Areas E Capstone (4 units). One course selected from G.E. Area E list in the *Class Schedule*.
- B. G.E. Area G1-3: GS 1010 (3 units). Three one-unit freshman activity courses (CSU Hayward students only).
- C. G.E. Area G4 Information Literacy (1-4 units). (CSU Hayward students only). May be satisfied by CS 1020 (see Area I.D above) or other courses listed in the *Class Schedule*.
- D. Cultural Groups/Women General G.E. requirement (3 units). One course selected from the list in the *Class Schedule*.
- E. U.S. history, U.S. Constitution, California state and local government requirement (0-8 units). See list of approved courses in this Catalog and in the *Class Schedule*. (Also see Areas I.F and I.J above.)
- F. University Writing Skills Requirement. (See B.A./B.S. Degree Requirements chapter.)

Blended Liberal Studies/Credential Program

The Blended Liberal Studies/Credential Program combines, with minor changes, two outstanding programs on the Hayward and Concord campuses designed for future elementary school teachers: the Liberal Studies B.A. major (Credential Track) and the Multiple Subject Credential Program. The Blended Program meets the requirements set by the California Commission on Teacher Credentialing for subject matter and professional preparation. A student who completes this program will be granted a B.A. degree major in Liberal Studies and, upon passage of the RICA examination, a Level I (Preliminary) Multiple Subject teaching credential.

The Blended Program does not replace the existing Liberal Studies major or the traditional sequence of four years of undergraduate work and one year of graduate work in the Teacher Education Department. That degree/credential path

continues to exist and is chosen by most of our students. Rather, the Blended Program is an alternative path that allows selected students to complete in four calendar years an academic and professional program that combines subject matter coursework with training in educational methods and experience in the elementary school classroom. Students will take courses in ethics, social policy, ethnic experience, language acquisition, American history, and science concurrently with sociological foundations of education, bilingual methods, math methods, social studies methods, and science methods. Students in the program are required to select Childhood Studies as their option in Area VII of the Liberal Studies major. The Blended Program incorporates General Education requirements, and all university graduation requirements can be completed within the structure of the Liberal Studies major.

The lower division portion of the Blended Program can be completed in two years, but students are free to take a longer time if necessary. However, the upper division portion of the Blended Program is a full-time commitment for two years including the intervening summer. It is difficult to hold down a job during the junior and senior years. During those years, students are required to take 17 to 18 units a quarter. Final admission requirements for the Credential Program must be completed during the junior year. During the senior year, students are members of a Multiple Subject Team. Members of the Team take their courses together and finish together. Thus students are unable to move through the program at their own pace.

Admission

Students must declare Liberal Studies as their major and then contact the Liberal Studies office to apply for admission to the Blended Program. Admission is a two stage process: (1) provisional admission during the summer prior to the student's junior year, and (2) final admission at the end of the junior year.

Provisional admission requirements are: completion of a minimum of 21 courses to a maximum of 25 courses in the Liberal Studies major; a minimum GPA of 2.90; completion of T ED 1500 or equivalent course which requires a minimum of 20 hours of field experience in an elementary school classroom; and three letters of recommendation, including one from a teacher or principal verifying experience in a K-8 classroom. (One letter may be from the instructor in T ED 1500 or equivalent course.) Final admission requirements are: passage of the CBEST examination; completion of 80% of the Liberal Studies major; a minimum GPA of 2.90 in coursework taken during the junior year; and an admission interview by the Multiple Subject Credential Team Leader.

Please contact the Liberal Studies office for information concerning admission forms, admission deadlines, and for the specific courses required during the junior and senior years.

Options

The Liberal Studies Office advises students interested in the following Liberal Studies Options. See the departmental chapters in this catalog for information on other Liberal Studies Options. Contact the appropriate department for additional information.

Bilingual/Cross Cultural Studies (36 units)

Areas I and/or II, Spanish Language (12 units)

Three courses from the following:

MLL 2401 Intermediate Spanish I (4), 2402 Intermediate Spanish II (4), 2403 Intermediate Spanish III (4), 2410 Spanish Conversation (4), 3401 Advanced Spanish Composition and Syntax, I (4), 3402 Advanced Spanish Composition and Syntax, II (4), 3403 Advanced Spanish Composition and Syntax III (4), 3411 Introduction to Spanish Linguistics (4), 3412 Spanish Phonetics (4), 3495 Spanish-American Culture and Civilization (4)

Area VII (24 units)

A. Required course:

E S 1200 Introduction to Mexican American/Latino Studies (4)

B. Twenty units selected from:

E S 3110 Racism in America (4), 3120 The Civil Rights Movement (4), 3290 Community Development (4), 3805 Mexican and Latin American Immigration (4); E S 4020 Senior Seminar (2) and 4030 Senior Thesis (2) (*Note: Students must complete both E S 4020 and 4030.*)

Business Studies (32 units)¹

Area I (8 units)

ECON 2301 Principles of Microeconomics (4)
ECON 2302 Principles of Macroeconomics (4)

Area VII (24 units)

Either ACCT 2210 Accounting for Non-Business Majors (4) or
ACCT 2251 Financial Reporting and Analysis I (4)

CIS 3060 Computer Information Systems (4)
MGMT 3600 Theories of Management (4)
MGMT 3614 Organizational Behavior (4)
MGMT 4500 Business, Government, and Society (4)
MKTG 3401 Marketing Principles (4)

Childhood Studies (18 units)

This option is open only to students in the Blended Liberal Studies/Credential Program. (Note: One lower division course may be used in the option with consent of the Program Coordinator. No course in the option may be taken CR/NC.)

HDEV 4510 Cognitive Development (4)
HDEV 4520 Language Acquisition and the Symbolic Function (4)

HDEV 4700 Childhood Development (4) or T ED 3500 Introduction to Childhood Studies

T ED 5355 Sociological Foundations of Education (2)

One course from the following:

- DANC 3235 Dance for Children (4)
- ENGL 4740 History of Children's Literature (4)
- KPE 4004 Elementary School Physical Education (4)
- T ED 4320 Art Skills for Teachers (4)
- T ED 5242 Teaching Multi-Ethnic Literature to Children (4)
- THEA 3610 Interpretation of Children's Literature and Story Telling (4)
- THEA 3650 Dramatic Activities for Children (4)

Early Childhood Studies (23-25 units)

Area VII

A. Core requirements (15-16 units)

1. Either HDEV 4700 Childhood Development (4) or T ED 3500 Introduction to Early Childhood Studies (4)
2. HDEV 4510 Cognitive Development (4)
3. HDEV 4520 Language Acquisition and the Symbolic Function (4)
4. One course from the following (3-4 units):
DANC 3235 Dance for Children (4); ENGL 4740 History of Children's Literature (4); T ED 4320 Art Skills for Teachers (4), 5240 Children's Literature in Elementary Education (3), 5242 Teaching Multi-Ethnic Literature to Children (4); THEA 3610 Interpretation of Children's Literature and Story Telling (4), 3650 Dramatic Activities for Children (4).

B. Electives (8-9 units)

ANTH 3740 Cross-Cultural Studies in Child-Rearing (4); DANC 3235 Dance for Children (4); EPSY 5021 Introduction to Educating all Students in Diverse Classrooms (4); ENGL 4740 History of Children's Literature (4); HDEV 3001, 2, or 3 Behavioral and Biological Approaches in Human Development I, II, or III (3), 4710 The Child in the Family and in the Community (4); PSYC 4200 Conditioning and Learning (4), 4210 Theories of Learning (4), 4420 Developmental Psychology (4);

SOC 3410² Sociology of the Family (4), 3413² Sociology of Parenting (4), 3415² Sociology of the African American Family (4), 3416² Sociology of the Mexican American Family (4), 3417² Sociology of the Asian American Family (4), 4750² Child Welfare (4); SPPA 3852-3 Survey of Speech and Language Disorders-Part I or II (4), 3856 Observation of Clinical Procedures in Communicative Disorders (1-4), 4863 Phonological Disorders in Children (4), 4865 Language Disorders in Children (4); T ED 4320 Arts Skills for Teachers (4), 5021 Child Growth and Development (3), 5038 Multicultural Education (4), 5180 Play and Learning in the Education of the Young Child (4), 5240 Children's Literature in Elementary Education (3), 5242 Teaching Multi-Ethnic Literature to Children (4); THEA 3610 Interpretation of Children's Literature and Story Telling (4), 3650 Dramatic

Activities for Children (4).

Integrative Science (44-52 units)

Areas I and III (18-23 units)

BIOL 1001 Introduction to Biology (or one of 1003, 1005, 2001, 2002, 2003, or 2004) (4)

BIOL 1002 Introduction to Biology Laboratory (or 1004 or 2005) (1)

BIOL 3032 Diversity of Organisms in Selected Habitats (4)

or

BIOL 2040 Survey of the Animal Kingdom (4), and either BIOL 2030 Survey of the Plant Kingdom (4) or BIOL 4015 Horticultural Botany (4)

CHEM 1100 General Chemistry (5) or CHEM 1601 Basic Chemistry for the Health Sciences (or 1605) (4) (strongly recommended)

PHYS 1700 Elementary Physics (4) and PHYS 1780 Elementary Physics Laboratory (1)

Area VII (26-29 units)

BIOL 3015 Natural History of Marine Organisms (4) or BIOL 3031 Nature Study (4)

BIOL 3020 Genetics, Evolution, and Humanity (4)

GEOL 2101 Physical Geology (or 2100) (5)

GEOL 2300 Natural Disasters (4) or GEOL 3030 Earth and Life Through Time (5) or GEOL 3040 Fundamentals of Meteorology (4)

PHYS 1800 Astronomy (4)

PHYS 1880 Astronomy Laboratory (1)

One Chemistry-based course. In consultation with an advisor, choose one of the following:

BIOL 2010 Human Physiology and Anatomy I (or 2011) (5)

BIOL 2025 Introduction to Microbiology (5)

CHEM 1602 Basic Chemistry for the Health Sciences (4)

CHEM 1603 Basic Chemistry for the Health Sciences (4)

GEOL 3601 Mineralogy and Optical Crystallography (5)

In addition to the above requirements, it is strongly recommended that students satisfy other major requirements as follows:

Area I (Basic Math or Statistics Course)

MATH 1130 College Algebra (4) or MATH 1300 Trigonometry and Analytic Geometry (4) or STAT 1000 Elements of Probability and Statistics (5)

Area VI (Women in Society Requirement)

BIOL/CHEM/GEOL/PHYS 3800 Women in Science (4)

Language Studies (28 units)

Area II. B

Required course (4 units)

HDEV 4520 Language Acquisition and the Symbolic Function
(4) (Prerequisite: HDEV 4510 which is waived for Liberal
Studies majors)

Area VII (24 units)

A. Required courses

A third quarter foreign language course (4)
COMM 4830 Intercultural Communication (4) or T ED 5038
Multicultural Education (4)
ENGL 3005⁵ Study of Language (4)

B. Electives (12 units)

ANTH 1800 Introduction to Anthropological Linguistics (4),
3800 Language and Culture (4); ENGL 3015⁵ Introduction to
Phonology (4), 3040⁵ Linguistic History of the English
Language (4), 4010⁵ Current Theories in Formal Grammar
(4), 4060⁵ Topics in the Study of the English Language (4) (if
topic is appropriate); PSYC 4740⁵ Psycholinguistics (4);
SPPA 3854 Anatomy and Physiology of Speech (4); T ED
5242 Teaching Multi-Ethnic Literature (4).

Physical Sciences (40-45 units)

Areas I and III (17-19 units)

BIOL 1001 Introduction to Biology (or one of 1003, 1005, 2001,
2002, 2003, or 2004) (4)
PHYS 1700 Elementary Physics (4)
PHYS 1780 Elementary Physics Laboratory (1)

One of the following (4-5 units):

CHEM 1100 Introduction to College Chemistry (5), 1101
General Chemistry (5), 1601 Basic Chemistry for the Health
Sciences (4)

One of the following (4-5 units):

BIOL 2010 Human Physiology and Anatomy I (or 2011) (5);
2030 Survey of the Plant Kingdom (4); 2040 Survey of the
Animal Kingdom (4); 3015 Natural History of Marine
Organisms (4); 1002 Introduction to Biology Lab (1) and 3020
Genetics, Evolution, and Humanity (4); 3031 Nature Study (4)

Area VII, Credential Track, or Area VI, General Track
(23-26 units)

PHYS 1800 Astronomy (4)
PHYS 1880 Astronomy Laboratory (1)
GEOL 2101 Physical Geology (or 2100) (5)
GEOL 3030 Earth and Life Through Time (5)

Electives from the following (8-11 units):

CHEM 1102 General Chemistry (5), 1103 General Chemistry
(5), 1602 Basic Chemistry for the Health Sciences (4), 1603
Basic Chemistry for the Health Sciences (4); GEOL 1201
Introduction to Oceanography (4), 1202 Oceanography
Laboratory (2), 2300 Natural Disasters (4), 3040
Fundamentals of Meteorology (4), 3050 Volcanoes and Plate
Tectonics (4), 3051 Volcanoes Laboratory (2), 3100 Geology

of Western National Parks (4), 3110 Principles of Geomorphology (4), 3200 Regional Field Geology (1-2), 3400 General Oceanography (4), 3810 Structural Geology (5), 4320 Hydrogeology (4); PHYS 3700 The Big Bang and Other Cosmologies (4)

Special Education (26-29 units)

Area I (5 units)

Recommend:

STAT 1000 Elements of Probability and Statistics (5)

Area II. B (4 units)

Recommend one of the following:

HDEV 4520 Language Acquisition and the Symbolic Function (4); PSYC 4740[□] Psycholinguistics (4); SPPA 3854 Anatomy and Physiology of Speech (4)

Area IV. B (4 units)

Recommend one of the following:

HDEV 3001 Behavioral and Biological Approaches to Human Development I (3); PSYC 4200[□] Conditioning and Learning (4), 4420[□] Developmental Psychology (4)

Area IV. C (Field Experience)

Required:

Documented experience in a special education setting, either in addition to T ED 3001 or as part of a journal or other documentation submitted for this requirement.

Area VII (26-29 units)

A. Core requirements (16 units):

EPSY 5021 Introduction to Educating all Students in Diverse Classrooms (4)

EPSY 5125 Educational Practices: Mild-Moderate Disabilities (4)

EPSY 5126 Special Education Law and Program Design (4)

EPSY 5136 Educational Practices: Moderate-Severe Disabilities (4)

B. Electives: 10-13 units selected from at least two (2) of the following groups (10-13 units)

1. SPPA 3852[□] Survey of Speech and Language Disorders I (4), 3853[□] Survey of Speech and Language Disorders II (4), 3855 Introduction to Phonetics (4), 3856[□] Observation of Clinical Procedures (1), 3859 Introduction to Audiology (4), 4861 Introduction to Audiometry (4), 4863 Phonological Disorders in Children (4), 4865 Language Disorders in Children (4)

2. DANC 3235 Dance for Children (4); KPE 3305 Structural Kinesiology (5) (Prerequisite: BIOL 2010 or 2011), 4800 Physical Education for Exceptional Individuals (4); REC 4600 Recreation Therapy Documentation and Assessment (4), 4601 Recreation Therapy Treatment and Program Planning (4); T ED 5038 Multicultural Education (4), 5610 Methods and Materials for Teaching English as a Second

Required Course List (RCL)

Language and Bilingual Education (4)

3. HDEV 3001 Behavioral and Biological Approaches to Human Development I (3), 3800 Human Development and Interaction (4), 4510 Cognitive Development (4), 4520 Language Acquisition and the Symbolic Function (4), 4700 Childhood Development (4), 4710 The Child in the Family and in the Community (4); PSYC 4345[□] Sensation and Perception (4), 4410[□] Abnormal Psychology (4), 4420[□] Developmental Psychology (4); SOC 4750 Child Welfare (4); T ED 5021 Child Growth and Development (3)

Liberal Studies Major requirements in Areas II-VI are to be satisfied by courses selected from the following list current as of November 2003. For additions and deletions thereafter, students should check with the Liberal Studies Office.

Area II. Language and Communication

B. Critical Writing

ENGL 1014 Ancient Literature, 2070 Beginning Workshop in Fiction, 2999 Literary and Cultural Responses to Technology, 3020 Advanced Expository Writing, 3077 Writing from Life to Video

D. Upper Division English Literature

ENGL 3400, 3600, 3650, 3670, 3680, 3691, 3692, 3700, 3715, 3716, 3720, 3725, 3730, 3740, 3745, 3760, 3770, 4151, 4251, 4260, 4325, 4411, 4412, 4450, 4635, 4636, 4637, 4710, 4720, 4740, 4745, 4810-4876

E. Language Acquisition

One foreign language course at the level of at least the third quarter of the first year, or one course selected from the following:

ANTH 1800 Introduction to Anthropological Linguistics, 3800 Language and Culture, 4800 Understanding Language; COMM 4830 Intercultural Communication, 4860 Ethnic Public Address; ENGL 3005 Study of Language, 3040 Linguistic History of the English Language, 4010 Current Theories in Formal Grammar, 4050 Second Language Acquisition; HDEV 4520 Language Acquisition and the Symbolic Function; PSYC 4740[□] Psycholinguistics; SPPA 3852[□] Survey of Speech and Language Disorders-Part I, 3854 Anatomy and Physiology of Speech, 3855 Introduction to Phonetics, 3856[□] Observation of Clinical Procedures in Communicative Disorders; T ED 5370 Second Language Acquisition

Area III. A. Natural Sciences

Two courses selected from the following, one from Life Sciences and one from Physical Sciences. The total of four science courses taken in Areas I and III must include at least three laboratory/activity courses.

A. Life Sciences

BIOL 1001 (or one of 1003, 1005, 2001, 2002, 2003, or

2004) and 1002 (or 1004 or 2005) Introduction to Biology/Lab, 2010 Human Physiology and Anatomy I (or 2011), 2030 Survey of the Plant Kingdom, 2040 Survey of the Animal Kingdom, 3001 Concepts of Molecular Biology, 3015 Natural History of Marine Organisms, 3020 Genetics, Evolution, and Humanity (non-lab), 3031 Nature Study, 3060 Human Sexuality (non-lab), 4015 Horticultural Botany, 4020 Contemporary Human Biology (non-lab)

B. Physical Sciences

CHEM 1000 Popular Topics in Chemistry (or 2001 or 2002) (non-lab), 1100 Introduction to College Chemistry, 1101 General Chemistry, 3010 The Making of Wine; GEOL 1001 (or 1003 or 1004) and 1002 Introduction to the Earth Sciences/Environmental Geology Laboratory, 1201/1202 Introduction to Oceanography/Oceanography Laboratory, 2101 Physical Geology (or 2100), 3040 Fundamentals of Meteorology (non-lab), 3050/3051 Volcanoes and Plate Tectonics/Volcanoes Laboratory, 3100 Geology of the Western National Parks (non-lab), 3300 Principles of Geology (non-lab), 3400 General Oceanography; PHYS 1500/1780 How Things Work/Physics Lab, 1600/1880 Evolution of the Universe/Astronomy Lab, 1700/1780 Elementary Physics/Laboratory, 1800/1880 Astronomy/Laboratory, 2005 Science of Energy (non-lab), 2023/1780 Physics of Perception/Physics Lab, 2100/1780 Physics in the 21st Century/Physics Lab, 3700/1880 The Big Bang and Other Cosmologies/Astronomy Lab

Area III. C. Environmental Perspectives

One course selected from the following:

ANTH 1100 Introduction to Biological Anthropology, 3100 Human Evolution I, 3101 Human Evolution II, 3110 Primate Social Behavior; BIOL 3015 Natural History of Marine Organisms, 3020 Genetics, Evolution, and Humanity, 3031 Nature Study, 3035 Endangered and Threatened Species in Bay Area and California Habitats, 4010 Microbes and Humanity, 4020 Contemporary Biology; ECON 4306 Environmental Economics; ENVT 2000 Introduction to Environmental Studies, 4100 Environmental Impact Analysis

GEOG 3000 Resource Management, 3115 Physical Landscape Analysis, 3320 Geography of World Agriculture, 3340 Urban Planning, 3400 Field Geography of the San Francisco Bay Region, 4320 Energy Resources and Management, 4330 Sustainable Development, 4350 Water Resources and Management;

GEOL 2300 Natural Disasters, 3000 Conservation of Natural Resources, 3030 Earth and Life through Time, 3110 Principles of Geomorphology, 3300 Principles of Geology, 4320 Hydrogeology; HSC 3200 Environmental Health; HIST 3505 California Environmental History; PHIL 3151 Environmental Ethics; POSC 3460 Environmental Law, 4171 Public Policy and the Environment; SCI 1005 Technology of the Future, 3335 Science, Technology, and Values; SOC 3100 Seminar in Human Ecology.

Area IV. A. Physical Development

One course selected from the following:

DANC 3235 Dance for Children; KPE 1625 Nutrition and Performance, 3250 Kinesiological Foundations of Physical Education.

Area IV. B. Social Development

One upper division course (two if T ED 5351/5355 selected), at least 3-5 units, selected from the following:

ANTH 3700 Educational Systems in Cross-Cultural Perspective, 3740 Cross-Cultural Studies in Child-Rearing; EPSY 5021 Introduction to Educating all Students in Diverse Classrooms; E S 3105 African American Identity, 3180 The World of the Black Child; HDEV 3001-2-3 Behavioral and Biological Approaches in Human Development I, II, III; 3011-12-13 Sociocultural and Experiential Approaches in Human Development I, II, III, 3800 Human Development and Interaction, 4400 Adolescence, 4510 Cognitive Development, 4520 Language Acquisition and the Symbolic Function, 4700 Childhood Development, 4710 The Child in the Family and in the Community

PSYC 4200 Conditioning and Learning, 4410 Abnormal Psychology, 4420 Developmental Psychology; SOC 3410 Sociology of the Family, 3413 Sociology of Parenting, 3730 Juvenile Delinquency; T ED 5021 Child Growth and Development

Area IV. C. Field Experience

The subject matter preparation program requirement for experience in the classroom may be satisfied by one of the alternatives below. *However students should be aware that admission requirements for a credential program may require additional school experience.* For further information, consult the Department of Teacher Education.

- A. Completion of T ED 1500 Introductory Field Experience or 3001 Exploring Education or their equivalent or
- B. Documented experience (50 hours) in an elementary (K-8) school classroom with children of elementary school age, in positions such as teacher's aide, tutor, or volunteer. Especially recommended is experience in a culturally diverse setting and with children with disabilities. Degree requirements may be cleared by submitting a letter from the school principal or supervisor (on school letterhead) verifying completion of K-8 classroom experience. This letter is due in the Liberal Studies Office on or before the last day of classes of the student's last quarter. A journal is to be submitted to complete degree requirements.

Area V. A. History, Theory, and Appreciation of the Arts

Two courses, from different departments, selected from the following:

ART 1010 The Idea of Art History (or 1011) or any other Art History course; COMM/ART 4620 History of Photography; DANC 4200 Dance Through the Ages, 4201 Dance in Modern Society, 4202 Women in Dance; ENGL 4745 Film Criticism; E S

2125 The Black Aesthetic, 2300 Blacks in Film, 2410 Mexican American/Latino Perspectives in Film, 3145 African American Music, 3243 Mexican American/Latino Perspectives in Film; HIST 4895 Architecture and Society;

MUS 1000 Survey of Music Literature (or 2020), 1004 Introduction to World Music (or 1014), 1005 Music of Our Time, 1006 History of Rock and Roll, 1007 History of Jazz, 1008 Music Theory for Non-Majors, 2120 A Panorama of Jewish Music, 3002 What to Listen For in Music; THEA 1005 How to See a Play, 1010 All the World's a Stage (or 1011), 3201 Classical Greek and Roman Drama, 3202 European Medieval and Renaissance Drama, 3203 Modern European Drama, 3207 Modern American Theatre, 3208 Postmodern Theatre, 3210 Script Analysis: The Western Tradition, 3216 History of Musical Theatre, 3225 Theatre Today, 3226 The Woman Artist, 3228 Women in Dramatic Literature, 3230 Shakespeare on Film, 3232 Modern Art and Theatre, 3422 History of Costume, 3423 Non-Western Costume, 4375 Ethnic and Immigrant Theatre in the U.S

Area V. B. Arts Activities

At least 4 units selected from the following:

ART 1020 Introduction to World Art, 1111 The Art Experience or any other Art Studio course

Any other Art course listed in G.E. Area F

ART/COMM 2701 Introduction to Photography, 3600 Intermediate Photography, 4600 Advanced Photography; COMM 3101 Television Pre-production, 4183 Speech and Debate Activities Workshop (Forensics competition); COMM/ART 2700 Introduction to Photography, 3340 Graphic Communication; MUS 1015, 1016 Basic Musicianship Through Guitar for Non-Music Majors I, II; 1027, 1028, 1029 Sightsinging I, II, III; 1311, 1312, 1313 Elementary Class Piano I, II, III; 1314, 1315, 1316 Basic Piano Class I, II, III; 2314 Keyboard Sight-Reading, 2315 Keyboard Harmony, 2500 Chamber Music in the Public Schools, 3210-3270 Applied Music (individual instruments), 3515 University Oratorio Society

Any other Music course listed in G.E. Area F

DANC 1141-2-3 Beginning Modern Dance I, II, III (1 unit activity), 1171-2-3 Beginning Jazz Dance I, II, III (1 unit activity), 2022 Contemporary Musical Theatre Dance, 2030 Fundamentals of Modern Dance, 2141-2-3 Intermediate Modern Dance I, II, III (1 unit activity), 2171-2-3 Intermediate Jazz Dance I, II, III (1 unit activity), 2250 Dance Performance Theatre (1 unit activity), 3021 Cultural Dance Forms, 3215 Dance Touring, 3216, 3217 Dance Touring II, III, 3220, 4220 Dance Performance, Composition, and Production I, II, 3235 Dance for Children, 3241 The Dance Experience, 3426 Collaborative Dance Theatre, 3690 Dance: Art and Education into Therapy; T ED 4320 Art Skills for Teachers

THEA 1012 Exploring Creativity in Theatre and Dance, 1020 Discover Acting, 2005 Acting Fundamentals: Improvisation, 2015 Acting Fundamentals: Stage Movement, 2188 Summer Theatre Workshop; 3189 Production Practicum; 3310 Interpretation of Women's and Ethnic Literature, 3610 Interpretation of Children's

Literature and Story Telling, 3650 Dramatic Activities for Children, 3660 Children's Theatre Performance, 4801 Topics in Theatre Performance

Any other Theatre course listed in G.E. Area F

Area VI. The Social World

A. Upper Division U.S. History

HIST 3400, 3411-3417, 3500, 3503, 3505, 3511, 3515, 3530, 3540, 3547, 3550, 3567, 3568, 3570, 3571, 3575, 3580

B. Western Heritage

One course selected from the following:

ART 3035 Modern Art, 3040 Art in the United States, 3220 Art in the Ancient World, 3225 Renaissances in European Art, 4071 Art Since 1945; COMM 4201 Comparative Traditions of Rhetoric; ECON 3170 History of Economic Thought; ENGL 3400 Masterworks of British Literature, 3600 Masterworks of American Literature, 3700 Classical Literature, 3715 Dante's World I, 3716 Dante's World II, 3720 Renaissance Humanism, 3725 Petrarch and Boccaccio, 3730 The Neo-Classical Tradition, 3740 The Romantic Era, 3745 The Gothic, 3760 Literature of the Twentieth Century, 4710 Bible for Students of Literature, 4720 Mythology, 4833 British Novel from 1914-1945, 4870 The American Novel, 1914-1945

HIST 1014 World Civilizations I, 1015 World Civilizations II, 1016 World Civilizations III, 4030 Historiography or any upper division course in European history; HUM 1001 Humanities I, 1002 Humanities II, 1003 Humanities III, 3000 Literature of the Holocaust

Modern European Languages: any upper division literature course, including those in English translation, except those in Brazilian and Spanish-American literature

PHIL 3321 Philosophy of the Human Sciences, 3331 History of Science, 3332 Philosophy of Science, 3503 Philosophy of Law, 3601 Ancient and Medieval Philosophy, 3602 Modern Philosophy, 3603 Kant and Idealism, 3604 Roots of Contemporary Philosophy, 3605 Studies in Contemporary Philosophy

POSC 3704 Marxism in Theory and Practice, 3711 Greek, Roman, and Medieval Political Thought, 3712 Early Modern Political Thought, 3713 Contemporary Political Thought; THEA 3201 Classical Greek and Roman Drama, 3202 European Medieval and Renaissance Drama, 3203 Modern European Drama, WOST 4922 Women of the Classics

Area VI. C. African, Asian, and Western Hemisphere Civilizations

One upper division course selected from the following:

ANTH 3240 Archeology of North America, 3250 Precolumbian America: Aztec, Inca, Maya, 3430 Ethnicity and Nationalism, 3510 South America, 3535 Southeast Asia, 3545 Anthropology of China, 3550 Modern Japan, 3560 India, 3580 Middle East, 3755

Culture, Conflict, and Law, 3780 The Anthropology of Production and Exchange; ART 3010 Latin American Art, 3055 Ancient American Art, 3058 Far Eastern Art

E S 3800 Peoples of Central America; GEOG 3510 Geography of Mexico, Central America, and the Caribbean Islands, 3515 Geography of South America, 3540 Geography of Eastern Asia, 3550 Geography of Southeast Asia; HIST 3302 Modern East Asia Through Film, 3311 Traditional China, 3312 Modern China, 3313 People's Republic of China, 3322 Early Japan, 3323 Modern Japan, 3325 Postwar Japan, 3600 Colonial Latin America, 3601 Latin America: 1700-1900, 3602 Latin America in the 20th Century, 3605 Modern Latin America, 3620 The Cuban Revolution and Latin America, 3622 Mexico Since 1810, 3803 Topics in Asian History, 3804 Topics in Latin American History

LAST 3000 The Latin American World; MLL 3461 Introduction to Spanish-American Literature: 1492 to 1900, 3463 Introduction to Spanish-American Literature: from 1900 to the Present, 3495 Spanish-American Culture and Civilization, 3830 Japanese Literature and Culture, 3871 Topics in Brazilian Literature, 4495 A Single Movement, Country or Theme: Spanish-American Literature PHIL 3214 Philosophy and Myth in Latin American Literature, 3403 Philosophy of the East, 3410 Comparative Themes in Eastern and Western Philosophy; POSC 3204 Political Systems of Asia, 3230 Government and Politics in the Middle East, 3260 Government and Politics of Africa South of the Sahara, 3280 Political Systems of Latin America; SOC 3431 Seminar in World Development; THEA 3311 Filipino Theatre, 3423 Non-Western Costume

Area VI. D. Ethnic Experience in America

One upper division course selected from the following:

ANTH 3500 North American Indians, 3505 Indians of California, 3520 Contact Period of California; ART 3056 Ethnic Art; COMM 3400 The Ethnic Media in America, 4515 Critical Discourse in Multicultural America, 4830 Intercultural Communication, 4860 Ethnic Public Address; ENGL 3660 Native American Literature, 3670 Asian/Filipino American Literature, 3680 Hispanic/Latino/U.S. Literature, 3691 Black Literature I, 3692 Black Literature II

E S 3000 Ethnic Writers, 3003 African American Women Writers, 3030 Immigrant and Refugee Women, 3105 African American Identity, 3110 Racism in America, 3120 The Civil Rights Movement, 3130 Slavery in the Americas, 3180 World of the Black Child, 3201 Mexican American/Latino Renaissance: Ethnicity from the 1960s to Present, 3202 Latino Writers, 3210 Latinas in the U.S., 3290 Community Development, 3305 Contemporary Native American Life, 3310 Native American World View, 3330 Native American Liberation Movements, 3555 Asian American Family Patterns, 3805 Mexican and Latin American Immigration, 3810 History of Minority Education, 3851 Asian American Women and Men, 4290 Latino Politics

HIST 3515 The Mexican American and the American Southwest, 3567 Blacks in the United States, 3568 Blacks in the West; POSC 3333 Ethnic and Minority Politics; SOC 3414 Filipino Labor/Immigration, 3415 Sociology of the African

American Family, 3416 Sociology of the Mexican American Family, 3417 Sociology of the Asian American Family, 3425 Prejudice and Discrimination, 3507 Filipino American Communities, 3520 Sociology of Minority Groups, 3525 The African American Male; T ED 5038 Multicultural Education; THEA 3310 Interpretation of Women's and Ethnic Literature, 3315 Multicultural Theatre Troupe, 4375 Ethnic and Immigrant Theatre in the United States; WOST 3420 Minority Women in America

Area VI. E. Women in Society

One upper division course, selected from the following:

ANTH 3750 Women in Cross-Cultural Perspective; ART 3227 Women in Art; BIOL 3800 Achievements of Women in Science; COMM 4500 Women in Media; CRJA 4125 Women in Criminal Justice; DANC 4202 Women in Dance; ENGL 3650 Women and Literature, 4450 Studies in British Women's Literature, 4650 Studies in American Women's Literature; E S 3003 African American Women Writers, 3030 Immigrant and Refugee Women, 3210 Latinas in the U.S., 3851 Asian American Women and Men; HIST 3124 Women in Classical Antiquity, 3571 Women in American History, 4710 History and Trends in Nursing; POSC 3170 Public Policy on the Family, 3340 Women and Politics; PSYC 3410 Psychology of Women; REC 3202 Women and Leisure; SOC 3411 Sociology of Sex Roles

THEA 3226 The Woman Artist, 3228 Women in Dramatic Literature, 3310 Interpretation of Women's and Ethnic Literature, 4231 Eve and her Sisters-Women of the Bible; WOST 3100 Seminar in Women's Studies, or any other upper division Women's Studies course

Area VI. F. Ethics and Social Policy

One upper division course selected from the following:

ANTH 3000 Anthropology in the Modern World; 3720 Medical Anthropology, 3760 Anthropology Through Media; CRJA 3700 Ethics and Justice Administration; ECON 3370 Public Finance, 3375 Public Choice, 3685 Labor Institutions; E S 3120 The Civil Rights Movement; H SC 3300, 3350, 3400; HIST 3000 Contemporary World Problems, 3017 The Twentieth Century, 3547 The United States and Modern War; INTS 3100 Global Systems; MGMT 4500 Business, Government, and Society

PHIL 3100 Ethics, 3150 Contemporary Ethics, 3151 Environmental Ethics, 3152 Medical Ethics, 3213 Ethics in Literature, 3400 Philosophy of Religion, 3401 Contemporary Religious Thinkers, 3502 Social and Political Philosophy, 3503 Philosophy of Law, 3510 Human Rights and Social Justice, 3560 Business and Professional Ethics, 3701 Philosophy of Education, 3925 Moral Values in the Modern World; PHIL/SCI 3335 Science, Technology, and Values; POSC 3170 Public Policy on the Family, 3370 Citizen Action, 3410 Law and Society, 3442 American Constitutional Law II, 3500 World Problems and Global Response, 3510 War and Peace, 3711 Greek, Roman and Medieval Political Thought, 3716 Citizenship, Community, and Democratic Theory, 3800 Public Policy Analysis, 3801 Welfare Politics, 4911 Seminar on Administrative Ethics; PUAD 4800 Public Administration and Society

SOC 3420 Social Inequality, 3425 Prejudice and Discrimination, 3431 Seminar in World Development, 3480 Violence and Conflict, 3620 Sociology of Education, 3710 Social Policy, 3720 Human Behavior and Social Environment, 4720 Medical Sociology, 4750 Child Welfare; WOST 3100 Seminar in Women's Studies

Area VI. G. Geography

One upper division course, selected from the following:

GEOG 3000 Resource Management, 3320 Geography of World Agriculture, 3360 Historical Geography of the United States, 3500 Geography of the United States and Canada, 3505 Geography of California, 3510 Geography of Mexico, Central America, and the Caribbean Islands, 3515 Geography of South America, 3540 Geography of Eastern Asia, 3550 Geography of Southeast Asia, 4330 Sustainable Development, 4350 Water Resources and Management

Footnotes

- ❑ By California Commission on Teacher Credentialing Directive, the Business Studies Option is not allowed for the Credential track.
- ❑ Maximum of two Sociology courses allowed.
- ❑ Prerequisite is ENGL 1001, required in Area I of the major.
- ❑ Prerequisite is PSYC 1000 (or one of 1001, 1005, 2004, or 2009) which is an elective in the major.
- ❑ Enrollment in SPPA 3852 or 3853 requires concurrent enrollment in at least one unit of SPPA 3856.



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HELP



Biological Science

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Department Information

Department of Biological Sciences
 College of Science
 Office: North Science 429
 Phone: (510) 885-3471

Professor Emeritus: Richard E. Tullis

Professors: Christoph W. Baysdorfer, Stephen C. Benson, Beverly A. Dixon, Lynne O. Elkin, Donald A. Gailey (Chair), Christopher L. Kitting, Maria C. Nieto, Susan B. Opp, Richard A. Symmons

Associate Professors: Michael S. Hedrick, Carol R. Lauzon

Assistant Professors: Caron Inouye, Laura Marschall, Erica L. Wildy

Lecturers: D. Gail DeLalla, Michele A. Graham, David C. Rosen

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

Biology is concerned with living matter in all its forms, responses, and interactions. It deals with the study of anything which has been or is alive: microbes, all plants, and all animals, including humans. The Science of Biology includes a large number of sub-disciplines such as anatomy, reproduction, development, genetics, ecology, evolution, physiology, systematics, and behavior. A biologist must draw upon a wide variety of academic disciplines to make observations and draw conclusions. A well-trained biologist will have a background in chemistry, mathematics, computer science, statistics, and physics to meet the demands of the present professions.

The Department of Biological Sciences offers a diversified curriculum in the life sciences. Courses are designed for biology majors with specific degree objectives, for students seeking applied technical training, and for non-major students with general interest in biological subjects. Undergraduate programs will prepare students for both graduate work and for a diversity of careers. Biology majors may enter specialized or general careers in life science and find themselves working in laboratories, offices, the field, farms, administrative posts, academic institutions, industry, government agencies, private foundations, botanic gardens and zoos, wildlife preserves, and elsewhere.

Career Possibilities

Administrator • Biotechnologist • Botanist • Cell Biologist • Consultant • Dentist • Ecologist • Entomologist • Environmentalist • Genetic Engineer • Physiologist • Geneticist • Health Scientist • Lab Assistant • Marine Biologist • Medical Doctor • Medical Technologist • Pharmacologist • Physical Therapist • Population Biologist • Researcher • Teacher • Space Biologist • Technical Sales • Technical Writer • Toxicologist • Veterinarian • Zoologist

Features

Classes are offered on the Hayward campus in well-equipped facilities, at the Moss Landing Marine Laboratories located on Monterey Bay, and at a number of field locations throughout the San Francisco Bay Area, including the South San Francisco Bay National Wildlife Refuge Field Station, and the Garin Reserve adjacent to campus.

A program in Biomedical Laboratory Sciences is offered to qualify students for California hospital traineeships which lead to state licensure as medical technologists.

Preparation

A student who has successfully completed an advanced placement course in biology in high school and has earned a score of "3," "4" or "5" on the Advanced Placement Examination will be granted 9 units of credit in place of BIOL 1001-2 and either BIOL 2030 or 2040 (by advisement) or, if student is a Biology Major, 10 units in place of BIOL 1401 and 1403. No Advanced Placement credit is given for BIOL 1402.

Prerequisite courses for all Biology courses must be passed with a grade of "C-" or better. Some specified courses in biology may not be academically renewed. All academic renewals are subject to space availability, with priority given to newly enrolled students.

Major Requirements (B.S.)

The B.S. degree should be considered by students anticipating careers in biology or the health sciences that require graduate school, professional school, or specialized training programs such as biotechnology and medical technology. All students wishing to enter medicine, dentistry, veterinary medicine, or biomedical laboratory positions should obtain a Bachelor of Science degree. Students wishing to teach in secondary schools may want to

consider the B.A. degree. The B.S. degree requires a minimum of 180 units (181 units with the Biomedical Laboratory Sciences Option).

Note: Requirements are subject to change, so consult your advisor in the Department of Biological Sciences for clarification and interpretation of your major requirements. Because the upper division requirements of the B.S. degree are not large, students also need to carefully track their progress toward the 60 upper division units required for graduation.

For the B.S. degree, students must select one of the following options:

Biology (General) Option (100 units)

The General Option in Biological Science provides the broad background in the basic sciences and in biology to meet the prerequisites for professional schools. It may be completed in as few as 100 units, allowing graduation with a total of 180 units minimum.

I. Physical Sciences and Mathematics (47 units)

CHEM 1101, 1102, 1103 General Chemistry (5, 5, 5)

CHEM 2301, 2302 Survey of Organic Chemistry (4, 4) (CHEM 3301, 3302, 3303 may be substituted, but only 8 units apply to major.)

CHEM 3400 Introductory Biochemistry (4) or CHEM 4411 General Biochemistry (4)

MATH 1300 Trigonometry and Analytic Geometry (4) or MATH 1304 Calculus I (4) (Students should take the most advanced course for which they are qualified. Biologists continuing on to graduate work should complete MATH 1305 as a minimum.)

STAT 3031 Statistical Methods in Biology (4)

PHYS 2701, 2702, 2703 Introductory Physics (4, 4, 4)

II. Biological Sciences (36 units)

BIOL 1401 Molecular and Cellular Biology (5)

BIOL 1402 Plant Biology (5)

BIOL 1403 Animal Biology (5)

BIOL 3110 Principles of Ecology (4)

BIOL 3121 Principles of Genetics (5)

BIOL 3122 Principles of Developmental Genetic Analysis (4)

BIOL 3130 Principles of Evolutionary Biology (4)

BIOL 3150 Principles of Physiology (4)

III. Advanced Biological Science Electives (17 units)

Upper division electives in biological science. (May include up to 4 units of approved courses in sciences other than Biology and pertinent to the student's area of special interest. The approved courses are CHEM 4412 and GEOL 3400; other courses subject to approval by petitioning the department prior to registration.)

Biomedical Laboratory Sciences Option

(113 units)

The Biomedical Laboratory Sciences option leading to a B.S. degree in Biological Science prepares students for further training after graduation in State approved hospital laboratories as required for State licensure of Medical Technologists. Traineeships are available to qualified graduates in laboratories throughout California. Trainee positions are highly competitive. This option is recommended for students contemplating work in public health, industrial microbiology, quality control, research, and graduate work in related fields.

- I. Physical Sciences and Mathematics (43 units)
CHEM 1101, 1102, 1103 General Chemistry (5, 5, 5)
CHEM 2301, 2302 Survey of Organic Chemistry (4, 4) (CHEM 3301, 3302, 3303 may be substituted, but only 8 units apply to major.)

MATH 1300 Trigonometry and Analytic Geometry (4) or MATH 1304 Calculus I (4) (Students should take the most advanced course for which they are qualified.)

STAT 3031 Statistical Methods in Biology (4)
PHYS 2701, 2702, 2703 Introductory Physics (4, 4, 4)

- II. Biological Sciences (24 units)
BIOL 1401 Molecular and Cellular Biology (5)
BIOL 1402 Plant Biology (5)
BIOL 1403 Animal Biology (5)
BIOL 3121 Principles of Genetics (5)
BIOL 3150 Principles of Physiology (4)

- III. Concentration Courses (46 units)
CHEM 2200 Quantitative Analysis (5)
CHEM 3400, 3401, 3405 Introductory Biochemistry and Clinical Chemistry (11)
BIOL 3405 Microbiology (6)
BIOL 3430 Hematology (4)
BIOL 3440 Medical Parasitology (4)
BIOL 4411 Medical Microbiology I (5)
BIOL 4412 Medical Microbiology II (5)
BIOL 4430 Immunology (4)
BIOL 4431 Immunology Lab (2)

Cell and Molecular Biology Option (105 units)

- I. Physical Sciences and Mathematics (58 units)
CHEM 1101, 1102, 1103 General Chemistry (5, 5, 5)
CHEM 3301, 3302, 3303 Organic Chemistry (5, 5, 5)
CHEM 4411, 4412 General Biochemistry (4, 4)

MATH 1300 Trigonometry and Analytic Geometry (4) or MATH 1304 Calculus I (4) (Students should take the most advanced course for which they are qualified. Biologists continuing on to graduate work should complete MATH 1305 as a minimum.)

PHYS 2701, 2702, 2703 Introductory Physics (4, 4, 4)
STAT 3031 Statistical Methods in Biology (4)

- II. Biological Sciences (28 units)
 - BIOL 1401 Molecular and Cellular Biology (5)
 - BIOL 1402 Plant Biology (5)
 - BIOL 1403 Animal Biology (5)
 - BIOL 3121 Principles of Genetics (5)
 - BIOL 3122 Principles of Developmental Genetic Analysis (4)
 - BIOL 3150 Principles of Physiology (4)

- III. Concentration Required Courses (7 units)
 - BIOL 4455 Molecular Cell Biology (4)
 - BIOL 4456 Molecular Techniques (3)

- IV. Concentration Electives (12 units)
 - A minimum of 12 units must be selected from the following:
 - BIOL 3405 Microbiology (6), 3425 Biomedical Laboratory Research (5), 4430 Immunology (4), 4431 Immunology Laboratory (2), 4450 Cell Culture Techniques (4), 4485 PCR, DNA Sequencing and Fragment Analysis (4), 4490 Bioinformatics (4); CHEM 4430 General Biochemistry Laboratory (4)

Ecology and Conservation Biology Option (100-107 units)

- I. Physical Sciences and Mathematics (40-47 units)
 - CHEM 1101, 1102, 1103 General Chemistry (5, 5, 5)

 - CHEM 2301, 2302 Survey of Organic Chemistry (4, 4) or CHEM 3301, 3302, 3303 Organic Chemistry (5, 5, 5)

 - CHEM 3400 Introductory Biochemistry (4) or CHEM 4411 General Biochemistry (4)

 - PHYS 1700 Elementary Physics (4) and PHYS 1780 Elementary Physics Laboratory (1); or a maximum of 5 units from PHYS 2701, 2702, 2703

 - STAT 3031 Statistical Methods in Biology (4)

- II. Biological Sciences (36 units)
 - BIOL 1401 Molecular and Cellular Biology (5)
 - BIOL 1402 Plant Biology (5)
 - BIOL 1403 Animal Biology (5)
 - BIOL 3110 Principles of Ecology (4)
 - BIOL 3121 Principles of Genetics (5)
 - BIOL 3130 Principles of Evolutionary Biology (4)
 - BIOL 3150 Principles of Physiology (4)
 - BIOL 4350 Conservation Biology (4)

- III. Concentration Courses (24 units)
 - Ecology Courses*
 - Select at least one course (minimum 4 units) from the following:
 - BIOL 4175 Population Biology (4), 4516 Environmental Animal Physiology (4), 4530 Ecological Methods (4), 4560 Wildlife Ecology (4)

Organismal/Systematics Courses

Select at least 20 units from the following (can include one course from the "Ecology Courses" listed above):

BIOL 3115 Marine Biology (4), 3116 Freshwater Biology (5), 3122 Principles of Developmental Genetic Analysis (4), 3202 Advanced Plant Biology (4), 3210 Woody Plants (4), 3405 Microbiology (6), 3440 Medical Parasitology (4), 4200 Plant Taxonomy (4), 4300 General Entomology (4), 4310 Insect Systematics and Identification (4), 4340 Environmental Microbiology (4) (prerequisite BIOL 3405), 4565 Ornithology (4), 4575 Herpetology (4), 4580 Natural History of the Vertebrates I (5), 4581 Natural History of the Vertebrates II (5); BIOL/GEOG 4130 Biogeography (4); ENVT 3400 Environmental Resource Analysis (4), 4100 Environmental Impact Analysis (4); M SC 4570 Ichthyology (4)

Forensic Science Option (119 units)

Completion of the Forensic Science Option also qualifies the student to receive a minor in Chemistry which consists of 38 units of coursework included in the option.

I. Physical Sciences and Mathematics (63 units)

CHEM 1101, 1102, 1103 General Chemistry (5, 5, 5)
CHEM 3301, 3302, 3303 Organic Chemistry (5, 5, 5)
CHEM 2200 Quantitative Analysis (5)
CHEM 3200 Bioanalytical and Forensic Instrumentation (4)
CHEM 3400 Introductory Biochemistry (4)

MATH 1300 Trigonometry and Analytic Geometry (4) or MATH 1304 Calculus I (4)

PHYS 2701, 2702, 2703 Introductory Physics (4, 4, 4)
STAT 3031 Statistical Methods in Biology (4)

II. Biological Sciences (33 units)

BIOL 1401 Molecular and Cellular Biology (5)
BIOL 1402 Plant Biology (5)
BIOL 1403 Animal Biology (5)
BIOL 2010 Human Physiology and Anatomy I (5)
BIOL 3121 Principles of Genetics (5)
BIOL 3430 Hematology (4)
BIOL 4485 PCR, DNA Sequencing and Fragment Analysis (4)

III. Criminal Justice (11 units)

CHEM/BIOL 4830 Seminar in Forensic Research (1) (taken three times for a total of 3 units)
CRJA 2200 Basic Criminal Investigation (4)
CRJA 3800 Comparative Evidence and Its Evaluation (4)

IV. Concentration Electives (12 units)

Select at least two courses (minimum 8 units) from the following:

BIOL 2020 Human Physiology and Anatomy II (5), 3405 Microbiology (6), 4160 Medical Physiology (4); 4300 General Entomology or 4310 Insect Systematics and Identification (4) (not both); 4490 Bioinformatics (4), 6613 Scanning Electron Microscopy (3)

Select at least one course (minimum 4 units) from the following:

- CRJA 3400 Advanced Criminal Investigation (4)
- CRJA 3500 Criminal Identification (4)
- CRJA 4124 Sex Crime Investigation (4)

Physiology Option (100-107 units)

- I. Physical Sciences and Mathematics (47-54 units)
CHEM 1101, 1102, 1103 General Chemistry (5, 5, 5)

CHEM 2301, 2302 Survey of Organic Chemistry (4, 4) or
CHEM 3301, 3302, 3303 Organic Chemistry (5, 5, 5)

CHEM 3400 Introductory Biochemistry (4) or CHEM 4411
General Biochemistry (4)

MATH 1304 Calculus I (4)

PHYS 2701, 2702, 2703 Introductory Physics (4, 4, 4)

STAT 3031 Statistical Methods in Biology (4)

- II. Biological Sciences (28 units)

BIOL 1401 Molecular and Cellular Biology (5)

BIOL 1402 Plant Biology (5)

BIOL 1403 Animal Biology (5)

BIOL 3110 Principles of Ecology (4) or BIOL 3130 Principles
of Evolutionary Biology (4)

BIOL 3121 Principles of Genetics (5)

BIOL 3150 Principles of Physiology (4)

- III. Concentration Courses (17-18 units)

BIOL 4500 Quantitative Methods in Physiology (2)

Select at least four courses (15-16 units) from the following:

- BIOL 4150 Mammalian Physiology (4), 4160 Medical
Physiology (4), 4504 Comparative Physiology (4), 4505
General Endocrinology (4), 4506 Animal Physiology
Laboratory (4), 4510 Neurobiology (4), 4512 Applied
Neurobiology (4), 4516 Environmental Animal Physiology (4);
- CHEM 4460 Major Organ Biochemistry (3), prerequisite
CHEM 4413

- IV. Upper Division Electives (7-8 units)

Select at least two additional courses from the previous list or
any other upper division biology course applicable to the B.S.
degree, for a minimum of 100 units.

Major Requirements (B.A.)

The Bachelor of Arts major program should be considered by students wishing broad experience in biology as well as specialized course work tailored to their special interests. Students planning careers in education, biological interpretative work, natural history programs, health-related vocations, or seeking generalized biological training may find this program most adaptable to their needs. However, the B.A. degree major in

many cases will not provide the required courses for admission to graduate or professional schools. The major consists of a minimum of 98 units; the B.A. degree requires a minimum of 180 units.

- I. Physical Sciences and Mathematics (21-39 units)
CHEM 1601 (or 1605), 1602, 1603¹ Basic Chemistry for the Health Sciences or CHEM 1101-2-3 General Chemistry and CHEM 2301-2 Survey of Organic Chemistry (12-23)

MATH 1130 College Algebra or MATH 1300 Trigonometry and Analytic Geometry or MATH 1304 Calculus I or STAT 3031² Statistical Methods in Biology (4)

PHYS 1700¹ Elements of Physics and PHYS 1780¹ Elementary Physics Laboratory or PHYS 2701-2-3 Introductory Physics (5-12)

- II. Biological Sciences (28 units)
BIOL 1401 Molecular and Cellular Biology (5)
BIOL 1402 Plant Biology (5)
BIOL 1403 Animal Biology (5)
BIOL 3121 Principles of Genetics (5)

Two courses (8 units) selected from:

BIOL 3110 Principles of Ecology
BIOL 3122 Principles of Developmental Genetic Analysis
BIOL 3130 Principles of Evolutionary Biology
BIOL 3150 Principles of Physiology

- III. Electives (31-49 units)
Any upper division biology course except BIOL 3032 and 4020. BIOL 2010 (or 2011) and 2020 may also be used.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

The minor program is designed to provide students in other majors the opportunity to broaden their experience and understanding of the biological sciences, and it may expand their educational and employment opportunities. The minor consists of 35-37 units.

CHEM 1100 Introduction to College Chemistry (5) or CHEM 1601 Basic Chemistry for the Health Sciences (or 1605) (4)

BIOL 1401 Molecular and Cellular Biology (5)
BIOL 1402 Plant Biology (5)
BIOL 1403 Animal Biology (5)

BIOL 3020 Genetics, Evolution and Humanity (4) or BIOL 3121

Life Sciences
Option: Liberal
Studies

Principles of Genetics (5)

Upper division Biology electives (12) [can include BIOL 2010 (or 2011) or BIOL 2020]

Area I and III.A (17-19 units)

BIOL 1001 Introduction to Biology (or one of 1003, 1005, 2001, 2002, 2003, or 2004) (4)

BIOL 2030 Survey of the Plant Kingdom (4)

Either CHEM 1100 Introduction to College Chemistry (5), or
CHEM 1601 Basic Chemistry for Health Sciences (or 1605) (4)

Either GEOL 1001 Introduction to the Earth Sciences (4) (or
1003 or 1004), or GEOL 1201 Introduction to Oceanography (4)

One of the following (1-2 units):

BIOL 1002 Introduction to Biology Lab (or 1004 or 2005) (1)

GEOL 1002 Environmental Geology Lab (2)

GEOL 1202 Oceanography Lab (2)

Area VII, Credential Track or Area VI, General Track
(23-27 units)

BIOL 2040 Survey of the Animal Kingdom (4)

BIOL 3020 Genetics, Evolution, and Humanity (4)

Either BIOL 3015 Natural History of Marine Organisms (4), or
BIOL 3031 Nature Study (4)

Elective courses from the following (11-15 units):

BIOL 2010 Human Physiology and Anatomy I (or 2011) (5),
2020 Human Physiology and Anatomy II (5), 2025 Introduction
to Microbiology (5), 3001 Concepts in Molecular Biology (4),
3015 Natural History of Marine Organisms (4), 3031 Nature
Study (4), 3035 Endangered and Threatened Species in Bay
Area and California Habitats (4), 3060 Human Sexuality (4),
3070 Human Nutrition (4), 3210 Woody Plants of California (4),
4010 Microbes and Humanity (4), 4580, 4581 Natural History
of the Vertebrates, I, II (5, 5); GEOL 2300 Natural Disasters
(4), 3030 Earth and Life Through Time (5), 4320 Hydrogeology
(4)

A Certificate in Pre-physical Therapy can be earned in conjunction
with either degree in biological sciences. The requirements can be
found in the section on Preprofessional Programs.

Undergraduate
Courses

The course prefix for the following courses is BIOL.

1000 Basic Concepts in Biology (5)
Plants, animals and microorganisms and the modern
biological concepts that apply to their structure and
function on cellular, organismal, population, and

ecosystem levels. Special emphasis on humans and their relationships with other living things. Not open to those with credit for BIOL 1001, 1003, 1005, 1007, 2001, 2002, 2003, or 2004. Not for biology major or minor credit. Four hrs. lect., 3 hrs. lab.

- 1001** Introduction to Biology (4)
Plants, animals and microorganisms and the modern biological concepts that apply to their structure and function on cellular, organismal, population, and ecosystem levels. Special emphasis on humans and their relationships with other living things. Recommended: concurrent enrollment in lab, BIOL 1002 (or 1004 or 2005). Not open to those with credit for BIOL 1000, 1003, 1005, 1007, 2001, 2002, 2003, or 2004. Not for biology major or minor credit.
- 1002** Introduction to Biology Lab (1)
Laboratory exposure to biological phenomena including microscope activities of cells, osmosis, diffusion, human nutrition, human genetics, plant growth, classification of plants and animals, fertilization and development, natural selection simulation, field ecology and ecosystems. Prerequisite/co-requisite: prior or concurrent enrollment in BIOL 1001 (or one of 1003, 1005, 1007, 2001, 2002, 2003, or 2004) or equivalent. Not open to those with credit for BIOL 1000, 1004, or 2005. Not for biology major or minor credit. Two hrs. lab.
- 1003** Biological Evolution (4)
The origins of life forms such as bacteria, vertebrates, primates and humans. Theories of human expansion and diversity with application to medicine and the future of human evolution. Co-requisite: concurrent enrollment in BIOL 1004. Not open to those with credit for BIOL 1000, 1001, 1005, 1007, 2001, 2002, 2003, or 2004. Not for biology major or minor credit.
- 1004** Biological Evolution: Lab (1)
Laboratory identification and analysis of basic chemicals of life, bacteria and their evolution, vertebrate structure, and human DNA. Co-requisite: concurrent enrollment in BIOL 1003. Not open to those with credit for BIOL 1002 or 2005. Not for biology major or minor credit. Three hours lab.
- 1005** How Things Work: The Human Body (4)
A conceptual look at how important systems work, what they mean in an everyday way, and how they all fit together in one working unit...the human body. Not open to those with credit for BIOL 1000, 1001, 1003, 1007, 2001, 2002, 2003, or 2004. Not for biology major or minor credit.
- 1007** Human Biology (4)
Human organisms, with emphasis placed on human structure and function; examination of relationships with the environment, including plants, animals, and microorganisms. Not open to those with credit for BIOL 1000, 1001, 1003, 1005, 2001, 2002, 2003, or 2004. Not

for biology major or minor credit.

- 1020** Ecology and the Environment (4)
Introduction to ecology of individuals, populations, communities, and ecosystems; interactions of organisms with their environment. Case studies of environmental issues that impact the ecology of organisms.
- 1401** Molecular and Cellular Biology (5)
[CAN BIOL 2] [CAN BIOL SEQ A = BIOL 1401, 1402, 1403]
Introduction to molecular and cellular biology with emphasis on the integration of structure and function in the living cell as a biological system; cellular aspects of inheritance. Four hrs. lect., 3 hrs. lab. (Y)
- 1402** Plant Biology (5)
[CAN BIOL 6] [CAN BIOL SEQ A = BIOL 1401, 1402, 1403]
An introduction to plant biology with emphasis on relationship of structure and function in plants, principles of classification and ecology, and a brief survey of the plant kingdom, including evolutionary relationships. Prerequisite: BIOL 1401 or consent of instructor. Four hrs. lect., 3 hrs. lab. (Y)
- 1403** Animal Biology (5)
[CAN BIOL 4] [CAN BIOL SEQ A = BIOL 1401, 1402, 1403]
An introduction to animal biology with emphasis on relationship of structure and function in animals, principles of classification and ecology, and a brief survey of the animal kingdom, including evolutionary relationships. Prerequisites: BIOL 1401 and 1402 or consent of instructor. Four hrs. lect., 3 hrs. lab. (Y)
- 2001** Introduction to Human Nutrition (4)
Biological basis of human nutrition from the cellular to organismal level. The role of carbohydrates, lipids, fats, proteins, and vitamins in growth and maintenance of healthy individuals. Principles of digestion and nutrient utilization by different physiological systems. Not open to those with credit for BIOL 1000, 1001, 1003, 1005, 1007, 2002, 2003, or 2004. Not for biology major or minor credit.
- 2002** Genes and Heredity (4)
An overview of the structure and function of genes, with particular emphasis on human issues. Topics include biomedical and agricultural genetic engineering, mutation and cancer, gene therapy experiments, and the genetic regulation of development. Not open to those with credit for BIOL 1000, 1001, 1003, 1005, 1007, 2001, 2003, 2004, 3020, 3121, or 3122. Not for biology major or minor credit.
- 2003** Biology in the 21st Century (4)
Basic biological principles including scientific method, basic chemistry, cell structure and function, energy flow and use, reproduction, genetics, evolution, ecology. Not

open to those with credit for BIOL 1000, 1001, 1003, 1005, 1007, 2001, 2002, or 2004. Not for biology major or minor credit.

- 2004** Natural History of California (4)
Introduction to natural history of California with special emphasis on biogeography and evolution of plant communities and their associated biota, endemic species, unique habitats, conservation topics including water use and distribution, development of wild lands, fire ecology, human impact. Some weekend field trips required. Co-requisite: concurrent enrollment in BIOL 2005. Not open to those with credit for BIOL 1000, 1001, 1003, 1005, 1007, 2001, 2002, or 2003. Not for biology major or minor credit.
- 2005** Natural History of California Lab (1)
Use of microscopes and dissecting microscopes. Lab and field experience with plants, invertebrates, and vertebrates of California. Lab exercises in evolution and natural selection, biogeography, systematics and use of taxonomic keys. Surveys of animal and plant kingdoms, field ecology. Some weekend field trips required. Not open to those with credit for BIOL 1002 or 1004. Co-requisite: concurrent enrollment in BIOL 2004. Not for biology major or minor credit. Two hrs. lab.
- 2010** Human Physiology and Anatomy I (5)
[CAN BIOL SEQ B = BIOL 2010, 2020]
An integrated approach to essential concepts of human physiology and anatomy. Analysis of skeletal, muscular, sensorimotor, cardiovascular and respiratory systems. Recommended preparation: high school biology and chemistry, or BIOL 1001 (or one of 1003, 1005, 2001, 2002, 2003, or 2004) and BIOL 1002 (or 1004 or 2005); CHEM 1100 or 1601 (or 1605). Not for Biology B.S. degree credit. No Academic Renewal permitted. Four hrs. lect., 3 hrs. lab.
- 2011** Anatomy and Physiology I (5)
An integrated approach to health through the essential concepts of human physiology and anatomy. Analysis of skeletal, muscular, sensorimotor, cardiovascular and respiratory systems. Recommended preparation: high school biology and chemistry, or BIOL 1001 (or one of 1003, 1005, 2001, 2002, 2003, or 2004) and BIOL 1002 (or 1004 or 1005); CHEM 1100 or 1601 (or 1605). Not open to those with credit for BIOL 2010 (or 2011). Not for Biology B.S. degree credit. No Academic Renewal permitted. Four hrs. lect., 3 hrs. lab.
- 2020** Human Physiology and Anatomy II (5)
[CAN BIOL SEQ B = BIOL 2010, 2020]
An integrated analysis of physiology and anatomy of the integumentary, autonomic and central nervous, endocrine, urinary and reproductive systems and of the blood and special senses. Coverage of histology, metabolism, and thermoregulation. Prerequisites: BIOL 2010 (or 2011) or equivalent and CHEM 1100 (may be taken concurrently). No Academic Renewal permitted. Not for Biology B.S.

degree credit. Four hrs. lect., 3 hrs. lab.

- 2021** Anatomy and Physiology II (5)
An integrated analysis of human physiology and anatomy of the integumentary, autonomic and central nervous, endocrine, urinary and reproductive systems and of the blood and special senses. Coverage of histology, metabolism, and thermoregulation. No academic renewal permitted. Not for Biology B.S. degree credit. Co-requisites: BIOL 2010 (or 2011) or equivalent and CHEM 1100 (may be taken concurrently), or consent of instructor. Four hrs. lect., 3 hrs. lab.
- 2025** Introduction to Microbiology (5)
The nature and activities of beneficial and harmful microorganisms; their role in health, disease, and their natural environment. Laboratory practice in handling microorganisms, including identification and culture techniques. Designed for health sciences and nursing. Prerequisites: BIOL 1001 (or one of 1003, 1005, 2001, 2002, 2003, or 2004) and BIOL 1002 (or 1004 or 2005) or permission of instructor; CHEM 1601 (or 1605) or equivalent. Not open to those with credit for BIOL 3005, 3405 or 4010. Not for Biology B.S. degree credit. No Academic Renewal permitted. Three hrs. lect., 3 hrs. lab, 1 hr. disc.
- 2030** Survey of the Plant Kingdom (4)
General biology of the major plant groups, stressing the fundamentals of classification, morphology, physiology and reproduction. Prerequisites: BIOL 1001 (or one of 1003, 1005, 2001, 2002, 2003, or 2004) and BIOL 1002 (or 1004 or 2005) or equivalent. Not for biology major credit and not open to those with credit for BIOL 1302 or 1402. Three hrs. lect., 3 hrs. lab.
- 2040** Survey of the Animal Kingdom (4)
Introduction to the anatomy, physiology, classification and evolution of the major animal phyla. Prerequisites: BIOL 1001 (or one of 1003, 1005, 2001, 2002, 2003, or 2004) and BIOL 1002 (or 1004 or 2005) or equivalent. Not for biology major credit and not open to those with credit for BIOL 1301 or 1403. Three hrs. lect., 3 hrs. lab.
- 3001** Concepts in Molecular Biology (4)
Principles and practice of molecular biology with emphasis on the human genome, human genetic diseases, and human evolution. Prerequisite: BIOL 1001 (or one of 1003, 1005, 2001, 2002, 2003, or 2004) or 1401 or equivalent. Not for Biology B.S. degree credit. Two hrs. lect., 6 hrs. lab.
- 3015** Natural History of Marine Organisms (4)
Natural history of marine plants and animals with emphasis on explorations of local marine habitats. Prerequisites: BIOL 1001 (or one of 1003, 1005, 2001, 2002, or 2004) and BIOL 1002 (or 1004 or 2005) or equivalent. Not for Biology B.S. degree credit. Not open to those with credit for BIOL 3115. Two hrs. lect., 6 hrs. lab and/or field.

- 3020** Genetics, Evolution, and Humanity (4)
Principles of genetics, their application to human problems, and to theories of evolutionary change, including the evolution of humans. Prerequisites: BIOL 1001 (or one of 1003, 1005, 2001, 2002, 2003, or 2004) and BIOL 1002 (or 1004 or 2005) or equivalent. Not open to those with credit for BIOL 3121. Not for Biology B.S. degree credit.
- 3031** Nature Study (4)
Natural history in the field and laboratory with emphasis on biotic communities and their component plants and animals. Prerequisites: BIOL 1001 (or one of 1003, 1005, 2001, 2002, 2003, or 2004) and BIOL 1002 (or 1004 or 2005) or equivalent. Not for Biology B.S. degree major credit. Two hrs. lect., 6 hrs. lab/field.
- 3032** Diversity of Organisms in Selected Habitats (4)
Relationships among the diverse organisms found in selected habitats including freshwater, marine and terrestrial. Emphasis on organismal function, structure and ecology. Prerequisites: BIOL 1001 (or one of 1003, 1005, 2001, 2002, 2003, or 2004) and BIOL 1002 (or 1004 or 2005) or equivalent. Not for biology degree credit. Three hrs. lect., 3 hrs. lab/field.
- 3035** Endangered and Threatened Species in Bay Area and California Habitats (4)
Endangered, threatened and other protected animal and plant species in the greater Bay Area and other selected sites in California. Emphasis on the factors which have reduced or destroyed their habitats. A Saturday field trip will explore several Bay Area sites where endangered species studies are presently in progress Prerequisite: BIOL 1001 (or one of 1003, 1005, 2001, 2002, 2003, or 2004) or equivalent. Not for Biology B.S. degree credit. Three hrs. lect., 3 hrs. lab/field.
- 3060** Human Sexuality (4)
Anatomy, physiology, endocrinology of adult sexual organs; human development through birth; abnormalities of sexual development and adult function; sexually transmitted and congenital diseases; new reproductive techniques. Prerequisites: BIOL 1001 (or one of 1003, 1005, 2001, 2002, 2003, or 2004) and BIOL 1002 (or 1004 or 2005) or equivalent, or consent of instructor. Not for Biology B.S. degree credit.
- 3070** Human Nutrition (4)
Key nutrients, including carbohydrates, lipids, proteins, vitamins, and minerals. Role each plays in human metabolism. Current controversies in nutritional information, including food supplements and claims for prevention of disease. Prerequisite: BIOL 1001 (or one of 1003, 1005, 2001, 2002, 2003, or 2004) or equivalent. Not for Biology B.S. degree credit.
- 3110** Principles of Ecology (4)
Relationships within and among populations in various

environments; introduction to population dynamics and species interactions in natural communities and ecosystems; applications to human welfare. Prerequisites: BIOL 1402, 1403, MATH 1130 and STAT 3031 or equivalents; BIOL 1401 recommended. Three hrs. lect., 3 hrs. lab, and/or field trips. (Y)

- 3115** Marine Biology (4)
The general biology of marine organisms with emphasis on the ecology of local marine communities. Students with concurrent or previous enrollment in M SC 4103 not admitted. Not open to those with credit for BIOL 3015. Prerequisites: BIOL 1402 and 1403 or equivalents. Two hrs. lect., 6 hrs. lab, field trips.
- 3116** Fresh-water Biology (5)
The ecology of lakes, ponds and streams, with emphasis on water chemistry, structure and distribution of inland water communities, and biological productivity. Frequent trips to local aquatic habitats. Prerequisites: BIOL 1301, 1302, 1303, or equivalent; courses in general chemistry and general ecology recommended. Three hrs. lect., 6 hrs. lab/field.
- 3121** Principles of Genetics (5)
Comprehensive analysis of gene structure, function, and inheritance incorporating classical and molecular-based approaches. Emphasis on the experimental evidence that has led to our current understanding of the nature of the gene, drawing on examples from bacteria to humans. Prerequisites: BIOL 1401, 1402, 1403 and CHEM 1101 or equivalents. Not open to those with credit for BIOL 3020. Four hrs. lect., 1 hr. disc. (Y)
- 3122** Principles of Developmental Genetic Analysis (4)
Continuation of BIOL 3121. Aspects of development from subcellular to organismal phenomena, emphasizing current theories, techniques, and applications of cell biology and molecular genetics. Prerequisites: BIOL 1401, 1402, 1403, 3121; CHEM 1101-2-3 or 1601 (or 1605), 1602, 1603 or equivalents. (Y)
- 3130** Principles of Evolutionary Biology (4)
A survey of the basic processes involved in the evolution of natural populations. The systematic and phylogenetic implications of evolutionary change will also be considered. Prerequisites: BIOL 1401, 1402, 1403 and 3121 or equivalents. (Y)
- 3150** Principles of Physiology (4)
Introduction to current views on the various physiological functions such as transport, respiration, nutrition, excretion, sensory reception, and nervous and hormonal systems. Concepts of these functions derived from plant and animal forms. Prerequisites: BIOL 1401, 1402, 1403; CHEM 2301-2 or 3301-2-3 or concurrent enrollment. Three hrs. lect., 3 hrs. lab. (Y)
- 3202** Advanced Plant Biology (4)

Development and evolution of structure and function in green algae and land plants from theoretical and historical perspectives. Genetics, developmental biology, ecology, molecular biology and paleobotany integrated into discussion of invasion of terrestrial habitat, evolution of vascular tissue, tree growth habit and wood, seeds, and flowers. Anatomy and morphology of extant and fossil land plants. Prerequisites: BIOL 1401, 1402, 1403. Three hrs. lect., 3 hrs. lab.

- 3210** Woody Plants of California (4)
Identification, distribution, and ecological characteristics of native and introduced trees and shrubs of California. Prerequisites: BIOL 1402 or BIOL 2030 and 3031 or equivalent. Two hrs. lect., 6 hrs. lab. or field trips and/or weekend field trips.
- 3405** Microbiology (6)
The general biology of major groups of microorganisms, including their morphology, metabolism, reproduction, genetics and ecology. Not open to those with credit for BIOL 2025, 3005 or 4010. Prerequisites: BIOL 1401, 1402, 1403 or equivalents, organic chemistry. Four hrs. lect., 6 hrs. lab.
- 3410** Epidemiology (4)
Study of the distribution and determinants of disease and health-related aspects in populations. Application of results to the prevention and control of health problems. Prerequisites: BIOL 1000 and 2025 or permission of instructor.
- 3425** Biomedical Laboratory Research (5)
First-hand experience in a wide variety of basic biomedical research techniques as applied in the study of human disease mechanisms at the cellular and molecular level. Prerequisites: BIOL 1401, 1402, 1403; CHEM 1101, 1102, 1103; or permission of instructor. Not applicable to G.E. requirements. Three hrs. lect., 6 hrs. lab.
- 3430** Hematology (4)
Morphology, function and composition of human blood fluids and cells, both normal and diseased. Prerequisites: BIOL 1401 and 1403 and organic chemistry. Two hrs. lect., 6 hrs. lab.
- 3440** Medical Parasitology (4)
Study of protozoa and metazoa important in the pathogenesis of human diseases, including pathology, immunology and epidemiology, as well as life cycles and laboratory identification of the parasites. Prerequisites: BIOL 1401 and 1403 or equivalent. Two hrs. lect., 6 hrs. lab.
- 3800** Achievements of Women in Science (4)
Historical and contemporary analysis of the achievements, lives, influences, experiences, attitudes, and status of women in science and mathematics with special emphasis on the role of education, mentoring, family, and the media. Cross-listed with CHEM, GEOL, and PHYS

3800. Not for major or minor credit in Biology, Chemistry, Geology, or Physics.

- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to eight units, but only up to four units are applicable to the biology major. No more than a total of four units of BIOL 3898, 4900, 6898, or 6900 or a combination thereof, may be applied to the Biology majors. Prerequisites: at least 2.0 GPA; departmental approval of activity. (A)
- 3999** Issues in Biological Science (2-4)
Readings, discussion, and research on contemporary and/or significant issues in biological science. May be repeated for credit when content varies.
- 4010** Microbes and Humanity (4)
Historical review of microbial organisms, their role in causing disease and beneficial contribution to humanity. For Liberal Studies, Biology majors (B.A. only), and General Education (Lifelong Understanding). Does not meet Nursing prerequisite requirements. Prerequisites: BIOL 1001 (or one of 1003, 1005, 2001, 2002, 2003, or 2004), and BIOL 1002 (or 1004 or 2005) or equivalents. Not open to those with credit for BIOL 2025, 3005 or 3405.
- 4015** Horticultural Botany (4)
Plant biology as illustrated by contemporary horticultural applications, including biotechnology, with lab exercises on plant morphology, plant growth experiments, water relations, horticultural techniques and soil conditioning. Prerequisites: BIOL 1001 (or one of 1003, 1005, 2001, 2002, 2003, or 2004) and 1002 (or 1004 or 2005) or equivalent or permission of instructor. Applicable to B.A. degree in Biological Sciences, but not to B.S. degree in Biological Sciences. Three hrs. lect, 3 hrs. lab/field.
- 4020** Contemporary Human Biology (4)
Contemporary biology issues are examined to promote understanding of topics directly affecting human lives. Major emphasis on the modern biology of human genetics, biotechnology, health, nutrition, and bioethics. Not for Biology major credit.
- 4025** Human Ecology (4)
Identification and implementation of practical solutions to increasing problems of environmental degradation; survey of current ecological work applied to human populations; emphasis on resource availability, depletion, management, and restoration. Prerequisite: BIOL 1001 (or one of 1003, 1005, 2001, 2002, 2003, or 2004) or equivalent. Not for biology major or minor credit.
- 4070** Nutritional Supplements (4)
A wide spectrum of nutritional supplements and the numerous claims that profess to offer benefits to health, longevity, performance, and treatment of specific medical

conditions. A fully online course (no on-campus meetings). Students must have ready access to a recent model computer (Pentium 200 or equivalent), a modem, and an Internet connection. Prerequisites: BIOL 3070, KPE 1620, KPE 1625, or a basic course in human nutrition. Not for Biology B.S. degree credit.

- 4130** Biogeography (4)
Study of the distribution of organisms; the evolution and ecology of biomes, their biotas, dispersal, change in range, phylogenetic systematics and islands. Cross-listed with GEOG 4130. Prerequisites: BIOL 1402 and 1403 or equivalents.
- 4150** Mammalian Physiology (4)
Mammalian physiological systems with particular emphasis on homeostasis and mechanisms of muscle, cardiovascular, respiratory, renal, and acid-base physiology. Prerequisites: BIOL 2010 (or 2011) and 2020; or BIOL 3150; or equivalents.
- 4160** Medical Physiology (4)
Particular emphasis on human pathophysiology, its etiology, diagnosis, and the physiologic rationale for treatment of multiple system disease, entities, and/or failures. Prerequisites: BIOL 2010 (or 2011) and 2020, or BIOL 3150 or equivalent, or consent of instructor. (F, Sp)
- 4175** Population Biology (4)
Study of the sizes and distributions of plant and animal populations. Processes affecting reproduction, age structure, density and population fluctuations. Recommended for students interested in ecology, conservation, or environmental biology. Prerequisites: BIOL 3110 or equivalent and statistics or consent of instructor. Three hrs. lect., 3 hrs. lab.
- 4185** Molecular Evolution (4)
Evolution of biological macromolecules, particularly genetic material and proteins; use of molecular data in reconstruction of evolutionary history of genes and organisms; emphasis on developing an evolutionary framework to better understand changes in genes and proteins; modern methods of data analysis. Prerequisites: BIOL 3121, 3130.
- 4200** Plant Taxonomy (4)
Principles of plant taxonomy. Field and laboratory studies of native seed plants. Prerequisites: BIOL 1401, 1402, 1403 or equivalents. Two hrs. lect., 6 hrs. lab., field trips.
- 4300** General Entomology (4)
Introduction to the anatomy, physiology, ecology and behavior of insects. Identification of local insect forms and techniques of collecting, rearing and preserving insects. Prerequisites: BIOL 1402 and 1403. Two hrs. lect., 6 hrs. lab., field trips.
- 4310** Insect Systematics and Identification (4)
Advanced study of the evolutionary history and

systematics of insects and their terrestrial arthropod relatives. Taxonomy and identification of insects including techniques of collecting and preserving. Prerequisites: BIOL 1301 and 1302 or equivalents. Two hrs. lect., 6 hrs. lab/field.

- 4340** Environmental Microbiology (4)
Key positions that microorganisms occupy in nature and their effects on global ecosystems; includes bioremediation, disease transmission/public health, biogeochemical cycling, plant-animal-insect-microbe interactions. Prerequisite: BIOL 3405.
- 4350** Conservation Biology (4)
Principles and theories of conservation biology, including biodiversity, extinction, habitat fragmentation, captive-breeding programs, restoration ecology, role of humans in western U.S. Prerequisites: BIOL 1401, 1402, 1403, 3110 or equivalents. Two hrs. lect., 6 hrs. lab.
- 4411**, **4412** Medical Microbiology I, II (5, 5)
Laboratory isolation and identification and host-parasite interactions of the Gram negative (4411) and the Gram positive, acid-fast anaerobic (4412) pathogenic bacteria. Prerequisites: BIOL 3405 or equivalent. 4412 may be taken prior to 4411. Three hrs. lect., 6 hrs. lab.
- 4420** Genetics Laboratory (4)
Introduction to genetic analysis including classical experiments with viruses, bacteria and fruit flies. Implementation of genetic variants in DNA technology. Prerequisites: BIOL 3121 or equivalent. Two hrs. lect, 6 hours lab.
- 4430** Immunology (4)
Specific and nonspecific reactions in immunity; manifestations of antigen-antibody reactions, hypersensitivity and transplantation immunity. Prerequisites: BIOL 1401, 1402, 1403, 3121; CHEM 2301-2 or CHEM 3301-2-3.
- 4431** Immunology Laboratory (2)
Antibody/antigen interactions, T and B cell functions, and the variability in the immune response. Biochemical and recombinant DNA techniques as well as standard immunodiagnostic tests. Prerequisites: BIOL 1401, 1402, 1403 or equivalents, and prior or concurrent enrollment in BIOL 4430 or equivalent. Six hrs. lab.
- 4450** Cell Culture Techniques (4)
Techniques of in vitro culture of primary and established cell lines of multi-cellular origin. Topics include nutrition, growth, cloning, cell fusion, transformation, preservation, karyotyping, autoradiography, metabolic labeling, quality control applications. Prerequisite: permission of instructor. Two hrs. lect., 6 hrs. lab.
- 4455** Molecular Cell Biology (4)
In-depth look at molecular aspects of cellular processes; emphasis on experimental evidence of molecular

mechanisms responsible for implementation and regulation of gene expression, protein synthesis, membrane transport, intracellular transport, cell signaling, and cell division. Prerequisites: BIOL 3121, 3122, CHEM 3400 or equivalents.

- 4456** Molecular Techniques (3)
Techniques utilized in contemporary experimental cell biology; laboratory studies designed to mimic, in practical fashion, the usual course a researcher takes in examining an experimental question relevant to cell biology. Study will include a broad range of experimental techniques including: polymerase chain reaction (PCR), recombinant DNA construction, advanced genetic analysis, protein detection, isolation and analysis, and microscopy. Prerequisite/co-requisite: completion of, or concurrent enrollment in BIOL 4455. One hr. lect., 6 hrs. lab.
- 4485** PCR, DNA Sequencing and Fragment Analysis (4)
Laboratory course covering the theory and applications of PCR, DNA sequencing and Fragment Analysis. Topics include DNA sequencing and sequence analysis, genomic PCR, quantitative PCR, RT-PCR, DNA fingerprinting and an individual project. Prerequisites: BIOL 1401 and 3121 or equivalent. One hr. lect., 9 hours lab.
- 4490** Bioinformatics (4)
Introduction to Molecular Bioinformatics. Survey of concepts and methods for assembly, comparison, and annotation of DNA sequence data. Analysis of protein structure and function. Phylogenetic analysis, database techniques, and selected molecular biology applications. Prerequisite: BIOL 3121 or equivalent, and consent of instructor. Two hrs. lect., 6 hrs. lab.
- 4500** Quantitative Methods in Physiology (2)
Quantitative treatment and analysis of physiological data using modern methods including applied statistics, spread sheets, graphical methods and data presentation. Not open to those with credit for BIOL 6500. Prerequisites: BIOL 3150, STAT 3031, or consent of instructor.
- 4504** Comparative Physiology (4)
Physiology of metabolic, respiratory, circulatory, excretory, muscle, and nervous systems of vertebrate and invertebrate animals with an emphasis on physiological diversity and adaptation. Not open to those with credit for BIOL 6504. Prerequisite: BIOL 3150 or consent of instructor.
- 4505** General Endocrinology (4)
Anatomy, physiology, and biochemistry of the endocrine system in vertebrate and invertebrate organisms. Prerequisite: BIOL 3150.
- 4506** Animal Physiology Laboratory (3)
The examination of regulatory mechanisms of animal organ systems using controlled laboratory experiments,

with an emphasis on experimental design and data analysis. May be taken concurrently or following BIOL 4504 (Comparative Physiology) or BIOL 4516 (Environmental Animal Physiology). Not open to those with credit for BIOL 6506. Prerequisite: BIOL 3150 or equivalent, or consent of instructor. One hr. lect., 6 hrs. lab.

- 4510** Neurobiology (4)
The structure and function of the vertebrate and invertebrate nervous system with emphasis on the principles of communication, control, and sensorimotor responses. Survey of concepts of neurochemistry, feedback, bionic models, and higher brain processes. Prerequisites: BIOL 3150 or BIOL 2010 (or 2011), 2020 or consent of instructor.
- 4512** Applied Neurobiology (4)
Basic principles of neurobiology demonstrated using laboratory experiments that include intracellular and extracellular nerve recording, membrane potentials, action potentials, sensory and motor neural processing, nerve tracing, and histology. Prerequisite: BIOL 4510 or consent of instructor. Two hrs. lect., 6 hrs. lab.
- 4516** Environmental Animal Physiology (4)
An examination of the physiological adaptations that animals use to cope with their environments, emphasizing the physiological responses of species to extreme environments. Not open to those with credit for BIOL 6516. Prerequisite: BIOL 3150 or equivalent, or consent of instructor.
- 4518** Animal Behavior (4)
Behavior patterns of animals; sensory adaptations, perception, orientation, imprinting instinct and learning, social and reproductive behavior; communication; emphasis on evolutionary relations. Prerequisites: BIOL 1401, 1402, 1403 or equivalents. Three hrs. lect., 3 hrs. lab./field.
- 4530** Ecological Methods (4)
Methods of design and analysis of ecological studies, including sampling techniques, field and laboratory measurements, and computer-aided data analysis including introductory modeling. Recommended for students interested in advanced study in ecology or conservation or environmental biology. Prerequisites: BIOL 1401, 1402, 1403 or equivalents, and BIOL 3110. Recommended prerequisite: statistics course. Three hrs. lect., 3 hrs. lab/field.
- 4560** Wildlife Ecology (4)
North American gamebirds and mammals, world wildlife problems, wildlife management principles and techniques, the U.S. and California endangered species programs, and practical field work in the preparation of a wildlife environmental impact report. Prerequisite: BIOL 3110 or equivalent, or permission of instructor. Two hrs lect., 6 hrs. lab/field.

- 4565 Ornithology (4)**
The major adaptations and habits of birds, including sensory and behavioral limitations, flight, migration, nesting, and distributional ecology. Identification and taxonomy with field and lab work emphasizing western U.S. forms. Prerequisites: BIOL 1401, 1402, 1403 or equivalents. Two hrs. lect., 6 hrs. lab/field.
- 4570 Ichthyology (4)**
The ecology, physiology, ethology, identification, and evolution of the fishes of California and coastal waters. Prerequisites: BIOL 1401, 1402, 1403 or equivalents. Cross-listed with M SC 4570. Two hrs. lect., 6 hrs. lab. and/or field trips.
- 4575 Herpetology (4)**
The ecology, physiology, ethology, identification, and evolution of amphibians and reptiles with emphasis on western forms. Prerequisites: BIOL 1401, 1402, 1403. Two hrs. lect., 6 hrs. lab/field.
- 4580 Natural History of the Vertebrates I (5)**
Water birds, amphibians and large mammals of northern California. Field trips include water bird cruises on S.F. Bay, trips to Sacramento valley waterfowl refuges, and a weekend stay at Cleary Reserve. Prerequisites: BIOL 1401, 1402, 1403 or equivalents. Three hrs. lect., 6 hrs. lab/field.
- 4581 Natural History of the Vertebrates II (5)**
Non-aquatic birds, reptiles, and small mammals of California. Field trips include local regional parks, a riparian habitat on the Stanislaus River, and a weekend trip to the Mojave Desert. Prerequisites: BIOL 1401, 1402, 1403 or equivalents. Three hrs. lect., 6 hrs. lab/field.
- 4820 Biology Seminar (1)**
Guest speakers describe their biological research and develop a dialogue between faculty and students. Not open to those with credit for BIOL 4825. May be repeated once for credit. Prerequisite: one course in biology. Not applicable to G.E. requirements.
- 4825 Science Information Seminar (3)**
Seminar series delivered by guest speakers who are pursuing careers in basic biomedical research of human disease mechanisms. Reading and discussion of the scientist's published work will precede each seminar, with post-seminar discussion and written critique. Not open to those with credit for BIOL 4820. Not applicable to G.E. requirements. Prerequisites: BIOL 1401, 1402, 1403 and permission of instructor.
- 4830 Seminar in Forensic Research (1)**
Seminar on biological aspects of forensic research. Current issues in forensic science based on biological concerns.
- 4900 Independent Study (1-4)**

Individual projects or limited reading for students competent to assume individual work. Admission requires approval of professor and department chair. No more than a total of four units of BIOL 3898, 4900, 6898, or 6900 or a combination thereof, may be applied to the Biology majors.

Marine Science Courses

Offered at Hayward Campus

BIOL 3015 Natural History of Marine Organisms (4)
BIOL 3115 Marine Biology (4)
BIOL 4570 Ichthyology (4)

Offered at the Moss Landing Marine Laboratories
(See the undergraduate [Marine Science](#) chapter for descriptions of the following courses.)

Courses listed under Marine Science at Moss Landing Laboratories are offered on a semester basis in the Fall and Spring. Semester units have been converted to quarter units.

M SC 4103 Marine Ecology
M SC 4104 Quantitative Marine Science (6)
M SC 4105 Marine Science Diving (4.5)
M SC 4112 Marine Birds and Mammals (6)
M SC 4113 Marine Ichthyology (6)
M SC 4124 Marine Invertebrate Zoology I (6)
M SC 4125 Intertidal Invertebrates of California (4.5)
M SC 4131 Marine Botany (6)
M SC 4135 Physiological Ecology of Marine Algae (6)
M SC 4144 Biological Oceanography (6)
M SC 4900 Independent Study (1.5-6)

Footnotes

¹Students electing these courses should be aware that they may not be acceptable for admission to graduate and professional schools.

²Students anticipating careers in quantitative biology should include units in both mathematics and statistics as biology Core electives.



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Library

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Department Information

Reference Desk: Library 2000
Phone (510) 885-3765

Librarians Emeriti: Carol Castagnozzi, Douglas Ferguson

University Librarian: Myoung-ja Lee Kwon

Associate University Librarian: Aline Soules

Librarians: Michele Buda, Judy Clarence, Elizabeth Ginno, Kristin Ramsdell

Associate Librarians: Dana Edwards, Judith Faust, Douglas Highsmith, Jennifer Laherty, Stephen Philiposian

Senior Assistant Librarians: Thomas Bickley, Kyzyl Fenno-Smith

Mission and Goals

University Library Mission Statement

The mission of the University Library at Cal State Hayward is to provide user-focused quality services and collections in support of undergraduate and graduate programs, faculty research, and the general information needs of the diverse community. The University Library provides access to recorded knowledge in all formats regardless of ownership. Consistent with the teaching mission of the university, the library assists students in becoming information competent, critical thinkers, and life-long learners. The University Library provides physical facilities to foster individual and collaborative teaching and learning and to encourage the exchange of ideas.

The Library's mission is accomplished through the following goals:

Goals

- Identify, acquire, organize, preserve, and provide access to pertinent recorded knowledge to support teaching, research, and creative activities.
- Recruit, hire, and retain, quality faculty and staff committed to delivering excellent services in response to the rapidly changing needs of the diverse user community.
- Offer formal and informal instruction to promote information

Information Literacy Courses

literacy.

- Provide an easily accessible, user-friendly and safe environment that fosters teaching and learning for both library users and library employees.
- Apply appropriate technological innovations to achieve productivity and efficiency, as well as provide library services to distant learners and information seekers.
- Communicate library services to raise awareness and promote partnerships with university organizations, other libraries and educational institutions, and local communities.
- Create a forward thinking, dynamic organization that is responsive and flexible in order to achieve its mission and goals.
- Continue to improve the library's effectiveness through systematic, on-going outcome assessment.

The course prefix for the following courses is LIBY.

- 1010** Fundamentals of Information Literacy (1)
Information structure and organization. Techniques and computer skills for effectively identifying, acquiring, evaluating, using, and communicating information in various formats. Sections tailored to articulate with courses in first year thematic G.E. sequences in Areas B, C, and D.
- 1210** Introduction to Information Literacy (2)
Basic information literacy concepts. Research strategies and appropriate techniques for effectively identifying, acquiring, evaluating, using, and communicating information in various formats. Sections tailored to articulate with courses in first year thematic G. E. sequences in Areas B, C, and D. Prerequisite: enrollment in the First Year Cluster or permission of instructor.
- 1551** Information Skills in the Electronic Age (2)
Instruction and practice in accessing information through print, electronic, and other non-print formats. Includes examination of the Library's collections as well as information available remotely through electronic means. CR/NC grading only.
- 3200** Discipline Based Information Research (2)
Research techniques and computer skills for effectively identifying, acquiring, evaluating, using and communicating information in specific disciplines. The focus changes from quarter to quarter as appropriate. May be repeated for credit with consent of the instructor.



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Last Updated: March 9, 2005





Business Administration

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Department Information

Departments of Accounting and Computer Information Systems, Economics, Management and Finance, Marketing and Entrepreneurship
College of Business and Economics

Dean: _____

Dean's Office: Music and Business Bldg., Room 2571
Phone: (510) 885-3311

Please consult the 2006-2007 online catalog for any changes that may occur.

• College of Business and Economics Student Service Center (MB 2525, 510-885-3323)

• Department of Accounting and Computer Information Systems (MB 2525, 510-885-3311)

Professor Emeritus: Vernon T. S. Kam

Professors: Doris G. Duncan, Micah Frankel, Ching-Lih Jan, Franklin Lowenthal, Christopher W. K. Lubwama, Nancy R. Mangold, Bijan Mashaw, Gary R. McBride, Kenneth Pefkaros, Ray Roberts, Diane Satin, Philip P. Storrer (Chair), Kathleen K. Wright

Associate Professors: Y. Robert Lin, Xinjian Lu

Assistant Professor: Hongwei Du

Lecturers: Charlene Abendroth, Suzanne M. Busch, Stuart G. Gould, James Potter, Bruce L. Raine, Lily T. Sieux, F. Victor Stanton

- Department of Economics (MB 2525, 510-885-3311)
See the undergraduate Economics chapter for a listing of Economics faculty and a description of the Economics major and minor.

- Department of Management and Finance (MB 2525, 510-885-3311)

Professors Emeriti: Spyros Economides, John G. Kilgour, Susan D. Schaefer, Paul D. Staudohar, Richard Zock

Professors: S. David Aviel, Sam N. Basu, Joyendu Bhadury (Chair), Loretta Breuning, Samuel I. Doctors, Craig G. Johnson, Guido Krickx, Duane R. Lambert, John B. Major, Stephen H. Miller, William L. Moore, Surendra Pradhan, Zinovy Radovitsky, Harry Waters, Jr., John J. Villarreal, Donna L. Wiley, Donald H. Wort

Associate Professors: Hadi Behzad, Alan P. Goldberg, Sharon Green, Fung-Shine Pan, Asha Rao

Assistant Professors: Vishwanath Hegde, H. Steven Peng, Tammie X. Simmons-Mosley, Gregory Theyel

Adjunct Professor: Peter A. Wilson

Lecturers: Kurt S. Martsof, Carol F. Moore, John L. Primus, James E. Riley, Anne Roth, Joseph Tombari, Gary Wishniewsky

- Department of Marketing and Entrepreneurship (MB 2525, 510-885-3311)

Professor Emeritus: Ricardo L. Singson

Professors: Jagdish Agrawal, Chong S.K. Lee (Chair), Norman Smothers, Eric Soares, Steve Ugbah

Associate Professors: Stevina Evuleocha, Cesar Maloles

Assistant Professors: Brian McKenzie, Jean Ann West

Lecturers: Kenneth Hanley, Valerie Smith

- Institutes and Centers

Center for Business and Environmental Studies.

Director: Samuel I. Doctors

Center for Economic Education

Director: Jane E. Lopus

Center for New Ventures and Alliance

Director: Ricardo L. Singson

Human Investment Research and Education (HIRE) Center

Director: Nan Maxwell

Program Description

Smith Center for Private Enterprise Studies

Director: Charles W. Baird; *Associate Director:* Micah Frankel

The College of Business and Economics is committed to providing a broadly oriented professional education to prepare students for careers in business, government, and non-profit organizations. Our program is based on the realization that while many business college graduates secure their initial job through their specialization in one of the functional areas, in a relatively short period of time they progress to positions that require a broad managerial approach incorporating the perspectives of other specialties in addition to their own.

Thus, our Business Administration Major is structured around a large core of required courses that exposes our students to the basic tools of quantitative methods and economic theory, provides them with an introduction to each of the primary functional areas of business, and still leaves them the opportunity to pursue a limited concentration in one or two of these specialized areas. This extensive set of core courses lets students develop a substantive background in the management of organizations prior to choosing an option and enables them to change options during their program with little or no loss of progress toward their degree.

The undergraduate and the graduate programs in Business Administration are accredited by the Association to Advance Collegiate Schools of Business International.

For more information and advising, contact the Business and Economics Student Service Center, MB 2525, (510) 885-3323.

The University also offers a program in Industrial Engineering (see Engineering chapter).

Features

All core and option requirements of the undergraduate programs of the College of Business and Economics are available on the Hayward campus. These options include Accounting, Advertising, Business Economics, Computer Information Systems, E-Commerce Marketing Management, Entrepreneurship, Finance, General Business, Human Resources Management, Marketing Management, Organizational Communication/Public Relations, Production and Operations Management, Purchasing and Materials Management, Real Estate Management, Sales, and Telecommunications Management. Minors are also available in Advertising, Business Administration, Business Computer Telecommunications, Computer Information Systems, International Business, Marketing, and Taxation. All upper division Business Administration core courses plus selected option courses are also offered at the Contra Costa Campus. Sufficient courses in these options--Accounting, Computer Information Systems, Finance, General Business, Human Resources Management, Marketing Management, and Telecommunications Management--are scheduled at the Contra Costa Campus so that all of the upper division requirements for the options can be completed there. This

Major Requirements (B.S.)

set of option courses frequently overlaps the requirements of other options, so that at least one or two courses from most of the remaining options can be taken at the campus.

The College of Business and Economics has a Student Computing Lab with microcomputers and computer terminals that access the campus mainframes and the CSU statewide computer network. The Student Computing Lab is entered through MB 2519. The Contra Costa Center computer lab is equipped with both PC/Windows and Macintosh hardware which can be used as microcomputers or as access to the mainframes on the Hayward campus and to the CSU statewide computer network.

Consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 114-126 units; the B.S. degree requires a total of 180-191 units. The Business Administration major consists of (1) lower division core requirements, (2) upper division core requirements, and (3) requirements in one option or in an approved minor from outside the College of Business and Economics.

- I. Lower Division (38-42 units)
 - ACCT 2251 Financial Reporting and Analysis I (4)
 - ACCT 2252 Financial Reporting and Analysis II (4)
 - ECON 2301 Principles of Microeconomics (4)
 - ECON 2302 Principles of Macroeconomics (4)
 - MGMT 2701 Legal Environment of Business (4)
 - MATH 1810 Mathematics for Business & Social Science I (4)
 - MATH 1820 Mathematics for Business & Social Science II (4)
 - P/C Software Proficiency (students lacking this proficiency may take CIS 1270) (0-4)
 - PSYC 1000 General Psychology (or one of 1001, 1005, 2004, or 2009) (5)
 - STAT 2010 Statistics for Business and Economics (5)
[Note: a CAN STAT 2 course and STAT 2011 (1) will substitute for STAT 2010.]

Notes on Mathematics/Statistics Courses

Students who plan to pursue one of the more quantitative business options (e.g., Production and Operations Management) or graduate programs are encouraged to enroll in MATH 1304 and 1305, Calculus I and II, in place of MATH 1810 and 1820.

Students who have a grade of "B" or better in MATH 1810 or its equivalent are encouraged to substitute STAT 3502 Statistical Inference I, for STAT 2010.

- II. Upper Division Core Requirements (56-60 units)

All lower division core requirements must be completed prior to enrollment in upper division courses. ACCT 3200, ECON 3551, FIN 3300, MGMT 3100 and 3600, and MKTG 3401 must be completed prior to enrollment in 4000-level courses.

ACCT 3200 Accounting for Management Decision-Making (4)
CIS 3060 Computer Information Systems (4) (Required for all options except C.I.S. and T.M.) or CIS 3270 Algorithm Development and Programming (4) (Required for C.I.S. and

T.M. Options only)

ECON 3005 Macro-Economic Theory and Business Strategy
(4)

ECON 3551 Managerial Economics and Business Strategy (4)

FIN 3300 Financial Management (4)

MGMT 3100 Introduction to Quantitative Methods in Business
(4)

MGMT 3600 Theories of Management (4)

MGMT 3614 Organizational Behavior (4)

MGMT 3620 Introduction to Production and Operations
Management (4)

MGMT 3680 Industrial Relations (4) (Not required in ACCT,
C.I.S., and T.M. Options)

MGMT 4500 Business, Government and Society (4)

MGMT 4650 Seminar in Strategic Business Management (4)

MGMT 4670 Multinational Business (4)

MKTG 3401 Marketing Principles (4)

MKTG 3495 Business Communication (4)

III. Option Requirements (16-28 units)

If you wish to have more than one option recorded on your permanent record, the pattern of courses taken to fulfill each additional option must differ by a least 3 courses and 12 units from any other option or combination of options certified for you. Business Administration majors may substitute an approved minor from outside the College of Business and Economics for the option requirement. Interdisciplinary minors (Advertising, Communication Skills, and International Business) are acceptable. Students choosing to do an approved minor in place of an option must complete all 103 units of the lower division and upper division Business Administration core courses plus the additional units necessary for their minor. The program content of their minor must be approved by the CBE minor advisor and an advisor from the area of the minor. The degree for students taking this route will be a B.S. degree, Major in Business Administration, Minor in _____. Note again that, where otherwise appropriate, units used to satisfy the requirements of a minor can also meet general education and/or major requirements. Courses taken for a minor that are to be used in place of an option must be taken for a letter grade.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

Accounting (28 units)

All business operations are involved with decision-making, and accounting is an integral part of this process. The task of accounting is to identify, measure, and communicate relevant information for decision-making purposes. The demand for well-trained accountants remains high. The program is rigorous, challenging, interesting, and rewarding. The program will prepare students for employment in private, public, and non-profit accounting, and will aid in the preparation for all professional examinations. *Note: Students must complete MKTG 3495 no later than the beginning of their Senior year (135 units) as a prerequisite to taking any required and/or elective courses in the Accounting option.* Required courses: ACCT 3170 or 4704; ACCT 3220 or 4220; ACCT 3211 and 3212; and three ACCT 3000-4000 level courses beyond those listed as required (excluding ACCT 3228, 3898, 4226, 4227, 4900).

Notes:

Students completing both the Accounting and CIS options should replace CIS 3060 and ACCT 3170 with CIS 3270 and 3281.)

If ACCT 3170 is selected as a required course, ACCT 4704 may be selected as an elective. If ACCT 4704 is selected as a required course, ACCT 3170 may be selected as an elective.

If ACCT 3220 is selected as a required course, ACCT 4220 may be selected as an elective. If ACCT 4220 is selected as a required course, ACCT 3220 may be selected as an elective.

ACCT 4223 may be used as a substitute for one of the following: MGMT 2701 or 4500. If substituted, select three electives from the remaining accounting electives available.

Academic Renewal is allowed only once per ACCT option course for students pursuing the Accounting option.

Advertising (16 units)

Students completing this option acquire the knowledge and skills necessary for effective management of an organization's advertising program. Advertising is recognized as an important element of a firm's integrated marketing communication. This option leads to a variety of careers in advertising, such as account management, advertising creation, media planning, advertising research, and corporate advertising and promotion management. The Advertising option is offered in cooperation with the Department of Mass Communication. Required courses: MKTG 3410, 3425, and choice of two from COMM 4530 and MKTG 3445, 3460, 4412, 4415. See also undergraduate Advertising chapter. A student cannot receive both an Advertising option and an Advertising minor.

Business Economics (16 units)

The Business Economics option concentrates on the economic aspects of business decision making. The coursework emphasizes forecasting product demand, setting product prices, estimating production costs, calculating firm profitability, evaluating investment alternatives, and assessing the effects of government regulations and industry competition on firm performance and

strategy. Students selecting this option will be prepared for careers in banking, finance, economic forecasting, and business economics. The option also provides an excellent background for graduate training in economics and business. Students in this option are encouraged to take MATH 1304 and 1305 instead of MATH 1810 and 1820. Required courses: ECON 3310 and choice of three from ECON 3370, 3375, 3500, 3680, 3685, 4306, 4315, 4400, 4520, 4590, 4700, 4705. A student cannot receive credit for both an Economics major or minor and the Business Economics option.

Computer Information Systems (C.I.S.) (24 units)

This option prepares the graduate for positions in the computer-based data processing areas of business. Careers in computer information systems are rapidly growing. Because computers are becoming so much a part of an organization's life, there is a need for this training in nearly every area of operation--finance, production and manufacturing, marketing, personnel, accounting, auditing, purchasing, distribution, as well as the computer department itself. As a graduate, you might help the organization design, develop, program, and install new computer or telecommunication systems. You might work for organizations in many different industries. Or you might concentrate on one or a few areas in which you have a particular interest, such as banks, stock brokers, hospitals, hotels, real estate, public utilities, oil and gas, electronics, insurance, law, and government agencies. You might become involved in the development of systems which apply new techniques--such as artificial intelligence, voice recognition, and optical storage. Required courses: CIS 3275, 4271; CIS/ENGR 3281; TC 3250, and choice of two from CIS 3275, 3282, 4272, 4273, 4277, 4278, and TC 4266. (Students completing both the Accounting and CIS options should replace CIS 3060 and ACCT 3170 with CIS 3270 and 3281.) A student cannot receive credit for both a CIS option and minor.

E-Commerce Marketing Management (24 units)

This option is designed to prepare students for careers in interactive electronic marketing. Required courses: MKTG 3445, 4400, 4585. Choice of one from MKTG 3485, 4465. Choice of two from ENTR 4485 and MKTG 3410, 3425, 3435, 3440, 4412, 4415, 4417, 4450 (needs department approval; approval dependent upon topic), 4470.

Entrepreneurship (16 units)

This option concentrates on the management of existing small and medium size businesses, the procedures for establishing new ventures either as new firms or as subdivisions of existing firms, and the problems confronting new venture managers during the critical start-up period. The option provides an excellent preparation to those who plan to have their own firm, to be employed by small or medium size business firms with high growth potential, or to work in positions within financial institutions, government agencies, management consulting firms, and marketing agencies that deal primarily with the needs and problems of small to medium sized firms. Required courses: ENTR 4485, 4490; and choice of two from the following--ACCT 3230; CIS 4278; MGMT 3610; FIN 4415; MKTG 3415, 3425, 3440, 3445, 3460, 3485, 4415, 4420, 4425, 4465, 4585; or one course selected in consultation, and with the approval of an Entrepreneurship option advisor. Students are encouraged to meet

with their faculty advisor to discuss selection of electives.

Finance (16 units)

The Finance option is designed to prepare students for careers in the financial management of business firms, banks, related financial institutions, and in investment banking, investment management, and securities brokerage. In addition to the development of a theoretical basis of decision-making, coursework emphasizes experience in solving the problems that face the financial manager. Required courses: FIN 4300 and choice of three from ECON 3310 and FIN 3320, 3360, 3400, 4310, 4320, 4325, 4370, 4375, 4410, 4415, 4470.

General Business (16 units)

This option is based on courses from several different business fields rather than on a concentration of courses in one field. It is designed for individuals interested in management trainee positions in large firms, in graduate study in business administration, or in fields such as law or public administration. However, students planning on graduate work in accounting should complete the Accounting Option rather than General Business Option. Required courses: select four courses from the following--ACCT 3170 or TC 3250; ENTR 4485 or 4490; FIN 4320; MGMT 3110, 3610, 3612, 3624, 3626, 4640; MKTG 4420; PHIL/MGMT 3560.

Human Resources Management (16 units)

The Human Resources Management option prepares students for careers in human resources management and labor relations in business, government, and labor organizations. Those with a strong interest in human behavior will find this to be an appropriate area of study. Coursework is concerned with management of human resources, including selection, training, evaluation, and compensation of employees. Required courses: MGMT 3610 and choice of three from MGMT 3612, 3616, 4615, 4618, 4675, PHIL/MGMT 3560.

Marketing Management (16 units)

The task of marketing is to help an organization create and maintain satisfying relationships with its important customers. Students completing the Marketing Management option acquire the knowledge and skills necessary to understand the needs of customers and the market, to design effective marketing strategies, and to successfully implement and monitor the chosen marketing program. Global competition coupled with technological advances forces both profit and nonprofit organizations to revitalize the marketing function for their success. The growing awareness of the importance of marketing has led to an increase in the number of marketing positions available. The option prepares students for careers in advertising and promotion, brand and product management, sales and sales management, retailing, non-profit, international marketing, marketing research, new product planning, marketing logistics and public relations. Required courses: MKTG 3445, 4400, and choice of two from the following--ENTR 4485, 4490; MKTG 3410, 3415, 3425, 3435, 3440, 3460, 3485, 4412, 4415, 4417, 4420, 4425, 4450, 4465, 4470, 4585. A student cannot receive credit for both a Marketing Management option and a Marketing minor.

Organizational Communication/Public Relations (16

units)

This option prepares students for careers in corporate communication, non-profit marketing communication, and public relations for both profit and non-profit organizations. Required courses: select two courses from MKTG 3425, 3445, 4415, 4420, 4425, and choose two courses from either Group I (COMM 3010, 3100, 3310, 3800, 4510, 4530) or Group II (COMM 3510, 4810, 4830, 4840). Note: COMM 3800 and MKTG 3445 cannot both be counted in the option.

Production and Operations Management (16 units)

This option provides specialized knowledge for careers in production management in manufacturing and service enterprises. Emphasis is on such areas as production planning, forecasting, inventory control, quality control, and use of computers. Special attention is given to the larger sphere of operations management which includes services, governmental organizations, and large-scale, complex systems. Students in this option should take MATH 1304 and 1305 instead of MATH 1810 and 1820. Required courses: MGMT 4640 and choice of three from the following--ACCT 3170 or TC 3250; MGMT 3110, 3624, 3626, 3645, 4625.

Purchasing and Materials Management (16 units)

In recent years, the purchasing and materials function has undergone a complete re-evaluation by business management. It is now a function with the responsibility and the authority for making major contributions to profits. The option is designed to prepare students to buy and manage the material resources of a firm effectively. Required courses: MGMT 3624, 4625 and choice of two from the following--ACCT 3170 or TC 3250; MGMT 3110, 3626, 3645, 4640. MGMT 3624 will be waived for a student who has completed 8 semester or 12 quarter units of community college purchasing courses. The student will then have to complete three electives.

Real Estate Management (16 units)

This option prepares students for careers in environmental and urban planning, lending and title institutions, investment, site location, real estate management, and real estate brokerage. The program is available to students with no prior work in real estate and, in addition, enables students of real estate in the community colleges to finish a baccalaureate major in Business Administration while building on the real estate courses offered by the community college. This is an advanced, comprehensive program in real estate management combined with a solid core of related business administration courses. Required courses: FIN 3400 and choice of three from ECON 3500 and FIN 4410, 4415, 4470.

Sales (16 units)

This option was developed in response to the significant growth of career opportunities in professional selling and sales management. It prepares students to compete in the challenging and rewarding field of personal selling and management of the sales force. Required courses: MKTG 3415, 4420, and a choice of two from MKTG 3460, 4417, 4425, or a 4-unit course selected in consultation, and with the approval of a Sales Option advisor.

Telecommunications Management (24 units)

This option was developed because of the rapid growth and spread of digital electronics to enable the conversion of data, voice, image, and video into bit streams that can be transmitted over a common medium. The rapid growth of telecommunications has created a critical lack of trained network administrators. This impacts operators of telephones, television, cellular devices, and satellites. New courses keep the curriculum on the forefront of this expanding field. Required courses: TC 3250, 3320, 3321, 4266, 4277, 4300. Recommended: one course in programming selected from CIS 3275; CS 1160, 2170, 2430. A student cannot receive credit for both the Telecommunications Management option and the Business Computer Telecommunications minor.

Minor

From Outside the College of Business and Economics
In place of the option requirement, a student may choose to complete a minor from outside the College of Business and Economics. A second major from outside the College and interdisciplinary minors such as Advertising, Communication Skills, and International Business may also be substituted for the option requirement. The Minor program must be approved by both the Minor Advisor of the College of Business and Economics and an advisor from the area of the minor. Note that courses taken for a minor that is to be used in lieu of an option must be taken for letter grades rather than CR/NC.

The number of units required for the Business Administration major under this alternative is the combined 103 units of the lower division and upper division Business Administration cores for the non-CIS Option student plus the additional units necessary for the chosen, approved minor. Note that, where otherwise appropriate, units used to satisfy the requirements of a minor can also meet general education and/or major requirements.

The degree conferred under this alternative will be "Bachelor of Science, Major in Business Administration, Minor in"

Sample Programs

Business Administration

Freshman Year	Sophomore Year
U.S. History/Institutions Requirement (8)	ACCT 2251 (4)
Area A.3 G.E. Requirement ² (4)	ACCT 2252 (4)
COMM 1000 or 1004 (4)	MGMT 2701 (4)
ENGL 1001, 1002 (8)	ECON 2301-02 (8)
MATH 1810-20 (8)	STAT 2010 (5)
PSYC 1000 (or one of 1001, 1005, Other G.E. courses 2004, or 2009) (5)	PC Software Proficiency
Other G.E. courses	

Junior and Senior Years

The following sample programs for the options assure that prerequisite courses are taken in proper sequence. If deviations are made from the proposed programs, check individual course descriptions to assure that prerequisites are met.

Option in Accounting

Junior Year

First Quarter

ACCT 3200 (4)
CIS 3060 (4)
ECON 3551 (4)
MGMT 3600 (4)

Second Quarter

ACCT 3211 (4)
ACCT 3170 (4) or 4704 (4)
MGMT 3100 (4)
MKTG 3401 (4)

Third Quarter

ACCT 3212 (4)
ECON 3005 (4)
MGMT 3614 (4)
MKTG 3495 (4)

Senior Year

First Quarter

ACCT 3220 or 4220 (4)
FIN 3300 (4)
MGMT 3620 (4)

Second Quarter

ACCT elective (4)
MGMT 4500 (4)
MGMT 4670 (4)

Third Quarter

ACCT elective (4)
ACCT elective (4)
MGMT 4650 (4)

**Options in Advertising, Entrepreneurship, Marketing
Management, Organizational Communication/Public
Relations, Sales**

Junior Year

First Quarter

ACCT 3200 (4)
ECON 3551 (4)
MGMT 3600 (4)
MKTG 3401 (4)

Second Quarter

FIN 3300 (4)
MGMT 3614 (4)
MGMT 3680 (4)
Option course (4)

Third Quarter

CIS 3060 (4)
MGMT 3100 (4)
MKTG 3495 (4)
Option course (4)

Senior Year

First Quarter

ECON 3005 (4)
MGMT 3620 (4)
MGMT 4670 (4)
Option course (4)

Second Quarter

MGMT 4500 (4)
Option Course (4)

Third Quarter

MGMT 4650 (4)

Option in Business Economics

Junior Year

First Quarter

Second Quarter

ACCT 3200 (4) ECON 3551 (4)
ECON 3005 (4) FIN 3300 (4)
MGMT 3600 (4) MGMT 3614 (4)
MKTG 3401 (4) MGMT 3680 (4)

Third Quarter

ECON 3310 (4)
MGMT 3100 (4)
MKTG 3495 (4)
Option course (4)

Senior Year

First Quarter

MGMT 3620 (4)
MGMT 4670 (4)
Option course (4)

Second Quarter

CIS 3060 (4)
MGMT 4500 (4)

Third Quarter

Option course (4)
MGMT 4650 (4)

Option in Computer Information Systems

Junior Year

First Quarter

ACCT 3200 (4)
CIS 3270 (4)
ECON 3551 (4)
MGMT 3100 (4)

Second Quarter

CIS 3275 (4)
CIS/ENGR 3281 (4)
MGMT 3600 (4)
MKTG 3401 (4)

Third Quarter

ECON 3005 (4)
FIN 3300 (4)
MKTG 3495 (4)
TC 3250 (4)

Senior Year

First Quarter

CIS 4271 (4)
MGMT 3620 (4)
MGMT 3614 (4)

Second Quarter

MGMT 4500 (4)
MGMT 4670 (4)
Option Course (4)

Third Quarter

MGMT 4650 (4)
Option Course (4)

Option in E-Commerce Marketing Management

Junior Year

First Quarter

ACCT 3200 (4)
ECON 3551 (4)
MGMT 3600 (4)
MKTG 3401 (4)

Second Quarter

FIN 3300 (4)
MGMT 3614 (4)
MGMT 3680 (4)
MKTG 3445 (4)

Third Quarter

CIS 3060 (4)

MGMT 3100 (4)
MKTG 3495 (4)
Option course (4)

Senior Year

First Quarter
ECON 3005 (4)
MGMT 3620 (4)
MGMT 4670 (4)
Option course (4)

Second Quarter
MGMT 4500 (4)
MGMT 4585 (4)
Option Course (4)

Third Quarter
MGMT 4650 (4)
MKTG 4400 (4)

Options in Finance and General Business

Junior Year

First Quarter
ACCT 3200 (4)
ECON 3551 (4)
MGMT 3100 (4)
MGMT 3600 (4)

Second Quarter
ECON 3005 (4)
FIN 3300 (4)
MGMT 3614 (4)
MKTG 3401 (4)

Third Quarter
CIS 3060 (4)
MGMT 3680 (4)
MKTG 3495 (4)
Option course (4)

Senior Year

First Quarter
MGMT 4500 (4)
Option Courses (8)
MGMT 4670 (4)

Second Quarter
MGMT 3620 (4)

Third Quarter
Option Course (4)
MGMT 4650 (4)

**Options in Human Resources Management, Purchasing and
Materials Management, Production and Operations
Management, and Real Estate Management**

Junior Year

First Quarter
ACCT 3200 (4)
ECON 3551 (4)
MGMT 3100 (4)
MGMT 3600 (4)

Second Quarter
CIS 3060 (4)
MGMT 3620 (4)
MGMT 3614 (4)
MKTG 3401 (4)

Third Quarter
FIN 3300 (4)
MGMT 3680 (4)
MKTG 3495 (4)
Option course (4)

Senior Year

First Quarter
ECON 3005 (4)
MGMT 4670 (4)
Option course (4)

Second Quarter
MGMT 4500 (4)
Option course

Third Quarter
MGMT 4650 (4)
Option course (4)

Option in Telecommunications Management

Junior Year

First Quarter
ACCT 3200 (4)
CIS 3270 (4)
MGMT 3100 (4)
TC 3250 (4)

Second Quarter
TC 3320 (4)
MGMT 3600 (4)
MKTG 3401 (4)
ECON 3551 (4)

Third Quarter
ECON 3005 (4)
FIN 3300 (4)
MKTG 3495 (4)
TC 3321 (4)

Senior Year

First Quarter
MGMT 3620 (4)
MGMT 3614 (4)
TC 4266 (4)

Second Quarter
MGMT 4500 (4)
MGMT 4670 (4)
TC 4277 (4)

Third Quarter
MGMT 4650 (4)
Option Course (4)
TC 4300 (4)

Minor from Outside the College

Junior Year

First Quarter
ACCT 3200 (4)
ECON 3551 (4)
MGMT 3600 (4)
Minor Course (4)

Second Quarter
ECON 3005 (4)
MGMT 3614 (4)
MKTG 3401 (4)
Minor Course (4)

Third Quarter
FIN 3300 (4)
MGMT 3100 (4)
MKTG 3495 (4)
Minor Course (4)

Senior Year

First Quarter
MGMT 3620 (4)
MGMT 3680 (4)
Minor Courses (8)

Second Quarter
MGMT 4500 (4)
MGMT 4670 (4)
Minor Courses (8)

Minors

Third Quarter
CIS 3060 (4)
MGMT 4650 (4)
G.E. Courses or Minor Courses
or Free Electives

Subject Area Business Administration

At least 12 units of the coursework must be completed at Cal State Hayward in order for the student to receive recognition of the minor on the Cal State Hayward transcript or diploma. A student cannot have both an option and a minor in the same area.

Minor in Advertising

See the undergraduate Advertising chapter for a description of this minor.

Minor in Business Administration (40-44 units)

Complete either Alternative A, B, or C.

Alternative A

I. Lower Division (20 units)

ACCT 2251 Financial Reporting and Analysis I (4)
ACCT 2252 Financial Reporting and Analysis II (4)
ECON 2301 Principles of Microeconomics (4)
ECON 2302 Principles of Macroeconomics (4)
MGMT 2701 Legal Environment of Business (4)

II. Upper Division (20 units)

Students must have completed the prerequisites listed in the course description for any course they select to satisfy the following requirements.

MGMT 3600 Theories of Management (4)
MKTG 3401 Marketing Management (4)
CIS 3060 Computer Information Systems (4)

Any two additional upper division Business Administration courses in the core (8)

Note: Business Administration courses are those with Accounting, Computer Information Systems, Entrepreneurship, Finance, Management, Marketing, and Telecommunications prefixes. Courses in Economics cannot be included in these 8 units.

Alternative B

I. Lower Division (16 units)

ACCT 2210 Accounting for Non-Business Majors (4)
ECON 2301 Principles of Microeconomics (4)
ECON 2302 Principles of Macroeconomics (4)
MGMT 2701 Legal Environment of Business (4)

II. Upper Division (24 units)

Students must have completed the prerequisites listed in the course description for any course they select to satisfy the

following requirements.

MGMT 3600 Theories of Management (4)
MKTG 3401 Marketing Management (4)
CIS 3060 Computer Information Systems (4)

Any three additional upper division Business Administration courses in the core (12)

Note: Business Administration courses are those with Accounting, Computer Information Systems, Entrepreneurship, Finance, Management, Marketing, and Telecommunications prefixes. Courses in Economics cannot be included in these 12 units.

Alternative C

I. Lower Division (16 units)

ACCT 2210 Accounting for Non-Business Majors (4)
ECON 2301 Principles of Microeconomics (4)
MGMT 2701[□] Legal Environment of Business (4)

CS 1160 Introduction to Computer Science and Programming Methods or any other introductory course in computer programming (4)

II. Upper Division (28 units)

Students must have completed the prerequisites listed in the course description for any course they select to satisfy the following requirements.

MGMT 3600[□] Theories of Management (4)
MKTG 3401[□] Marketing Principles (4)
CIS/ENGR 3281 Systems Analysis and Design (4)

ENGR 3140 Engineering Economics or ECON 2302 Principles of Macroeconomics (4)

ACCT 3200[□] Accounting for Management Decision-Making or ENGR 3090 Industrial Costs and Controls (4)

Any two additional upper division Business Administration courses in the core as listed below.

ECON 3005[□] Macro-Economic Theory (4)
ECON 3551[□] Managerial Economics and Business Strategy (4)
FIN 3300 Financial Management (4)
MGMT 3614[□] Organizational Behavior (4)
MGMT 3680[□] Industrial Relations (4)
MGMT 4500[□] Business, Government, and Society (4)
MGMT 4670 Multinational Business (4)
MKTG 3495 Business Communication (4)

Students completing the Business Administration Minor with the intention of possibly changing to the Business Administration Major, completing a second bachelor's degree in Business Administration, or entering a master's program in Business Administration are urged to discuss their selection of courses for the Business Administration Minor with an advisor in the College

of Business and Economics. Such students, for example, should choose Alternative A to satisfy their lower division requirements. Engineering students completing this minor with the intention of entering the M.B.A. program should consult the Director of the Engineering Program.

Minor in Business Computer Telecommunications (32-38 units)

The minor in Business Computer Telecommunications is offered through the Accounting and Computer Information Systems Department. Business Administration majors who want to have this minor listed on their transcripts must have at least 18 units in the minor that are not counted in the major requirements.

- I. Lower Division (8-12 units)
ACCT 2210 Accounting for Non-Business Majors (4) or ACCT 2251 Financial Reporting and Analysis I (4) and ACCT 2252 Financial Reporting and Analysis II (4)

ECON 2301 Principles of Microeconomics (4)
- II. Upper Division (20 units)
CIS 3270 Algorithm Development and Programming (4)
MGMT 3600 Theories of Management (4)
TC 3250 Introduction to Networks and Telecommunications Systems (4)
TC 4266 Network Operating Systems and Architecture (4)
TC 4277 Telecommunications Industry and Regulatory Issues (4)
- III. Elective Requirement (4-6 units)
Choose at least 4 units from the following:

CIS/ENGR 3281 Systems Analysis and Design I (4)
C S 2170 C Language Programming (2)
C S 2430 Computer Organization and Assembly Language Programming (4)
TC 3320 Internet Programming and Client Server Systems I (4)
TC 4300 Telecommunications Systems Analysis and Design (4)

Minor in Computer Information Systems (32 units)

The minor in Computer Information Systems is offered through the Accounting and Computer Information Systems Department. Business Administration majors who want to have this minor listed on their transcripts must have at least 18 units in the minor that are not counted in the major requirements.

- I. Lower Division (8 units)
ACCT 2210 Accounting for Non-Business Majors (4) or ACCT 2251 Financial Reporting and Analysis I (4)
ECON 2301 Principles of Microeconomics (4)
- II. Upper Division (24 units)
CIS 3270 Algorithm Development and Programming (4)
CIS 3281 Systems Analysis and Design I (4)
CIS 4271 Database Management Systems (4)

Three additional CIS courses (excluding CIS 3060), with

consent of advisor (12)

Minor in International Business

See the undergraduate International Business chapter for a description of this minor.

Minor in Marketing (32 units)

The minor in Marketing is offered through the Department of Marketing and Entrepreneurship. Business Administration majors who want to have this minor listed on their transcripts must have at least 18 units in the minor that are not counted in the major requirements.

I. Lower Division (12 units)

ACCT 2210 Accounting for Non-Business Majors (4) or ACCT 2251 Financial Reporting and Analysis I (4)
ECON 2301 Principles of Microeconomics (4)
ENTR 2485 Establishing and Managing a Small Business (4)

II. Upper Division (20 units)

MGMT 3600 Theories of Management (4)
MKTG 3401 Marketing Principles (4)
MKTG 4420 Sales Management (4)
Two additional Marketing courses excluding ENTR 4485, 4490 and MKTG 3495 (8)

Minor in Taxation (28 units)

The minor in Taxation is offered through the Accounting and Computer Information Systems Department. Business Administration majors who want to have this minor listed on their transcripts must have at least 18 units in the minor that are not counted in the major requirements.

I. Lower Division (16 units)

ACCT 2251, 2252 Financial Reporting and Analysis I, II (8)
ECON 2301 Principles of Microeconomics (4)
MGMT 2701 Legal Environment of Business (4)

II. Upper Division (12 units)

ACCT 3220 Tax Accounting: Fundamentals and Individuals (4)
ACCT 4220 Tax Accounting: Corporate Tax (4)
ACCT 4221 Tax Accounting: Partnerships, Gifts, Estates, Trusts (4)

Business
Studies Option:
Liberal Studies

Secondary
Level Teaching
Program

For the Business Studies Option in Liberal Studies, see Liberal Studies in the undergraduate section of this catalog.

Students interested in secondary teaching should recognize that the College does not offer a subject matter preparation program in Business Education. Furthermore, although students can complete the undergraduate Business Administration major on this campus and then enroll in the fifth year credential program elsewhere, the College does not offer all of the coursework

Undergraduate Courses

considered prerequisite to some credential programs.

Note: To be eligible for credit for any 3898 Cooperative Education course, registration for the course must be completed in advance of the activity (past work experience does not apply, and the activity must be a substantive expansion of the student's exposure to date.)

Accounting

The course prefix for the following courses is ACCT.

- 2210** Accounting for Non-Business Majors (4)
A survey of accounting concepts designed for students desiring a general knowledge of accounting. Emphasis placed on the use and analysis of accounting data. Not open to those with credit for ACCT 2251. Prerequisite: satisfactory completion of Entry-level Mathematics (ELM) requirement. (F, Sp)
- 2251, 2252** Financial Reporting and Analysis I, II (4 each)
Interpretation and analysis of financial statements for decision-making. Introduction to identification, measurement, and reporting of financial events of business entities. Courses are sequential. Prerequisites: Sophomore standing, satisfactory completion of Entry-level Mathematics (ELM) requirement, and either credit for intermediate algebra or a satisfactory score on the Mathematics Diagnostic Test (MDT).
- 3170** Information Technology in Business (4)
The role of business information systems, roles and responsibilities within the IT function, IT fundamentals, disaster recovery and business continuity including data backup and data recovery, and financial statement and business implications of electronic commerce. Prerequisites: ACCT 2252 and CIS 3060.
- 3200** Accounting for Management Decision-Making (4)
Use of accounting information for managerial planning, control, and decision-making. Topics include costing systems, cost estimation and analysis, operational and capital budgeting decisions. Prerequisites: ACCT 2251, MATH 1810, STAT 2010, and PC Software Proficiency satisfied. (A)
- 3210** Cash Management (4)
Principles of cash management in a corporate finance setting. Focus on how financial accounting, the collection cycle, electronic commerce, information technology, investment strategies, debt, and international business effect cash management. Yield curve analysis. Prerequisites: ACCT 2252 and FIN 3300.
- 3211, 3212** Intermediate Financial Accounting I, II (4 each)
In-depth study of financial accounting concepts and practices, including information processing, valuation, statement presentation, and analysis. Emerging issues

and professional accounting standards also studied. Courses are sequential and require a grade not lower than "C-" to continue. Prerequisite: ACCT 2252 or its equivalent, with a grade not lower than a "C-". FIN 3300 is highly recommended before taking ACCT 3212. (A)

3220 Tax Accounting: Fundamentals and Individuals (4)

Subject matter focuses on tax fundamentals such as gross income, losses, property transactions, tax accounting and individual taxation. Skills developed include tax research, analysis and technical writing in the context of the course subject matter.

3228 Volunteer Income Tax Assistance (VITA): Income Tax Return Preparation (4)

Classroom training in the preparation of federal and state income tax returns. Students are assigned individual state and federal tax returns to prepare and file for clients from the community. May be repeated once for credit. Prerequisite: permission of instructor.

3230 Cost Management (4)

Fundamental concepts of cost accounting, new developments in cost management, and costing information for managerial decisions. Topics include various costing systems, activity-based costing, cost allocation, pricing decisions, transfer pricing, and performance measurements. Prerequisite: ACCT 3200.

3280 Accounting for Governmental and Non-Profit Entities (4)

Accounting for governmental and other non-profit entities including the standards and methods for financial reporting. Prerequisites: ACCT 2210 or 2252 and ACCT 3200.

3898 Cooperative Education (1-4)

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 4 units. Units not applicable to options or minor. Prerequisites: at least 2.0 GPA; departmental approval of activity. CR/NC grading only. (A)

3999 Issues in Accounting (4)

Readings, discussion, and research on contemporary and/or significant issues in accounting. May be repeated for credit when content varies.

4211 Advanced Financial Accounting (4)

In-depth study of advanced financial accounting concepts and practices, measurement, valuation, disclosure, and analysis. Includes research, the study of emerging issues and professional accounting standards. Prerequisite: ACCT 3212 with a grade not lower than "C-". Not open to those with credit for ACCT 3213. (Sp)

4220 Tax Accounting: Corporate Tax (4)

Corporate taxation from inception to dissolution. Also

includes consolidated returns, multinational issues, multistate issues, S Corporations, and tax exempt corporations. Skills developed include tax research, analysis and technical writing in the context of the course subject matter.

- 4221** Tax Accounting: Partnerships, Gifts, Estates, Trusts (4)
The taxation of partnerships and partners, gift tax, estate tax, and income taxation of trusts and estates. Skills developed include tax research, analysis and technical writing in the context of the course subject matter.
Prerequisite: ACCT 3220 or 4220. (Y)
- 4223** Business Ethics, Organizations, Regulation and Law (4)
Business ethics, forms and financial structure of business organizations; rights, duties and responsibilities of owners and managers; professional responsibility and liability; federal statutory liability; privileged communications and confidentiality; agency, contracts, creditor's rights and bankruptcy, federal securities acts and other government regulation, Uniform Commercial Code, real property.
- 4226** Volunteer Income Tax Assistance (VITA): Supervisory III (2)
Management of a group of VITA centers with emphasis upon teaching first-year supervisors to operate a VITA center effectively, the development of new VITA centers, and the coordination of publicity in geographic areas.
Prerequisite: consent of instructor.
- 4227** Volunteer Income Tax Assistance (VITA): Supervisory IV (4)
Coordinating the operations of two or more VITA centers to achieve optimum combination of output and quality control and providing assistance to center supervisors in answering technical taxation questions, directing VITA preparers, and solving other center problems.
Prerequisites: ACCT 3220 and consent of instructor.
- 4250** Auditing (4)
Principles, techniques and procedures in auditing.
Prerequisite: ACCT 3212. (A)
- 4370** International Accounting (4)
International disclosure issues, comparative analysis of financial statements, transfer pricing, multinational reporting problems, and international taxation.
Prerequisite: ACCT 2252.
- 4704** Financial Reporting Systems: Design and Implementation (4)
Design, implementation and analysis of financial reporting systems for manufacturing and service organizations. Topics include fundamentals of financial reporting and analysis; design and implementation of financial applications for general ledger, assets, procurement and payables; order fulfillment and receivables; budgeting and cash management. Prerequisite: ACCT 2251.

4900 Independent Study (1-4)

Computer Information Systems

The course prefix for the following courses is CIS.

- 1270** PC Fundamentals (2)
Fundamentals using microcomputers operating systems such as WINDOWS and DOS, including subdirectories and batch files. Hands-on business applications using spreadsheet, database, wordprocessing, and electronic mail applications. Satisfies PC software proficiency requirement.
- 3060** Computer Information Systems (4)
Effective and efficient uses of computers in business as a problem solving tool. Topics include computer systems components, systems analysis, database management systems, telecommunications, productivity tools, and mini-projects related to computer-based solutions to business problems. Prerequisite: PC software proficiency. (A)
- 3270** Algorithm Development and Programming (4)
Developing algorithms for solving problems and using a computer language as a tool. Topics include input, output, iteration, decision structures, files, arrays, and programming methods, such as structured and object-oriented. Prerequisite: PC software proficiency satisfied.
- 3275** Object-Oriented Programming (4)
Object-oriented programming: development, implementation, and testing. Topics will include OO techniques, data abstraction, encapsulation, hierarchical structures, inheritance, encapsulation, polymorphism, and tools for development such as object charts and object modeling. Prerequisite: CIS 3270 or equivalent.
- 3278** Advanced Programming and Software Development (4)
Advanced study of selected topics in programming and software development. Variety of applications will be used for projects. Prerequisite: CIS 3275 or consent of instructor.
- 3279** Graphical User Interface Programming (4)
Programming for graphical interfaces, techniques and procedures. Topics will include standard GUI components, threads, library classes, and event handling. Projects will be used to develop production-quality GUI applications. Prerequisite: CIS 3275.
- 3281** Systems Analysis and Design (4)
Fundamentals and approaches of systems analysis, design, and development. Problem identification and analysis, feasibility study, specifications, design, and documentation techniques of computer-based information systems. Prerequisite: CIS 3270 or a programming language approved by the instructor. Cross-listed with ENGR 3281.

- 3282** Object-Oriented Systems Analysis and Design (4)
The use of different methodologies such as object-oriented analysis and design in developing quality computer-based information systems in different disciplines. Topics include systems development, systems integration, quality assurance and management. Project oriented. Prerequisites: CIS 3275 and 3281.
- 3501** Operating Systems and Applications (4)
Study and practice with various operating systems including Windows, UNIX/Linux, and others. Designed to invoke a solid understanding of operating systems in information systems, and practice the use of operating systems particularly in a UNIX platform. Prerequisite: CIS 3270.
- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 4 units. Units not applicable to options or minor. Prerequisites: at least 2.0 GPA; departmental approval of activity. CR/NC grading only. (A)
- 3999** Issues in Computer Information Systems (4)
Readings, discussion, and research on contemporary and/or significant issues in computer information systems. May be repeated for credit when content varies.
- 4271** Database Management Systems (4)
The use of database management systems in effective and efficient storage and use of data. Topics include data storage, logical view, schema and subschema, database design and modeling, normalization, and query languages such as SQL. Includes mini-projects. Prerequisite: CIS 3281.
- 4272** Advanced Topics in Business Computer Systems (4)
Advanced study of selected technical aspects of business computer systems, including data structures and algorithmic analysis. Prerequisite: CIS 3275 or consent of instructor.
- 4273** Data Warehousing and Mining (4)
Use of organizational data for monitoring, planning, and forecasting. Topics include data warehousing and mining techniques, query and information access methods and strategies, design, development and implementation of data warehouses, migration and conversion. Prerequisite: CIS 4271.
- 4275** Software Development and Testing (4)
Concepts, tools and techniques of software engineering for systematic analysis and design of large-scale information systems. Topics include tools and models in system engineering, planning, reliability, integrity, quality assurance, and project management. Prerequisites: CIS

3275 and CIS 3281.

- 4277** Database Management Systems in Networks (4)
Use of database management systems, and the design of a database in a network environment. Topics include server-oriented databases, transactions processing and host languages, data retrieval through the Web, integrity, security, and administration of databases. Includes student projects. Prerequisite: CIS 4271.
- 4278** Electronic Business (4)
The use of electronic methods and the Internet in business functions such as marketing, accounting, finance, and management. Topics include development and design, technologies, integrity, authenticity, security, and performance in an enterprise system. Web authoring tools will be used for projects. Prerequisite: CIS 3281.
- 4900** Independent Study (1-4)

Economics

See undergraduate Economics chapter for list of Economics courses.

Entrepreneurship

The course prefix for the following courses is ENTR.

- 2485** Establishing and Managing a Small Business (4)
The fundamentals of establishing and operating a small business. Not open for credit to majors in Business Administration or Economics. Prerequisite: ACCT 2210 or 2251 or consent of instructor.
- 4485** Establishing New Enterprises (4)
In-depth coverage of procedures for setting up new businesses and of problems confronting managers during the critical start-up period; extensive use of cases, situational analyses, and projects. Prerequisites: ACCT 3200; FIN 3300; MGMT 3600; MKTG 3401. Recommended: CIS 3060.
- 4490** Practicum in Small Business Management (4)
Student consultant teams assisting small businesses; responsibilities include reviewing performance; isolating problems; researching solutions; presenting oral analysis to class; preparing written reports for business. Prerequisites: ACCT 3200; ECON 3551; FIN 3300; MGMT 3100; MKTG 3401. Prerequisite/concurrent: MKTG 3495. Recommended: CIS 3060.

Finance

The course prefix for the following courses is FIN.

- 3300** Financial Management (4)
Theory and practices that underlie the financial manager's decision-making process. Capital investment analysis,

capital structure, dividend policy, risk and return, and market valuation of the firm. Prerequisites: ACCT 3200; ECON 2301-2; STAT 2010.

- 3320** Financial Markets and Services (4)
The contemporary environment of the financial system and the organization and operation of financial markets, financial products and instruments, and the financial services industry. Prerequisite: FIN 3300.
- 3360** Management of Risk and Insurance (4)
Techniques of risk management and uses of insurance contracts for individual and business insurance planning. The operation and regulation of the insurance industry and contract provisions for property, liability, life, annuity, health, and disability insurance. Prerequisite: Junior standing.
- 3400** Fundamentals of Real Estate Management and Decision-Making (4)
Fundamental tools of real estate decision-making and the management of real estate development, finance, investment valuation and operations. Recommended preparation: MGMT 2701.
- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 8 units. Units not applicable to options or minor. Prerequisites: at least 2.0 GPA; departmental approval of activity. CR/NC grading only.
- 3999** Issues in Finance (4)
Readings, discussion, and research on contemporary and/or significant issues in finance. May be repeated for credit when content varies. Prerequisite: consent of instructor.
- 4300** Corporate Finance (4)
In-depth study of theories and practices of corporate financial management. Emphasis on corporate financial decision-making, including capital budgeting, capital structure, dividend policy, risk management, and international financial management. Prerequisite: FIN 3300.
- 4310** Investment Analysis (4)
Introduction to security analysis and portfolio management. Prerequisites: FIN 3300 and MATH 1820.
- 4320** Problems in Corporate Finance (4)
Studies of specific problems in corporate financial policy formulation and decision-making using financial data bases and models. Prerequisites: FIN 3300 and MATH 1820.
- 4325** Introduction to Commercial Banking Operations (4)
An introduction to commercial banking. The emphasis is

on operations of the bank, its organization structure, accounting procedures, and financial management objectives and policies. Prerequisite: FIN 3300.

- 4370** Seminar in Financial Theory (4)
Selected topics dealing with recent developments in financial theory and management practice. May be repeated for credit with the approval of the department. Prerequisites: FIN 3300; MATH 1820; Senior or graduate standing, and consent of instructor.
- 4375** International Business Finance (4)
Financial aspects of international business including international financial markets, foreign exchange management, foreign investment, multinational capital budgeting, working capital management, financing of international business including import-export financing and international banking. Not open to those with credit for FIN 6375. Prerequisite: FIN 3300.
- 4410** Financing Real Estate Operations (4)
Study of equity, mortgage, lease, sale and lease-back, and innovative methods of financing, including related tax effects. Prerequisites: FIN 3300 and either FIN 3400 or graduate standing.
- 4415** Real Estate Investment Analysis and Advanced Appraisal (4)
Applications of investment analysis and appraisal theory to real estate management. Prerequisite: FIN 4410.
- 4470** Seminar in Advanced Topics in Real Estate (4)
Advanced topics in real estate, including contemporary environmental, sociological, financial, economic, and political issues. Prerequisites: two of ECON 3500 and FIN 4410 and 4415.
- 4900** Independent Study (1-4)

Management

The course prefix for the following courses is MGMT.

- 2701** Legal Environment of Business (4)
[CAN BUS 8]
Legal and institutional setting in which business operates; the nature, sources, functions, and processes of law and legal reasoning relating to contracts, agency, torts, partnerships, and corporations; government regulations and administrative law as they apply to the legal environment.
- 3100** Introduction to Quantitative Methods in Business (4)
A survey of linear programming, transportation models, CPM/PERT, deterministic inventory models, and decision analysis. Emphasis on problem formulation and applications. Prerequisites: MATH 1820 or 1305; STAT 2010; PC Software Proficiency satisfied. Four hrs. lect., 2 hrs. act.

- 3110** Applications of Decision-Making (4)
Topics in decision theory, utility analysis, and multi-criteria decision-making. Evaluation of information for complex decisions and analysis of risks and uncertainties. Bayes theory and models. Integer and goal programming and their applications in decision-making models. Prerequisite: MGMT 3100 or permission of instructor. Cross-listed with ENGR 3110.
- 3560** Business and Professional Ethics (4)
(See PHIL 3560 for course description.)
- 3600** Theories of Management (4)
Management is viewed as a process involving the utilization of human resources to accomplish organizational objectives. Critical analysis of descriptive and normative theories of formal organization, including a consideration of organization structure, communications, planning, and control. Cross-listed with ENGR 3600.
- 3610** Human Resources Management (4)
Fundamentals of strategic human resource management from the perspective of human resources professionals and general managers. Focus on how firms use human resource functions, such as recruitment and selection, training and development, performance management, compensation and benefits, to gain a competitive advantage. Prerequisite: MGMT 3600.
- 3612** Topics in Human Resources Management and/or Industrial Relations (4)
Current topics in human resources management and/or industrial relations selected by the instructor. May be repeated for credit with the approval of the department. Prerequisite: junior or higher standing.
- 3614** Organizational Behavior (4)
Current theory and research of individual and small group behavior in the organization. Prerequisites: PSYC 1000 (or 1005); MGMT 3600.
- 3616** Human Resources Evaluation (4)
Procedures in selecting, placing, and evaluating employees. Topics include interviews, ability and psychological tests, innovative assessment methods, and organizational use of testing specialists and services. Prerequisites: PSYC 1000 (or 1005); STAT 2010; MGMT 3600.
- 3620** Introduction to Production and Operations Management (4)
Production and operations management in manufacturing and service enterprises; topics include: MRP II, inventory control, quality control, production planning/forecasting, productivity studies, international operations, equipment replacement, and quantitative methods and computer software applications. Prerequisites: ECON 3551 and MGMT 3100.

- 3624** Fundamentals of Purchasing and Materials Management (4)
The major topics important to the functions of the purchasing department, including purchasing, quality control, sources, prices, negotiation, inventory management, value analysis, capital equipment procurement, and make or buy calculations.
- 3626** Total Quality Management (4)
Elements of total quality management, methods of and techniques in quality assurance, statistical process control and acceptance sampling. Emphasis on decision making and applications in quality improvement. Prerequisite: STAT 2010.
- 3645** Logistics Management (4)
Analysis of physical distribution. Methods of logistics analysis and planning. Prerequisite: MGMT 3600.
- 3680** Industrial Relations (4)
The study of labor-management relations: the labor force, labor law, collective bargaining, grievance procedures, and the development of industrial relations policy.
- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 8 units. Units not applicable to options or minor. Prerequisites: at least 2.0 GPA; departmental approval of activity. CR/NC grading only.
- 3999** Issues in Management (4)
Readings, discussion, and research on contemporary and/or significant issues in management. May be repeated for credit when content varies.
- 4500** Business, Government, and Society (4)
The relationships between business managers and the social, economic, and political environment within which they operate; business ethics, antitrust policy, social responsibility, and consumer protection. Prerequisites: ECON 3005 and either 3551 or 6051.
- 4615** Compensation and Benefits (4)
Wage and salary administration, wage and hour law, and employee benefits. Prerequisite: MGMT 3610.
- 4618** Human Resources Training and Development (4)
Systems approach to human resources training and development. Topics include needs assessments, learning theories, instructional design, training methodologies, presentation techniques, and program evaluation. Students will design and present sample training and development programs. Prerequisite: MGMT 3600; MGMT 3610 is recommended.
- 4625** Management of Purchasing and Materials Organizations (4)

Seminar on management of purchasing and materials organizations. Topics include: planning, policies, organization design, control, automation, buying for institutions, and government procurement. Prerequisites: MGMT 3600 and 3624.

- 4640** Advanced Operations Management (4)
Detailed study of selected techniques used in materials, production, and operations management applied to manufacturing and service enterprises in both private and public sectors. Activities include case studies, computer simulation, plant tour, and presentations by industry representatives. Prerequisite: MGMT 3620.
- 4650** Seminar in Strategic Business Management (4)
Capstone course that takes a top management perspective and integrates the functional disciplines into decision-making. Emphasis on evaluating complex business situations, integrating theory with practice, and presenting comprehensive strategic business plans. Prerequisites: FIN 3300; MGMT 3100, 3600, 4500; MKTG 3401. Restricted to seniors who have current application for graduation on file.
- 4670** Multinational Business (4)
A study of the leading technical, environmental, and management features peculiar to the operation of the U.S. firms in foreign countries. Prerequisites: MGMT 3600, MKTG 3401.
- 4675** International Human Resources Management (4)
Seminar on how multinational firms use human resource functions, such as recruitment and selection, training and development, performance appraisal, compensation and benefits, to compete internationally. Focus on international and comparative labor-management relations and management of multicultural teams. Prerequisite: MGMT 3680 or consent of instructor; MGMT 3610 and 4670 are recommended.
- 4900** Independent Study (1-4)

Marketing

The course prefix for the following courses is MKTG.

- 3401** Marketing Principles (4)
A marketing management study of the major internal and external variables in the design of a marketing program. Recommended prerequisite or concurrent enrollment: ECON 2301. (A)
- 3410** Advertising Management (4)
Managing the firm's advertising function: defining the market; integrating advertising into the marketing mix; setting goals and budgets; selecting media; planning, scheduling, and controlling advertising campaigns; research applications; societal evaluation and regulation. Prerequisite or concurrent: MKTG 3401. (F,W)

- 3415** Personal Selling (4)
Theory and practice of personal selling in individual and small group settings. Skills development in product knowledge, customer analysis, listening, prospecting techniques, sales presentation, closing methods, and the place of selling within business. Student Project.
Prerequisite: MKTG 3401 or consent of instructor.
- 3425** Promotion (4)
Management of marketing promotional functions including personal selling, sales promotions, advertising, and publicity/public relations. Comparison of promotions for profit/non-profit organizations, products/services, and consumer/industrial markets. Student project. Prerequisite: MKTG 3401.
- 3435** Environmental Marketing (4)
The effects of commerce on sustainability. The societal marketing concept and how the environmental perspective can be reflected in marketing strategy formulation, including a broader product life cycle analysis and reverse logistics. Student project may be required. Prerequisite: MKTG 3401.
- 3440** Products and Pricing (4)
The process of both consumer and industrial product development, based on marketing intelligence, product introduction, strategy and pricing throughout product life cycle. Field observation and case discussion.
Prerequisite: MKTG 3401.
- 3445** Marketing Research (4)
Training in the process and techniques of marketing research. Topics include problem formulation, research design, development of research instrument, data collection and analysis, and report writing. Hands-on experience emphasized. Prerequisite: MKTG 3401. (A)
- 3460** Negotiation (4)
Principles and practice in business negotiations. Topics include negotiating concepts, strategies, situational applications, and practice in applied techniques. Situations include negotiation in sales, customer relations, employee management, and career development.
Prerequisites: junior standing, lower-division General Education Areas A1, 2, 3. Recommended: MKTG 3495.
- 3485** Database Marketing (4)
Principles and applications of database marketing. Uses of geographic information systems, list sourcing and management, customer profiling and market segmentation, customer lifetime value analysis for direct and interactive marketing decisions. Prerequisites: MKTG 3401, STAT 2010, PC proficiency.
- 3495** Business Communication (4)
Applications of logical and creative thinking, and oral and written communications in the administrative decision-making process in business organizations. Prerequisites:

Junior standing; either C- (CR) or better in ENGL 3000 or 3001, or score of 7 or better on the Writing Skills test, or satisfaction of the graduation writing assessment requirement (GWAR) at any CSU campus including the UWSR at Hayward. Credit unavailable through challenge. Enrollment priority given to Business Administration and Economics majors, then Business Administration minors. (A)

- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 8 units. Units not applicable to options or minor. Prerequisites: at least 2.0 GPA; departmental approval of activity. CR/NC grading only. (A)
- 3999** Issues in Marketing and Entrepreneurship (4)
Readings, discussion, and research on contemporary and/or significant issues in marketing and entrepreneurship. May be repeated for credit when content varies.
- 4400** Integrated Marketing Management (4)
An integrative perspective of marketing management. Students acquire knowledge and skills in applying marketing mix variables in competitive decision making environments. Lectures, simulation, and/or cases used to emphasize integration of marketing mix variables. Prerequisites: MKTG 3401; any one course from MKTG 3410, 3425, 3440, 3445, 4417, and 4420. (A)
- 4412** Media Planning (4)
Media choice related to advertising and promotion strategies; media data sources, syndicated services. Researching media for a specific product, structuring optimum media mixes, developing/managing media budgets; using computers and commercial computer services in deriving media schedules. Prerequisite: MKTG 3401.
- 4415** Corporate Communications (4)
Development of organizational image campaigns by identifying corporate culture, corporate image, intraorganizational goals. Determining media strategies, tactics, and tools for lobbying, trade organization relations, press agency, publicity, internal communications, and public opinion research included in the context of social responsibility. Student project. Recommended prerequisites: MKTG 3401; MGMT 3600, 3680.
- 4417** Consumer Behavior (4)
Survey of theoretical foundations of consumer decision-making; in-depth analysis of contemporary factors influencing consumer behavior, including social, cultural, and psychological dimensions; extensive outside readings and case applications; student project required. Prerequisites: MKTG 3401; PSYC 1000 (or one of 1001, 1005, 2004, or 2009).

- 4420** Sales Management (4)
Planning, hiring and training, directing, motivating and controlling of a company's sales force. Competitive analysis and internal marketing. Prerequisite: MKTG 3401. Recommended: MKTG 3415.
- 4425** Sales Training (4)
Sales training program development and practice; application of motivation theory to sales personnel; analysis of content of sales meetings, sales conferences, and employment and exit interviews. Student project. Recommended prerequisite: MKTG 3415.
- 4450** Marketing Seminar (4)
Selected topics emphasizing the integration of marketing literature with current business practices through seminar discussions and individual field investigations. May be repeated for credit with approval of the Department. Prerequisites: MKTG 3401 and consent of instructor. (Sp)
- 4465** Web Marketing (4)
Web-based marketing strategies, issues, and problems. Websites as effective marketing tools. Formulation and implementation of customer-driven web marketing strategies. Prerequisite: MKTG 3401.
- 4470** International Marketing (4)
Marketing management problems and techniques in international business. Prerequisite: MGMT 4670; prerequisite or concurrent: MKTG 3401.
- 4585** E-Commerce Marketing (4)
E-commerce marketing issues and problems. Understanding e-customers, characteristics of electronic marketplace, marketing implication of information technologies, and e-marketing strategies and tactics. Prerequisite: MKTG 3401 or consent of instructor.
- 4900** Independent Study (1-4)

Telecommunications, Business Computer

The course prefix for the following courses is TC.

- 3250** Introduction to Networks and Telecommunications Systems (4)
Review of computer systems, hardware and components, coding systems, and networking. The network and telecommunication systems principles, analogue/digital signals, topologies, media, switches, routers, protocols, local and wide area networks, the Internet, and programming languages used in the Web. Prerequisite: CIS 3060 or 3270.
- 3320** Web-Page Programming and Development (4)
Web application development and design using client-side tools and browsers. Topics include building XML applications, JavaScript applications, design methods, and performance. Prerequisite: CIS 3270.

- 3321** Client-Server Application Development and Programming (4)
Design and development of Web-based applications and services controlled by the server and server tools. Hands-on experience with use server-side tools such as Perl, CGI, ASP, etc. Prerequisite: TC 3320.
- 3999** Issues in Business Computer Telecommunications (4)
Readings, discussion, and research on contemporary and/or significant issues in business computer telecommunications. May be repeated for credit when content varies.
- 4266** Network Operating Systems and Architecture (4)
The study of the network operating systems and their functionality, network integration and components management, and operating system environments. Hands-on experience will use an updated NOS and include network configuration, PC scripts, using a shell, and API interfaces. Prerequisite: TC 3250.
- 4277** Telecommunications Industry and Regulatory Issues (4)
Study of major companies and their market strategies, trends in the telecommunications marketplace and job market, international aspects of telecommunications. Legal problems related to wired and wireless communications. Prerequisite: TC 3250.
- 4300** Telecommunications Systems Analysis and Design (4)
The process and practice of network analysis and design from the user perspective. Topics include analysis, requirements specification, topology identification, technologies, and design of a LAN or WAN as a solution to business needs. Prerequisite: TC 3250.
- 4877** Internship in Telecommunication (2)
Supervised work experience in a department-approved program with a company, such as a telecommunications firm or telecommunications department of a business, governmental or non-profit organization. Academic assignments integrated with off-campus paid or volunteer activities. CR/NC only. May be repeated for credit. Prerequisite: TC 3250. Recommended: TC 3277.
- 4900** Independent Study (1-4)

Footnotes

¹Has a prerequisite not included in the option.

²Business Administration majors should consider taking PSYC 1100 to satisfy the Critical Thinking Requirement after completing the prerequisite.

³Course meets foundation course requirement for the

M.B.A. program.

❑ Not more than 12 units of VITA coursework can be counted toward undergraduate degree requirements.



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Marine Science

► [Undergraduate Courses](#)

Moss Landing Marine Laboratories

The undergraduate curriculum is designed to fulfill major requirements for qualified upper division and graduate students. Such students can plan their academic schedules to provide for one or more terms at the Moss Landing Marine Laboratories and will be considered as in-residence at Hayward. Students may also take one or two all-day courses at Moss Landing to supplement their on-campus schedule. (The Admissions Office has information for concurrent registration.)

Interested students should make early application because enrollment is limited. Consult advisors in the Department of Biological Sciences or the Department of Geological Sciences for further details. An information brochure is available from the biology office or the Director's office at Moss Landing Marine Laboratories.

For additional information on the Marine Sciences program at Moss Landing Marine Laboratories, see Marine Science in the Graduate section of this catalog.

Undergraduate Courses

The course prefix for the following courses is M SC.

Units are given in quarter units; hours are hours per week for a semester.

Courses Offered through the Department of Biological Sciences

- 4103** Marine Ecology (6)
A field oriented introduction to the interrelationships between marine and estuarine organisms and their environment with emphasis on quantitative data collection and analysis. Prerequisites: BIOL 3110, STAT 3031 or equivalent and consent of instructor. Two hrs. lect., 6 hrs. lab/field.
- 4104** Quantitative Marine Science (6)
Mathematical methods for analysis of biological, chemical, and physical data from the marine environment; experimental design, parametric and non-parametric statistics; computers and programming techniques.

Prerequisites: Basic college math. Not for Biological Science B.S. degree credit or for Marine Science M.S. degree credit. Three hrs. lect., 3 hrs. lab.

- 4105** Marine Science Diving (4.5)
Scientific SCUBA diving course. Diving physics, physiology, dive planning, research diving techniques, marine life identification, and diver rescue. Open water diver training includes navigation, search and light salvage, scientific methods, small boat diving, photography and videography, and night diving. Prerequisites: certified SCUBA diver (or equivalency as determined by instructor), upper division science major status, thorough physical examination, ability to pass swimming test, instructor's consent. One hr. lect., 6 hrs. lab.
- 4112** Marine Birds and Mammals (6)
Systematics, morphology, ecology, and biology of birds and mammals. Prerequisites: BIOL 3580; M SC 4103 recommended. Two hrs. lect., 6 hrs. lab./field.
- 4113** Marine Ichthyology (6)
The taxonomy, morphology and ecology of marine fishes. Not open to students with credit for BIOL 4570. Prerequisites: BIOL 1403 or BIOL 3580. Two hrs. lect., 6 hrs. lab./field.
- 4124** Marine Invertebrate Zoology I (6)
A field oriented introduction to the structure, systematics, evolution and life histories of the major and minor marine phyla. Prerequisites: college zoology or consent of instructor; M SC 4103 recommended. Not open to students with credit for BIOL 3521-22. Two hrs. lect., 6 hrs. lab/field.
- 4125** Intertidal Invertebrates of California (4.5)
A field oriented introduction to the structure, systematics, evolution and life histories of the minor marine invertebrate phyla. Prerequisites: BIOL 1403; M SC 4103 and 4124 recommended. Not open to students with credit for BIOL 3521-22. One hr. lect., 6 hrs. lab/field.
- 4131** Marine Botany (6)
Introduction to the plants of the sea, marshes, and dunes, with emphasis on the morphology, taxonomy and natural history of seaweeds and vascular plants. Prerequisites: M SC 4103 recommended. Two hrs. lect., 6 hrs. lab/field.
- 4135** Physiological Ecology of Marine Algae (6)
Biology of seaweeds and phytoplankton, modern methods in algae physiological research including respiration, enzyme activity, biochemical composition. Modern methods in algae physiological research, hands-on experience in basic electronic instrumentation, chemical separations, optical measurements, culturing methods, radioisotope techniques. Prerequisites: M SC 4103, 4131, 4144, or consent of instructor. Two hrs. lect., 6 hrs. lab/field.
- 4144** Biological Oceanography (6)
The ocean as an ecological system. Emphasis on the

complexity of organismal-environmental interaction of the plankton, the transfer of organic matter between trophic levels and nutrients cycles. Laboratory sessions will include methods in sampling, shipboard techniques, identification of the plankton, and current analytical techniques. Prerequisites: general biology, general chemistry. Two hrs. lect., 6 hrs. lab.

4570 Ichthyology (4)
(See BIOL 4570 for course description.)

4900 Independent Study (1.5-6)

Courses Offered through the Department of Geological Sciences

4141 Geological Oceanography (6)
A study of the structures, physiography and sediments of the sea bottom and shoreline. Not open to students who have completed GEOL 4141. Prerequisite: GEOL 3702, and recommended: any course in general oceanography (concurrent registration satisfactory). Three hrs. lect., 3 hrs. lab. One field trip.

4142 Physical Oceanography (6)
An introduction to the nature and causes of various oceanic motions including currents, waves, tides, and mixing and the physical properties of seawater. Limited use of calculus. Prerequisite: college algebra; college physics recommended. Three hrs. lect., 3 hrs. lab.

4143 Chemical Oceanography (6)
An introduction to the theoretical and practical aspects of the chemistry of the oceans, including major salts, dissolved gases, nutrient ions, carbonate system, transient tracers, and shipboard sampling techniques. Prerequisites: One year college chemistry. Two hrs. lect., 6 hrs. lab.

4900 Independent Study (1.5-6)



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Department Information

UNDERGRADUATE PROGRAMS

California Studies

- ▶ [Department Information](#)
- ▶ [Program Description](#)
- ▶ [Minor in California Studies](#)
- ▶ [Footnote](#)

Department of Geography and Environmental Studies
College of Arts, Letters, and Social Sciences
Office: Robinson Hall 220
Phone: (510) 885-3193

Professors Emeriti: Herbert M. Eder (Geography and Environmental Studies), Richard J. Orsi (History)

Professors: David J. Larson (Geography and Environmental Studies), Sherman L. Lewis (Political Science), Scott Stine (Geography and Environmental Studies)

Associate Professor: Karina Garbesi (Geography and Environmental Studies)

Assistant Professor: Robert A. Phelps (History)

Director: David J. Larson

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

The minor in California Studies offers coursework on California with emphasis on the state's history, government, geography, ethnic diversity, and environment. Such a focus on California's diverse and sizable population, economic development, and geo-social regions will better prepare graduates to address the ongoing economic, demographic, and social evolution challenging California and its political institutions.

Minor in California Studies

The minor consists of 28-29 units. At least 18 of these units must be taken outside the student's major.

I. Core Requirements (20-21 units)

1. HIST 3500 History of California (4)
2. POSC 3120 State and Local Politics and Government (4) or
POSC 3150 Politics of California (4)

3. GEOG 3505 Geography of California (4)

4. One course (4 units) on the California ethnic experience, selected from:

ANTH 3505 Indians of California (4); COMM 3400 The Ethnic Media in America (4); E S 3210 Latina Women in the U.S. (4), 3805 Mexican and Latin American Immigration (4), 4290 Latino Politics and Public Policy (4); HIST 3515 The Mexican American and the American Southwest (4); SOC 3416¹ Sociology of the Mexican-American Family (4)

5. One course (4-5 units) on California environmental and scientific perspectives, selected from:

ANTH 4240¹ Data Analysis in Archeology (4), 4250¹ Field Course in Archeology (5); BIOL 3015¹ Natural History of Marine Organisms (4), 3031¹ Nature Study (4), 3210¹ Woody Plants of California (4), 4200¹ Plant Taxonomy (4); GEOG 4350¹ Water Resources and Management (4); HIST 3505 California Environmental History (4); POSC 4171 Public Policy and the Environment (4)

II. Electives (8 units)

Any course listed above which was not taken in the core, or any course from the following list:

ECON 3500¹ Regional and Urban Economics: Survey (4); GEOG 3400¹ Field Geography of the San Francisco Bay Region (4), 3525 Geography of California Wine Country (3), 3526 Field Geography of California Wine Country (1); GEOL 3100 Geology of the Western National Parks (4); HIST 3503 History of the San Francisco Bay Area (4), 4032 Introduction to Public History (4); POSC 3113 Political Internship (4), 3130 Urban Politics (4), 3310 Political Parties and Campaigning (4)

Any Cooperative Education course with substantial content unique to California and approved in advance by a California Studies advisor.

Footnote

¹ Has a prerequisite which is not applicable to the program.



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Mathematics

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- ▶ [Mathematics Option: Liberal Studies](#)
- ▶ [Single Subject Matter Preparation Program](#)
- ▶ [Basic Skills Courses](#)
- ▶ [Undergraduate Courses](#)

Department Information

Department of Mathematics and Computer Science
 College of Science
 Office: North Science 335
 Phone: (510) 885-3414
 E-mail: mathcs@csuhayward.edu
<http://www.mcs.csuhayward.edu>
 Student Service Center: North Science 337
 Phone: (510) 885-4011

Professor Emeritus: Charles M. Marut

Professors: James S. Daley, Kathleen Hann, Edward L. Keller (Associate Chair), Gary E. Lippman, Massoud Malek, Russell L. Merris, Christopher L. Morgan, William R. Nico (Computer Science Coordinator), Edna E. Reiter (Chair), Istvan Simon, Stuart Smith, William Thibault, Bruce E. Trumbo, Donald L. Wolitzer, Ytha Y. Yu

Associate Professors: Jagdish Bansiya, Edward A. Billard, Kevin A. Brown, Kevin E. Callahan, Julie S. Glass, Dan Jurca, Thomas W. Roby, Farzan Roohparvar, Assim Sagahyroon

Assistant Professors: Leann Christianson, Roger W. Doering, Levent Ertaul, Madhavi Gandhi, Lynne L. Grewe, Hilary J. Holz, C. Matthew Johnson, Chung-Hsing OuYang, David Yang

Lecturers: Paula Albert, Jack A. Carter, Francis Conlan, Michael A. Contino, Dorothy E. Fujimura, Phil Gonsalves, Ching-Cheng Lee, David L. Pugno, Denise Sargent-Natour, Jean Simutis

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

Modern technological society has many fields that need specialists in mathematics. The Department of Mathematics and Computer Science offers a variety of courses intended for those who want to pursue a career in mathematics as well as those who wish to develop quantitative and problem-solving skills for use in other fields.

Students choose to major in mathematics for a number of reasons. Some intend to become high school, community college, or university teachers. Others seek careers in business, industry, or government, where mathematically trained people are in demand. An undergraduate major in mathematics is one of the best preparations not only for studying advanced Mathematics, but also for graduate work in Computer Science, Statistics, Operations Research, Actuarial Science, and the Natural Sciences. Most law schools are pleased to accept students with rigorous and logical training in Mathematics.

Many students combine their study of mathematics with the study of computer science. A popular option is to obtain a double major in Mathematics and Computer Science. Or students may earn a major in one of these fields and minor in the other.

The major requires six lower division courses and eleven upper division mathematics courses. The requirements are flexible enough that a student can choose one of several options according to his/her interest.

Each student is assigned a faculty advisor when (s)he declares a major and should consult this advisor regularly. A booklet containing a number of sample schedules, as well as further information about the mathematics major, is available in the Mathematics/Computer Science Student Service Center (North Science 337) or see the departmental website. Although it is not a requirement, mathematics majors are urged to take as many courses as possible in an area such as Biology, Chemistry, Economics, Management Sciences, Physics, or Statistics. These are all fields where Mathematics plays a significant role, and it is important for a mathematics major to appreciate the relevance of the subject in applications. Study of one or more foreign languages is also recommended, especially for those students anticipating graduate study.

Career Opportunities

Actuary • Computer Analyst • Cryptologist • Economist • Engineer • Engineering Analyst • Financial Analyst • Market Researcher • Mathematician • Numerical Analyst • Operations Research Analyst • Personnel Representative • Programmer • Professor/Teacher • Publisher Representative • Statistician • Stockbroker • Technical Writer

Features

Cal State Hayward students can participate in the Mathematics Club, which features lectures by students and faculty and offers a variety of social activities.

Each year the department awards a number of scholarships

covering a portion of fees for the subsequent year. Scholarship applications may be obtained from the department student service center office during the Winter quarter.

Qualified upper division and graduate students may be employed as graders for classes. Also, students may earn credit in mathematics by tutoring in the Mathematics Lab.

Students who intend to earn a high school teaching credential after graduation may apply most of their mathematics major courses to meet the standards of California's Single Subject Matter Preparation Program for a Single Subject Credential in Mathematics.

Math majors who continue on to earn a master's degree in mathematics may pursue a career as a community college mathematics teacher.

Preparation

For Advanced Placement course equivalencies, see Registration chapter.

Major Requirements (B.S.)

Because requirements are subject to change, consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 68 units; the BS degree requires a total of 180 units.

I. Lower Division Requirements (24 units)

This requirement consists of the following six courses:

MATH 1304, 1305, 2304 The Calculus sequence
CS 1160 Introduction to Computer Science and Programming Methods
MATH 2101 Elements of Linear Algebra
MATH 2150 Discrete Structures
(Mathematics majors may substitute MATH 3151 or MATH 4151 for MATH 2150.)

A student who has recently taken a pre-calculus course in high school should be prepared to begin the calculus sequence. A student with three years of high school mathematics, including two years of algebra and one year of geometry, should be prepared to take MATH 1130, or possibly MATH 1300. Students who are unsure about what mathematics course to begin with should call the department office. Students may not enroll in any baccalaureate level mathematics or computer science courses unless they have met the Entry Level Mathematics (ELM) requirement, or are exempt from it. Contact the Testing Office 885-3661 for more information.

II. Upper Division Requirements (44 units)

Every Mathematics major is required to complete one of the following options:

Option A (44 units)

Required courses:

MATH 3000 Introduction to Abstract Mathematics and

Proofs (4) (Mathematics majors are encouraged to take MATH 3000 as early as possible.)

MATH 3100 Linear Algebra (4)
MATH 3331 Differential Equations (4)

The following two sequences:

MATH 3121-3122 Abstract Algebra I and II (4, 4)
MATH 3300-3301 Analysis I and II (4, 4)

One sequence from the following five:

MATH 3151-4151 Combinatorial Mathematics (4, 4)
MATH 3215-4215 Geometry (4, 4)
MATH 3361-4361 Differential Equations (4, 4)
MATH 3750-4750 Numerical Analysis (4, 4)
MATH 3841-4841 Optimization (4, 4)

Electives: Two upper division mathematics courses (8 units), which may include any cross-listed, upper division course in Statistics or Computer Science (but not MATH 4012, 4013, 4014).

Option B - Applied Mathematics (44 units)

Required courses:

MATH 3000 Introduction to Abstract Mathematics and Proofs (4) (Mathematics majors are encouraged to take MATH 3000 as early as possible.)

MATH 3100 Linear Algebra (4)
MATH 3331 Differential Equations (4)

Three out of the four courses from the following two sequences:

MATH 3121-3122 Abstract Algebra I and II (4, 4)
MATH 3300-3301 Analysis I and II (4, 4)

Two sequences from the following four:

MATH 3151-4151 Combinatorial Mathematics (4, 4)
MATH 3361-4361 Differential Equations (4, 4)
MATH 3750-4750 Numerical Analysis (4, 4)
MATH 3841-4841 Optimization (4, 4)

Electives: One upper division mathematics course (4 units), which may include any cross-listed, upper division course in Statistics or Computer Science (but not MATH 4012, 4013, 4014).

Option C - Mathematics Teaching (44 units)

Required courses:

MATH 3000 Introduction to Abstract Mathematics and Proofs (4) (Mathematics majors are encouraged to take MATH 3000 as early as possible.)

MATH 3121 Abstract Algebra I (4)
MATH 3100 Linear Algebra (4)
MATH 3215 Geometry I (4)
MATH 3300 Analysis I (4)
MATH 3331 Differential Equations (4)
MATH 3600 Number Theory (4)
MATH 4040 History of Mathematics (4)

STAT 3401 Introduction to Probability Theory I (4)

One from the following three courses:

- MATH 3122 Abstract Algebra II (4)
- MATH 3301 Analysis II (4)
- MATH 4215 Topics in Geometry (4)

Electives: One upper division mathematics course (4 units), which may include any cross-listed, upper division course in Statistics or Computer Science (but not MATH 4012, 4013, 4014).

A student who completes Option C can satisfy rather easily the requirements for the State-approved Single Subject Matter Preparation Program in Mathematics, a program of courses designed to prepare the student for entry into the Credential Program in Mathematics, provided that judicious choices of mathematics elective courses and general education courses are made. To accomplish this, the student who completes Option C must:

1. choose MATH 4901 Senior Seminar (2) and MATH 4900 Tutoring in Mathematics (2) in the mathematics elective category.
2. complete STAT 2010 Elements of Statistics for Business and Economics (5).

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

The minor consists of 28 units.

Required courses:

- MATH 1304 Calculus I (4)
- MATH 1305 Calculus II (4)
- MATH 2101 Elements of Linear Algebra (4)
- MATH 2304 Calculus III (4)

Two courses from the following list:

- MATH 3100 Linear Algebra (4)
- MATH 3121 Abstract Algebra I (4)
- MATH 3215 Geometry I (4)
- MATH 3300 Analysis I (4)
- MATH 3331 Differential Equations (4)

One 4-unit upper division mathematics course, which may include any cross-listed, upper division course in Statistics or Computer Science (but not MATH 4012, 4013, 4014).

Minor in Computer Science

The complete description of this minor may be found in the undergraduate Computer Science section of the current Cal State Hayward catalog. It is relatively easy for a Mathematics major to complete a minor in Computer Science. To do this, the student should take the following courses in addition to those required for the mathematics major.

CS 2360 Programming Methodology and Introduction to Software Engineering (4)

CS 2430 Computer Organization and Assembly Language Programming (4)

Three upper division courses as follows:

A. Two courses from the following list:

CS 3120 Programming Language Concepts (4)

CS 3240 Data Structures and Algorithms (4)

CS 3430 Computer Architecture (4)

CS 4560 Operating Systems (4)

B. One upper division Computer Science elective. This may be a third course from (A) or any course from category IV of the requirements for the major in Computer Science.

Mathematics Option: Liberal Studies

Area VII, Credential Track, or Area VI, General Track (24-25 units)

MATH 1304¹ Calculus I (4)

MATH 1305 Calculus II (4)

Either MATH 2101 Elements of Linear Algebra (4)

or MATH 2150 Discrete Structures (4)

Either MATH 2304 Calculus III (4) or STAT 2010 Elements of Statistics for Business and Economics (5) or STAT 3010 Statistical Methods in the Social Sciences (4)

Eight units of upper division Mathematics electives, selected with approval of advisor (8)

Single Subject Matter Preparation Program

See the Single Subject Matter Preparation Program chapter in the undergraduate section of this catalog for a description of the Single Subject Matter Preparation Program in Mathematics.

Basic Skills Courses

The course prefix for the following courses is MATH.

0801, Elementary Algebra A and B (4 each)

0802² A two-quarter sequence in basic mathematics and elementary algebra. CR/NC grading only. On successful

completion of this sequence, students should register for MATH 0950. Units will not count toward the baccalaureate degree. Prerequisite--MATH 0801: ELM score of 370 or below (ELM scores are required for registration); MATH 0802: Grade of CR in MATH 0801. (F, W, Sp)

0900  Elementary Algebra (4)

A one quarter course in elementary algebra. CR/NC grading only. On successful completion of this course, students should register for MATH 0950. Prerequisite: ELM score of 380-470. (ELM scores are required for registration.) Not open to students who have passed MATH 0802. Units will not count toward the baccalaureate degree. (A)

0911 Algebra Lab (2)

Supplemental study, discussion, and practice in the theory, problems, and applications of elementary and intermediate algebra. CR/NC grading only. Units will not count toward the baccalaureate degree. May be repeated for credit (non-baccalaureate) with permission of the Math/CS Department. Co-requisite: enrollment in MATH 0801, 0802, 0900, or 0950.

0950 Intermediate Algebra (4)

Operations with algebraic expressions, exponents and radicals; linear and quadratic equations; systems of equations and inequalities; linear and quadratic functions and their graphs; elementary conic sections; word problems. CR/NC grading only. Prerequisite: Grade of CR in MATH 0802 or MATH 0900 or an ELM score of 480-540. Units will not count toward baccalaureate degree.

The course prefix for the following courses is MATH.

Computer Science courses offered by the Department of Mathematics and Computer Science are fully described in the Computer Science section of this catalog.

A student who has recently taken a pre-calculus course in high school should be prepared to enter calculus. A student with three years of high school mathematics, including two years of algebra and one year of geometry, should be prepared to take MATH 1130, or possibly MATH 1300. Such students, and others who are unsure about what mathematics course to begin with, should call the Mathematics and Computer Science Department for advice. Also, Assessment and Testing (885-3661) offers placement tests that can assist students in finding the appropriate starting class.

1110  The Nature of Mathematics (4)

[CAN MATH 2]

This course is designed to introduce the student to mathematics as an art and mathematics as a tool, emphasizing the place of mathematics in today's world. Will satisfy the general education requirement for nonmajors. Prerequisite: satisfactory completion of Entry-Level Mathematics requirement. (F, W, Sp)

Undergraduate Courses

- 1130**  College Algebra (4)
[CAN MATH 10]
Functions and graphs: polynomials, rational functions, exponential and logarithmic functions. Prerequisite: satisfactory completion of Entry-Level Mathematics requirement. See note at beginning of course listings. (A)
- 1300** Trigonometry and Analytic Geometry (4)
Definitions, properties and graphs of the trigonometric functions. Applications. Analytic geometry of conic sections. A preparatory course for calculus. Prerequisites: MATH 1130 or departmental permission. See note at beginning of course listings.
- 1304** Calculus I (4)
[CAN MATH SEQ C = MATH 1304, 1305, 2304]
Differential calculus. Limits and continuity. Exponential and logarithmic functions. Techniques and applications of differentiation. Prerequisite: MATH 1300 or departmental permission. See note at beginning of course listings.
- 1305** Calculus II (4)
[CAN MATH SEQ C = MATH 1304, 1305, 2304]
Integral calculus. The indefinite integral, area, the Fundamental Theorem and techniques of integration. Applications to volume, arc length, physical and biological problems. Prerequisite: MATH 1304. (A)
- 1810** Mathematics for Business and Social Sciences I (4)
[CAN MATH 30]
Precalculus review, limits and continuity, differential calculus including derivatives of polynomial, exponential and logarithmic functions, integral calculus, applications to business and social sciences. Prerequisite: MATH 1130. (A)
- 1820** Mathematics for Business and Social Sciences II (4)
Multivariable calculus, Lagrange multipliers, elementary differential equations, systems of linear equations, matrices, determinants, difference equations, elementary graph theory, applications to business and social sciences. Prerequisite: MATH 1810. (A)
- 2011**  Number Systems (4)
Structure of number systems, place value, whole numbers, integers, fractions, decimals, real numbers. Standard and nonstandard algorithms, mental computation. Algebra as generalized arithmetic. Divisibility, prime and composite numbers, GCF, LCM. Ratio, proportion, percents. Not open to students with credit for MATH 4021. Prerequisite: satisfactory completion of the Entry Level Mathematics (ELM) requirement.
- 2101** Elements of Linear Algebra (4)
[CAN MATH 26]
Vector spaces, linear transformations, matrices, systems

of linear equations. Stress on 2 and 3 dimensions, including geometric and other applications. Prerequisite: MATH 1305 or 1820 (may be taken simultaneously with, or after, MATH 2304). (A)

- 2150** Discrete Structures (4)
Topics in discrete mathematics. Elementary logic, set theory, and relations; induction, enumeration techniques, recurrence relations, trees and graphs. Boolean algebra, algorithm analysis. Prerequisite: MATH 1304. (A)
- 2304** Calculus III (4)
[CAN MATH SEQ C = MATH 1304, 1305, 2304]
Infinite series, convergence of power series. Vectors in space. Partial derivatives, chain rule, directional derivative and gradient. Curves and surfaces. Maxima and minima. Multiple integrals. Prerequisite: MATH 1305. (A)
- 3000** Introduction to Abstract Mathematics and Proofs (4)
Introduction to methods and proof techniques in several branches of mathematics, with topics chosen from logic, set theory, abstract algebra, number theory, analysis, and graph theory. Provides a transition from lower division mathematics courses, which concentrate on computation, to upper division proof-oriented mathematics courses. Prerequisite: MATH 2304; co-requisite: MATH 2101.
- 3100** Linear Algebra (4)
Abstract vector spaces, linear transformations, matrices and determinants. Dual spaces and inner product spaces. Eigenvalues and eigenvectors. Prerequisites: MATH 2101 and either 2150 or 3000. (MATH 3000 is strongly encouraged for mathematics majors and may be taken concurrently with MATH 3100.) (F, Sp)
- 3121** Abstract Algebra I (4)
Equivalence relations, binary operations. Integers: divisibility, factorization, integers modulo n . Groups: subgroups, cyclic groups, permutation groups, quotient groups. Homomorphisms and isomorphisms. Selected topics as time permits. Prerequisites: MATH 2101 and either 2150 or 3000. (MATH 3000 is strongly encouraged for mathematics majors and may be taken concurrently with MATH 3121.)
- 3122** Abstract Algebra II (4)
Rings and fields: integral domains, ideals, quotient rings, polynomial rings, roots of polynomials, algebraic extensions and finite fields. Selected topics as time permits. Prerequisite: MATH 3121.
- 3151** Combinatorics (4)
Theory of counting, including partitions, Stirling numbers, generating functions. Applications of Burnside's lemma from multiple transitivity to the Polya-Redfield Theorem. Ferrers diagrams, symmetric functions, and majorization. Prerequisites: MATH 2101 and either 2150 or 3000.
- 3215** Geometry I (4)

An axiomatic approach to incidence, neutral, Euclidean, and non-Euclidean plane geometry. Various models, such as the Euclidean, hyperbolic, and taxicab planes, will be considered throughout the course. Prerequisite: MATH 2101 and either 2150 or 3000. (MATH 3000 is strongly encouraged for mathematics majors and may be taken concurrently with MATH 3215.) (Y)

3300, Analysis I, II (4 each)

3301 The real numbers, limits, sequences and series of real numbers, Bolzano-Weierstrass theorem. Continuity, intermediate and extreme value theorems, uniform continuity, sequences of functions. Topology of \mathbb{R}^n . Differentiation, chain rule, implicit and inverse function theorems. Prerequisites for MATH 3300: MATH 2101, 2304, and either 2150 or 3000. Prerequisite for MATH 3301: MATH 3300. (MATH 3000 is strongly encouraged for mathematics majors and may be taken concurrently with MATH 3300.) (Y)

3320 Calculus of Vector Functions (4)

Differentiation and integration of vector valued functions; gradient, divergence, and curl; cylindrical and spherical coordinates; theorems of Green and Stokes. Prerequisite: MATH 2304 and MATH 2101 (2101 may be taken concurrently).

3331 Differential Equations (4)

Methods of solution and applications of first order differential equations. Linear n -th order equations with emphasis on equations of 2nd order. Other topics may include power series solutions, Laplace transforms, linear systems. Prerequisite: MATH 2304.

3361 Ordinary Differential Equations (4)

Series solution of linear differential equations with variable coefficients, two point boundary value problems, systems of differential equations, phase plane analysis. Prerequisites: MATH 2101 and 3331.

3401, Introduction to Probability Theory I, II (4 each)

3402 (See STAT 3401, 3402 for course descriptions.)

3502, Statistical Inference I, II (4 each)

3503 (See STAT 3502, 3503, for course descriptions.)

3600 Number Theory (4)

Euclid's algorithm, prime numbers, congruences, theorems of Fermat and Euler, quadratic residues. Prerequisites: MATH 2101 and either 2150 or 3000. (MATH 3000 is strongly encouraged for mathematics majors and may be taken concurrently with MATH 3600.) (Y)

3750 Numerical Analysis I (4)

Basic numerical methods and analysis; practical solutions of problems from engineering, science, and mathematics. Computer representation of real numbers, errors, root finding, interpolation, numerical integration, ordinary differential equations. Prerequisites: CS 1160, MATH 2101

and 2304. Cross-listed with CS 3750. (Y)

- 3841** Linear Programming (4)
Problems of maximizing or minimizing a linear function subject to linear constraints; typical applications involve planning ("programming") the allocation of limited resources to achieve an optimal result. Topics include problem formulation, solution procedures, duality theory, sensitivity analysis, special problems (e.g., transportation and assignment problems). Prerequisite: MATH 2304 and competence in matrix algebra. (Y)
- 3865** Mathematical Modeling (4)
Discrete and continuous mathematical models. General introduction to the use of difference and differential equations, probability and statistics, and matrices for solving realistic problems. Computer simulation. Emphasis on effective written reports. Prerequisites: MATH 2101 and 2304.
- 3898** Cooperative Education (2)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 8 units. A maximum of 2 units will be accepted toward the Mathematics major. CR/NC grading only. Prerequisites: at least 2.0 GPA; departmental approval of activity; completion of lower division Mathematics major requirements and upper division standing. (A)
- 4012** Geometry and Measurement (4)
Properties of 2- and 3-dimensional figures including congruence, similarity, proportional reasoning, area, perimeter, volume, surface area. Informal constructive proofs of properties of angles, polygons, parallel lines and Pythagorean theorem. Transformational geometry. Measurement systems, estimation, coordinate geometry. Not open to students with credit for MATH 4022. Prerequisite: MATH 2011.
- 4013** Statistics, Data Analysis, and Probability (4)
Displaying and interpreting data via graphs, tables and charts. Descriptive statistics, including mean, median, mode and range. Basic Survey design, including possible sources of biases. Elementary discrete probability. Dependent and independent events. Cross-listed with STAT 4013. Not open to students with credit for MATH 4023. Prerequisites: MATH 2011 and satisfactory completion of the Entry Level Mathematics requirement.
- 4014** Algebra and Functions (4)
Patterns and functional relationships. Linear and quadratic equations and inequalities. Interpretation of graphs, multiple representations of functions. Factoring and completing the square. Proportional reasoning. Systems of linear equations. Not open to students with credit for MATH 4024. Prerequisites: MATH 2011 and satisfactory completion of the Entry Level Mathematics requirement.
- 4040** History of Mathematics (4)

The historical development of mathematical ideas and techniques. Prerequisite: calculus or consent of instructor. (Y)

- 4121** Advanced Algebra (4)
Theory of groups, including factor groups, Jordan-Holder Theorem, Sylow theorems. Mappings and homomorphisms. Introduction to rings and fields. Topics continued in MATH 6121. Prerequisite: MATH 3122.
- 4151** Graph Theory (4)
Introduction to graph theory. Graphic sequences. Planar graphs and the theorems of Euler and Kuratowski. Bipartite graphs. Connectivity and spanning trees. Hamiltonian graphs. Matching, chromatic and characteristic polynomials. Cospectral graphs and the graph isomorphism problem. Algorithms. Prerequisites: MATH 2101 and either 2150 or 3000.
- 4170** Theory of Automata (4)
(See CS 4170 for course description.)
- 4215** Topics in Geometry (4)
Topics in geometry such as algebraic, differential, finite, or projective geometry, convexity, packing and tiling, polytopes, and isoperimetric problems. Prerequisites: MATH 3215 or consent of instructor. May be repeated once for credit with consent of the chair.
- 4235** Introduction to Knot Theory (4)
An introduction to the theory of knots and links. Topics covered include Reidemeister moves, knot invariants, including 3-colorings, the linking number, the Alexander polynomial, the Kauffman bracket and Jones polynomial. As time permits, some applications in biology and/or chemistry will be discussed. Prerequisite: MATH 3121.
- 4245** Analysis of Algorithms (4)
(See CS 4245 for course description.)
- 4340** Introduction to Complex Variables (4)
Introduction to theory of functions of complex variables. Prerequisite: MATH 3300.
- 4350** Theory of Functions of a Real Variable (4)
Pointwise and uniform convergence, Taylor series, Riemann integration, sets of measure zero, Lebesgue's theorem on the Riemann integral, the metric space of continuous functions, and selected topics. Prerequisite: MATH 3300.
- 4360** Introduction to Topology (4)
Topological spaces, metric spaces, continuity, connectedness and compactness. Prerequisite: MATH 3300.
- 4361** Partial Differential Equations (4)
Differential equations of physics: the wave equation, the heat equation, Laplace's equation; boundary-value problems. Elementary Sturm-Liouville theory, Fourier

series, Fourier and Laplace transforms, Bessel functions, selected topics. Prerequisite: MATH 3331.

- 4365** Dynamical Systems (4)
Introduction to dynamical systems and applications. Variational calculus, Lagrangian dynamics, principle of critical action, Hamiltonian systems and symplectic mechanics, Hamilton-Jacobi equation, chaotic and nonlinear systems, fractals. Prerequisites: MATH 3100, 3300, 3331, or consent of instructor.
- 4401** Introduction to Stochastic Processes (4)
(See STAT 4401 for course description.)
- 4412** Probability Theory (4)
(See STAT 4412 for course description.)
- 4750** Numerical Analysis II (4)
Continuation of MATH 3750. Numerical solution of linear systems, matrix norms, approximation of functions, algebraic eigenvalues. Prerequisite: MATH/CS 3750. Cross-listed with CS 4750. (F, W, Sp)
- 4841** Topics in Optimization (4)
Sequel to MATH 3841. Topics to be drawn from linear and/or nonlinear programming. Linear programming topics may include integer programming, game theory, network programming; nonlinear programming topics include optimality conditions and solution procedures for unconstrained and constrained optimization problems. May be repeated once for credit with consent of the chair. Prerequisite: MATH 3841.
- 4900** Independent Study (1-5)
- 4901** Senior Seminar (2)
Exploration of topics in mathematics. Topics selected from the literature to illustrate relationships among various areas of mathematics. Oral presentations and paper required. Prerequisite: senior standing in mathematics (completion of 32 units of mathematics courses) or permission of the instructor.

Footnotes

¹Students with insufficient mathematics background may have to complete MATH 1300 before entering MATH 1304. Students subject to the Entry Level Mathematics requirement (ELM) must fulfill that requirement before enrolling in any baccalaureate level mathematics course.

²Completion of MATH 0801-2 or MATH 0900 does not satisfy the ELM requirement. Students must also pass MATH 0950 before enrolling in a baccalaureate-level mathematics course.

³Upper division mathematics and computer science majors will not receive credit for this course.

Intended for prospective elementary and junior high school teachers; Mathematics and Computer Science majors will not receive credit for this course.



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Department Information

Department of Chemistry and Biochemistry
College of Science
Office: North Science 431
Phone: (510) 885-3452

Professors Emeriti: Kevin D. Cadogan, Richard S. Monson,
Charles T. Perrino

Professors: Michael K. Leung, Richard T. Luibrand (Chair), Larry
G. Scheve

Associate Professors: Joy C. Andrews, Ann A. McPartland

Assistant Professors: Michael Groziak, Chul-Hyun Kim, Anne T.
Kotchevar

Lecturers: Ronald J. Hicks, Mark A. Karplus

*Please consult the 2006-2007 online catalog for any changes that
may occur.*

Program Description

The Department of Chemistry and Biochemistry provides a strong education in chemistry and biochemistry that prepares its students to function and thrive in our society. The department attempts to increase the problem solving and critical thinking skills of all students. Non-science students learn about the scientific and chemical aspects of everyday life that allow them to understand issues related to the environment, energy production, disease prevention, and nutrition. Students of the sciences learn the fundamentals of chemistry that control the interactions of elements and molecules which form the building blocks in nature. Chemistry majors receive extensive instruction in predicting chemical reactivity. Building on an understanding of mathematics, physics, and biology, chemistry majors receive a background in the major disciplines of chemistry including inorganic, analytical, organic, physical, and biochemistry. Students learn the protocols and

Career Opportunities

Features

techniques for working safely with chemicals. The department recognizes the importance of the pursuit of new knowledge in the development of skilled scientists and productive members of society, and encourages its students to participate in research projects and cooperative educational opportunities.

The undergraduate programs offered by the department include: B.S. degree major in Chemistry, B.S. degree major in Biochemistry, B.A. degree major in Chemistry, B.A. degree option in Biochemistry, and a minor in Chemistry. Descriptions of these programs and their requirements are listed below. (See the "Graduate Programs" section of this catalog for descriptions of the department's M.S. in Chemistry and M.S. Option in Biochemistry.)

The B.S. degree in Chemistry is approved by the American Chemical Society (ACS). A certified degree is a valuable credential that serves as national-level recognition for completing a rigorous academic chemistry curriculum in an ACS-approved department. The extra rigor of an ACS certified degree is valued by both potential employers and graduate schools.

Analytical Chemist • Biotechnologist • Biochemist • Biophysicist • Chemical Engineer • Chemist • Dietitian • Environmental Chemist • Food and Drug Inspector • Forensic Chemist • Geochemist • Geophysicist • Health Professional • Materials Scientist • Organic Chemist • Perfumer • Petrologist • Pharmacist • Pharmaceutical Chemist • Physical Chemist • Pollution Control • Professor • Public Health Educator • Quality Control Technician • Teacher • Water Purification Chemist

The Department of Chemistry and Biochemistry employs highly qualified and experienced technical staff to assist faculty and students in their course and research experiences.

The Department of Chemistry and Biochemistry maintains laboratory equipment and instruments typical of comparable institutions. These include UV, infrared and visible (diode array) and atomic absorption (AA: flame, graphite furnace and cold vapor) spectrophotometers; high performance liquid chromatograph (HPLC) and ion chromatograph (IC); NMR and FTIR spectrometers; and capillary gas chromatograph/mass spectrometer (GC/MS). Other specialized equipment includes a research-grade dry box, growth chamber, anaerobic chamber, and environmental field sampling equipment. There are PC-controlled and various desktop versions of the HPLC and visible spectrometers; all other instruments besides the NMR are PC-controlled. The AA, HPLC, IC and GC/MS are all available online so that students can spend extensive one-on-one time with the instruments. A molecular modeling facility is also available for instruction and research.

The university offers Cooperative Education coursework which provides chemically related employment opportunities and students may, with department approval, obtain credit for this work.

Preparation and Prerequisites

Major Requirements (B.S.)

The Alchemist Club, a student affiliate of the American Chemical Society, is available to students majoring in Chemistry. They are active in many aspects of the department and provide free peer tutoring, participate in fund-raising for special projects, and take interesting field trips to local industries.

For Advanced Placement course equivalencies, see Registration chapter. Prerequisite courses for all chemistry courses must be passed with a grade of "C-" or better. Requests for Academic Renewal will be allowed only on a space-available basis.

Major in Chemistry

The Bachelor of Science degree, major in Chemistry, is designed to prepare students for graduate school in Chemistry and related fields and for industrial employment which involves research or a high degree of technical proficiency. It is intended for students desiring the highest degree of specialization. Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 110-111 units; the B.S. degree requires a total of 180 units.

- I. Lower Division (55 units)
 - CHEM 1101, 1102, 1103 General Chemistry (15)
 - CHEM 2200 Quantitative Analysis (5)
 - MATH 1304, 1305, 2304, 2101 Calculus I, II, III, and Elements of Linear Algebra (16)

 - CS 1020 Introduction to Computers or CS 1160 Introduction to Computer Science and Programming Methods (4)

 - PHYS 1001, 1002, 1003 General Physics (15)
- II. Upper Division (55-56 units)
 - CHEM 3301, 3302, 3303 Organic Chemistry (15)
 - CHEM 3511, 3512, 3513 Physical Chemistry Lecture (9)
 - CHEM 3531, 3532 Physical Chemistry Laboratory (4)
 - CHEM 4161, 4162 Advanced Inorganic Chemistry (6)
 - CHEM 4180 Inorganic Chemistry Laboratory (2)
 - CHEM 4240 Instrumental Methods of Analysis (4)
 - CHEM 4411 General Biochemistry (4) or CHEM 3400 Introductory Biochemistry (4)

Advanced Chemistry Electives (11-12 units) including:

- A. At least three courses chosen from the following: CHEM 4311, 4412, 4430, 4521, 4601, 4602, 4810.
- B. Additional courses chosen from the above list of electives or from the following: CHEM 3401, 3405, 4413, 4700, 4900. (No more than four units of CHEM 4810 and 4900 combined may be applied to the Advanced Chemistry Electives for the B.S. degree major.) Graduate courses (numbered 6000 or above) may be taken to satisfy this requirement.

III. Recommended Electives

At least one year's study of a foreign language is strongly recommended, although it is no longer required. Students contemplating graduate study later, particularly leading to the Ph.D. degree, are advised that chemistry departments at many universities require a reading knowledge of scientific German or Russian. Further, the ability to translate German chemical literature is particularly useful in some areas of specialization within chemistry. Courses in the Modern Languages and Literatures department may be applied to the G.E. requirements in Area C.

Major in Chemistry with Option in Forensic Science

The Bachelor of Science degree, major in Chemistry with an option in Forensic Science, is designed to prepare students for a career as forensic chemists. This program also provides students with the necessary background to pursue graduate study in forensic science. The major in Chemistry with a Forensic Science option consists of 119-120 units.

I. Lower Division (63 units)

BIOL 1401 Molecular and Cellular Biology (5)
BIOL 1402 Plant Biology (5)
BIOL 1403 Animal Biology (5)
CHEM 1101, 1102, 1103 General Chemistry (5, 5, 5)
CHEM 2200 Quantitative Analysis (5)
CRJA 2200 Basic Criminal Investigation (4)
MATH 1304, 1305, 2304 Calculus I, II, III (4, 4, 4)
PHYS 2701, 2702, 2703 Introductory Physics (4, 4, 4)

II. Upper Division (53 units)

BIOL 3121 Principles of Genetics (5)
BIOL 4485 PCR, DNA sequencing and Fragment Analysis (4)
CHEM 3200 Bioanalytical and Forensic Instrumentation (4)
CHEM 3301, 3302, 3303 Organic Chemistry (5, 5, 5)
CHEM 3400 Introductory Biochemistry (4)
CHEM 3511, 3512 Physical Chemistry Lecture (3, 3)
CHEM 4240 Instrumental Methods of Analysis (4)
CHEM/BIOL 4830 Seminar in Forensic Research (1), taken 3 times
CRJA 3800 Comparative Evidence and Its Evaluation (4)
STAT 3031 Statistical Methods in Biology (4)

III. Elective (3-4 units)

Select one course (minimum 3 units) from the following list:

CHEM 3513 Physical Chemistry Lecture (3), 3898 Cooperative Education (3-4), 4161 Advanced Inorganic Chemistry (3), 4700 Survey of Chemical Literature (2); CRJA 3400 Advanced Criminal Investigation (4)

Major in Biochemistry

The Bachelor of Science degree, major in Biochemistry, is designed to prepare students for entrance into graduate programs of biochemistry and medical schools. In addition, students completing this program are prepared to secure employment in the areas of biochemistry, biotechnology and related fields. This

program is intended for students desiring the highest degree of technical proficiency in this specialized area at the undergraduate level. Since requirements are subject to change, consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 115-120 units, the B.S. degree requires a total of 183 units.

I. Lower Division (63-66 units)

BIOL 1401 Molecular and Cellular Biology (5)
BIOL 1402 Plant Biology (5)
BIOL 1403 Animal Biology (5)
CHEM 1101, 1102, 1103 General Chemistry (15)
CHEM 2200 Quantitative Analysis (5)

CS 1020 Introduction to Computers or CS 1160 Introduction to Computer Science and Programming Methods (4)

MATH 1304, 1305, 2304 Calculus I, II, and III (12)

PHYS 2701, 2702, 2703 Introductory Physics or PHYS 1001, 1002, 1003 General Physics (12-15)

II. Upper Division (52-56 units)

STAT 3031 Statistical Methods in Biology or STAT 3502 Statistical Inference I (4)

CHEM 3301, 3302, 3303 Organic Chemistry (15)
CHEM 3511, 3512, 3513 Physical Chemistry (9)
CHEM 4411, 4412, 4413 General Biochemistry (12)
CHEM 4430 General Biochemistry Laboratory (4)
CHEM 4431 Advanced Biochemistry Laboratory (2)

Two courses (6-10 units) chosen from the following: BIOL 3121 (5), 3425 (5) or 4455 (4); CHEM 4240 (4), 4440 (3), 4450 (3), 4460 (3)

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

Major Requirements (B.A.)

The Bachelor Arts degree, major in Chemistry (including the Option in Biochemistry), is intended for students who would like to use their knowledge of chemistry as a starting point for a career in medicine, molecular biology, dentistry, teaching, environmental remediation, law, or business. Graduate degrees in these fields follow naturally from the undergraduate training required of the chemistry student. The major consists of 84 units; the B.A. degree requires a total of 180 units.

I. Lower Division (48 units)

CHEM 1101, 1102, 1103 General Chemistry (15)
CHEM 2200 Quantitative Analysis (5)

MATH 1304, 1305, 2304 Calculus I, II, III (12)

CS 1020 Introduction to Computers, or CS 1160 Introduction to Computer Science and Programming Methods (4)

PHYS 2701, 2702, 2703 Introductory Physics (12)

II. Upper Division (36 units)

CHEM 3301, 3302, 3303 Organic Chemistry (15)

CHEM 3511, 3512, 3513 Physical Chemistry Lecture (9)

Upper Division Chemistry Electives (12 units) including all upper-division courses except CHEM 3010 and 3800 (no more than two units of CHEM 4900 and 4810 combined may be applied to the Upper Division Chemistry Electives for the B.A. degree). Graduate courses (numbered 6000 and above) may be taken in satisfaction of this requirement.

Sample Program

Fall	Winter	Spring
<i>Freshman Year</i>		
CHEM 1101 ¹	CHEM 1102	CHEM 1103
MATH 1304	MATH 1305	MATH 2304
GE	GE	GE
<i>Sophomore Year</i>		
CHEM 3301 ¹	CHEM 3302	CHEM 3303
PHYS ²	PHYS ²	PHYS ²
CHEM 2200	CS	MATH 2101 ³
GE	GE	GE
<i>Junior Year</i>		
CHEM 3511	CHEM 3512	CHEM 3513
CHEM 3531 ⁴	CHEM 3532 ⁴	CHEM Elective
GE	GE	GE
<i>Senior Year</i>		
CHEM 4161 ⁵	CHEM 4162 ⁵	CHEM 4180 ⁵
CHEM Elective	CHEM 4240 ⁵	CHEM Elective
GE	GE	GE

Major in Chemistry with Option in Biochemistry

The Bachelor of Arts degree, major in Chemistry with an option in Biochemistry, allows students to concentrate on an important subdivision of chemical-biological studies. It prepares students for graduate work in Biochemistry and related fields such as molecular biology and biotechnology. It is recognized as being one of the most useful and popular programs for students who intend to fulfill premedical or predoctoral requirements. The major with an option in Biochemistry consists of 111-114 units; the B.A. degree requires a total of 180 units.

I. Lower Division (63 units)

BIOL 1401 Molecular and Cellular Biology (5)

BIOL 1402 Plant Biology (5)

BIOL 1403 Animal Biology (5)
CHEM 1101, 1102, 1103 General Chemistry (15)
CHEM 2200 Quantitative Analysis (5)

CS 1020 Introduction to Computers, or CS 1160 Introduction to
Computer Science and Programming Methods (4)

MATH 1304, 1305, 2304 Calculus I, II, III (12)
PHYS 2701, 2702, 2703 Introductory Physics (12)

II. Upper Division (48-51 units)

CHEM 3301, 3302, 3303 Organic Chemistry (15)
CHEM 3511, 3512, 3513 Physical Chemistry Lecture (9)
CHEM 4411, 4412, 4413 General Biochemistry (12)
CHEM 4430 General Biochemistry Laboratory (4)

Two courses (8-11 units) in Biology chosen from the following:
BIOL 3121 (5), 3140 (4), 3150 (4), 3405 (6), 4120 (4), 4430
(4), 4505 (4), 4510 (4)

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

Students majoring in other fields may wish to complete a coherent pattern of work in chemistry for the purpose of expanding their employment and educational opportunities. Students successfully completing this program will have the fact entered on their university records. The minor consists of 38-39 units.

CHEM 1101, 1102, 1103 General Chemistry (15)
CHEM 2200 Quantitative Analysis (5)
CHEM 3301, 3302, 3303 Organic Chemistry (15)

One of the following courses:

CHEM 3400 Introductory Biochemistry (4)
CHEM 3511 Physical Chemistry Lecture (3)
CHEM 4411 General Biochemistry (4)
CHEM 4601 Environmental Chemistry I (4)

Undergraduate Courses

The course prefix for the following courses is CHEM.

Courses for Non-Science Majors

1000 Popular Topics in Chemistry (4)
Nonmathematical discussions of subjects as: energy in the universe and the cell, evolution, nutrition, chemical senses, drugs, hormones, synthetics, and pollution.
Designed as a general education course for non-science

majors. Not open to those with credit for CHEM 2001 or 2002. (F, Sp)

- 1100** Introduction to College Chemistry (5)
Elementary principles of chemistry: measurement, properties of matter, chemical symbols and formulas, chemical equations, stoichiometry, atomic structure, gas laws, solutions. Prerequisite: Satisfaction of the ELM exam requirement. Three hrs. lect., 6 hrs. lab., disc. (F, Su)
- 1605** Basic Chemistry for Healthier Living (4)
A chemical perspective for healthier living. Basic inorganic chemistry: an introduction to atomic and molecular structure. A-F grading only. Not open to those with credit for CHEM 1601. Three hrs. lect., 3 hrs. lab.
- 2001** Chemistry for Human Nutrition (4)
Essential chemical and biochemical information for understanding human nutrition. The structure of atoms and matter, chemical reactions and the structure, function, and metabolism of important biomolecules such as proteins, enzymes, carbohydrates, and lipids. A-F grading only. Not open to those with credit for CHEM 1000 or 2002.
- 2002** Introductory Chemistry for Genes and Heredity (4)
An introduction to atomic and molecular structure. Emphasis on organic functional groups of biological interest and biopolymers. Recognition of DNA sequencing and gene structure. A-F grading only. Not open to those with credit for CHEM 1000 or 2001.
- 3010** The Making of Wine (4)
The history, chemistry and technology of wine making. Production of standard types of wine from grape varieties. Laboratory illustrates chemical principles as applied to wine making. Not an elective for the chemistry major. Three hrs. lect., 3 hrs. lab. (Sp)
- 3999** Issues in Chemistry (4)
Readings, discussion, and research on contemporary and/or significant issues in chemistry. May be repeated for credit when content varies.

Courses for Chemistry and Other Science Majors

- 1101**, General Chemistry (5 each)
1102, [CAN CHEM SEQ A = CHEM 1101, 1102, 1103]
1103 Fundamental principles of chemistry, chemical structure, bonding, equilibrium, dynamics, and reactions. Laboratory includes study of chemical and physical behavior of elements and compounds, and qualitative and quantitative analysis. Prerequisites: CHEM 1100, one year high school chemistry, two years high school mathematics, and one year high school physics are recommended. CHEM 1101 is prerequisite to CHEM 1102; CHEM 1102 is prerequisite

to CHEM 1103. Three hrs. lect., 6 hrs. lab. each. (1101: F, W; 1102: W, Sp; 1103: Sp, Su)

- 1601, 1602, 1603** Basic Chemistry for the Health Sciences (4 each)
A one-year, terminal sequence in chemistry for students preparing for careers in health-related sciences including nursing. CHEM 1601: basic inorganic chemistry; CHEM 1602: basic organic chemistry and introduction to biochemistry; CHEM 1603: basic biochemistry. Does not satisfy chemistry requirement for physical science, geology, physics or biology B.S. majors. Prerequisite: high school algebra. CHEM 1601 is not open to those with credit for CHEM 1605. CHEM 1601 (or 1605) is prerequisite to CHEM 1602; CHEM 1602 is prerequisite to CHEM 1603. Three hrs. lect., 3 hrs. lab. each. (1601: F; 1602: W; 1603: Sp)
- 2200** Quantitative Analysis (5)
Elementary gravimetric and volumetric analysis; instrumental methods of analysis. Prerequisite: CHEM. 1103. Three hrs. lect., 6 hrs. lab. (F, Tent. Su)
- 2301, 2302** Survey of Organic Chemistry (4 each)
Classes of organic compounds and reactions emphasizing subjects in biological sciences. For non-chemistry majors not planning advanced work in organic chemistry. Prerequisite: CHEM 1103, CHEM 2301 is prerequisite to CHEM 2302. CHEM 2301, 4 hrs. lect.; CHEM 2302, 2 hrs. lect., 6 hrs. lab. (2301: W; 2302: Sp)
- 3200** Bioanalytical and Forensic Instrumentation (4)
Introduction to biotechnical and forensic laboratory analytical methods, including preparation of biological and other forensic samples for analysis. Operation and data analysis of instruments such as HPLC, GC, GC/MS and AA. Prerequisite: CHEM 3303. Two hrs. lect., 6 hrs. lab.
- 3301, 3302, 3303** Organic Chemistry (5 each)
An introduction to the chemistry of aliphatic, aromatic, and heterocyclic compounds emphasizing basic principles. Laboratory work in basic techniques and synthesis. Prerequisite: CHEM 1103; CHEM 3301 is prerequisite to CHEM 3302; CHEM 3302 is prerequisite to CHEM 3303. Three hrs. lect., 6 hrs. lab. each. (3301: F, W; 3302: W, Sp; 3303: Sp, Su)
- 3400** Introductory Biochemistry (4)
A survey of biochemistry emphasizing the structure and metabolism of biomolecules such as amino acids, proteins, carbohydrates, lipids and nucleic acids. Prerequisite: CHEM 2302 or 3303. (F, Sp)
- 3401** Introductory Biochemistry Laboratory (2)
Introduction to laboratory techniques in biochemistry. Prerequisite: CHEM 3400 (may be taken concurrently) or CHEM 4411. Six hrs. lab. (F)
- 3405** Clinical Chemistry (5)
Biochemical processes associated with disease; principles

underlying the use of laboratory tests to monitor human health; quantitation of body fluid constituents such as enzymes, carbohydrates, cholesterol, hormones and other metabolites. Prerequisites: CHEM 3400 and CHEM 3401. Three hrs. lect., 6 hrs. lab. (Alt. W)

- 3511, Physical Chemistry Lecture (3 each)
3512, Fundamental physical laws, theoretical principles and
3513 mathematical relations of chemistry. Prerequisites: CHEM 2200, MATH 2304 and PHYS 1003 (or concurrent) or PHYS 2703; CHEM 3511 is prerequisite to CHEM 3512; CHEM 3512 is prerequisite to CHEM 3513. (3511: F; 3512: W; 3513: Sp)
- 3531, Physical Chemistry Laboratory (2 each)
3532 Experience in the measurement of physicochemical properties, digital computer analysis of experimental data, and report writing. Prerequisites: CS 1020 or CS 1160 (or concurrent enrollment); CHEM 3511 (or concurrent enrollment); CHEM 3531 is prerequisite to CHEM 3532. Six hrs. lab. each. (3531: F; 3532: W)
- 3800 Achievements of Women in Science (4)
(See BIOL 3800 for course description.)
- 3898 Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 4 units. No units may be counted toward the Chemistry major or minor. CR/NC grading only. Prerequisites: at least a 2.0 GPA; departmental approval of activity; completion of CHEM 2200. (A)
- 4161, Advanced Inorganic Chemistry (3 each)
4162 The bonding, structure and reactivity of inorganic compounds. CHEM 4162 emphasizes the structure and chemistry of coordination compounds and complex ions, including the application of group theory to spectral analysis. Prerequisites: CHEM 3513 and CHEM 3303 or CHEM 2302. CHEM 4161 is prerequisite to CHEM 4162. (4161: F; 4162: W)
- 4180 Inorganic Chemistry Laboratory (2)
Laboratory experience in the preparation and characterization of selected inorganic compounds. Prerequisite: CHEM 3532 and CHEM 4162. Six hrs. lab. (Sp)
- 4240 Instrumental Methods of Analysis (4)
Principles of operation and application of instrumental methods including visible/ultraviolet and infrared spectrophotometry, atomic emission and absorption, nuclear magnetic resonance and mass spectrometry, gas-liquid and high-performance liquid chromatography, electrochemistry, and data acquisition and instrument control using microcomputers. Prerequisites: CHEM 3303; CHEM 3512 (may be taken concurrently). Two hrs. lect., 6 hrs. lab. (W)

- 4311** Advanced Organic Chemistry (4)
Mechanistic approaches to synthetic studies; chemistry of carbonyl compounds; chemistry of heterocyclic and polycyclic compounds with emphasis on those of natural origin or biological interest. Prerequisite: CHEM 3303. (F)
- 4411, 4412** General Biochemistry (4 each)
Selected topics in the chemistry and metabolism of biologically important compounds; investigation of intermediate reactions and cycles involved in metabolism; thermodynamics and kinetics of enzyme-catalyzed reactions. Prerequisites: CHEM 2200 and CHEM 3303; CHEM 3511 (may be taken concurrently); or consent of instructor. CHEM 4411 is prerequisite to CHEM 4412. (4411: F; 4412: W)
- 4413** General Biochemistry (4)
Topics in biochemistry including the chemistry of protein and amino acid metabolism and the chemistry of nucleotides and nucleic acids, with emphasis on the latter. Prerequisites: CHEM 4412. (Sp)
- 4430** General Biochemistry Laboratory (4)
Laboratory techniques in biochemistry. Intended to supplement General Biochemistry, CHEM 4411 and CHEM 4412. Prerequisites: CHEM 4412 (or concurrent). Two hrs. lect., 6 hrs. lab. (W)
- 4431** Advanced Biochemistry Laboratory (2)
Advanced laboratory techniques in biochemistry. The focus is on biochemical procedures not covered in CHEM 4430 (advanced electrophoresis techniques, advanced protein characterization and emphasis on the analysis of nucleic acids). Prerequisites: CHEM 4413 (or concurrent), and CHEM 4430. Six hrs. lab. (Sp)
- 4440** Protein Structure (3)
The basic structural motifs found in proteins such as enzymes, antibodies, membrane-bound proteins, virus-coat proteins, and nucleic acid binding proteins. Discussion will also focus on the biological significance of these structures. Prerequisite: CHEM 4413. (F)
- 4450** Nucleic Acid Chemistry (3)
Nucleic acid structure, modification, and processing. Oligonucleotide synthesis, methods essential to the chemical characterization of nucleic acids, and virus structure and replication. Prerequisite: CHEM 4413 (W)
- 4460** Major Organ Biochemistry (3)
The unique biochemistry of the major organs of the human body including brain, heart, liver, kidney, skeletal muscle, adipose tissue, endocrine glands, and reproductive organs. The metabolism unique to a particular organ system and to inter-relationships with the other organs of the body. Prerequisite: CHEM 4413 (Sp)
- 4521** Elements of Chemical Thermodynamics (4)
Selected topics in classical and statistical thermodynamics, with emphasis on thermochemical

calculations. Prerequisite: CHEM 3513. (Tent. F)

- 4601** Environmental Chemistry I (4)
A study of the environmental aspects of chemistry: aqueous multiple equilibria, pH effects of solubility, carbon dioxide systems, inorganic pollutants in water and soils. Prerequisites: CHEM 1103 and CHEM 2302. Three hrs. lect., 3 hrs. lab. (F)
- 4602** Environmental Chemistry II (4)
Additional environmental aspects of chemistry: organic pollutants in the environment, photochemical smog, hazardous waste treatment, toxicology, environmental chemical analysis. Prerequisite: CHEM 4601. Three hrs. lect., 3 hrs. lab. (W)
- 4700** Survey of Chemical Literature (2)
Systematic introduction to the use of the chemical literature. Prerequisites: two years of chemistry. May be taken CR/NC by majors. (Sp)
- 4810** Undergraduate Research (2)
Independent research under the guidance of a member of the Chemistry Department faculty. Prerequisites: CHEM 3532 and consent of instructor. May be repeated once for credit. Students should consult with faculty members to determine specific research opportunities.
- 4830** Seminar in Forensic Research (1)
Seminar on chemical aspects of forensic research. Current issues in forensic science based on chemical concerns.
- 4900** Independent Study (1-4)

Footnotes

- 1** Sequence may be taken W, Sp, Su Quarters
- 2** Differs for B.A. and B.S.
- 3** Not required for B.A.



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HELP



Modern Languages and Literatures

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Department Information

Department of Modern Languages and Literatures
College of Arts, Letters, and Social Sciences
Office: Warren Hall UM67
Phone: (510) 885-3211

Professors Emeriti: Roland Heine, Yolanda Patterson, Helen Schulak

Professors: L. Iliana Holbrook (Chair), Kenneth Mikos, Teresa Myintoo, Vincenzo Traversa

Associate Professor: Rodolfo Galan

Assistant Professors: Marcelo Paz, Meiling Wu

Lecturers: Leslie Frates, Jose Llanes, Victoria Robertson, Yoko Shioiri-Clark

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

The Department of Modern Languages and Literatures at Cal State Hayward offers courses of study leading to a Bachelor of Arts degree with majors in French and Spanish. Academic Minors are offered in French, German, Italian, Portuguese, Russian, Sign Language, and Spanish. Elementary courses are offered also in Filipino, Japanese, Latin, Mandarin, and Vietnamese. All programs have been designed to provide students with the cultural understanding and the academic knowledge necessary for future pursuits in the teaching of foreign languages and literatures or for graduate work in the same fields. Students may utilize other

Career Opportunities

Features

languages and literatures offered in the department as part of a Special Major in various area studies.

A Bachelor of Arts degree major in International Studies is administered through the Department of Political Science. The International Studies major consists of an integrated group of courses reflecting international aspects of various disciplines and requires intermediate level competency in a modern language. It is designed to provide the student with a broad base of understanding of the interrelationship of the world community, while at the same time providing the opportunity to specialize in an area of interest. An International Studies minor is also offered. See the listing under International Studies for further details.

With the growing involvement of the United States in international business and the increasingly multicultural character of American society itself, the importance of foreign languages in nearly every kind of occupation is considerable. The majors in foreign languages and literatures, therefore, may lead to teaching careers and represent direct, practical assets in other fields such as business, industry and commerce, civil service, law, library science, media, science, health services, social work, travel, and tourism.

Teaching • Business • Industry and Commerce • Law and Law Enforcement • Library Science • Mass Communication • Health and Social Services • Travel and Tourism • Translation and Interpretation • Government Service

The department faculty come from a wide variety of national and academic backgrounds and have traveled extensively in the countries whose languages they are teaching. Slides, films, dramatic performances, potluck dinners and other activities provide the opportunity for students to interact with one another and with their professors. For those who wish to further their interest in a foreign culture and language, the Department of Modern Languages and Literatures offers clubs. Foreign Language Clubs include the French Club, the German Club, the Tomodachi Club (Japanese Cultural Club), and the Spanish Language Club.

For those who wish to accelerate their learning of another language, the department offers a Summer quarter intensive program in Spanish which covers one year's work in one quarter and yields twelve units of credit. The language laboratory is another useful feature of the department. In the laboratory students can listen to tapes which help improve their pronunciation, fluency, and comprehension. In addition, students are encouraged to take advantage of the California State University International Programs. They can take courses in a variety of universities abroad and apply them towards a degree at Cal State Hayward.

Preparation

For students to enroll at the proper level of language instruction, the department recommends the following guideline: one year of high school foreign language instruction equals one quarter of Cal State Hayward instruction. Students are expected not to repeat credit already earned in high school unless significant time has passed since the initial instruction. The department offers placement exams to facilitate student placement. Students should contact the department before enrolling in a lower division language class.

Students in foreign language majors, minors, and options may have lower division language requirements waived for those courses below the level at which they enroll.

Advanced Placement

A student who has successfully completed the advanced placement course in a foreign language or literature in high school and has a score of 3 or better on the Advanced Placement Examination will receive 8-12 units of credit equivalent to two or three courses of a foreign language as listed below.

If you have completed the French Language examination with a score of 3 or better, you will receive 12 units of credit equivalent to MLL 2101, 2102, and 2103. If you have completed the German Language examination with a score of 3 or better, you will receive 12 units of credit equivalent to MLL 2201, 2202, and 2203. If you have completed the Spanish Language examination with a score of 3 or better, you will receive 12 units of credit equivalent to MLL 2401, 2402, and 2403. If you have completed the Spanish Literature examination with a score of 3 or better, you will receive 8 units of credit equivalent to MLL 3400 and 4455.

Please consult an advisor in your major department for clarification and interpretation of your major requirements.

I. French

The French major consists of 44-68 units; the B.A. degree requires a total of 180 units. Acquisition of a reading knowledge in a second foreign language is strongly recommended.

Note: Admission to the B.A. program in French has been temporarily put on hold. Contact the department for additional information.

A. Lower Division (0-24 units) ¹

MLL 1101-2-3 Elementary French (12)

MLL 2101-2-3 Intermediate French (12), or equivalent

MLL 2110 French Conversation (4) is strongly recommended

B. Upper Division (44 units)

MLL 3101-2 Composition and Advanced Composition (8)
and

MLL 3130 French Culture and Civilization (4)

Thirty-two units from among the other upper division French courses (32)

Major Requirements (B.A.)

II. Spanish

The Spanish major consists of 44-72 units; the B.A. degree requires a total of 180 units. Students are expected to consult with Spanish division advisors in order to assure a well balanced program of upper division courses. Proficiency in another foreign language is strongly recommended.

A. Lower Division (0-28 units)

- MLL 1401-2-3 Elementary Spanish (12)
- MLL 2401-2-3 Intermediate Spanish (12)
- MLL 2410 Spanish Conversation (4)

B. Upper Division (44 units)

1. MLL 3401-2-3 Advanced Composition and Syntax (12)

Plus One course selected from the following group:
MLL 3411, 3412 Spanish Linguistics, Phonetics (4)

2. Eight (8) units of Spanish American Literature from among the following courses:
MLL 3461, 3463, 3495, 4495

3. Eight (8) units of Spanish Peninsular Literature from among the following courses:
MLL 4455, 4459, 4460

4. Twelve (12) additional units should be selected from among all upper division Spanish courses. (*Note:* Courses numbered MLL 4455, 4459, 4460, and 4495 may be repeated as content changes. If repeated, the courses may be applied to more than one category of requirements: Groups 2 and 4 or Groups 3 and 4)

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

I. French Minor (20-44 units)

A. Lower Division (0-24 units)

- MLL 1101-2-3 Elementary French (12)
- MLL 2101-2-3 Intermediate French (12), or equivalent
- MLL 2110 French Conversation (4) is strongly recommended

B. Upper Division (20 units)

- MLL 3101-2 Composition and Advanced Composition (8)
- Any three other upper division French courses (12)

II. German Minor (24-36 units)

A. *Lower Division* ¹

MLL 1201-2-3 Elementary German (12)
MLL 2201-2-3 Intermediate German (12)

B. *Upper Division*

MLL 3201 Advanced German (4)
MLL 3291 German Studies (4)
Four units of upper division coursework in German studies, with consent of advisor (4)

III. Italian Minor (24-36 units)

A. *Lower Division (12-24 units)* ¹

MLL 1301-2-3 Elementary Italian (12)
MLL 2303 Intermediate Italian (4), plus 8 additional units of intermediate Italian, with consent of advisor (12)

B. *Upper Division (12 units)*

MLL 3308 Italy Today (4)
Four units of upper division coursework in contemporary spoken Italian, with consent of advisor (4)

Four units of upper division coursework in Italian literature, with consent of advisor (4)

IV. Portuguese Minor (24-36 units)

A. *Lower Division (12-24 units)* ¹

MLL 1851-2-3 Elementary Portuguese or
MLL 1861-72 Self-paced Elementary Portuguese (12)
MLL 2851-2-3 ² Intermediate Portuguese (12)

B. *Upper Division (12 units)*

MLL 3851 Portuguese Grammar and Composition (4)
MLL 3861 ² Topics in Portuguese Literature (4)
MLL 3871 ² Topics in Brazilian Literature (4)

V. Russian Minor (20-44 units)

A. *Lower Division (8-24 units)* ¹

MLL 1501-2-3 Elementary Russian (12) or
MLL 1521-31 Self-Paced Elementary Russian (12)
(an alternative method of satisfying first-year lower division requirements for the minor in Russian)
MLL 2501-2-3 Intermediate Russian (12)

B. *Upper Division (20 units)*

MLL 3587 ¹ Topics in Russian Literature and Culture (in English) (4)
Upper division coursework in advanced Russian, with consent of advisor. The number of required units to be determined by advisor.

VI. Sign Language Minor (24-36 units)

A. *Lower Division (12-24 units)* ¹

MLL 1901-2-3 Elementary Sign Language (12)
MLL 2901-2-3 Intermediate Sign Language (12)

- B. Upper Division (12 units)*
MLL 3902 Deaf Culture (4)
MLL 3903 Topics in American Sign Language (4)
MLL 3904 Sign Language: Field Work (4)

VII. Spanish Minor (24-48 units)

- A. Lower Division (0-24 units)*¹
MLL 1401-2-3 Elementary Spanish (12)
MLL 2401-2-3 Intermediate Spanish (12)
- B. Upper Division (24 units)*
MLL 3401-2-3 Advanced Composition and Syntax (12)
MLL 3411 Introduction to Spanish Linguistics (4)
or MLL 3412 Spanish Phonetics (4)
- C. One course from each of the two following areas:*
Spanish Peninsular literature:
MLL 4455, 4459, 4460 (4)
- Spanish-American literature:
MLL 3461, 3463, 3495, 4495 (4)
MLL 3400 may replace one of the above required courses.

Modern
Languages
Options: Liberal
Studies

Program for French and Spanish

Areas I and II.B (0-12 units)¹
Third quarter of first year and 1st and 2nd quarters of second year college-level courses

Area VII Credential Track or Area VI General Track (24 units)
Third quarter of second year (4)
Twenty units of upper division courses in the same language, with no more than 4 units taught in translation (20)

Program for Italian, Portuguese, Russian

Areas I and II.B (0-12 units)¹
1000-level first year courses

Area VII Credential Track or Area VI General Track (24 units)
2000-level second year courses (12)
Twelve units upper division courses (12)

Single Subject
Matter
Preparation
Programs

The department no longer offers Single Subject Matter Preparation Programs.

Sign Language Option: Liberal Studies

- Areas I and II.B (0-12 units)
- MLL 1901 Elementary Sign Language I (4)
 - MLL 1902 Elementary Sign Language II (4)
 - MLL 1903 Elementary Sign Language III (4)

Area VII Credential Track or Area VI General Track
(24 units)

- MLL 2901 Intermediate Sign Language I (4)
- MLL 2902 Intermediate Sign Language II (4)
- MLL 2903 Intermediate Sign Language III (4)
- MLL 3902 Deaf Culture (4)
- MLL 3903 Topics in American Sign Language (4)
- MLL 3904 Sign Language: Field Work (4)

Undergraduate Courses

The course prefix for the following courses is MLL.

General

- 1104** Gender in Francophone Literature and Culture (4)
Gender issues in the francophone cultures of Europe, Africa, the Caribbean, Asia, and Quebec through literature and the arts. (In English)
- 1831** Introduction to Asian Thought (4)
The thought of China and Japan, past and present, as expressed in literature. (In English)
- 2831** Asian Thought (4)
The school of Zen in China and Japan as expressed in its philosophical texts, visual art, music, and literature. How texts demonstrate the interconnection among the arts disciplines.
- 3611** New Chinese Cinema (4)
An interdisciplinary study of new Chinese cinema filmmakers and cultural movements of greater China (including mainland China, Taiwan, Hong Kong) since the emergence of new cinematic movements of the 80's to the present.
- 3730** The Neo-Classical Tradition (4)
(See ENGL 3730 for course description.)
- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 4 units. A maximum of 4 units will be accepted toward the majors and minors offered by Modern Languages. CR/NC grading only. Prerequisites: at least 2.0 GPA; departmental approval of activity. (A)
- 3999** Issues in Modern Languages and Literatures (4)
Readings, discussion, and research on contemporary and/or significant issues in modern languages and literatures. May be repeated for credit when content

varies.

4900 Independent Study (1-4)

5900 Independent Study (1-4)

6900 Independent Study (1-4)

Modern Literature in English Translation

3119 French Literature in English Translation (4)
(See description under French courses.)

3140 French Films: France through the Eye of the
Camera (in English) (4)
(See description under French courses.)

3240 German Film: from **Metropolis** to Present German
Cinema (in English) (4)
(See description under German courses.)

3291 German Studies (in English) (4)
(See description under German courses.)

3587 Topics in Russian Literature and Culture (in
English) (4)
(See description under Russian courses.)

3612 Modern Chinese Short Stories (in English) (4)
(See description under Chinese courses.)

3831 Experiencing Japanese Culture (in English) (4)
(See description under Japanese courses.)

3938 Italian American Women Through Literature (in
English) (4)
(See description under Italian courses.)

4461 Spanish Film (in English) (4)
(See description under Spanish courses.)

*NOTE: Students may be admitted to any of the following courses
by consent of instructor.*

Arabic

1721 Elementary Arabic I (4)
Functional usage of Arabic in the four language skills:
listening, speaking, reading, and writing. Authentic audio,
video, and reading materials are presented. Students are
encouraged to be creative with the language in and out of
class.

1722 Elementary Arabic II (4)
A continuation of MLL 1721. Prerequisite: MLL 1721 or
consent of instructor.

1723 Elementary Arabic III (4)

A continuation of MLL 1722. Prerequisite: MLL 1722 or consent of instructor.

Chinese

- 1601**, Elementary Mandarin Chinese I, II, III (4 each)
1602, Introduction to the speaking, understanding, reading, and
1603 writing Mandarin Chinese. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. (F, W, Sp) MLL 1601 is prerequisite to MLL 1602, or consent of instructor; MLL 1602 is prerequisite to MLL 1603, or consent of instructor.
- 1611** Intensive Elementary Chinese (4)
Designed for students with conversational background in Mandarin Chinese, Cantonese, Taiwanese or other Chinese dialects that require instruction in the Pinyin romanization system, in writing Chinese characters, and synthesizing Chinese grammar. Not open to students who are currently enrolled in, or have credit for MLL 1601-2-3.
- 2601**, Intermediate Mandarin Chinese I, II, III (4 each)
2602, A continuation of MLL 1603 with increased emphasis on
2603 the structure of the language, on vocabulary building and conversation, and on the appreciation of Chinese culture. (F, W, Sp) MLL 2601 is prerequisite to MLL 2602, or consent of instructor; MLL 2602 is prerequisite to MLL 2603, or consent of instructor.
- 3612** Modern Chinese Short Stories (4)
Short stories and feature films about Modern China from ante-Republic era to present. Stories by prominent writers portray controversial images of Chinese women, either as wilting flowers or powerful dragon-ladies. Cultural and gender issues observed from various perspectives. May be repeated once for credit when content varies.

Filipino

- 1651**, Elementary Filipino I, II, III (4 each)
1652, Introduction to speaking, reading, and writing and
1653 understanding Filipino. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. (F, W, Sp) MLL 1651 is prerequisite to MLL 1652, or consent of instructor; MLL 1652 is prerequisite to MLL 1653, or consent of instructor.
- 2651**, Intermediate Filipino I, II, III (4 each)
2652, A continuation of MLL 1653 with increased emphasis on
2653 the structure of the language, on vocabulary building, on conversation, and on the appreciation of Filipino culture. MLL 2651 is prerequisite to MLL 2652, or consent of instructor; MLL 2652 is prerequisite to MLL 2653, or consent of instructor. (F, W, Sp)

French

- 1101,** Elementary French I, II, III (4 each)
1102, [CAN FREN SEQ A = MLL 1101, 1102, 1103]
1103 Introduction to speaking, understanding, reading, and writing French. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. (F, W, Sp) MLL 1101 is prerequisite to MLL 1102, or consent of instructor; MLL 1102 is prerequisite to MLL 1103, or consent of instructor.
- 2101,** Intermediate French I, II, III (4 each)
2102, A continuation of MLL 1103, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of the cultures of the French-speaking world. (F, W, Sp) MLL 2101 is prerequisite to MLL 2102, or consent of instructor; MLL 2102 is prerequisite to MLL 2103, or consent of instructor.
2103
- 2110** French Conversation (4)
Emphasis on the spoken language studied through texts. Strongly recommended for majors. Prerequisite: MLL 2103 or consent of instructor.
- 3101** French Composition (4)
Written French and formal grammar. Prerequisite: MLL 2103 or equivalent.
- 3102** Advanced French Composition (4)
Continuation of MLL 3101. Prerequisite: MLL 3101 or equivalent.
- 3105** French Conversation (4)
The spoken language studied and practiced. For students with a good academic background and/or literary level beyond MLL 3102 and an introductory French literature survey course. Prerequisite: MLL 3102 and consent of instructor. May be repeated for credit when content varies, with consent of instructor.
- 3109** French Medieval and Renaissance Literature (4)
The epic, Arthurian romances, satire, the theatre, poetry, Rabelaisian humor, and essays. Selections from the Chanson de Roland, Chrétien Troyes, Villon, Rabelais, Ronsard, the Pleiade, and Montaigne. Prerequisites: four units of upper division coursework in introductory French literature (prose or drama) and consent of instructor. May be repeated for credit if subject matter is different.
- 3114** 17th Century French Literature (4)
Studies in 17th Century French society and literature emphasizing the theatre (Corneille, Racine, Molière), or the non-dramatic writers (Pascal, Mme. de la Fayette, La Fontaine). Prerequisites: four units of upper division coursework in introductory French literature (prose or drama) and consent of instructor. May be repeated for credit if subject matter is different.
- 3115** 18th Century French Literature (4)
Selected topics from 18th Century French literature emphasizing writers such as Voltaire, Rousseau, and

Diderot. Prerequisites: four units of upper division coursework in introductory French literature (prose or drama) and consent of instructor. May be repeated for credit if subject matter is different.

- 3116** 19th Century French Literature (4)
Studies in Romanticism, Realism, and Naturalism emphasizing such writers as Hugo, Lamartine, Balzac, Stendhal, Flaubert, Zola, Baudelaire, Rimbaud, and Mallarmé. Prerequisites: four units of upper division coursework in introductory French literature (prose or drama) and consent of instructor. May be repeated for credit if subject matter is different.
- 3117** 20th Century French Literature (4)
Studies in the modern novel, poetry, the theatre of the absurd, and existentialism. Works by Proust, Mauriac, Gide, Camus, Sartre, Beauvoir, Ionesco, and Apollinaire. Prerequisites: four units of upper division coursework in introductory French literature (prose or drama) and consent of instructor. May be repeated for credit if subject matter is different.
- 3118** French Dramatic Performance (4)
Preparation of scenes from French theatre and of a Guignol puppet show for performance. May be repeated once for credit. Prerequisite: MLL 1102 or equivalent or consent of instructor.
- 3119** French Literature in English Translation (4)
An interdisciplinary study of major authors and movements in French literature, emphasizing literary, philosophical, historical and cultural backgrounds. May be repeated for credit once if subject matter is different. Prerequisites: Junior standing; either C- (CR) or better in ENGL 3000 or 3001, or score of 7 or better on the Writing Skills Test, or satisfaction of the graduation writing assessment requirement (GWAR) at any CSU campus including the UWSR at the Hayward campus.
- 3130** French Culture and Civilization (4)
A study of French culture through literary and linguistic examples, taken from the Middle Ages through the twentieth century, illustrating its artistic, political, social, and philosophical schools. Prerequisite: MLL 2103 or consent of instructor. May be repeated once for credit if subject matter changes.
- 3140** French Films: France Through the Eye of the Camera (in English) (4)
French language and culture in films dealing with childhood, war, women, male-female relationships, violence, social class. Development of French cinema in films by Jean Renoir, Cocteau, Truffaut, Godard and others. May be repeated once when content changes.
- 4100** French Literary Themes and Figures (4)
A study of selected themes and figures in French literature emphasizing an author, genre, or movement. Prerequisites: four units of upper division coursework in

introductory French literature (prose or drama) and consent of instructor. May be repeated for credit if subject matter is different.

German

1201, Elementary German I, II, III (4 each)

1202, [CAN GERM SEQ A = MLL 1201, 1202, 1203]

1203 Introduction to speaking, understanding, reading, and writing German. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. (F, W, Sp) MLL 1201 is prerequisite to MLL 1202, or consent of instructor; MLL 1202 is prerequisite to MLL 1203, or consent of instructor.

1221- Self-Paced Elementary German (1 each)

1232 [CAN GERM SEQ B = MLL 2201, 2202, 2203]

The self-paced series in Elementary German, divided into twelve mini-courses, allows students to complete one year of Elementary German at their individual paces. Two chapters equal 1 unit of credit. Regular class attendance is not required; however, students must meet with the instructor at least two times per chapter. MLL 1221-24 correspond to MLL 1201; MLL 1225-28 correspond to MLL 1202; MLL 1229-1232 correspond to MLL 1203. Students may register for up to 12 units in self-paced Elementary German; however, those students who had previously earned credit for any of the MLL 1201-2-3 courses cannot earn credit for the corresponding MLL 1221-32 self-paced modules, and vice versa.

1221 Definite articles, gender of nouns, personal pronouns in the nominative, present tense of some verbs.

1222 Word-order, indefinite articles, accusative of nouns.

1223 Verb-last word order, separable-prefix verbs, cardinal numbers, familiar commands, prepositions requiring the accusative, negations, function of adverbs, compound nouns, telling time.

1224 Dative of articles and personal pronouns, verbs governing the dative, two-way prepositions.

1225 Modal auxiliaries, subordinating conjunctions, genitive case.

1226 Present perfect and past tenses of regular and irregular verbs.

1227 Possessive adjectives, reflexive verbs, da-/wo-compounds, future tense.

1228 Future tense, the three forms of werden.

- 1229 Adjectival endings.
- 1230 Comparative and superlative of adjectives, adverbs vs. adjectives, infinitive constructions.
- 1231 Relative pronouns, past perfect.
- 1232 Present and past subjunctive, passive voice.

2201, Intermediate German I, II, III (4 each)
2202, [CAN GERM SEQ B = MLL 2201, 2202, 2203]
2203 A continuation of MLL 1203, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of German culture. (F, W, Sp) MLL 2201 is prerequisite to MLL 2202, or consent of instructor; MLL 2202 is prerequisite to MLL 2203, or consent of instructor.

2221- Self-Paced Intermediate German I, II, III (1
2232 each)
The self-paced series in Intermediate German, divided into twelve mini-courses, allows students to complete one year of Intermediate German at their individual paces. Regular class attendance is not required; however, students must meet with the instructor at least two times per chapter. MLL 2221-24 correspond to MLL 2201; MLL 2225-28 correspond to MLL 2202; MLL 2229-32 correspond to MLL 2203. Students may register for up to 12 units in self-paced Elementary German; however, those students who had previously earned credit for any of the MLL 2201-2-3 courses cannot earn credit for the corresponding MLL 2221-32 self-paced modules, and vice versa.

- 2221 Word-order rules, questions, negations.
- 2222 Verb tenses, imperatives.
- 2223 Modal auxiliaries, gender and plural of nouns, cases of nouns.
- 2224 Der- and ein-words, personal pronouns.
- 2225 Prepositions, interrogatives, da- and wo-compounds.
- 2226 Adjectives, comparison of adjectives and adverbs.
- 2227 Numerals, time expressions.
- 2228 Conjunctions, infinitive phrases.
- 2229 Subjunctive.
- 2230 Demonstrative and indefinite pronouns, relative clauses.
- 2231 Passive voice.

2232 Word order variations, special features of German grammar.

- 3201** Advanced German (4)
Advanced grammar and structure of the German language with emphasis on composition. Prerequisite: MLL 2203 or consent of instructor. (Y)
- 3240** German Film: from *Metropolis* to Present German Cinema (4)
Representative films from German cinema illustrating the artistic use of film during Expressionism, its propagandistic use during the Third Reich, recent films as fictional representation of the quest for German identity. May be repeated once for credit when content varies.
- 3291** German Studies (in English) (4)
Interdisciplinary course with variable topics dealing with particular aspects of German literature and culture. A significant written component is required. Course may be repeated for credit when content varies.

Greek

- 1711** Ancient Greek I (4)
A study of ancient Greek grammar to achieve skill in reading and writing both classical and New Testament (Koine) Greek.
- 1712** Ancient Greek II (4)
A continuation of MLL 1711. Prerequisite: MLL 1711 or consent of instructor.
- 1713** Ancient Greek III (4)
A continuation of MLL 1712. Prerequisite: MLL 1712 or consent of instructor.

Italian

- 1301**, **1302**, **1303**, Elementary Italian I, II, III (4 each)
[CAN ITAL SEQ A = MLL 1301, 1302, 1303]
- 1303** Introduction to speaking, understanding, reading, and writing Italian. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. (F, W, Sp) MLL 1301 is prerequisite to MLL 1302, or consent of instructor; MLL 1302 is prerequisite to MLL 1303, or consent of instructor.
- 2303** Intermediate Italian III (4)
A continuation of MLL 2302, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of Italian culture. (Sp) MLL 2302 is prerequisite to MLL 2303, or consent of instructor.
- 3308** Italy Today (4)
Discussions and readings based on the literature

reflecting cultural trends in Italy. Prerequisite: MLL 2303 or consent of instructor.

- 3938** Italian American Women through Literature (in English) (4)
A portrayal of Italian American women as emerging through literature written by men and women. Changing roles of grandmothers, mothers, and daughters and to what extent these have been influenced by inherited Italian culture patterns persisting in the U.S. Cross-listed with WOST 3938.

Japanese

- 1801**, Elementary Japanese I, II, III (4 each)
1802, Introduction to speaking, understanding, reading, and
1803 writing Japanese. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. (F, W, Sp) MLL 1801 is prerequisite to MLL 1802, or consent of instructor; MLL 1802 is prerequisite to MLL 1803, or consent of instructor.
- 2801**, Intermediate Japanese I, II, III (4 each)
2802, A continuation of MLL 1803, with increased emphasis on
2803 the structure of the language, on vocabulary building and conversation, and on the appreciation of Japanese culture. (F, W, Sp) MLL 2801 is prerequisite to MLL 2802, or consent of instructor; MLL 2802 is prerequisite to MLL 2803, or consent of instructor.
- 3831** Experiencing Japanese Culture (in English) (4)
Interdisciplinary study of Japanese culture, literature, and philosophy as manifested in classical and modern fiction, cinema and animation. Translated readings focus on the social realities of Japan. Hands-on experience of Japanese culture includes calligraphy, origami, and tea ceremony.

Portuguese

- 1851**, Elementary Portuguese I, II, III (4 each)
1852, Introduction to speaking, understanding, reading, and
1853 writing Portuguese. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. (F, W, Sp) MLL 1851 is prerequisite to MLL 1852, or consent of instructor; MLL 1852 is prerequisite to MLL 1853, or consent of instructor.
- 1861-** Self-Paced Elementary Portuguese (1 each)
1872 The self-paced series in elementary Portuguese, divided into twelve mini-courses, allows students to complete one year of Elementary Portuguese at their individual paces. Regular class attendance is not required; however, students must meet with the instructor at least two times per chapter. MLL 1861-64 correspond to MLL 1851, MLL 1865-68 correspond to MLL 1852, MLL 1869-72 correspond to MLL 1853. Students may register for up to 12 units in self-paced Elementary Portuguese; however,

those students who had previously earned credit for any of the MLL 1851-2-3 courses cannot earn credit for the corresponding MLL 1861-72 self-paced modules.

- 1861 The present tense of -ar verbs, word order, contractions of prepositions and articles.
- 1862 The present tense of -er and -ir and some irregular verbs, indefinite and negative adverbs and pronouns.
- 1863 More irregular verbs, possessives, personal information phrases.
- 1864 Irregular plurals, preterites, objective pronouns, kinship and calendar terms.
- 1865 Irregular preterites, imperfect tense, colors.
- 1866 Future and conditional tenses, comparatives and superlatives, letter writing.
- 1867 Present and past participles, perfect tenses, passive voice.
- 1868 Present subjunctive, syllabication.
- 1869 Past subjunctive, future perfect, que and qual.
- 1870 Future subjunctive, reflexives, por and para.
- 1871 Personal infinitive, simple pluperfect, diminutives and augmentatives.
- 1872 Perfect subjunctives, conditional sentences with se clauses, spelling alternation in conjugations.

2851, Intermediate Portuguese I, II, III (4 each)
2852, A continuation of MLL 1853, with increased emphasis on
2853 the structure of the language, on vocabulary building and conversation, and on the appreciation of the cultures of the Portuguese-speaking world. (F, W, Sp) MLL 2851 is prerequisite to MLL 2852, or consent of instructor; MLL 2852 is prerequisite to MLL 2853, or consent of instructor.

3851 Portuguese Grammar and Composition (4)
Advanced grammar and structure applied to composition in the language. Prerequisite: MLL 2853 or consent of instructor.

3861 Topics in Portuguese Literature (4)
A variable subject course dealing with a particular aspect of Portuguese literature. May be repeated for credit if subject matter is different. Prerequisite: MLL 2853 or consent of instructor.

3871 Topics in Brazilian Literature (4)
A variable subject course dealing with a particular aspect of Brazilian literature. May be repeated for credit if subject

matter is different. Prerequisite: MLL 2853 or consent of instructor.

Russian

- 1501, Elementary Russian I, II, III (4 each)
- 1502, Introduction to speaking, understanding, reading, and writing Russian. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. (F, W, Sp) MLL 1501 is prerequisite to MLL 1502, or consent of instructor; MLL 1502 is prerequisite to MLL 1503, or consent of instructor.

- 1521- Self-paced Elementary Russian (12)
- 1531 The self-paced series in Elementary Russian, divided into eleven mini-courses, allows students to complete one year of Elementary Russian at their individual paces. Regular class attendance is not required; however, students must meet with the instructor at least two times per chapter. Two chapters equal 1 unit of credit, with the exception of MLL 1521, where three chapters equal 2 units of credit because the Cyrillic alphabet, the sound system and some basic vocabulary are introduced. MLL 1521-1523 correspond to MLL 1501, MLL 1524-1527 correspond to MLL 1502, MLL 1528-1531 correspond to MLL 1503. Students may register for up to 12 units in self-paced Elementary Russian; however, those students who had previously earned credit for any of the MLL 1501-2-3 courses cannot earn credit for the corresponding MLL 1521-1531 self-paced modules or vice versa.

- 1521 Self-paced Elementary Russian I (2)
The Russian alphabet and sound system, and some basic vocabulary. (Y)
- 1522 Self-paced Elementary Russian I (1)
Introduction to the genders, the gender endings of nouns and adjectives, declensions, personal pronouns, and possessive and demonstrative pronoun-adjectives. (Y)
- 1523 Self-paced Elementary Russian I (1)
Adjectives in the nominative, locative and genitive cases. The genitive case of nouns. (Y)
- 1524 Self-paced Elementary Russian II (1)
Introduction to the accusative and dative singular of nouns and modifiers, and first conjugation verbs. (Y)
- 1525 Self-paced Elementary Russian II (1)
The instrumental case, possessives, numerals and second conjugation verbs. (Y)
- 1526 Self-paced Elementary Russian II (1)
Review of the singular declension of nouns, pronouns and adjectives. Introduction to the

- nominative plural of nouns and modifiers. (Y)
- 1527 Self-paced Elementary Russian II (1)
Introduction to verbal aspects in the Russian language. (Y)
- 1528 Self-paced Elementary Russian III (1)
The genitive and accusative plural of nouns and adjectives, age, time, and verbs of going and riding. (Y)
- 1529 Self-paced Elementary Russian III (1)
Introduction to the imperative mood, ordinal numbers, days of the week, reflexive verbs, the dative, instrumental, and locative plural of nouns, adjectives, and pronoun-adjectives, and prepositions with the instrumental. (Y)
- 1530 Self-paced Elementary Russian III (1)
Some verbal prefixes, verbs of position, review of declension in plural, adjectival words expressing quantity, and a survey of conjugation patterns. (Y)
- 1531 Self-paced Elementary Russian III (1)
Verbs of motion, verbs of carrying, leading and bringing, prepositions of position and motion, short form adjectives, expressions of health, and verbs of learning, studying and teaching. (Y)

2501, Intermediate Russian I, II, III (4 each)
2502, A continuation of MLL 1303, with increased emphasis on
2503 the structure of the language, on vocabulary building and conversation, and on the appreciation of Russian culture. (F, W, Sp) MLL 2501 is prerequisite to MLL 2502, or consent of instructor; MLL 2502 is prerequisite to MLL 2503, or consent of instructor.

2521- Self-Paced Intermediate Russian (6)
2526 The self-paced series in Intermediate Russian is divided into six mini-courses. Regular class attendance is not required; however, students must meet with the instructor at least two times per chapter. Generally, two chapters earn 1 unit of credit. MLL 2521-2524 correspond to MLL 2501. Students can register for up to 6 units in Self-Paced Intermediate Russian; however, those students who had previously earned credit for any of the MLL 2501-2-3 courses cannot earn credit for any of the MLL 2521-2526 series, and vice versa.

- 2521 Self-Paced Intermediate Russian I (1)
The hypothetical mood, verbs of placing and going, comparative and superlative adjectives, verb prefixes, selected readings.
- 2522 Self-Paced Intermediate Russian II (1)
Declension of numerals, fractions, dates, time, conjunctions of time, participles, selected readings.

- 2523 Self-Paced Intermediate Russian III (1)
Grammatical review, nouns, adjectives, verbs, aspects.
- 2524 Self-Paced Intermediate Russian IV (1)
Forms and use of the genitive and the accusative, direct objects of negated verbs, affirmative verbs, specific time expressions.
- 2525 Self-Paced Intermediate Russian V (1)
The imperative mood, aspects in the imperative, selected readings.
- 2526 Self-Paced Intermediate Russian VI (1)
Forms and use of the dative and the instrumental, modal expressions, verbs.

- 3587** Topics in Russian Literature and Culture in English (4)
An interdisciplinary course with variable subject matter which may deal with general surveys of Russian Literature and culture, comparative readings in Russian and Western European literatures, and monographic studies on various Russian authors. May be repeated for credit if subject matter is different. Fulfills the University Writing Skills requirement for students who began work on the present degree before Fall quarter, 1985. (Y)

Sign Language

- 1901,** Elementary Sign Language I, II, III (4 each)
1902, A basic sequence in American Sign Language with
1903 emphasis on receptive and expressive skills. Includes intensive practice, individual evaluation, and introduction to Deaf culture. (F, W, Sp) MLL 1901 is prerequisite to MLL 1902, or consent of instructor; MLL 1902 is prerequisite to MLL 1903, or consent of instructor.
- 2901,** Intermediate Sign Language I, II, III (4 each)
2902, A continuation of MLL 1903, with increased emphasis on
2903 the structure of the language, on vocabulary building and conversation, and on the appreciation of Deaf culture. (F, W, Sp) MLL 2901 is prerequisite to MLL 2902, or consent of instructor; MLL 2902 is prerequisite to MLL 2903, or consent of instructor.
- 3902** Deaf Culture (4)
Analysis of factors that define the deaf community/culture. Compares and contrasts deaf culture with other minority groups. Readings about the deaf in the arts, sciences and humanities. Prerequisite: MLL 2903 or consent of instructor.
- 3903** Topics in American Sign Language (4)

Selected topics related to American Sign Language (ASL). Analysis of the structure of ASL. Conversation strategies in ASL. Cross-cultural interactions between the deaf and the hearing. Some theoretical bases of language acquisition of deaf children. Prerequisite: MLL 2903 or consent of instructor.

- 3904** Sign Language: Field Work (4)
Application in the community: state school, special classes in public schools, agencies serving the deaf. Comparison of variations in Sign Language due to ethnic, racial, educational, regional, and age factors. Prerequisite: MLL 2903 or consent of instructor.

Spanish

- 1401**, **1402**, **1403**, Elementary Spanish I, II, III (4 each)
Introduction to speaking, understanding, reading, and writing Spanish. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. (F, W, Sp) MLL 1401 is prerequisite to MLL 1402, or consent of instructor; MLL 1402 is prerequisite to MLL 1403, or consent of instructor.
- 2401**, **2402**, **2403**, Intermediate Spanish I, II, III (4 each)
A continuation of MLL 1403, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of the cultures of the Spanish-speaking world. (F, W, Sp) MLL 2401 is prerequisite to MLL 2402, or consent of instructor; MLL 2402 is prerequisite to MLL 2403, or consent of instructor.
- 2410** Spanish Conversation (4)
A practical application of Spanish to present-day experiences. Spanish sounds and intonation; vocabulary building. Prerequisite: MLL 2403 or consent of instructor. (Alt. Y)
- 3400** Introduction to Literary Analysis (4)
An introduction to literary analysis; the recognition of the terminology, genres, and rhetorical figures as well as a discussion of movements and literary styles. Prerequisite: MLL 2402. May be taken concurrently with MLL 2403. (Alt. Y)
- 3401** Advanced Spanish Composition and Syntax, I (4)
Written Spanish and formal grammar applied to advanced composition in the language. Prerequisite: MLL 2403 or consent of instructor. (F)
- 3402** Advanced Spanish Composition and Syntax, II (4)
Continuation of MLL 3401. Prerequisite: MLL 3401 or consent of instructor. (W)
- 3403** Advanced Spanish Composition and Syntax, III (4)
Selected authors with special attention to style.

Prerequisite: MLL 3402 or consent of instructor. (Sp)

- 3411** Introduction to Spanish Linguistics (4)
An introduction to the principles of linguistic analysis with emphasis upon examples taken from Spanish. A brief historical survey of the development of the Spanish language. Prerequisite: MLL 2403 or consent of instructor. (Alt. Y)
- 3412** Spanish Phonetics (4)
The fundamentals of Spanish pronunciation and intonation through the phonetic structure of the language. Attention given to each student's difficulties. Individual laboratory work. Prerequisite: MLL 3411 or consent of instructor. (Alt. Y)

Spanish Peninsular Literature and Culture

- 3418** Spanish Culture and Civilization (4)
A study of Spanish culture through literary examples, illustrating Spain's artistic, political, social movements and philosophical ideas. Prerequisite: MLL 2403 or consent of instructor.
- 4455** Studies in the Golden Age of Spain (4)
Specific author, movement, genre or theme of the 16th and 17th Centuries. May be repeated for credit as subject matter changes. Prerequisite: MLL 2403 or consent of instructor. (Alt. Y)
- 4457** Survey Spanish Literature I: Medieval and Golden Age (4)
Survey of Spanish literature from the Middle Ages to 1700. Socio-political, aesthetic, philosophical and literary ideas studied through readings of major works from the Medieval, Renaissance, and Baroque periods. Prerequisite: MLL 2403 or consent of instructor. (Alt. Y)
- 4458** Survey Spanish Literature II: 18th Century to Present (4)
Survey of Spanish Literature from the 18th Century to the present. Socio-political, aesthetic, philosophical and literary ideas studied through selections of major works; neo-classicism, romanticism, naturalism, the Generation of '98, and current authors. Prerequisite: MLL 2403 or consent of instructor. (Alt. Y)
- 4459** Studies in Spanish Literature of the Modern Age (4)
Intensive study of selected authors, genres, or literary movements from 18th Century to early 20th Century. Neo-classicism, romanticism, naturalism, the Generation of '98. Course may be repeated as content changes. Prerequisite: MLL 2403 or consent of instructor. (Alt. Y)
- 4460** Studies in 20th Century Spanish Literature (4)
Spanish literature after the Generacion del '98; intensive study of a single literary genre, movement theme, or author from 1927 to the present. May be repeated twice

as content changes. Prerequisite: MLL 2403 or upper division standing in Spanish, or consent of instructor. (Alt. Y)

- 4461** Spanish Film (in English) (4)
Spanish cinematography from 1920 to the present, as related to cultural mythology and social and political problems of Spain. Films in Spanish with English subtitles. Prerequisite (applies to Spanish majors and minors only): MLL 2403 or consent of instructor.

Spanish-American Literature and Culture

- 3461** Introduction to Spanish-American Literature: 1492 to 1900 (4)
Philosophical, religious, political, artistic, and literary elements examined in Latin American literature. Survey begins with the analysis of pre-Colombian texts and moves through the centuries; colonial literature, romanticism, realism, and modernism discussed. Prerequisite: MLL 2403 or consent of instructor.
- 3463** Introduction to Spanish-American Literature: 1900 to the Present (4)
Philosophical, religious, political, artistic, and literary elements examined in contemporary Latin American literature. Prose, poetry and drama of the 20th Century. Continuation of MLL 3461. Prerequisite: MLL 2403 or consent of instructor.
- 3495** Spanish-American Culture and Civilization (4)
A study of Spanish American culture and civilization through its history, arts, and social institutions. Prerequisite: MLL 2403 or consent of instructor. (Alt. Y)
- 4495** A Single Movement, Country or Theme: Spanish American Literature (4)
Single author, country, movement or theme in Spanish-American Literature. May be repeated for credit as subject matter changes. Prerequisite: MLL 2403 or consent of instructor. (Alt. Y)

Vietnamese

- 1751**, Elementary Vietnamese I, II, III (4 each)
1752, Introduction to speaking, understanding, reading, and writing Vietnamese. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. (F, W, Sp) MLL 1751 is prerequisite to MLL 1752, or consent of instructor; MLL 1752 is prerequisite to MLL 1753, or consent of instructor.
- 2751**, Intermediate Vietnamese I, II, III (4 each)
2752, A continuation of MLL 1753, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of Vietnamese culture. (F, W, Sp) MLL 2751 is prerequisite to MLL 2752, or consent of instructor; MLL 2752 is prerequisite to MLL

2753, or consent of instructor.

Footnotes

- ❶ Lower division requirements will be waived for student with prior knowledge of the language. See the "Advanced Placement" section.
- ❷ May be repeated for credit if subject matter is different.



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Communication

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Department Information

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Lecturers: Michael Ackley, Deborah M. Alexander, Tom Ferentz,
 Marsha Ginsburg, Veronica Martinez, Eric Ronning, Agha Saeed,
 Rick Tejada-Flores

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

The Department of Communication features both the study of communication theory and criticism, and the development of practical skills. At a time when media (print, telephone, television, internet), modes of communication (oral, written, visual), and contexts (face-to-face, public, and organizational) converge in our careers and daily lives, the department offers the first state-university program in the Bay Area to cover this interrelated spectrum of today's communication in new and traditional forms. The Department of Communication's broad range of courses and programs (from public, interpersonal, and family communication to broadcasting, new media of electronic communication, and everything in between) provides exciting choices. Students acquire skills in critical analysis, speaking, writing, and electronic

Career Opportunities

and digital communication. They learn about the changing world of today's mass media as well as the long history of the relationship between communication, self, and society; and they are prepared for a broad array of careers. All graduates must complete six core courses in communication and select one of nine options. They may also take complementary coursework in other areas of study offered by the department.

Communication skills are essential in both work and social settings. Recruiters and placement officers for all types of organizations and positions rank oral and written communication skills at the very top of the list of qualities they look for in job candidates. The department's graduates have entered the following careers:

Advertising Executive • Business Executive • Communication Specialist • Consultant • Copy Editor • Copywriter • Corporate Communications Director • Corporate Communicator • Critic • Customer Service Representative • Debate Coach • Employee Relations Representative • Film Editor • Graphic Artist • Human Resource Administrator • Impression Management Specialist • Interviewer • Journalist • Media Consultant • Media Specialist • News Director • Newscaster • News Writer • Photojournalist • Professor • Public Information Specialist • Public Relations Representative • Publications • Radio Programmer • Sales Representative • Specification Writer • Talk Show Host • Teacher • Technical Writer • Television Producer • Trainer • Writer

Features

Related activities available through the Department of Communication include: the university paper (*The Pioneer*), and CNTV cable television which broadcasts the department's student-produced programs. Also housed within the department is a working advertising agency and an active internship program that functions in cooperation with Bay Area business.

Instructional facilities include a large and well-equipped television studio, color and black-and-white photography laboratories, a 28-station computer lab for news writing and reporting, and desktop publishing equipment for the student newspaper. Student productions are published on the Internet.

The department has affiliations with the Association of Schools of Journalism and Mass Communication, the Association for Education in Journalism and Mass Communication, the California Newspaper Publishers Association, and the California Intercollegiate Press Association. The department also sponsors a campus chapter of the Society of Professional Journalists and the Public Relations Student Society of America.

In addition to classroom study of interpersonal, intercultural, organizational, and public communication, the department sponsors a Communication Laboratory open to the campus community that provides communication-related support services. Upper division Communication majors and graduate students serve as tutors who help students research, organize, outline, and deliver oral presentations. The department also offers campus

Major Requirements (B.A.)

internship programs for credit, and each year awards a number of scholarships to Communication majors. The Rhetorical Criticism Conference, inaugurated in 1966, brings students to campus from across the United States. Student-scholars present papers to professor-critics who review and respond to their work. Commended papers are presented to the entire conference and published in the annual conference journal. This scholarly exchange of ideas provides not only suggestions for improvement in the current work of student participants, but stimulates further scholarship in rhetorical and communication criticism.

Because requirements are subject to change, consult an advisor in the Department of Communication for clarification and interpretation of your major requirements. The major in Communication consists of 24 units of core courses in communication, with an additional 50 to 100 units in a selected option for a total of 74-124 units; the B.A. degree requires a total of 180 units.

- I. Required Core Courses (24 units)
 - COMM 1000 Public Speaking (4) (Note: Meets GE Oral Communication requirement)
 - COMM 2100 Introduction to Communication (4)
 - COMM 2200 Introduction to Journalistic Writing (4)
 - COMM 3200 Introduction to Research Methods in Communication (4)
 - COMM 3810 Introduction to Communication Theory (4)
 - COMM 4875 Senior Seminar (4)
- II. Options (50-100 units)

Students must select one of the following options in addition to completing the required core courses listed above.

 - A. Advertising Option (93-99 units)

The Advertising option is offered in cooperation with the Department of Marketing and Entrepreneurship, College of Business and Economics. (An Advertising option is also available within the Business Administration major. See the undergraduate section of this catalog.)

 1. Specialized Courses Required (25 units)
 - a. Lower Division Requirements (9 units)
 - ECON 2301 Principles of Microeconomics (4)
 - STAT 1000 Elements of Probability and Statistics (5)
 - b. Upper Division Requirements (16 units)
 - COMM 4520 Advertising Theory and Practice (4)
 - COMM 4530 The Advertising/Public Relations Campaign (4)
 - MKTG 3401 Marketing Principles (4)
 - MKTG 3410 Advertising Management (4)
 2. Students must also complete the 68-74 units required for the general Mass Communication option. See "Mass Communication Option, General" later in this chapter.
 - B. Broadcasting Option (84-90 units)

1. Specialized Courses Required (26 units)
COMM 3100 Television Production/Direction (4)
COMM 3130 Broadcast News I (4)

Select one set of two courses (8 units)

- COMM 3140 Broadcast News II (4)
COMM 4100 Television Documentary Production (4)

or

- COMM 3160 Radio Operations (4)
COMM 4200 Radio Programming and Promotion (4)

Select two of three workshops (4 units)

- COMM 3220 Media Workshop: Print (2), COMM 3231
Media Workshop: Radio (2), or COMM 3232 Media
Workshop: TV (2)

Electives, selected from the following (6 units)

- COMM 3101 Television Pre-production (4)
COMM 3102 Television Post-production (4)
COMM 3231 Media Workshop: Radio (2)
COMM 3232 Media Workshop: TV (2)
COMM 4650 Internship in Communication and Media (2,
4)

2. Additional Upper-Division Required Courses (8 units)
COMM 3000 History of Mass Communication (4)
COMM 3110 Law of Mass Communication (4)

3. Students must also complete the 50-56 units listed under sections 3-6 of the general Mass Communication option. See "Mass Communication Option, General" later in this chapter.

C. Interpersonal Communication Option (50 units)

1. Specialized Courses Required (24 units)
COMM 1004 Interpersonal Communication (4)
COMM 4810 Human Communication Theory (4)

COMM 4858 Communication in Personal Relationships (4) or COMM 4880 Communication and Conflict Resolution (4)

COMM 4870 Methods of Research in Speech Communication (4)

Select two courses from the following (8 units):

- COMM 3520 Nonverbal Communication (4)
COMM 4515 Critical Discourse in Multicultural America (4)
COMM 4515 Critical Discourse in Multicultural America (4)
COMM 4810 Human Communication Theory (4)
COMM 4840 Organizational Communication (4)
COMM 4850 Gender and Communication (4)
COMM 4855 Family Communication (4)
COMM 4858 Communication in Personal Relationships

(4)
COMM 4880 Communication and Conflict Resolution (4)

2. Additional Upper Division Required Courses (18 units)

COMM 3411 Argumentation and Debate (4)

COMM 3510 Small Group Communication (4)

COMM 4183 Speech and Debate Activities Workshop (2)
or COMM 4650 Internship in Communication and Media
(2)

COMM 4201 Comparative Traditions of Rhetoric (4)

COMM 4830 Intercultural Communication (4)

3. Electives selected from the following (8 units):

COMM 1004 Interpersonal Communication (4), 3520
Nonverbal Communication (4), 3530 Interviewing
Principles and Practices (4), 3540 Business and
Professional Presentations (4), 3898 Cooperative
Education (1-4), 4183 Speech and Debate Activities
Workshop (1-3), 4350 Persuasive Speaking (4), 4411
Principles of Argumentation (4), 4460 American Public
Address (4), 4515 Critical Discourse in Multicultural
America (4), 4550 Communication Criticism (4), 4560
Ethics of Communication (4), 4610 Rhetoric of Popular
Culture (4), 4615 Modern Rhetorical Theory (4), 4650
Internship in Communication and Media (2-4), 4700
Topics in Speech Communication (4), 4810 Human
Communication Theory (4), 4840 Organizational
Communication (4), 4850 Gender and Communication
(4), 4855 Family Communication (4), 4858
Communication in Personal Relationships (4), 4860
Ethnic Public Address (4), 4870 Methods of Research in
Speech Communication (4), 4875 Senior Seminar (4),
4880 Communication and Conflict Resolution (4)

D. Journalism Option (90-96 units)

1. Specialized Courses Required (22 units)

COMM 3220 Media Workshop: Print (2)

COMM 3340 Graphic Communication (4)

COMM 3350 Magazine Publishing in America (4)

COMM 4010 Public Affairs Reporting (4)

Select two courses from the following (8 units):

COMM 3240 Public Opinion (4)

COMM 3410 Feature Writing (4)

COMM 4150 Mass Media and Government (4)

COMM 4450 Selected Topics in Reporting and Editing
(4)

2. Students must also complete the 68-74 units required for
the general Mass Communication option. See "Mass
Communication Option, General" which follows.

Note: To fulfill the Workshop requirement (section # 2
under the general Mass Communication Option)
students must choose either COMM 3231 or 3232, and
may not repeat COMM 3220 (Media Workshop: Print)
required under "Specialized Courses" above.

E. Mass Communication Option, General (68-74 units)

1. All of the following (16 units):
 - COMM 3000 History of Mass Communication (4)
 - COMM 3010 News Reporting and Writing (4)
 - COMM 3110 Law of Mass Communication (4)
 - COMM 3310 Editing (4)
2. One workshop course selected from the following (2 units):
 - COMM 3220 Media Workshop: Print (2)
 - COMM 3231 Media Workshop: Radio (2)
 - COMM 3232 Media Workshop: TV (2)
3. Two courses selected from the following (8 units):
 - COMM 3240 Public Opinion (4), 3700 Digital Photography and Photo Essay (4), 4050 Theories of Mass Communication (4), 4110 International Communication (4), 4150 Mass Media and Government (4), 4510 Public Relations Theory and Practice (4), 4520 Advertising Theory and Practice (4)
4. Two courses selected from the following (8 units):
 - COMM 1005 Viewing Diversity (4), 2250 Sports and Media (4), 3100 Television Production/Direction (4), 3130 Broadcast News I (4), 3340 Graphic Communication (4), 3350 Magazine Publishing in America (4), 3410 Feature Writing (4), 4010 Public Affairs Reporting (4), 4340 Advanced Graphic Communication (4), 4450 Selected Topics in Reporting and Editing (4), 4530 The Advertising-Public Relations Campaign (4)
5. Electives selected from the following (6-8 units):
 - ART/COMM 2701 Introduction to Photography (4), 3600 Intermediate Photography (4), 3650 Color Photography (4), 3660 Portrait Photography (4), 4600 Image and Idea (4); COMM 3101 Television Pre-production (4), 3102 Television Post-production (4), 3370 Information on the Internet (4), 3400 The Ethnic Media in America (4), 3700 Digital Documentary and Photo Essay (4), 4360 Advanced Electronic Web Publishing (4), 4500 Women in Media (4), 4540 Selected Topics in Mass Communication and Public Policy (4), 4650 Internship in Communication and the Media (2, 4); COMM/ART 2700 Introduction to Photography (4), 3500 Photojournalism (4), 4620 History of Photography (4)

Note: Any communication course that is listed in sections 1-4 may be used for elective credit if it is not being used elsewhere to fulfill major requirements. No course may be double-counted in different sections of the major.

6. Courses in Supporting Fields (28-32 units)
 - a. One course in computational skills (4-5 units):
 - STAT 1000 Elements of Probability and Statistics (5)

or MATH 1110 The Nature of Mathematics (4)

- b. Three courses in language skills (12 units):
Complete one of the following two sequences.

Foreign language sequence (12)

The foreign language sequence may be completed by taking three sequential quarters or two sequential semesters of a foreign language with a grade of "C" or better. (Sign language is accepted as a foreign language for purposes of this requirement.)

Language and symbolic systems sequence (12 units)

The language and symbolic systems sequence may be completed by taking three courses from the following:

ANTH 1800 Introduction to Anthropological Linguistics (4), 3800 Language and Culture (4); COMM 3510 Small Group Communication (4), 3530 Interviewing Principles and Practices (4), 4810 Human Communication Theory (4), 4840 Organizational Communication (4); ENGL 2005 Grammar for Writers (4), 2010 Vocabulary Building (4), 3005 Study of Language (4), 3010 Modern English Grammar (4), 3040 Linguistic History of the English Language (4); PSYC 4740 Psycholinguistics (4)

- c. Fields of Concentration (12-15 units)

Students should select three upper division courses, related in subject matter but not necessarily confined to a single department, that will provide a concentration of knowledge within an area of interest in the Mass Communication major. Ideally, this concentration will complement the student's communication skills and career choice. Any upper division course outside of COMM must be taken for a letter grade. (Students who have not yet fulfilled their upper division general education requirements may also be able to use these classes for that purpose.)

F. Organizational Communication (54 units)

1. Specialized Courses Required (24 units)

COMM 1004 Interpersonal Communication (4)
COMM 4810 Human Communication Theory (4)
COMM 4840 Organizational Communication (4)
COMM 4870 Methods of Research in Speech Communication (4)

Two courses selected from the following (8 units):

COMM 3485 Voice and Speech Improvement (4)
COMM 3520 Nonverbal Communication (4)
COMM 3530 Interviewing Principles and Practices (4)
COMM 3540 Business and Professional Presentations (4)
COMM 4610 Rhetoric of Popular Culture (4)
COMM 4850 Gender and Communication (4)
COMM 4880 Communication and Conflict Resolution (4)

2. Complete three advisor-approved courses from Group I, II or III (12 units)

Group I - Marketing Focus: MKTG 3401 Marketing Principles (4), 3410 Advertising Management (4), 3415 Personal Selling (4), 3425 Promotion (4), 3495 Business Communication (4), 4415 Corporate Communications (4), 4425 Sales Training (4), 4465 Web Marketing (4)

Group II - Media Focus: COMM 3010[□] News Reporting and Writing (4), 3020 Public Relations Writing (4), 3340[□] Graphic Communication (4), 3360 Electronic Publishing and the Internet (4), 4050[□] Theories of Mass Communication (4), 4510 Public Relations Theory Practice (4), 4520 Advertising Theory and Practice (4), 4530 The Advertising/Public Relations Campaign (4)

Group III - Management Focus: MGMT 3600 Theories of Management (4), 3614[□] Organizational Behavior (4), 4618 Human Resources Training and Development (4); PUAD 4800 Public Administration and Society (4) 4830 Organizational Theory and Human Behavior (4)

3. Additional Upper Division Required Courses (18 units)

COMM 3411 Argumentation and Debate (4)
COMM 3510 Small Group Communication (4)

COMM 4183 Speech and Debate Activities Workshop (2)
or COMM 4650 Internship in Communication and Media (2)

COMM 4201 Comparative Traditions of Rhetoric (4)
COMM 4830 Intercultural Communication (4)

G. Photocommunication Option (94-100 units)

1. Specialized Courses Required (26 units)

ART/COMM 2701 Introduction to Photography or
COMM/ART 2700 Introduction to Photography (4)

ART/COMM 3600 Intermediate Photography or
ART/COMM 3650 Color Photography (4)

COMM 3220 Media Workshop: Print (2)
COMM 3340 Graphic Communication (4)
COMM/ART 3500 Photojournalism (4)
COMM 3700 Digital Documentary and Photo Essay (4)
COMM/ART 4620 History of Photography (4)

2. Students must also complete the 68-74 units required for the general Mass Communication option. See "Mass Communication Option, General" earlier in this chapter.

Note: To fulfill the Workshop requirement (section # 2 under the general Mass Communication Option) students must choose either COMM 3231 or 3232, and may not repeat COMM 3220 (Media Workshop: Print) required under "Specialized Courses" above.

H. Public Communication Option (54 units)

1. Specialized Courses Required (28 units)

COMM 4411 Principles of Argumentation (4) or COMM 4560 Ethics in Communication (4)

COMM 4460 American Public Address (4)

COMM 4550 Communication Criticism (4)

COMM 4615 Modern Rhetorical Theory (4)

Three courses selected from the following (12 units):

COMM 3485 Voice and Speech Improvement (4)

COMM 4350 Persuasive Speaking (4)

COMM 4610 Rhetoric of Popular Culture (4)

COMM 4860 Ethnic Public Address (4)

2. Additional Upper Division Required Courses (18 units)

COMM 3411 Argumentation and Debate (4)

COMM 3510 Small Group Communication (4)

COMM 4183 Speech and Debate Activities Workshop (2)
or COMM 4650 Internship in Communication and Media (2)

COMM 4201 Comparative Traditions of Rhetoric (4)

COMM 4830 Intercultural Communication (4)

3. Electives selected from the following (8 units):

COMM 1004 Interpersonal Communication (4), 3520 Nonverbal Communication (4), 3530 Interviewing Principles and Practices (4), 3540 Business and Professional Presentations (4), 3898 Cooperative Education (1-4), 4183 Speech and Debate Activities Workshop (1-3), 4350 Persuasive Speaking (4), 4411 Principles of Argumentation (4), 4460 American Public Address (4), 4515 Critical Discourse in Multicultural America (4), 4550 Communication Criticism (4), 4560 Ethics of Communication (4), 4610 Rhetoric of Popular Culture (4), 4615 Modern Rhetorical Theory (4), 4650 Internship in Communication and Media (2-4), 4700 Topics in Speech Communication (4), 4810 Human Communication Theory (4), 4840 Organizational Communication (4), 4850 Gender and Communication (4), 4855 Family Communication (4), 4858 Communication in Personal Relationships (4), 4860 Ethnic Public Address (4), 4870 Methods of Research in Speech Communication (4), 4875 Senior Seminar (4), 4880 Communication and Conflict Resolution (4)

I. Public Relations Option (94-100 units)

The Public Relations option is offered in cooperation with the Department of Marketing and Entrepreneurship.

1. Specialized Courses Required (26 units)

COMM 4510 Public Relations Theory and Practice (4)

COMM 4530 Advertising/Public Relations Campaign (4)

PSYC 1000 General Psychology (or one of 1001, 1005, 2004, 2009) (5)

One statistics course (5 units):

STAT 1000 Probability and Statistics (5)

Select two courses from one of the two groups below (8 units)

Group 1

MKTG 3425 Promotion (4)
MKTG 4415 Corporate Communication (4)
MKTG 4420 Sales Management (4)
MKTG 4425 Sales Training (4)

Group II

COMM 3510 Small Group Communication (4)
COMM 3530 Interviewing Principles (4)
COMM 4810 Communication Theory (4)
COMM 4840 Organizational Communication (4)

2. Students must also complete the 68-74 units required for the general Mass Communication option. See "Mass Communication Option, General" earlier in this chapter.

Other Degree Requirements

In addition to major requirements, every student must also complete the university requirements for graduation described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

I. Communication Skills Minor

The Communication Skills Minor provides substantial study and training in oral and written communication and interpersonal relationships beyond the requirements for General Education. There are 12 units of prerequisites to the minor. The courses used to fulfill these prerequisites may also be used to satisfy the Communication in the English Language requirement (Area A) for General Education. There are 32 units in the minor. At least 16 units of the minor must be upper-division, and at least 18 of the 32 must have department prefixes from outside the student's major.

A. Prerequisites to the Minor (12 units)

(These courses satisfy the Communication in the English Language requirement for General Education.)

COMM 1000 Public Speaking (4)
ENGL 1001 Expository Writing (4)
PHIL 1000 Workshop in Clear Thinking or PHIL 1001 Introduction to Logic (4)

B. Requirements for the Minor (32 units)

Complete the following courses (12 units):

COMM 1004 Interpersonal Communication (4)
COMM 2200 Introduction to Journalistic Writing (4)

ENGL 3005 Study of Language (4)

Select two courses from Group 1, and one course from Group 2, and two courses from Group 3 (20 units):

Group 1. Written Presentation (8 units)

COMM 3010 News Reporting and Writing (4), 3310¹ Editing (4), 3410 Feature Writing (4); ENGL 2005 Grammar for Writers (4), 3020¹ Advanced Expository Writing (4); MKTG 3495 Administrative Communication (4)

Group 2. Oral Presentation (4 units)

COMM 3411 Argumentation and Debate (4), 3510 Small Group Communication, 4350 Persuasive Speaking (4)

Group 3. Organizational Behavior and Small Group Interaction (8 units)

COMM 3520 Nonverbal Communication (4), 4810 Communication Theory (4), 4830 Intercultural Communication (4), 4840 Organizational Communication (4); HDEV 3800 Human Development and Interaction (4); MGMT 3600 Theories of Management (4), 3614¹ Organizational Behavior (4); PSYC 3500¹ Social Psychology (4) (PSYC 3500 and SOC 3500 cannot both be counted in the minor), 3520¹ Interpersonal Processes (4), 3540¹ Groups and Organizations (4); PUAD 4830 Organization Theory and Human Behavior (4); SOC 3500¹ Social Psychology (4) (PSYC 3500 and SOC 3500 cannot both be counted in the minor), 3520 Sociology of Minority Groups (4)

II. Mass Communication Minor

The minor in Mass Communication consists of 34 units.

COMM 2100 Introduction to Communication (4)
COMM 2200 Introduction to Journalistic Writing (4)
COMM 3100 Television Production/Direction (4)
COMM 3110 Law of Mass Communication (4)
COMM 3220 Media Workshop: Print (2)
COMM 3810 Introduction to Communication Theory (4)

Select one broadcast workshop from the following (2 units):

COMM 3231 Media Workshop: Radio (2) or
COMM 3232 Media Workshop: TV (2)

Select two courses from the following (8 units):

COMM 3010 News Reporting and Writing (4), 3101 Television Pre-production (4), 3102 Television Post-production (4), 3130 Broadcast News I (4), 3140 Broadcast News II (4), 3160 Radio Operations (4), 3240 Public Opinion (4), 3310 Editing (4), 3400 The Ethnic Media in America (4), 4110 International Communication (4), 4500 Women in Media (4)

Department electives (2 units)

III. Speech Communication Minor

The minor consists of at least 32 units in Speech Communication, of which at least 20 must be upper division,

to be selected in consultation with a minor adviser. The following courses (20 units) are required for the Speech Communication Minor:

COMM 1000 Public Speaking (4)
COMM 1004 Interpersonal Communication (4)
COMM 3411 Argumentation and Debate (4) or
COMM 3510 Small Group Communication (4)
COMM 4201 Comparative Traditions of Rhetoric (4)
COMM 4830 Intercultural Communication (4)

See also: minors in Advertising; Multimedia (Art Department); and Photography (Art Department).

Organizational Communication Certificate

The Certificate in Organizational Communication consists of 28 units and is for individuals who already have good basic communication skills and want to perfect and hone those skills. In addition it offers the student a set of courses that are strongly career oriented. The certificate is very relevant to individuals who are already in communication-related career positions and desire both a higher level of communication skills and the accompanying certificate as vehicles to advancement. It is also particularly appropriate for two other groups. The first includes those who are on the fringe of a communication-related career path and want better acceptance as specific career individuals. The second includes those who are not now employed and see the completion of a particular program of study from this set of courses as a certification to potential employers not only of a higher level of communication skills achievement but also of their own seriousness of purpose and commitment to a specific career area.

I. Required Courses (20 units)

COMM 3510 Small Group Communication (4)
COMM 4520 Advertising Theory and Practice (4)
COMM 4840 Organizational Communication (4)
ENGL 3020 Advanced Expository Writing (4)
MGMT/ENGR 3600 Theories of Management (4)

II. Select two courses (8 units) from the following:

COMM 3010² News Reporting and Writing (4), 3310² Editing (4), 4510 Public Relations Theory and Practice (4), 4830 Intercultural Communication (4); MGMT 3614² Organizational Behavior (4), 3680 Industrial Relations (4); MKTG 3401 Introduction to Marketing Management (4), 3410 Advertising Management (4), 4422 Sales Training (4); PUAD 4830 Organization Theory and Human Behavior (4)

Note: Students who have completed at other schools the approved equivalent of any of the specifically required five courses should make additional selections from the electives grouping in order to offset those units already completed outside Cal State Hayward. Students who find themselves to be limited in their selection from the elective group due to the number of approved equivalent courses completed at other schools should consult with an advisor for this certificate in order to identify appropriate substitutions to meet the required 28 units in residence for the certificate.

Liberal Studies Options

I. Mass Communication Option: Liberal Studies

Area VII, Credential Track, or Area VI, General Track (24 units)

- COMM 2100 Introduction to Communication (4)
- COMM 2200 Introduction to Journalistic Writing (4)
- COMM 3100 Television Production/Direction (4)
- COMM 3110 Law of Mass Communication (4)
- COMM 3220 Media Workshop: Print (2)
- COMM 3231 Media Workshop: Radio (2) or COMM 3232 Media Workshop: TV (2)
- One additional upper division course in Mass Communication (4)

II. Speech Communication Option: Liberal Studies

Area I (4 units)

- COMM 1000 Public Speaking (4)

Area II.B (4 units)

- COMM 4830 Intercultural Communication (4)

Area VII, Credential Track, or Area VI, General Track (24 units)

- COMM 1004 Interpersonal Communication (4)

Performance Category - Two of the following (8 units):

- COMM 3411 Argumentation and Debate (4)
- COMM 3485 Voice and Speech Improvement (4)
- COMM 3510 Small Group Communication (4)
- COMM 3530 Interviewing Principles and Practices (4)
- COMM 4350 Persuasive Speaking (4)

Theory Category - Two of the following (8 units):

- COMM 4201 Comparative Traditions of Rhetoric (4)
- COMM 4560 Ethics in Communication (4)
- COMM 4615 Modern Rhetorical Theory (4)
- COMM 4810 Human Communication Theory (4)

Context Category - One of the following (4 units):

- COMM 4411 Principles of Argumentation (4)
- COMM 4460 American Public Address (4)
- COMM 4550 Communication Criticism (4)
- COMM 4610 Rhetoric of Popular Culture (4)
- COMM 4840 Organizational Communication (4)
- COMM 4850 Gender and Communication (4)
- COMM 4855 Family Communication (4)
- COMM 4858 Communication in Personal Relationships (4)
- COMM 4860 Ethnic Public Address (4)
- COMM 4880 Communication and Conflict Resolution (4)

Single Subject
Matter
Preparation

See undergraduate English chapter for Mass Communication and Speech Communication curriculum in English program.

Undergraduate
Courses

The course prefix for the following courses is COMM.

- 1000** Public Speaking (4)
[CAN SPCH 4]
Theory, practice, and evaluation of oral communication. Emphasis on ethical responsibility, careful selection and development of ideas, and logical organization of expository/argumentative/ persuasive discourse. (A)
- 1004** Interpersonal Communication (4)
[CAN SPCH 8]
Study of principles of oral communication in different interpersonal contexts; dyads, interviews, and exercises in listening and speaking intended to develop competence in oral communication. (A)
- 1005** Viewing Diversity (4)
Basic social science approaches to the study of local, national, and global constructions and representations of cultural diversity.
- 1010** Introduction to Communication Studies (4)
Theories, concepts and contexts for the study of human communication. Introduction to the methods of study of communication in private, work and public relationships. How culture influences human use and understanding of messages.
- 2000** Mass Media in Society (4)
[CAN JOUR 4]
Survey of the social and economic structure of the communication media; roles of audience, media, and government in shaping communication policies. (F, W, Sp)
- 2100** Introduction to Communication (4)
Study of human communication. Historical overview of technology's effects on communication; interconnections among areas of study. Critical analysis of messages in various media.
- 2200** Introduction to Journalistic Writing (4)
[CAN JOUR 2]
Fundamental theory and practice of newswriting. Prerequisite: ENGL 1001 or equivalent, with a grade of "C" or better, and typing skill. Three hrs. lect., 2 hrs. act. (A)
- 2250** Sports and Media (4)
The relationship between mass media and sports in America. Sports content in the major print and broadcast media, notable careers in sports media, and relevant social scientific research.
- 2700** Introduction to Photography (4)
[CAN ART 18]
Fundamental theory and practice of black and white photography with emphasis on darkroom printing and

developing. Cross-listed with ART 2700. Not open to students with credit for ART/COMM 2701 or MCOM/ART 2700. 35-mm camera required. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for current fee. Two hrs. lect., 4 hrs. act.

- 2701** Introduction to Photography (4)
(See ART 2701 for course description)
- 3000** History of Mass Communication (4)
An overview of the history of the mass media emphasizing development in the United States. The effects on media of such technological developments as satellites, fiber optics and computers. (F, W, Sp)
- 3010** News Reporting and Writing (4)
Developing information from various sources: public records, interviews, speeches, and meetings. Story structure and flow. Understanding the reader's interests. Current events and news values of the media.
Prerequisites: COMM 2100, 2200. Three hrs. lect., 2 hrs. act. (F, W, Sp)
- 3020** Public Relations Writing (4)
News, industry, and PR perspectives on what constitutes newsworthiness; research, structuring, and writing public-relations materials; grammar and AP style; and basic desktop publishing/presentation software skills. Students produce portfolio-quality pieces. Prerequisite: COMM 3220. Three hrs. lect., 2 hrs. act.
- 3100** Television Production/Direction (4)
Principles of producing and directing non-dramatic program materials for television. Theory, application and practice to include equipment, studio operations and program formats. Two hrs. lect., 4 hrs. act. (F, W, Sp)
- 3101** Television Pre-production (4)
Pre-production of creative video projects intended for broadcast on CSUH cable. Determining target audience, writing proposals, audio-visual shooting/edit plan, budgeting, scheduling. Prerequisite: COMM 3100. Repeatable once for credit. Two hrs. lect., 4 hrs. act.
- 3102** Television Post-production (4)
Production/direction of several dramatic programs, using multiple camera studio techniques. Online editing and preparing projects for cable television. Prerequisites: COMM 3100, 3101, or consent of instructor. Repeatable once for credit. Two hrs. lect., 4 hrs. act.
- 3110** Law of Mass Communication (4)
Case studies of current laws and regulations relating to defamation; contempt; invasion of privacy; obscenity; copyright; media competition; and consumer protection. (F, W, Sp)
- 3130** Broadcast News I (4)
Reporting methods for broadcast news with emphasis on field reporting, producing field stories, organizing the field

crew, operation of portable audio and visual equipment, and editing broadcast news tape. Prerequisites: COMM 2200, COMM 3100. Two hrs. lect., 4 hrs. act.

- 3140** Broadcast News II (4)
Application of advanced news writing styles and production techniques for the electronic media. Prerequisites: COMM 2200, 3100, 3130. Two hrs. lect., 4 hrs. act.
- 3160** Radio Operations (4)
Radio production techniques and station operations. Emphasis on audio production, advertising/sales, copywriting, and station management. Two hrs. lect., 4 hrs. act. (Y)
- 3200** Introduction to Research Methods in Communication (4)
Theories and methods of conducting research in communication. Basic assumptions that motivate research and differentiate research approaches. Quantitative, qualitative, and public-records research. Issues of basic research design, and data analysis.
- 3220** Media Workshop: Print (2)
A supervised laboratory experience in the preparation of materials for print media, particularly university student publications. Prerequisite: COMM 2200. May be repeated. Maximum number of workshop units towards graduation: ten (10). Maximum number in any workshop: six (6). Six hrs. minimum per week. (A)
- 3231** Media Workshop: Radio (2)
A supervised laboratory experience in the preparation of materials for radio, particularly university productions. Prerequisite: COMM 3160 or consent of instructor. May be repeated. Maximum number of COMM workshop units towards graduation: ten (10). Maximum number in any workshop: six (6). Six hrs. minimum per week. (Y)
- 3232** Media Workshop: TV (2)
A supervised laboratory experience in the preparation of materials for television, particularly university productions. Prerequisite: COMM 3100. May be repeated. Maximum number of COMM workshop units toward graduation: ten (10). Maximum number in any workshop: six (6). Six hrs. minimum per week. (F, W, Sp)
- 3240** Public Opinion (4)
Reading and discussion focusing on the relationship of public opinion and the mass media, including an examination of the literature on attitude change. Practice in conducting and interpreting opinion surveys. Prerequisites: An introductory course in sociology or psychology, or consent of instructor. (Y)
- 3250** The Media in Wartime (4)
Exploring media coverage and the role of the press during political and military crisis. This unique, hands-on course offers an opportunity to study intricacies of wartime reporting under censorship constraints.

- 3310** Editing (4)
Theory and practice of editing for the print media.
Prerequisite: COMM 2200, 3010. Three hrs. lect., 2 hrs. act. (F, W, Sp)
- 3340** Graphic Communication (4)
A survey of the concepts and methods of non-verbal communication with an emphasis on computer-oriented media. Provides an introduction for desktop publishing which includes design, layout, and graphic production for electronic and print media publication.
- 3350** Magazine Publishing in America (4)
A comprehensive investigation of the magazine publishing industry in America. Study includes types of publications, their management/economic/editorial policies. Field trips to Bay Area publishers. Prerequisite: COMM 3010. Three hrs. lect., 2 hrs. act. (Y)
- 3360** Electronic Publishing and the Internet (4)
Introduction to the Internet computer network. Use of the Internet for student research and electronic publishing; placing student publications on the Internet. Three hrs. lect., 2 hrs. act.
- 3370** Information on the Internet (4)
Theory and methods of information gathering and analysis on the Internet as they relate to mass communication. Students learn how to approach an on-line search for information, to use a variety of specific on-line resources, and to evaluate information retrieved from various browsers, search engines, and web sites. Two hrs. lect., 4 hrs. act.
- 3380** Mastering Modern Media (4)
An in-depth, investigative survey of contemporary media, including print, film, broadcasting, and web, emphasizing the content formation and the consumer's organization of output. An opportunity to learn about, and structure for oneself, the seemingly endless media output currently available.
- 3390** Communication in the Information Age (4)
Information Age characteristics, theoretical perspectives. Technological overview of computer-mediated communication and global connectivity. History: introduction to leading personalities and events. Business, political, cultural, and interpersonal implications. Legal and regulatory issues. Emergent technologies, trends, possible futures.
- 3400** The Ethnic Media in America (4)
Reading and discussion focusing on the development and impact of the ethnic media in American society, including an examination of purpose, role, audience and support. Instruction includes visits by prominent ethnic media representatives and field trips to ethnic media in the Bay Area. (Y)

- 3410** Feature Writing (4)
Writing feature articles, news analysis, and specialized broadcast reports distinguished from straight news reporting. Analysis of writing problems and style. Interpretive interviews and profiles. Prerequisite: COMM 2200, 3010 or consent of instructor. Three hrs. lect., 2 hrs. act.
- 3411** Argumentation and Debate (4)
A course stressing those elements of logic and rhetoric making up responsible argumentative discourse. Practice in presentation and evaluation of argumentative speeches and forensic debates. Prerequisite: COMM 1000, or consent of instructor. (F)
- 3485** Voice and Speech Improvement (4)
The acoustic features of the voice-resonance, pitch, rate, intensity, and articulation. Designed to improve the normal speaking voice through practice, and to understand the power of the voice in human communication.
- 3500** Photojournalism (4)
The use of photography as a tool in reporting and interpreting news for print media. Processing and printing black and white photographs, camera techniques, composition, picture page design. Cross-listed with ART 3500. Not open to students with credit for MCOM/ART 3500. Prerequisite: COMM/ART 2700. A miscellaneous course fee will be charged. Please consult the quarterly *Class Schedule* for the current fee. Two hrs. lect., 4 hrs. studio act. (Y)
- 3510** Small Group Communication (4)
Principles and methods of public and group discussion in problem solving and learning situations. Development of individual skills in discussion preparation, participation, and leadership through practical application. Small group dynamics. Prerequisite: COMM 1000, or consent of instructor. (Y)
- 3520** Nonverbal Communication (4)
Correlation between verbal and nonverbal communication systems. Principles, theories, and effects of physical appearance, space, body posture, facial displays and paralanguage on the process of human communication. (Y)
- 3530** Interviewing Principles and Practices (4)
Combining communication theory and practice, students plan, manage, and interpret professional interviews. Students develop skills in conducting and evaluating interviews for employment, problem solving, and performance appraisal.
- 3540** Business and Professional Presentations (4)
Principles, techniques, and presentational skills for professional and business speaking. Topics include oral reports, proposals, briefings, training modules, motivational speaking, and audio-visual presentations. Emphasis on presentation development, delivery skills, and preparation

and use of audio-visual aids and multimedia.

- 3555** Managing Meetings (4)
Management of formal business meetings for maximum efficiency in all varieties of democratic groups. Development of personal qualities of confidence and expertise to participate, function as a leader, or hold office in deliberative assemblies. Understanding the philosophical procedures underlying the discipline of parliamentary procedure.
- 3600** Intermediate Photography (5)
(See ART 3600 for course description.)
- 3630** Digital Photography (4)
(See ART 3630 for course description.)
- 3650** Color Photography (4)
(See ART 3650 for course description.)
- 3660** Portrait Photography (4)
(See ART 3660 for course description.)
- 3670** Introduction to Studio Lighting (4)
(See ART 3670 for course description.)
- 3671** Advanced Studio Lighting (4)
(See ART 3671 for course description.)
- 3680** Photography Career Preparation (2)
(See ART 3680 for course description.)
- 3700** Digital Photography and Photo Essay (4)
History of social documentary photography and the photo essay. Students will produce photo-essay projects using traditional photographic methods and equipment as well as computer technology. Final projects may be published on the Internet. Prerequisite: COMM/ART 2700 or consent of instructor. A miscellaneous course fee will be charged. Please consult the quarterly *Class Schedule* for the current fee. Three hrs. lect., 2 hrs. act.
- 3810** Introduction to Communication Theory (4)
Reading and discussion of the theoretical literature on communication. Theories in interpersonal, organizational, public, and mass communication. General theories that underpin the study of both public mediated and person-to-person communication.
- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 8 units. Not applicable to the Mass Communication major or minor. A maximum of 4 units will be accepted toward the Speech Communication major or minor. CR/NC grading only. Prerequisites: at least 2.0 GPA; departmental approval of activity. (A)
- 3999** Issues in Communication (4)

Readings, discussion, and research on contemporary and/or significant issues in communication. May be repeated for credit when content varies.

- 4005** Histories of Film (4)
(See ART 4005 for course description.)
- 4010** Public Affairs Reporting (4)
Examination of sources of information for mass media. Study to include the analysis of public records and public access broadcast channels. Dynamics of and practice in investigative reporting, interviewing and writing for these modes. Prerequisites: COMM 2200, 3010, 3110. Three hrs. lect., 2 hrs. act.
- 4050** Theories of Mass Communication (4)
Reading and discussion of the theoretical literature on mass communication. Surveys theories of media effects, persuasion, characteristics of audiences and channels, and the variety of human communication behavior related to mass media. Prerequisite: PSYC 1000 (or 1005) or SOC 1000 (or one of 1001, 1002, 2001, or 2002); or consent of instructor. (Y)
- 4100** Television Documentary Production (4)
Fundamentals of producing television documentaries using such basic story development patterns as concept, treatment, research, story focus, story boarding, scripting, performing and narration. Prerequisite: COMM 3130 or consent of instructor. Two hrs. lect., 4 hrs. act. (Y)
- 4110** International Communication (4)
Study of international communication systems, with attention to communication relationships between and among First, Second and Third World nations, and to international regulatory and policy-making agencies in communication. Reading and discussion on current issues, including technological developments and their impact on communication policy. (Y)
- 4150** Mass Media and Government (4)
Interactions between the media and government. Reading on and discussion of current issues, including political elite uses of the media; reporter-official relationships; studies in power manipulation, co-optation and conflict. (Y)
- 4183** Speech and Debate Activities Workshop (1-3)
An activity course for students participating in the co-curricular presentations of the department. Includes competition in debate and various speech events plus appearance before community groups. Admission by consent of instructor. Field trips required. Six units maximum for speech communication credit. (F, W, Sp)
- 4200** Radio Programming and Promotion (4)
Theory and practice of radio programming and promotion, including audience and music research, music rotations, news and public affairs programming, on- and off-air promotions, bartering, broadcast formatics, working with clients, record companies. Prerequisite: COMM 3160 or

consent of instructor. Two hrs. lect., 4 hrs. act. (Y)

- 4201** Comparative Traditions of Rhetoric (4)
A study of Greek, Roman, and non-European traditions of rhetoric and oratory with an emphasis on theories of discourse, rhetorical practices, and the influence of particular cultures on rhetorical theory and practice.
- 4340** Advanced Graphic Communication (4)
Advanced page layout, magazine ad creation, introduction to color theory and manipulation, and animation techniques. Prerequisite: COMM 3340. Three hrs. lect., 2 hrs. act. (Y)
- 4350** Persuasive Speaking (4)
Principles of public speaking and the development and presentation of talks designed to achieve specific purposes. May fulfill teaching credential speech communication requirement. Prerequisite: COMM 1000, or consent of instructor. (Y)
- 4360** Advanced Electronic Web Publishing (4)
Development of electronic publishing techniques appropriate for the world wide web. Includes use of two and three dimensional graphics, audio, video, HTML, Java and XML languages. Prerequisite: COMM 3360 or permission of instructor. Two hrs. lect., 4 hrs. act.
- 4411** Principles of Argumentation (4)
The elements of argumentation emphasizing presumption and burden of proof; propositions; issues; reasoning and fallacies; models of argumentation; and criticism of argumentation from the courtroom, legislature, and other settings. (Y)
- 4450** Selected Topics in Reporting and Editing (4)
Advanced methods for reporting and editing in mass communication. Topics to be selected from such areas as: enterprise reporting, consumer reporting, editing practices, editorial writing. Content may vary and will be announced before registration. Prerequisite: COMM 2200, 3010. Three hrs. lect., 2 hrs. act. May be repeated for credit with consent of instructor.
- 4460** American Public Address (4)
Analysis and evaluation of selected speeches by notable public figures in the United States. Focus on the rhetorical responses of women and men from diverse cultural backgrounds to various types of issues, audiences and occasions. May be repeated for credit with change in course content. (Y)
- 4500** Women in Media (4)
Study of women in the media, including both images of women in media content and an examination of careers for women in the media. Reading and discussion, including content analysis, of contemporary and historical media portrayals of women. (Y)
- 4510** Public Relations Theory and Practice (4)

Principles of public relations as applied to the creation and production of messages for institutions and industry. Analysis of their "publics" including investigation of the psychological, sociological, economic, political and ethical foundations leading to a theory of communication. Prerequisite: COMM 2200. (Y)

- 4515** Critical Discourse in Multicultural America (4)
Study of ancient and modern theories of rhetorical criticism. Extensive practice in applying principles of criticism to public communication in the diverse and multicultural American society. Emphasis on development of competence in analysis and refinement of judgment. (Y)
- 4520** Advertising Theory and Practice (4)
Principles of advertising applied to the creation and production of advertising messages in their many forms including the investigation of the psychological, sociological, economic, and legal aspects. (Y)
- 4530** The Advertising/Public Relations Campaign (4)
Current issues in advertising and public relations. Term project applying advertising or public relations principles to research, creation and production of all aspects of an actual campaign. Prerequisites: COMM 2100, 2200, 3200 or consent of instructor. (Y)
- 4540** Selected Topics in Mass Communication and Public Policy (4)
Subjects selected from such areas as: law, ethics, regulation, legislation and access to information. Content may vary and will be announced before registration. Prerequisite: Senior Standing. May be repeated for credit with consent of instructor.
- 4550** Communication Criticism (4)
Study issues in the analysis and evaluation of messages to explain their influence on audiences. Frequent practice in applying critical approaches to a wide variety of messages, including speeches, essays, and conversation.
- 4560** Ethics in Communication (4)
Ethical issues in verbal and nonverbal communication from standpoints of character, dialogue, politics, situation, and utility. Ethical principles and practices in contexts of public, interpersonal, organizational, mediated, and cross-cultural communication.
- 4600** Image and Idea (4)
(See ART 4600 for course description.)
- 4610** Rhetoric of Popular Culture (4)
Critical analysis of how popular culture (including clothing, sports events, television, rock concerts, ethnic festivals, advertisements, shopping malls, etc.) works rhetorically as messages and how it works discursively in our interactions with self and others. Students conduct field projects.
- 4615** Modern Rhetorical Theory (4)
An intensive study of leading theories from the eighteenth

century to the present, seeking to discover their substance, their relationships to one another, and their usefulness. (Y)

- 4620** History of Photography (4)
A general survey of the history of photography. The technical development and the social, aesthetic and commercial impact of the medium. Cross-listed with ART 4620.
- 4650** Internship in Communication and Media (2, 4)
On-the-job experience with media agencies and offices in the Bay Area. Ten to twenty hours weekly. Prerequisites: senior standing, consent of instructor. May be repeated for credit. Total number of units not to exceed 8, with only 4 units applicable to the Mass Communication major. Credit/No Credit grading only. (A)
- 4700** Topics in Speech Communication (4)
Topics of special interest for intensive study in speech communication. May be repeated for credit with change in course content. (Y)
- 4750** Mass Communication Research (4)
Applied research practices for journalists, public relations and advertising practitioners, and communication researchers. Traditional and innovative methods of gathering information: library research, interviewing, interpretation of public opinion polls, interpreting research literature. Computer database searches and analysis of data. Not open to those with credit for COMM 3800. Prerequisite: COMM 3200.
- 4810** Human Communication Theory (4)
Theories and models of interpersonal and organizational communication, and implications of those theories for research in human communication. (Y)
- 4830** Intercultural Communication (4)
Analysis and comparison of the perception and transmission of verbal and nonverbal messages in intercultural interactions within and among cultural and racial groups primarily of the United States. Cultural and social influences on the communication process and the communication of racism are emphasized. (Y)
- 4840** Organizational Communication (4)
Analysis and application of principles of human communication in the organizational setting. Study of communication structures, channels, climate, and relationships which influence the quality of verbal and nonverbal forms of interaction in the modern organization. (Y)
- 4850** Gender and Communication (4)
The communication styles of females and males in a variety of interpersonal and public settings. Emphasis on gender-related communication behavior as it influences effective personal and professional interaction.
- 4855** Family Communication (4)

Analysis of family communication with attention on how communication patterns learned in diverse family structures (sexual orientation, cultural, and class variations) influence our sense of self and provide models for intimate relationship; the variety of ways families communicate; development of analytical skills to improve communication competence in family interactions.

- 4858** Communication in Personal Relationships (4)
The influence of culture, gender, and sexual orientation on the community of intimacy in romantic, friendship, and family relationships.
- 4860** Ethnic Public Address (4)
The rhetorical principles and public address of ethnic speakers in the United States, including Native American, Asian American, Latino, and African American rhetoric.
- 4870** Methods of Research in Speech Communication (4)
An introduction to an application of theories and methods of conducting both quantitative and qualitative research in speech communication. Issues of basic research design and data analysis are explored and applied to specific research topics. (Y)
- 4875** Senior Seminar (4)
Integration of elements through discussion of current issues in the field. Learning portfolios demonstrating acquisition of intellectual and skill-based competencies are presented, refined, and reviewed by peers and faculty.
- 4880** Communication and Conflict Resolution (4)
Patterns and negotiation styles of expressed disagreements between individuals and/or groups. Culture, gender and relational influence on attitudes and the expression of conflict significantly infused throughout. Focus on informal and formal methods of negotiation in personal, organizational, or public settings. Repeatable once with consent of instructor.
- 4900** Independent Study (1-4)

Footnotes

- 1** May require prerequisites not included in the option or minor.
- 2** Has prerequisite(s) not included in the program or G.E.



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Department Information

Program Description

Music

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Department of Music
 College of Arts, Letters, and Social Sciences
 Office: Music and Business Bldg. 1501
 Phone: (510) 885-3135 FAX: (510) 885-3461

Professors Emeriti: David B. Stein, William Wohlmacher

Professors: Thomas W. Acord, Roberta Brokaw, David H. Eshelman, Frank J. La Rocca, Timothy M. Smith (Chair), Ellen Wassermann

Lecturers: Priscilla Granger, Eric E. Hansen, Ronald McKean, Jeffrey L. Miller, Jennifer S. Navarrete, Janice D. Ortega, David P. Ridge, Jay Rizzetto, Kathryn Smith, Arthur L. Storch, Marc S. Teicholz, Daniel L. Zinn

Please consult the 2006-2007 online catalog for any changes that may occur.

The Music Department's primary goal is to provide students with outstanding musical and educational experiences. There is a great opportunity for enjoyment and musical growth offered by the well-rounded curriculum and wide diversity of performance groups.

Student performance groups are open to all qualified students and one need not be a music major to participate. There are more than twenty active ensembles including Symphonic Band, Jazz Workshop, University Singers, Orchestra, Opera Workshop, New Music Ensemble, Chorus, Oratorio Society, Percussion Ensemble, Chamber Singers, and many small vocal and instrumental ensembles.

The Department of Music offers a Bachelor of Arts degree major which is fully accredited by the National Association of Schools of Music. All music majors have the advantage of continuous applied lessons with instrumental, vocal, or composition teachers on the

Career Opportunities

faculty. A music minor and a music option within the Liberal Studies major are also offered.

The Music Department occupies a large, modern, fully equipped facility, with over sixty pianos, an outstanding library, studios, practice rooms, rehearsal areas, a computer music studio, and a recital hall.

The Music curriculum is designed to serve the needs of students who have career goals in performance, composition, jazz, public school or private teaching, or graduate study, as well as those who are pursuing other fields of study and choose music as an elective.

Arranger • Choral Director • Composer • Concert Artist • Conductor • Disc Jockey • Freelance Performer • Jazz Musician • Lyricist • Music Producer • Music Professor/Teacher • Musical Theatre Director • Rock Musician • Symphony Member

Scholarships

The Music Department annually awards a number of scholarships to entering and returning music majors. For more information, contact the Music Department office at (510) 885-3135.

Preparation

For Advanced Placement course equivalencies, see Registration chapter.

Major Requirements (B.A.)

The major consists of 84 units; the B.A. requires a total of 180 units.

- I. Lower Division (45 units)
 - MUS 1027, 1028, 1029¹ Sightsinging I, II, III (3 units)
 - MUS 1031, 1032, 1033¹ Music Theory I, II, III (12 units)
 - MUS 1210-1270² Applied Music (major performance media) (12 units)
 - MUS 2031, 2032, 2033 Music Theory IV, V, VI (12 units)
 - MUS 3501-05, 3509-15 Music Performance Activities (6 units)

- II. Upper Division (39 units)
 - MUS 3034 Music Theory VII (4 units)

 - One of: Music 3051, 3061, 3062 Form and Analysis; Counterpoint I, II (4 units)

 - MUS 3155, 3156, 3157 Music Literature and Analysis I, II, III (9 units)

 - MUS 3210-3270² Applied Music (major performance media) (12 units)

 - MUS 3501-05, 3509-15 Music Performance Activities (6 units)

MUS 3506 Chamber Ensembles. Four units to be taken in four different quarters (4 units)

Special Requirements of the Department of Music

I. Applied Music

A. Each Music major will declare a principal medium (keyboard, voice, orchestral or band instrument, guitar, composition) with the department and perform an audition prior to his or her first quarter registration. The audition will be heard by a committee appointed by the chair of the department. This committee will evaluate the student's applied music level and will determine probationary conditions, if any, under which a student may be admitted as a music major.

Majors entering with composition as their applied area are required to be proficient in an instrumental medium. Since composition instruction does not normally begin before the sophomore year, an entering freshman will audition and enroll for instrumental instruction as described above; or, with permission of a composition instructor, may enroll without audition for Applied Piano.

B. Probationary Standing. A student who is admitted on probation will be allowed to enroll for one and no more than three quarters of applied instruction. To continue as a music major, the student must re-audition at the completion of this study and satisfactorily remove the conditions of probation.

C. Each music major must continuously study in his or her principal medium until he or she completes the level 40 requirements outlined in the Handbook for Undergraduate Music Majors.

D. Applied instruction may not exceed 12 units in lower division and 12 units in upper division without permission from the department chair.

E. In order to receive applied instruction, an undergraduate student must be enrolled for a minimum of six units, two of which must be in any music course other than performing ensembles and applied music, and must be making satisfactory progress toward the degree.

II. Recitals

A. Music majors are to appear each year in regularly scheduled student recitals as determined by the department.

B. Specific recital performance requirements are outlined in the Handbook for Undergraduate Music Majors.

C. No recitals may be given during the last week of classes or during the final examination period.

- D. Attendance at six recitals and concerts each quarter is required of all music majors. Recital attendance cards may be obtained in the Music Department office.

III. Performance Groups

- A. Each music major is required to be in one major music performance activity each quarter in which he or she plays his or her principal instrument.
- B. The 4 units of chamber ensemble required for the Music major should be taken in 4 different quarters.

IV. Proficiency Tests

- A. Proficiency tests may be required in any or all aspects of music performance skills, theory, and history and literature as a basis for determining placement in sequence courses.
- B. An upper division transfer student who has completed most of his or her music major may be required to take certain courses in theory, history and literature, and performance.
- C. All new music majors (except keyboard majors) are required to take a piano proficiency exam. If the exam is not passed, the student must enroll in the appropriate level of class piano instruction until the proficiency exam or MUS 2313 is passed.
- D. All keyboard majors are required to pass a proficiency exam in sight-reading, keyboard harmony and open-score reading or pass MUS 2314, 2315, 2316.

V. Further courses recommended

Study of a foreign language is recommended.

Sample Schedule

Recommended sequence of music courses for four-year baccalaureate program:

First Year

MUS 1031 (4)	MUS 1032 (4)	MUS 1033 (4)
MUS 1027 (1)	MUS 1028 (1)	MUS 1029 (1)
MUS 1210-70 (2) [□]	MUS 1210-70 (2) [□]	MUS 1210-70 (2) [□]
MUS 3500 (1)	MUS 3500 (1)	MUS 3500 (1)

Second Year

MUS 2031 (4)	MUS 2032 (4)	MUS 2033 (4)
MUS 1210-70 (2) [□]	MUS 1210-70 (2) [□]	MUS 1210-70 (2) [□]
MUS 3500 (1)	MUS 3500 (1)	MUS 3500 (1)

Third Year

MUS 3034 (4)	One of MUS 3051,	MUS 3210-70 (2) [□]
MUS 3210-70 (2) [□]	3061, 3062 (4)	MUS 3500 (1)
MUS 3500 (1)	MUS 3210-70 (2) [□]	MUS 3506 (1) [□]
MUS 3506 (1) [□]	MUS 3500 (1)	
	MUS 3506 (1) [□]	

Fourth Year

MUS 3155 (3)	MUS 3156 (3)	MUS 3157 (3)
MUS 3210-70 (2) [□]	MUS 3210-70 (2) [□]	MUS 3210-70 (2) [□]
MUS 3500 (1)	MUS 3500 (1)	MUS 3500 (1)
MUS 3506 (1) [□]		

Major Advising

Since requirements are subject to change, consult an advisor in your major department for clarification and interpretation of your major requirements.

The minor consists of 36 units.

Note: To be admitted to the minor program, the student must demonstrate vocal or instrumental performing ability. Applied instruction will be limited to three quarters of study.

Required courses:

- MUS 1027 Sightsinging I (1)
- MUS 1028 Sightsinging II (1)
- MUS 1029 Sightsinging III (1)
- MUS 1031 Music Theory I (4)
- MUS 1032 Music Theory II (4)
- MUS 1033 Music Theory III (4)
- MUS 1210-70[□] Applied Instruction for 3 quarters (6)
- MUS 3500-50[□] Performance Activities for 4 quarters (4)

Class piano instruction taken from: MUS 1314-16, 2311-13, 2314-16[□] (3)

Upper division electives in music selected in consultation with departmental advisor (8 units)[□]

Areas I, V.A, and V.B. (10-12 units)

Either MUS 1000 Survey of Music Literature (or 2020) (4) or MUS 1008 Music Theory for Non-Music Majors I (4)

At least two of the following courses: (6-8)

MUS 1005 Music of Our Time (4)

Either MUS 1000 Survey of Music Literature (or 2020) (4) or MUS 1008 Music Theory for Non-Music Majors I (4) (if not taken above)

MUS 1015 Basic Musicianship Through Guitar for Non-Music Majors (4)

Area VII Credential Track or Area VI General Track (24 units)

Twenty-four units from the following courses:

- MUS 1007 History of Jazz (4)
- MUS 1016 Basic Musicianship Through Guitar for Non-Music Majors II (4)
- MUS 2321 Basic Voice (1)
- MUS 2322 Basic Voice (1)

Minor Requirements

Music Option: Liberal Studies

Undergraduate Courses

MUS 3002 What to Listen for in Music (4)
MUS 3501-3515 Music Performance Activities (4)
A four-unit course selected from "Courses for Non-Music
Majors," with consent of advisor (4)

Any course in Basic Orchestral Instruments, or, with department
approval, in the Applied Music Series (4)

The course prefix for the following courses is MUS.

Courses for Non-Music Majors

- 1000** Survey of Music Literature (4)
A basic course in music understanding designed for the
person without formal musical training. The elements,
styles, media and social and historical significance of
Western music. Field trips may be required.
- 1004** Introduction to World Music (4)
Survey of the music and artistic media of non-European
cultures including Polynesia, Australia, Africa, Asia, Middle
East and native North America. Development of musical
understanding through exploration of basic universal
elements of music, dance, ceremony and common human
values. Previous musical training not necessary. Field
trips may be required. Not open to those with credit for
MUS 1014. (Sp)
- 1005** Music of Our Time (4)
Survey of modern forms and styles and of the cultural and
social influences on music in the 20th Century. Popular
styles such as Cajun, Blues, Reggae, Salsa, New Age,
and Alternative, as well as related classical forms from
the Western musical tradition. Previous musical training
not necessary. Field trips may be required. (Y)
- 1006** History of Rock and Roll (4)
A survey of important performers and styles from the
1950's to the present, and of the music's African, rhythm
and blues, and classical music sources. Previous musical
training not necessary. Not open to those with credit for
MUS 2130. (F, W, Sp)
- 1007** History of Jazz (4)
Periods, major performers and composers, trends,
influences, stylistic features and cultural significance. Field
trips may be required. (Y)
- 1008** Music Theory for Non-Music Majors I (4)
Fundamentals of music notation. Major and minor scale
and chord formations. Emphasis on practical musicianship
through rhythmic exercises and reading of songs on
simple melody and rhythm instruments. Recommended for
non-music majors in Liberal Studies and Multiple Subject
Credential programs. Three hrs. lect., 2 hrs. act. (Y)
- 1014** Introduction to World Music History (4)
Survey of the music of selected cultures. Relationships

among art, music, and religions from around the world with emphasis on cultural, historical, and social influences. Not open to those with credit for MUS/ANTH 1004. (F, W, Sp)

- 1015** Basic Musicianship Through Guitar for Non-Music Majors I (4)
Development of music reading and understanding through study of guitar. Recommended for non-music majors pursuing a credential program. Students provide own guitar. Three hrs. lect., 2 hrs. act. (Y)
- 1016** Basic Musicianship Through Guitar for Non-Music Majors II (4)
Continuation of MUS 1015, Guitar I. Development of musical understanding and music reading ability through the study of the guitar. Recommended for non-music majors who follow the Multiple Subject Credential program. Prerequisite: MUS 1015 or consent of instructor. Three hrs. lect., 2 hrs. act. (Tent. Sp)
- 2018** Cultures in Contact: Music of the Middle Ages through the Early Baroque (4)
Music history from the Middle Ages through the Baroque from the viewpoint of cultures in contact. Topics include Eastern and Western chant, Medieval and Renaissance music, Islamic and Jewish influences, music in the New World, and more. Previous musical training is not necessary.
- 2020** Music of the Holocaust (4)
Exploration of the music and culture of the oppressors and the oppressed from World War II and other periods. Development of listening skills and awareness of music's power to influence and express experiences of societies. (W)
- 2130** Pop Music in Western Society (4)
Popular forms of Rock Music and their influence on society. Topics include music of social protest, race relations, gender issues, and economic influences. Emphasis on developing listening skills through observing live performances, recordings, and videotapes. Previous training not necessary. Field trips may be required. Not open to those with credit for MUS 1006. (Y)
- 3002** What to Listen for in Music (4)
Development of a greater appreciation and enjoyment of music through study of the musical content of selected works. Study of the elements of music to develop critical listening skills applicable to all styles of music. Previous musical training not necessary. Field trips may be required.(Y)
- 3600** The Music Business (2)
A survey of business practices, legal rights, and other business concepts unique to the musician. Emphasis on self-promotion, clubs, studios, musicians' union, recording and manufacturing of CDs, copyrights, publishing, licensing, mechanicals, performance rights, media rights,

and contracts. (Tent. Sp)

- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 8 units. Not applicable to the music major; a maximum of 4 units may be applied to the music minor. CR/NC grading only. Prerequisites: at least a 2.0 GPA; departmental approval of activity. (A)
- 3999** Issues in Music (4)
Readings, discussion, and research on contemporary and/or significant issues in music. May be repeated for credit when content varies.
- 4450** Internship Seminar in Applied Arts Administration (2)
(See THEA 4450 for course description.)

Music Theory

- 1027,** Sight-singing I, II, III (1 each)
1028, Development of music reading skills applicable to all instrumental and vocal performance media. Dictation, analysis and singing of melodies and melodic exercises; study and performance of basic rhythmic materials. To be taken concurrently with Theory I, II, III. Prerequisite: Music major or minor, or consent of instructor. Two hrs. act. (F, W, Sp)
- 1029** Dictation, analysis and singing of melodies and melodic exercises; study and performance of basic rhythmic materials. To be taken concurrently with Theory I, II, III. Prerequisite: Music major or minor, or consent of instructor. Two hrs. act. (F, W, Sp)
- 1031,** Music Theory I, II, III (4 each)
1032, The integrated study of tonal harmony, part-writing, analysis and ear-training.
1033
- I. Music fundamentals. Preliminary work with triads, seventh chords and part-writing procedures. Co-requisite: MUS 1027. (F)
 - II. Continuation of MUS 1031. Intensive work with triads and dominant seventh chords. Co-requisite: MUS 1028. Prerequisites: MUS 1027, 1031. (W)
 - III. Continuation of MUS 1032. Introduction to tonicization and modulation. Co-requisite: MUS 1029. Prerequisites: MUS 1028, 1032. (Sp)
- 2031,** Music Theory IV, V, VI (4 each)
2032,
2033
- IV. Continuation of MUS 1033. Diatonic sequences, rhythmic and melodic figuration. Prerequisites: MUS 1029, 1033. (F)
 - V. Continuation of MUS 2031. Advanced tonal procedures, secondary dominants, diatonic modulation. Prerequisite: MUS 2031. (W)
 - VI. Continuation of MUS 2032. Chromaticism. Prerequisite: MUS 2032. (Sp)

- 2041** Jazz Theory and Improvisation (3)
Integrated approach to jazz theory, repertoire, and improvisation. Improvisation, theoretical studies and analytical techniques. Theoretical materials will influence and shape the improvisational skills developed in small performing ensembles. May be repeated once for credit. Prerequisite: MUS 1033 or consent of instructor. Two hrs. lect., 2 hrs. act. (Y)
- 3034** Music Theory VII (4)
Twentieth Century music up to the present; extension of tonality; non-tonal music. Analysis and compositional exercises. Prerequisite: MUS 2033 or equivalent. (F)
- 3051** Form and Analysis (4)
The study and analysis of music written in traditional forms. Prerequisite: MUS 2033. (W)
- 3061, 3062** Counterpoint I, II (4 each)
- I. The writing of counterpoint modeled on the style of Palestrina. Additional work modeled on other 16th century composers may be introduced at the discretion of the instructor. Prerequisite: MUS 3034. (Alt. Sp)
 - II. The writing of counterpoint modeled on the style of J. S. Bach. Additional work modeled on other 17th and 18th century composers may be introduced at the discretion of the instructor. Prerequisite: MUS 3034. (Alt. Sp)
- 3071** Jazz Arranging (3)
Technical features of various jazz styles; arranging for various combinations of instruments. Prerequisite: MUS 2033 or consent of instructor. (Alt. Sp)
- 3082** Seminar in Computer Music (3)
The theory and practice of computer applications in music. Production of specific computer-music projects. May be repeated for credit up to a maximum of 6 units. Prerequisite: MUS 3081 or consent of instructor. Two hrs. lect., 2 hrs. act.
- 4054** Instrumentation (4)
Study of the instruments of the orchestra and band; scoring for small ensembles; survey of scoring for school orchestra, band, and chorus. Prerequisite: MUS 3034.

Music History and Literature

- 3155, 3156, 3157** Music Literature and Analysis I, II, III (3 each)
Emphasis given to style analysis; the relationship of music to the social and cultural background of each epoch. Prerequisite for each: MUS 2033 or consent of instructor.
- I. Music from the beginnings of Western Civilization through Medieval and Renaissance times. (F)

II. Music of the Baroque and Classical periods. (W)

III. Music of the Romantic and Contemporary periods.
(Sp)

Applied Music

1210- Applied Music (2 each)

1270 Individual advanced instruction for music majors and minors. May be repeated for credit up to a maximum of 12 units. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. (F, W, Sp)

1210 Piano	1241 Oboe
1211 Organ	1242 Clarinet
1212 Harpsichord	1243 Bassoon
1220 Voice	1244 Saxophone
1230 Violin	1250 Trumpet
1231 Viola	1251 French Horn
1232 Cello	1252 Trombone
1233 String Bass	1253 Baritone
1234 Harp	1254 Tuba
1235 Guitar	1260 Percussion
1240 Flute	

1270 Composition -

Prerequisites: (1) reasonable proficiency in at least one other area of applied music; (2) knowledge of music theory equivalent to first year theory; and (3) consent of instructor.

1314, Basic Piano Class I, II, III (1 each)

1315, Group instruction in piano for music majors not

1316 concentrating in piano. *Prerequisites:* MUS 1314 is prerequisite to MUS 1315; MUS 1315 is prerequisite to 1316. Two hrs. act. (F, W, Sp)

2311, Intermediate Class Piano I, II, III (1 each)

2312, Continuation of MUS 1316. **MUS 2311:** Major mode formulae, *prerequisites:* MUS 1316 and MUS 1033 or equivalents. **MUS 2312:** Minor mode formulae; *prerequisite:* MUS 2311 or consent of instructor. **MUS 2313:** open score reading; *prerequisite:* MUS 2312 or consent of instructor. Two hrs. act. (F, W, Sp)

2314 Keyboard Sight-Reading (1)

Sight-reading technique as applied to keyboard literature. *Prerequisite:* Music major. Keyboard concentration. Two hrs. act. (Alt. F)

2315 Keyboard Harmony (1)

Harmonic formulae in all keys, sequences, transpositions and simple figured bass; sight harmonization of melodies and bass lines. Designed for keyboard concentrators at sophomore level or above. Two hrs. act. (Alt. W)

2316 Open Score Reading (1)

Principles of reading and transcribing open scores at the

keyboard. Examples chosen from choral, orchestral and ensemble literature. Designed for keyboard concentrators at sophomore level or above. Two hrs. act. (Alt. Sp)

2317 Jazz Piano and Keyboard Improvisation (1)
Repertoire, voicings, chords, and guidelines for improvisation in the contemporary styles of the jazz pianist. May be repeated once for credit. Prerequisites: basic knowledge of notation, keyboard performance, and jazz harmony. Two hrs. act.

3210- Applied Music (2 each)

3270 Individual advanced instruction for music majors. May be repeated for credit up to a maximum of 12 units. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. (F, W, Sp)

3210 Piano	3241 Oboe
3211 Organ	3242 Clarinet
3212 Harpsichord	3243 Bassoon
3220 Voice	3244 Saxophone
3230 Violin	3250 Trumpet
3231 Viola	3251 French Horn
3232 Cello	3252 Trombone
3233 String Bass	3253 Baritone
3234 Harp	3254 Tuba
3235 Guitar	3260 Percussion
3240 Flute	

3270 Composition -

Prerequisites: (1) reasonable proficiency in at least one other area of applied music; (2) knowledge of music theory equivalent to first year theory; and (3) consent of instructor.

Music Performance Activities

2400 Stage and Acting Basics for Singers (1)
Techniques of movement while singing and during musical interludes. Development of operatic character types through movement. Study of music as dialogue, pacing and timing of lines, acting out of recitatives. May be repeated for credit up to a maximum of 12 units. Prerequisite: concurrent enrollment in MUS 3505 or consent of instructor. Two hrs. act.

3500- Music Performance Activities (1 each)

3550 Music activities are open to all qualified students. They may be repeated for credit up to a maximum of 12 units. Music majors are required to enroll in one major performance group each quarter. Field trips may be required. (F, W, Sp)

- 01 University Chorus.
- 02 University Orchestra.
- 04 University Singers.
- 05 Opera Workshop.
- 06 Chamber Ensemble. Two hrs. act.
- 09 Piano Accompaniment. Two hrs. act.

10 Jazz Workshop.
11 Symphonic Band.
15 University Oratorio Society.

4200 Vocal Diction and Literature (3)
Diction and performance practice of representative vocal literature in the most commonly used languages: English, Italian, and Latin; or German, French, and Spanish. May be repeated once for credit. Prerequisite: upper division standing in Music, or consent of instructor. Two hrs. lect., 2 hrs. act.

Music Education

2321, Basic Voice (1 each)
2322, Class instruction in fundamentals of singing. May be repeated for credit. MUS 2321 prerequisite for 2322. MUS 2323 prerequisite for MUS 2323. Two hrs. act. (Y)

2331- Basic Orchestral Instruments (1 each)
2361 Instruction in the fundamentals of playing orchestral instruments; methods and materials for use in elementary and secondary schools. Two hours activity.

2331 Violin and Viola. (F)
2332 Cello and Bass. (W)
2341 Clarinet. (F)
2342 Double Reeds. Prerequisite: 2341 (Sp)
2343 Flute and Saxophone. Prerequisite: 2341 (W)

2355 Basic Brass
Fundamentals of playing brass orchestral instruments (trumpet, French horn, trombone, baritone, tuba) with attention to elementary and secondary school teaching techniques and materials. Two instruments will be studied each quarter. Two hours activity. May be repeated once for credit. Prerequisite: Music major; others by consent of instructor. (F, W)

2361 Percussion (Sp)

2371 Basic Guitar (1)
Fundamentals of playing guitar with emphasis on developing competencies sufficient to employ the instrument as a teaching tool. Prerequisite: Music major or consent of instructor. Two hours activity. (Sp)

3370 Basic Conducting (3)
Basic techniques of conducting including simple, compound and asymmetrical meters, expression and interpretation through observation and laboratory experience. Prerequisite: upper division standing or consent of instructor. (F)

3380 Choral Conducting (3)
Special techniques of choral conducting including vocal and score reading and analysis, interpretation, and rehearsal through observation and laboratory experience. Prerequisite: upper division standing or consent of

instructor; MUS 3370 or equivalent must precede MUS 3380. (Y)

- 3390** Instrumental Conducting (3)
Special techniques of instrumental conducting including score reading and analysis, interpretation, rehearsal through observation and laboratory experience.
Prerequisites: upper division standing or consent of instructor. MUS 3370 or equivalent must precede MUS 3390. (Y)
- 4435** Seminar in Public School Instrumental Teaching Techniques (3)
Provides opportunity for students intending to become teachers to develop rehearsal techniques, organizational procedures related to public school band and orchestra programs; to become familiar with public school teaching materials; to further develop conducting techniques; and to improve secondary instruments skills. Prerequisites: Basic Conducting; two quarters each, basic strings, woodwinds, brass, one of percussion; others by consent of instructor. Field trips may be required. (Y)
- 4440** Seminar in Public School Choral Teaching Techniques (3)
Development of rehearsal techniques and organizational procedures related to choirs and vocal ensembles in the public schools. Teaching materials and appropriate literature from various stylistic periods. Prerequisites: MUS 3370 and MUS 3380, or consent of instructor. Field trips may be required. (Y)
- 4445** Seminar in Elementary Classroom Music Teaching Techniques (3)
Development of classroom management and teaching techniques appropriate for elementary general music and choral classes. Emphasis on the Kodaly method and related instructional materials. Prerequisite: upper division standing or consent of instructor. Field trips may be required. (Y)
- 4502** Seminar in the Art and Science of Vocal Pedagogy II (3)
Practical application of principles and theories presented in level I (MUS 4501). Survey of pedagogical approaches; hands-on experience in diagnosis and correction of vocal problems; principles of effective ensemble singing. Intended for singers, teaching professionals, and aspiring teachers of choral and solo singing. Prerequisite: MUS 4501 (Seminar in the Art and Science of Vocal Pedagogy I) or consent of instructor.

Miscellaneous Course

- 4900** Independent Study (1-4)
-

Footnotes

1. MUS 1027-29 and 1031-33 to be taken concurrently.
2. Majors entering with composition as their applied area are required to be proficient in an instrumental medium. Because composition instruction does not normally begin before the sophomore year, an entering freshman will audition and enroll for instrumental instruction as described in section I.A.; or, with permission of a composition instructor, may enroll without audition for Applied Piano.
3. See "Special Requirements of the Department of Music," Section I.E.
4. The chamber ensemble requirement may be fulfilled during any four quarters.
5. Substitutions for this requirement may be made, with the approval of the Departmental Minor advisor.
6. Upper division substitutions may be made for this requirement, with the approval of the Departmental Minor advisor.



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Computer Science

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Department Information

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Lecturers: Paula Albert, Jack A. Carter, Francis Conlan, Michael A. Contino, Dorothy E. Fujimura, Phil Gonsalves, Ching-Cheng Lee, David L. Pugno, Denise Sargent-Natour, Jean Simutis

Please consult the 2006-2007 online catalog for any changes that may occur.

Description

designed to prepare students for employment or for advanced study in computer science. The student's course of study will provide a solid foundation of theoretical knowledge as well as experience with practical applications in hardware and software.

Computer Science is the study of computation and of methods for addressing, processing, storing, and transmitting information. It encompasses a broad perspective that includes what a computer is, its uses and applications, and theoretical approaches to what can be computed. The core curriculum in Computer Science, involving a blend of theory and practice, offers opportunities for problem solving in many areas and provides experience with a variety of computers, computer languages, and software packages. A typical student's experience can include scientific programming, language design and implementation, file handling and database design, data communication and networking, artificial intelligence, hardware design, and graphic implementations ranging from interface design to artistic presentations.

A strong mathematical background is important in Computer Science. High school students who are interested in computer science should take as much mathematics as possible, particularly algebra, trigonometry, and precalculus. Community college students who are planning to transfer to Cal State Hayward should take the calculus sequence, linear algebra, discrete structures, a sequence of courses in some programming language (such as C, C++, Java), and a course in computer organization and assembly language.

Career Possibilities

Computer Network Support Employee • Computer Operations Manager • Computer Sales Representative • Customer Support Employee • Database Applications Program Analyst or Designer • Graphics Specialist • Programmer or Administrator • Programming Team Member, Specializing in Design, Testing, or Documentation • Scientific Applications Programmer • Software Engineer Systems Analyst • Systems Manager or Programmer • Technical Writer • Teacher/Professor

Features

Computer Science students at Cal State Hayward have access to some of the most modern and powerful computer equipment available. The campus provides a network backbone, including connection to the Internet and hundreds of personal computers. The department also has equipment of its own, including a network of Unix workstations and classrooms equipped for computerized demonstrations. Several computer labs on campus offer terminal access and assistance with problems. Cal State Hayward has an active Computing Club which hosts a variety of events and projects.

Each year the department offers a number of scholarships covering a portion of fees for the subsequent year. Applications may be obtained from the department during Winter.

A booklet containing sample schedules, as well as further information about the computer science major, is available in the

Preparation

Major Requirements (B.S.)

Mathematics/Computer Science Student Service Center (North Science 337). This information may be obtained electronically at <http://www.mcs.csu Hayward.edu>.

For Advanced Placement course equivalencies, see [Registration chapter](#).

Many students pursue a double major in Mathematics and Computer Science, since a number of courses are common to both majors and can be double-counted. Another popular combination is a major in computer science and a minor in mathematics.

Please consult an advisor in your major department for clarification and interpretation of your major requirements. Computer Science majors may complete the following 80-unit program or may elect to complete an 88-unit option in Computer Engineering, Networking and Data Communications, or Software Engineering (see "Options" section). The B.S. degree requires a total of 180 units.

All Computer Science majors must complete the following courses in sections I, II, and III with a grade of "C" or better.

I. Mathematics (24 units)

Six courses are required:

- MATH 1304, 1305, 2304 Calculus I, II, III sequence (12)
- MATH 2101 Elements of Linear Algebra (4)
- MATH 2150 Discrete Structures (4)

Choice of:

- STAT 3401 Introduction to Probability Theory I (4) or
- STAT/MATH 3502 Statistical Inference I (4) or STAT/ENGR
- 3601 Introductory Statistics and Probability for Science and Engineering (4)

A student who has recently taken a pre-calculus course in high school should be prepared to begin the calculus sequence. A student with three years of high school mathematics, including two years of algebra and one year of geometry, should be prepared to take MATH 1130, or possibly MATH 1300. Students who are unsure about what mathematics course to begin with, should call the department office for advice.

It should be noted that students may not enroll in any baccalaureate level mathematics or computer science class unless they have met the Entry Level Mathematics (ELM) requirement or are exempt from it. Information about the ELM is available from the Testing Office at (510) 885-3661.

II. Lower Division Computer Science (12 units)

Required courses:

- CS 1160 Introduction to Computer Science and Programming

Methods (4)
CS 2360 Programming Methods and Introduction to Software Engineering (4)
CS 2430 Computer Organization and Assembly Language Programming (4)

Although CS 1160 is the required introductory course for Computer Science majors, it may be difficult for students with no experience using computers. Students who do not know how to use a word processor or who have no knowledge of computer files and operating systems should consider taking CS 1020 (Introduction to Computers) before taking CS 1160.

Students who have completed a multi-quarter course in C, C++, Java, or Pascal at another college should consult the Mathematics/Computer Science Department; they may be able to substitute their previous coursework for CS 1160 and possibly CS 2360.

III. Upper Division Computer Science: Required Courses (16 units)

CS 3120 Programming Language Concepts (4)
CS 3240 Data Structures and Algorithms (4)
CS 3430 Computer Architecture (4)
CS 4560 Operating Systems (4)

IV. Upper Division Computer Science: Concentration (16 units)

The selection of all elective Computer Science courses is important in giving the major a coherence, with depth in key areas. These electives must be chosen with the assistance and approval of a faculty advisor.

A student must take four of the following eight courses:

CS 3560 Introduction to Systems Programming (4)
CS 3590 Data Communications and Networking (4)
CS 4660 Database Architecture (4)
CS 4110 Compiler Design (4)
CS 4170 Theory of Automata (4)
CS 4245 Analysis of Algorithms (4)
CS 4310 Software Engineering I (4)
MATH/CS 3750 Numerical Analysis I (4)

V. Electives (12 units)

Any of the following courses may be used in meeting this requirement. However, at least 4 units (other than units from CS 3898) must be from courses with the CS prefix.

- A. Any course(s) from IV not used in meeting the requirements in that category.
- B. Any upper division course in Computer Science except those used in meeting requirements III or IV. No more than 4 units of CS 4900, Independent Study, and no more than 4 units of CS 3898, Cooperative Education, may be applied to the Computer Science major requirements.
- C. Any graduate course in Computer Science (except CS 6000 and CS 6909).

Options

D. Any upper division course in the Department of Mathematics and Computer Science or the Department of Statistics that is applicable to the BS degree major in Mathematics.

E. Any courses from the following list:

CIS 3281 Systems Analysis and Design (4)

CIS 3282 Object-Oriented Systems Analysis and Design (4)

CIS 4272 Advanced Topics in Business Computer Systems (4)

CIS 4273 Decision Support and Expert Systems (4)

PHIL 3002 Modern Logic (4)

PHYS/ENGR 3280 Electronics (4)

The student is responsible for meeting all prerequisites for any of these courses. Many of the courses in (E) have prerequisites that are not included among major requirements.

Note: Students contemplating graduate study in Computer Science should consult with a faculty advisor early in their programs. They should be sure to include an adequate number of theory courses in their major and should have an extensive background in Mathematics.

The major with one of the following three options consists of 88 units. In addition to the 24 units of mathematics courses (Section I), the 12 units of lower division computer science courses (Section II), and the 16 units of upper division computer science courses (Section III) required for a B.S. degree major in computer science, students choosing an option in Computer Engineering, Networking and Data Communications, or Software Engineering must complete an additional 36 units. See below.

Computer Engineering

The Option in Computer Engineering emphasizes the design of computer hardware and software and the close interaction between the two. It is an area of study with many issues, ranging from the design and development of large scale systems requiring an integration of hardware and software, to the design and deployment of special purpose devices used for control of physical processes. The option provides a foundation of knowledge for immediate application, but also provides a background for further study in the field.

Computer Engineering Concentration (24 units)

CS 3432 Digital Design Lab (4)

CS 3434 Microprocessor Lab (4)

CS 3590 Data Communications and Networking (4)

CS 4430 Computer Architecture II (4)

CS 4432 VLSI Circuit Design (4)

PHYS 2702 Heat, Sound, Electricity and Magnetism (4)

Computer Engineering Electives (12 units)

Choice of three courses from the following:

CS 3560 Introduction to Systems Programming (4)

CS 4310 Software Engineering I (4)

- CS 4590 Computer Networks (4)
- CS 4594 Broadband Networks and Communications (4)
- CS 4596 Wireless and Mobile Networking (4)
- CS 4840 Computer Graphics (4)

Networking and Data Communications

Data communication and networking comprise an important, broad subfield of computer science. The Networking and Data Communications Option provides a concentration in the study of electronic networks. It emphasizes the analysis, design, and management of software that controls electronic networks. This option will enhance students' chances for immediate employment in the area while also preparing them for a flexible long-term career.

Upper Division Computer Science: Concentration (16 units)

- CS 3560 Introduction to Systems Programming (4)

Choice of three courses from the following:

- CS 4660 Database Architecture (4)
- CS 4110 Compiler Design (4)
- CS 4170 Theory of Automata (4)
- CS 4245 Analysis of Algorithms (4)
- CS 4310 Software Engineering I (4)
- MATH/CS 3750 Numerical Analysis I (4)

Networking Concentration (12 units)

- CS 3590 Data Communications and Networking (4)
- CS 4590 Computer Networks (4)
- CS 4594 Broadband Networks and Communications (4)

Networking and Data Communication Electives (8 units)

Choice of two courses from the following:

- CS 4592 Network Operations and Administration (4)
- CS 4596 Wireless and Mobile Networking (4)
- TC 4277 Telecommunications Industry and Regulatory Issues (4)

Software Engineering

Software engineering is an important subfield of computer science and is an area of intense activity, both in research and in applications. The Software Engineering Option emphasizes code development as an engineering science and gives students the understanding and skills necessary to participate in the systematic analysis and development of large, real-world software projects.

Upper Division Computer Science: Concentration (16 units)

Choice of four courses from the following:

- CS 3560 Introduction to Systems Programming (4)
- CS 3590 Data Communications and Networking (4)
- CS 4110 Compiler Design (4)
- CS 4170 Theory of Automata (4)
- CS 4245 Analysis of Algorithms (4)
- MATH/CS 3750 Numerical Analysis I (4)

Software Engineering Concentration (12 units)
CS 3340 Introduction to Object-Oriented Programming (4)
CS 4310 Software Engineering I (4)
CS 4311 Software Engineering II (4)

Software Engineering Electives (8 units)

Choice of two courses from the following:

CS 3520 Web Site Development (4)
CS 4320 Software Testing and Quality Assurance (4)
CS 4660 Database Architecture (4)

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

Students majoring in other fields may wish to complete a coherent pattern of work in Computer Science or Software Development for the purpose of expanding their employment and educational opportunities.

Computer Science Minor (36 units)

- I. Lower Division Mathematics (12 units)
MATH 1304 and 1305 Calculus I and II (8)
MATH 2150 Discrete Structures (4)
- II. Lower Division Computer Science (12 units)
CS 1160 Introduction to Computer Science and Programming Methods (4)

CS 2360 Programming Methods and Introduction to Software Engineering (4)

CS 2430 Computer Organization and Assembly Language Programming (4)
- III. Upper Division Computer Science (12 units)
 - A. *Two courses from the following list:*
CS 3120 Programming Language Concepts (4)
CS 3240 Data Structures and Algorithms (4)
CS 3430 Computer Architecture (4)
CS 4560 Operating Systems (4)
 - B. *One upper division Computer Science elective.*
This may be a third course from the list in (A) above or any course from category IV of the requirements for the major in Computer Science.

Software Development Minor (36 units)

I. Required Courses (28 units)

CS 1160 Introduction to Computer Science and Programming Methods (4)

CS 2360 Programming Methods and Introduction to Software Engineering (4)

CS 3240¹ Data Structures and Algorithms (4)

CS 4310 Software Engineering I (4)

MATH 1304 Calculus I (4)

MATH 1305 Calculus II (4)

MATH 2150 Discrete Structures or MATH 2304 Calculus III (4)

II. Choice of two courses from the following (8 units):

CS 3340 Introduction to Object-Oriented Programming and Design (4)

CS 3520 Web Site Development (4)

CS 3560 Introduction to Systems Programming (4)

CS 4660 Database Architecture (4)

Mathematics Minor

Students majoring in Computer Science find it relatively easy to obtain a minor in Mathematics because there is a significant overlap in lower division requirements for the CS major/Math minor. To accomplish this, a student must complete three approved upper division mathematics electives. Two of these electives must be chosen from the following five courses: MATH 3100, 3121, 3215, 3300, and 3331; the third elective must be an upper division mathematics course (which may include any cross-listed, upper division course in Statistics or Computer Science, but not MATH 4021, 4022, 4023, or 4024). See undergraduate Mathematics chapter for details.

Undergraduate Courses

The course prefix for the following courses is CS.

Mathematics courses offered by the Department of Mathematics and Computer Science are fully described in the Mathematics section of this catalog. (*Note:* In order to enroll in any baccalaureate-level Mathematics or Computer Science course, students must satisfy the Entry-Level Mathematics (ELM) requirement.

1020 Introduction to Computers (4)
Computers, their use and place in modern society. Computer organization and hardware, computer software. Introduction to use of the computer, operating system commands, word processing, database management, other applications, and computer programming. Internet and its use. Ethical and societal issues. Prerequisite: Satisfaction of the Entry Level Mathematics (ELM) requirement. No prior computer experience necessary; course recommended for students of any major who want to learn about computers and how to use them.

1060 Introduction to Computer Programming for

Bioinformatics (4)

Introduction to computers, problem solving, algorithms, and program design; control structures, arrays, functions, input/output, files (C++ or other language); tools for the Internet and operating systems (UNIX, etc.), with emphasis on methods useful for bioinformatics. Prerequisite: MATH 1300; CS 1020 recommended for those without computer experience.

1160 Introduction to Computer Science and Programming Methods (4)

An introduction to computers, problem solving, algorithms, and program design. Use of University computing facilities. Programming done in C++. Topics include control structures, arrays, functions, input and output. Prerequisite: MATH 1300 or equivalent; students with no computer experience are encouraged to take CS 1020 as preparation for this course.

2170 C Language Programming (2)

Programming in the C language, especially in a Unix environment. Not open for credit to students with a previous course in C or C++ programming. Prerequisite: A previous course in programming.

2360 Programming Methods and Introduction to Software Engineering (4)

A systematic approach to the design, construction, and management of large computer programs, emphasizing programming style, documentation, debugging techniques, and testing. Includes files, structured data types, information hiding, pointers, and linked lists. Prerequisite: CS 1160.

2430 Computer Organization and Assembly Language Programming (4)

Functional organization of digital computers and programming in machine and assembly language. Internal representation of data, binary arithmetic, machine instructions, addressing modes, subroutine linkage, macros. Introduction to assemblers, linkers, and loaders. Prerequisite: An introductory programming course. (A)

3120 Programming Language Concepts (4)

Survey and critical comparison of a variety of computer languages. Issues include syntax, semantics, control structures, data representation. Discussion of both design and implementation; of both imperative and declarative languages. Prerequisite: CS 2360 and 2430. (A)

3240 Data Structures and Algorithms (4)

Definition, design, implementation of abstract data structures, including stacks, queues, generalized lists; implementation as contiguous or linked structures. Structures include tables and hashing, trees, graphs. Algorithms for manipulating structures, searching, sorting; introduction to the analysis of these algorithms. Prerequisites: MATH 2150, CS 2360, CS 2430. (A)

3340 Introduction to Object-Oriented Programming

and Design (4)

Programming in an object-oriented language, using object-oriented techniques and concepts. Classes, operator overloading, information hiding, inheritance, and polymorphism. Memory management. Parameterized classes. Exception handling. Object-oriented design of programs. Prerequisite: CS 3240 and knowledge of C or C++.

3430 Computer Architecture (4)

Logical design of digital computers. Boolean algebra, combinational and sequential circuits, computer arithmetic, memories, integrated circuits, control processors, input/output. No electronics experience needed.

Prerequisite: MATH 2150, CS 2430. (A)

3432 Digital Design Lab (4)

Design assembly and test of combinational and sequential circuits. Digital systems design using computer-aided-design tools and programmable logic devices. Prerequisite: CS 3430. Two hrs. lect., 6 hrs. lab. (Y)

3434 Microprocessor Lab (4)

Microprocessor organization and operation; hardware/software interaction; memory, serial, and parallel I/O port interfacing; interrupt-handling. Prerequisite: CS 3430. Three hrs. lect., 3 hrs. lab. (Y)

3520 Web Site Development (4)

Web servers and browsers. HTML, images, audio and video files, indexer, forms, CGI scripts, Java programming, Java script. Prerequisite: CS 3240.

3560 Introduction to Systems Programming (4)

Introduction to systems programming in a modern environment. Introduction to fundamental concepts of operating systems; analysis of a particular operating system (organization, interfaces, system calls, files, process control and communication, resource sharing). Shell and C programming. Development tools.

Prerequisite: CS 2360. (F, W, Sp)

3590 Data Communications and Networking (4)

Fundamentals of data communications: media, transmission, encoding and processing, interfacing, error detection and handling, link control, multiplexing, circuit and packet switching. Introduction to network architecture and topology: local and wide area networks. Prerequisites: CS 3430 and knowledge of C or C++. (F, W, Sp)

3750 Numerical Analysis I (4)

(See MATH 3750 for course description)

3752 Introduction to Digital Signal Processing (4)

Mathematical modeling of signals and systems. Continuous and discrete signals, with applications to audio, images, video, communications, and control. Frequency domain modeling and frequency response. Sampling of continuous-time signals. A simulation-based laboratory is part of the course. Cross-listed with ENGR 3752.

Prerequisites: MATH 1304, 2101; CS 1160. Three hrs. lect., 3 hrs. lab.

- 3860** Computer Music Programming (4)
Introduction to the concepts and software techniques of computer music. Students write programs to produce sounds, process sounds, and organize sounds into musical structures. Fundamentals of digital audio. Synthesis techniques. Reverberation and sound spatialization. Algorithmic composition. Computer languages for synthesis and scoring. The MIDI standard. Prerequisites: MATH 1300 and CS 1160.
- 3898** Cooperative Education (2)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 8 units. A maximum of 4 units will be accepted toward the Computer Science major. CR/NC grading only. Prerequisites: at least 2.0 GPA; departmental approval of activity; completion of lower division Computer Science major requirements, and upper division standing. (A)
- 4110** Compiler Design (4)
Design and construction of high-level language translators. Formal language theory, parsing algorithms, interpreting, code generation, optimization. Construction of a small compiler. Prerequisites: CS 3120, 3240. (A)
- 4170** Theory of Automata (4)
Formal models of automata, language, and computability and their relationships. Finite automata and regular languages. Push-down automata and context-free languages. Turing machines, recursive functions, algorithms and decidability. Prerequisites: MATH 2101, 2150, 2304. Cross-listed with MATH 4170. (Y)
- 4245** Analysis of Algorithms (4)
Design, analysis and implementation of algorithms. Methods of algorithm design, including recursion, divide and conquer, dynamic programming, backtracking. Time and space complexity analyses in the best, worst, and average cases. NP-completeness; computationally hard problems. Applications from several areas of Computer Science. Prerequisites: MATH 2101, 2304, CS 3240. Cross-listed with MATH 4245. (Y)
- 4310** Software Engineering I (4)
Concepts and issues in the development of large software projects. Systematic approaches to requirements, analysis, design, implementation, testing, and maintenance of high-quality software. Prerequisite: CS 3240.
- 4311** Software Engineering II (4)
Continuation of Software Engineering I with emphasis on the implementation stages of the life cycle, including detailed design, pseudocode, standards, coding, documentation, and testing. Prerequisites: CS 3340, 4310.
- 4320** Software Testing and Quality Assurance (4)

Concepts and issues in the testing and quality control of large software projects. Topics include white box, black box, unit, integration, and validation testing; quality assurance through planning, review, and use of software metrics. Prerequisite: CS 3240.

- 4430** Computer Architecture II (4)
Advanced computer organization and design. Topics chosen from among RISC architectures, computer arithmetic, pipelining, cache memory and parallel processors. Prerequisite: CS 3430; recommended: knowledge of C programming.
- 4432** VLSI Circuit Design (4)
Fundamental design techniques for VLSI (Very Large Scale Integrated) circuits. Theory of implementing complex integrated circuits on a microchip. Use of computer aided design tools. Prerequisites: CS 3430, 3432. (Y)
- 4560** Operating Systems (4)
Principles of operating system design and implementation. Concurrent processes, interprocess communication, job and process scheduling; deadlock. Issues in memory management (virtual memory, segmentation, paging) and auxiliary storage management (file systems, directory structuring, protection mechanisms). Performance issues. Case studies. Prerequisites: CS 3240 and CS 3430. (A)
- 4590** Computer Networks (4)
Computer network analysis, design, and implementation. Detailed study of specific standard models (e.g., ISO), implementations (e.g., SNA, DECNET), and protocols (e.g. IP, TCP, TLI). Emphasis on network to application layers. Remote procedure calls. Programming assignments using TCP/IP. Prerequisites: CS 3560 and 3590. (Y)
- 4592** Network Operations and Administration (4)
Network operations, administration, and management. Management Information Base (MIB). Standards including SNMP, CMIP, ASN-1. Network management programming. Network Management of Ethernet, TCP/IP, ATM. Survey and applications of existing network management systems. Prerequisites: CS 3560, 3592, 4590.
- 4594** Broadband Networks and Communications (4)
Principles of broadband networks and communications. Telephone system structure, signaling, services, and protocols. Circuit, packet and cell switching. Broadband signaling and traffic management. Advanced switch technology. Case studies: SONET, SDH, Frame relay, B-ISDN, Asynchronous Mode Transfer (ATM), IP and multimedia over ATM. Prerequisite: CS 3590.
- 4596** Wireless and Mobile Networking (4)
Network protocols and mechanisms to support mobility, e.g., Mobile-IP, M-RSVP, proxies. Issues including routing, tunneling, security, and handoffs. Wireless communication standards including AMPS, IS-95, GSM, PCS, and satellite standards. Underlying technologies including multiplexing and coding. Prerequisite: CS 3590.

- 4660** Database Architecture (4)
Relational, network, and hierarchical data models. Data description and data manipulation languages. Schemas, query processing, database system architecture. Integrity, concurrency, and security techniques. Distributed databases. Prerequisite: CS 3240. (Y)
- 4750** Numerical Analysis II (4)
(See MATH 4750 for course description)
- 4810** Artificial Intelligence (4)
"Intelligent" computer programs and models of human intelligence. Game playing, robotics, computer vision, understanding natural language, knowledge engineering, computer learning. Prerequisite: CS 3240. (Y)
- 4835** Human-Computer Interaction (4)
Human-centered software development and evaluation, human performance models, accommodating human diversity, principles of good design and good designers, introduction to usability testing. HCI aspects of multimedia systems, information systems, and collaboration and communication. Course work includes programming projects and fieldwork. Cross-listed with ENGR/PSYC 4835. Prerequisites: CS 3240 and either CS 3120 or 3340; or consent of instructor.
- 4840** Computer Graphics (4)
Survey of computer graphics hardware, algorithms, techniques, and standards. Software development on color-mapped raster-scan computer graphics system. Prerequisites: MATH 2101, 2304 and CS 3240, 3430.
- 4848** Computer Animation Programming (4)
Principles and techniques used to produce software for computer-generated animations. Survey of traditional animation techniques. Issues in 3-D viewing, rendering, and modeling. Motion specification and interpolation. Physically-based and behavioral modeling. Prerequisite: CS 4840.
- 4900** Independent Study (1-5)

Footnote

- 1** Has a prerequisite not included in the minor.



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Nursing

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- ▶ [Major Requirements \(B.S.\)](#)
- ▶ [Undergraduate Courses](#)
- ▶ [Footnote](#)

Department Information

Department of Nursing and Health Sciences
College of Science
Office: North Science 143
Phone: (510) 885-3481

Professors Emerite: Martha A. Auvenshine, Bette Felton, Linda Kinrade

Professors: Brenda Bailey (Chair), Arlene J. Kahn, Pamela Parlocha

Associate Professor: Theresa Gorman

Assistant Professors: Renee Granados, Kimberly Kim

Lecturers: Mary A. Carlson, Anna M. Fehrenbach, Julie L. Severet, Anne L. Spanier

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

The Department of Nursing and Health Sciences offers an undergraduate program that leads to the Bachelor of Science degree with a major in Nursing. The program is designed to prepare a nurse generalist. Graduates of the program are prepared to work as professional nurses and/or pursue graduate education in nursing. There are two options within the major: the Prelicensure option and the RN Advanced Placement option.

Career Opportunities

Nurses deliver care to people in hospitals, extended care facilities, private homes, public health organizations, schools and in other community settings.

Major

Prelicensure Option

The Prelicensure option consists of one year of pre-nursing

Requirements (B.S.)

requirements and eight quarters of nursing courses. Nine quarters, however, are frequently needed to complete all nursing courses because of clinical space limitations. The prerequisite courses may be completed at Cal State Hayward or by taking equivalent courses at another college or university. Nursing courses have concurrent laboratories on campus and in local hospitals and community settings. Expenses for clinical courses include the purchase of uniforms, stethoscopes, malpractice insurance, personal health insurance, laboratory equipment, course syllabi, and so forth.

The Prelicensure option program is accredited by the State of California Board of Registered Nursing (Tel: 916-322-3350) and by the National League for Nursing Accrediting Commission (Tel: 212-363-5555). Upon completion of the Nursing major, the student is qualified to take the National Council Licensure Examination (NCLEX-RN) and apply for the California Public Health Nursing Certificate.

Preparation

Students must take nine specific prerequisite courses to be eligible for admission to the Prelicensure option. Courses must be completed by the end of spring quarter for the student to be eligible for admission to the nursing program in the fall quarter.

Students who plan to use transfer courses to satisfy prerequisite requirements must have equivalencies determined by the Cal State, Hayward Department of Nursing and Health Sciences.

Admission

Because Nursing has been designated as an impacted program by the Board of Trustees, a special admission procedure has been instituted to assure that all students have an opportunity to be considered for admission to the Nursing major for fall quarter. General information on the program, admission criteria and application procedures may be obtained from the Department of Nursing and Health Sciences. To be considered for admission to the Clinical Nursing courses, students must complete two application forms: 1) The "CSU Application for Admission" and 2) the "Nursing Supplemental Application." The university application must be filed in November for admission in the fall quarter of the following academic year. The "Nursing Supplemental Application" and supporting documents must be filed by March 1 for admission the subsequent fall quarter. Students must also take the "Test of Essential Academic Skills." To be eligible for admission, as student must have an overall GPA of at least 2.5 on the most recent 90 quarter units of coursework and a GPA of 2.5 in prerequisite courses completed at the time of application to the major (at least two non-science courses and two science courses). "D" grades are not acceptable in the prerequisites that include:

- BIOL 2010 Human Physiology and Anatomy I (or 2011) (5)
- BIOL 2020 Human Physiology and Anatomy II (5)
- BIOL 2025 Introduction to Microbiology (5)
- CHEM 1601 Basic Chemistry for Health Sciences (or 1605) (4)
- CHEM 1602 Basic Chemistry for Health Sciences (4)
- COMM 1000 Public Speaking or COMM 1004 Interpersonal Communication (4)

ENGL 1001 College Writing I (4)
STAT 1000 Elements of Probability and Statistics (5)

A course in Critical Thinking such as PHIL 1000 Workshop in Clear Thinking or PHIL 1001 Introduction to Logic (4)

Licensed Vocational Nurses, Medical Corps members, and other health-care personnel wishing to gain admission to more advanced clinical nursing courses must seek advisement from the Department of Nursing and Health Sciences prior to applying to the program.

Curricular Requirements

The Prelicensure option consists of 146-147 units; the B.S. degree requires a total of 186 units.

- I. Pre-nursing Courses (40 units)
BIOL 2010 (or 2011), 2020, 2025 (15)
CHEM 1601 (or 1605), 1602 (8)
COMM 1000 or 1004 (4)
ENGL 1001 (4)
STAT 1000 (5)
A course in Critical Thinking such as PHIL 1000 or 1001 (4)
- II. Other Non-Clinical Courses (33-34 units):
BIOL 4160 or NURS 2005 (4)
HIST 4710 (4)
NURS 2015, 3401 (5)

Nutrition (one course, 4 units)
BIOL 3070 or NURS 2010

Social Science (two courses, 8-9 units)
ANTH 1000 or 1300; PSYC 1000 (or one of 1001, 1005, 2004, 2009); SOC 1000 (or one of 1001, 1002, 2001, 2002)

Group Communication (one course, 4 units)
COMM 3510; HDEV 4880; MGMT 3614; PSYC 3500, 3520

Human Growth and Development (one course, 4 units)
HDEV 3800 or PSYC 4420

III. Nursing Clinical Courses (73 units)

Level I: NURS 2020, 2021, 2022, 2030, 2031, 2032, 2040, 2041, 2042 (24)

Level II: NURS 3001, 3002, 3003, 3201, 3202, 3402, 3403, 3404, 3405, 3406, 3407, 3408, 3409, 3410, 3411, 3412, 3413, 3502 (31)

Level III: NURS 4203, 4207, 4208, 4301, 4302 (18)

RN Advanced Placement Option

The Registered Nurse Advanced Placement option is a 5-quarter program, although it may take 6 quarters to complete the program due to clinical space limitations. The first three quarters focus on selected theories and concepts

taught on Levels I and II of the basic nursing program. Students join the basic program for Research Utilization, Nursing Leadership, Community Health, and Preceptorship.

Note: The RN Advanced Placement program is open only to students who hold Registered Nurse licensure.

Eligibility

To be eligible for the RN Advanced Placement option, a student must:

1. Have a valid California RN License.
2. Be a graduate of an ADN program (within the last six months); or have six months or equivalent full-time nursing practice within the United States in the past two years.
3. Submit to the Department of Nursing a letter from faculty (if a new graduate), supervisor, or colleague evaluating your clinical experience.
4. Meet all university admission requirements.

Curricular Requirements

The RN Advanced Placement option consists of 110-111 units many of which will have been completed in the student's basic nursing program. Additional units may be earned through credit by examination. The B.S. degree requires a total of 180 units.

I. Pre-Nursing Courses (40 units)

BIOL 2010 (or 2011), 2020, 2025 (15)

CHEM 1601 (or 1605), 1602 (8)

COMM 1000 or 1004 (4)

ENGL 1001 (4)

STAT 1000 (5)

A course in Critical Thinking such as PHIL 1000 or 1001 (4)

II. Other Non-Clinical Courses (33-34 units)

BIOL 4160 or NURS 2005 (4)

HIST 4710 (4)

NURS 2015 (3) ¹

NURS 3401 (2) ¹

Nutrition (one course, 4 units)

BIOL 3070 or NURS 2010 ¹

Social Science (two courses, 8-9 units)

ANTH 1000 or 1300; PSYC 1000 (or one of 1001, 1005, 2004, 2009); SOC 1000 (or one of 1001, 1002, 2001, 2002)

Group Communication (one course, 4 units)

COMM 3510; HDEV 4880; MGMT 3614; PSYC 3500, 3520

Human Growth and Development (one course, 4 units)

HDEV 3800 or PSYC 4420

III. Clinical Nursing Courses (37 units)

Bridge Year: NURS 3202, 3503, 3505, 3507, 3509 (19)

Level III: NURS 4203, 4207, 4208, 4301 and either 4302 or a combination of 4305 and a 4-unit upper division course approved by advisor (18)

Clinical Course Progression Policies

I. Clinical Course Progression

- A. Courses with the NURS prefix must be successfully completed or challenged in the proper sequence.
- B. In order to progress within the Nursing major the student must:
 - 1. earn a grade of "C" or better or "CR" in courses with a NURS prefix,
 - 2. earn a grade of "C-" or better in NURS 2005; before beginning Level II clinical courses.
 - 3. be enrolled concurrently or have earned a grade of "C" or better in NURS 3201 before beginning any other Level II courses.
 - 4. earn a grade of "C" or better in NURS 3202 before beginning any subsequent Level III nursing courses.
- C. A student loses eligibility for preferential admission to subsequent nursing courses if a grade of "D," "F," "NC," or "W" is received in any NURS prefix course. This policy also holds true for students who receive a Departmental Warning in a clinical course.
- D. A student may not continue in a clinical practice course and will receive an "NC" grade after he or she is notified of clinically unsafe behavior(s).
- E. A student who has two failures ("NC," "D," "F") in any of the NURS prefix courses will be dropped from the Nursing major. In the calculation of failures, the first grade assigned in any NURS prefix course which received Academic Renewal is included.

II. Academic Renewal of Core Theory Courses

A. Eligibility criteria

- 1. For a course with a "D," faculty will make every effort for prompt renewal.
- 2. For a course with an "F," there is no consideration for prompt renewal.
- 3. Only one Academic Renewal is permitted while a student is in the Nursing major.
- 4. Failure of an exam or paper while promptly renewing a course is considered a second failure and the student is dropped from the major.

B. Guidelines, prompt renewal

1. The original grade remains on the transcript.
2. The student will be given an alternate exam or paper which must be completed before the beginning of the next quarter.
3. Students who pass the alternate exam or paper must register for the repeated course on an Individual Study basis in the next quarter to receive Academic Renewal.

III. Reentering Clinical Nursing Sequence

1. A written request for readmission to the clinical nursing sequence must be submitted to the chair of the Department of Nursing and Health Sciences. This must be done before Registration at the beginning of the academic year.
2. A student who withdraws or interrupts the clinical nursing sequence for physical and/or emotional reasons must present evidence (e.g., doctor's letter) that his/her current health status is satisfactory to physically and/or emotionally care for patients in any clinical setting. The final decision for reentry into the clinical nursing sequence will rest with the Executive Committee of the Department of Nursing and Health Sciences.
3. A student is not guaranteed that a request to repeat a clinical nursing course will be granted. This will depend on availability of clinical nursing practice space. First priority for repeating a course is given to students who withdrew or dropped the course. Second priority is given to those students who failed the course. The student must meet all requirements in effect upon return to clinical nursing courses.
4. Students who allow two years to elapse between enrollments in clinical nursing courses will be subject to recency considerations. If they are allowed to reenter, they may be required to repeat preparatory clinical courses at the discretion of the Nursing Executive Committee.

Major Advising

Because requirements are subject to change, consult an advisor in your major department for clarification and interpretation of your major requirements.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

Undergraduate Courses

The course prefix for the following courses is NURS.

- 2002** Success in Nursing (2)
Learning strategies for the applied science of nursing. Written and oral communication activities relevant to nursing major courses. May be repeated twice for credit. May be taken Credit/No Credit by Nursing majors. Prerequisite: departmental permission.
- 2005** Clinical Pathophysiology (4)
Mechanisms of disease with implications for recognition and clinical management. Prerequisites: BIOL 2010 (or 2011) and BIOL 2020 or equivalent.
- 2010** Principles of Nutrition and Medical Nutrition Therapy (4)
Functions and sources of nutrients. Health disorders caused by lack or excess of nutrients. Nutritional needs throughout the life cycle. Specialization and career opportunities of nutritionists and dietitians. Concepts of medical nutrition therapy and basis of nutritional assessment.
- 2015** Pharmacology (3)
Introduction to pharmacotherapeutics. Prerequisites: BIOL 2020 and 2025.
- 2020** Introduction to Contemporary Nursing (4)
Introduction to contemporary issues in nursing. Concepts and principles used in design/delivery of nursing care to promote client adaptation. Examination of nursing as a profession. Prerequisites: department permission; BIOL 2010 (or 2011), 2020, 2025; CHEM 1601 (or 1605), 1602; COMM 1000 or 1004; ENGL 1001; PHIL 1000 or 1001 or equivalent; STAT 1000. Co-requisites: NURS 2021, 2022.
- 2021** Nursing Support of Community-Based Clients (2)
Provision of nursing support to well clients living in the community. Health screening/assessment, client teaching included. Must be taken credit/no credit. Prerequisites: department permission; BIOL 2010 (or 2011), 2020, 2025; CHEM 1601 (or 1605), 1602; COMM 1000 or 1004; ENGL 1001; PHIL 1000 or 1001 or equivalent; STAT 1000. Co-requisites: NURS 2020, 2022. Six hrs. lab.
- 2022** Level I Nursing Skills I (2)
Prerequisite: department permission. Co-requisites: NURS 2020, 2021. Six hours lab.
- 2030** Nursing Care of Adults I (4)
Nursing care delivery for patients and families experiencing mild to moderate alteration in health/function. Concepts and principles necessary to anticipate, identify, and meet universal biopsychosocial adaptation needs for nursing in healthcare context. Prerequisites: department permission; NURS 2010, 2020, 2021, 2022; PSYC 1000 (or one of 1001, 1005, 2004, 2009). Co-requisites: NURS 2031, 2032.

- 2031** Care of Adults I Practicum (2)
Must be taken credit/no credit. Prerequisites: department permission; NURS 2010, 2020, 2021, 2022; PSYC 1000 (or one of 1001, 1005, 2004, 2009). Co-requisites: NURS 2030, 2032. Six hrs. lab.
- 2032** Basic Physical Assessment (2)
Physical assessment skills necessary to provide professional nursing care. Prerequisites: department permission; NURS 2010, 2020, 2021, 2022; PSYC 1000 (or one of 1001, 1005, 2004, 2009). Co-requisites: NURS 2030, 2031. Six hrs. lab.
- 2040** Nursing Care of Adults II (4)
Continuation of Nursing Care of Adults I. Nursing care to support patients and families experiencing mild to moderate alteration in health/function. Theories and principles necessary to anticipate, identify, meet biopsychosocial needs in selected pathophysiologic states. Prerequisites: department permission; NURS 2015, 2030, 2031, 2032; SOC 1000 (or one of 1001, 1002, 2001, 2002). Co-requisites: NURS 2041, 2042.
- 2041** Care of Adults II Practicum (3)
Must be taken credit/no credit. Prerequisites: department permission; NURS 2015, 2030, 2031, 2032; SOC 1000 (or one of 1001, 1002, 2001, 2002). Co-requisites: NURS 2040, 2042. Nine hrs. lab.
- 2042** Level I Nursing Skills II (1)
Prerequisite: department permission; NURS 2015, 2030, 2031, 2032; SOC 1000 (or one of 1001, 1002, 2001, 2002). Co-requisites: NURS 2040, 2041. Three hrs. lab.
- 3001** Level II Nursing Skills I (1)
Prerequisites: department permission; NURS 2005, 2010, 2015, 2040, 2041, 2042. Three hrs. lab. (F)
- 3002** Level II Nursing Skills II (1)
Prerequisites: department permission; NURS 3001 and 3201. Three hrs. lab. (W)
- 3003** Level II Nursing Skills III (1)
Prerequisites: department permission; NURS 3002. Three hrs. lab. (Sp)
- 3201** Patients and Families with Complex Needs (4)
Concepts and principles from nursing and behavioral sciences applied to care of acutely ill patients and their families. Concepts and theories addressed include role, adaptation, communication, teaching/learning, systems and research. Prerequisites: NURS 2040, 2041, and 2042; HDEV 3800 or PSYC 4420; department permission.
- 3202** Nursing Leadership (4)
Integration of traditional leadership and management theory with contemporary healthcare issues, nursing trends, and practice applications. Prerequisites: department permission; NURS 3001, 3002, 3201, 3401; may be taken concurrently with NURS 3402-3413 or with NURS 3509 for

RN Advanced Placement option.

- 3401** Legal Responsibilities of Health Care Providers (2)
Overview of American legislative and judicial system and its effect on consumer health care. The professional nurse is viewed as an advocate of clients as consumers of health care. Prerequisite: NURS 3201; department permission.
- 3402** Nursing Care of Adults III (1)
Nursing care of patients with complex illness requiring surgery. Principles from nursing, natural, and behavioral sciences to anticipate, identify, and meet nursing needs of patients and their families. Prerequisites: NURS 2005, 2010, 2015, 2040, 2041, 2042, 3201; department permission. May be taken concurrently with NURS 3201.
- 3403** Nursing Care of Adults III Practice (2)
Concurrent enrollment in NURS 3402 required. Must be taken Credit/No Credit. Prerequisites: NURS 2005, 2010, 2015, 2040, 2041, 2042, 3201; department permission. May be taken concurrently with NURS 3201. Six hrs. lab.
- 3404** Care of Childbearing Families (1)
Nursing care of families during childbearing including normal and high-risk conditions. Principles from nursing, natural, and behavioral sciences to anticipate, identify, and meet nursing needs. Prerequisites: NURS 2005, 2010, 2015, 2040, 2041, 2042, 3201; department permission. May be taken concurrently with NURS 3201.
- 3405** Childbearing Family Practice (2)
Concurrent enrollment in NURS 3404 required. Must be taken Credit/No Credit. Prerequisites: NURS 2005, 2010, 2015, 2040, 2041, 2042, 3201; department permission. May be taken concurrently with NURS 3201. Six hrs. lab.
- 3406** Care of Clients with Psychiatric/Mental Health Needs (1)
Theories of human behavior and the purposeful use of self provide a theoretical framework for psychiatric and mental health care of clients and their families. Prerequisites: NURS 2005, 2010, 2015, 2040, 2041, 2042, 3201; department permission. May be taken concurrently with NURS 3201.
- 3407** Psychiatric/Mental Health Nursing Practicum (2)
Concurrent enrollment in NURS 3406 required. Must be taken Credit/No Credit. Prerequisites: NURS 2005, 2010, 2015, 2040, 2041, 2042, 3201; department permission. May be taken concurrently with NURS 3201. Six hrs. lab.
- 3408** Nursing Care of Childrearing Families (1)
Care of families and children with emphasis on acute illness, health promotion, and growth and development. Physiologic, and psychosocial aspects of care are addressed. Prerequisites: NURS 2005, 2010, 2015, 2040, 2041, 2042, 3201; department permission. May be taken concurrently with NURS 3201.

- 3409** Childrearing Family Practice (2)
Concurrent enrollment in NURS 3408 required. Must be taken Credit/No Credit. Prerequisites: NURS 2005, 2010, 2015, 2040, 2041, 2042, 3201; department permission. May be taken concurrently with NURS 3201. Six hrs. lab.
- 3410** Nursing Care of Adults IV (1)
Nursing care of patients with acute, complex illness requiring medical intervention. Principles from nursing, natural, and behavioral sciences to anticipate, identify, and meet nursing needs of patients and their families. Prerequisites: NURS 2005, 2010, 2015, 2040, 2041, 2042, 3201; department permission. May be taken concurrently with NURS 3201.
- 3411** Nursing Care of Adults IV Practice (2)
Concurrent enrollment in NURS 3410 required. Must be taken Credit/No Credit. Prerequisites: NURS 2005, 2010, 2015, 2040, 2041, 2042, 3201; department permission. May be taken concurrently with NURS 3201. Six hrs. lab.
- 3412** Nursing Care of Elder Adults (1)
Nursing care of elders with acute, complex illness. Principles from nursing, natural, and behavioral sciences to anticipate, identify, and meet nursing needs of patients and their families. Prerequisites: NURS 2005, 2010, 2015, 2040, 2041, 2042, 3201; department permission. May be taken concurrently with NURS 3201.
- 3413** Care of Elder Adults Practice (2)
Concurrent enrollment in NURS 3412 required. Must be taken Credit/No Credit. Prerequisites: NURS 2005, 2010, 2015, 2040, 2041, 2042, 3201; department permission. May be taken concurrently with NURS 3201. Six hrs. lab.
- 3502** Continuum of Care (2)
Models of nursing case management. Facilitation of safe, efficient transitions across the continuum of care. Consideration of constraints imposed by healthcare payors. Nursing interventions of anticipation, planning, teaching and advocacy. Prerequisites: department permission; NURS 2005, 2010, 3201.
- 3503** Advanced Physical Assessment (3)
Physical assessment of adults for experienced Registered Nurses. Open only to R.N. students in the Nursing major. Department permission required.
- 3505** Advanced Principles I (4)
Advanced concepts of professional role, systems, change, and academic writing. Examination of evidence based practice resources. Open only to R.N. students in the Nursing major. Prerequisites: department permission; BIOL 2010 (or 2011), 2020, 2025; CHEM 1601 (or 1605), 1602; COMM 1000 or 1004; ENGL 1001; PHIL 1000 or 1001 or equivalent; STAT 1000; current California R.N. Licensure.
- 3507** Advanced Principles II (4)
Continuum of care as it applies to patients with complex illness. Adaptation and nursing process incorporated into

nursing interventions to facilitate patient transitions.
Prerequisite: NURS 3505. Open only to R.N. students enrolled in the Nursing major.

- 3509** Advanced Principles III (4)
Effects of hospitalization on patients and families. Exploration of nursing interventions related to theories of aging and illness role. Nursing research critique.
Prerequisite: NURS 3507. Open only to R.N. students enrolled in the Nursing major.
- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 8 units. Not applicable toward the Nursing major. CR/NC grading only.
Prerequisites: at least a 2.0 GPA; department approval of activity.
- 3999** Issues in Nursing (4)
Readings, discussion, and research on contemporary and/or significant issues in nursing. May be repeated for credit when content varies.
- 4203** Research Utilization (2)
Critique of quantitative and qualitative nursing research with implications for clinical practice. Use of evidence-based practice resources to facilitate research utilization.
Prerequisites: department permission; all 3000-level NURS courses; RN Advanced Placement option--NURS 3509.
- 4207** Principles of Community Health Nursing (2)
Community-oriented, population-focused approaches to health promotion, disease prevention. Core functions of public health and nursing applied to individuals, aggregates and communities at risk for development of health problems. Prerequisites: department permission; all 3000-level Nursing courses; RN Advanced Placement option--NURS 3509.
- 4208** Practicum of Community Health Nursing (4)
Concurrent enrollment in NURS 4207. Open only to students in the Nursing major. Credit/No Credit grading only. Prerequisites: department permission; all 3000-level Nursing courses; RN Advanced Placement option--NURS 3509.
- 4301** Preceptorship Seminar (2)
Preceptored course that promotes professional role transition through guided independence in professional nursing practice. Leadership/management concepts applied to contemporary professional practice issues.
Prerequisites: department permission; all 3000-level nursing courses; RN Advanced Placement option--NURS 3509.
- 4302** Preceptorship Practicum (8)
Concurrent enrollment in NURS 4301. Open only to students in the Nursing major. Credit/No Credit grading only. Prerequisites: department permission; all 3000-level

nursing courses; RN Advanced Placement option--NURS 3509.

4305 Preceptorship Practicum for the RN-BSN Student (4)
Concurrent enrollment in NURS 4301. Open only to RN-BSN students. Credit/No Credit grading only. Prerequisites: department permission; NURS 3509. Twelve hrs. act.

4900 Independent Study (1-4)

Footnote

Substitution for these courses may be made based on evaluation of transcripts and course descriptions of previous course work.



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Department Information

UNDERGRADUATE PROGRAMS

Creative Video

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- ▶ [Certificate Program](#)

Departments of Art, English, Communication,
Theatre and Dance
College of Arts, Letters, and Social Sciences
Office: Robinson Hall 220
Phone: (510) 885-3118

Professors: Thomas C. Hird (Theatre and Dance), Roderic M.
Prindle (Theatre and Dance)

Program Director: Thomas C. Hird

*Please consult the 2006-2007 online catalog for any changes that
may occur.*

Program Description

The field of video production, for television as well as for corporate and educational uses, is expanding rapidly and there is much demand by employers for people with these skills. Other programs and courses at Cal State Hayward feature documentary and news production (COMM); stage acting (THEA); fiction writing for the printed page and the Internet (ENGL). This program introduces a new dimension to each of these areas: fictional or creative video. The new minor enables these departments to collaborate and actually create several videos of broadcast quality each year, giving students the opportunity to learn skills by practicing them.

Minor Requirements

Complete 28 units from the following:

ART 3820 Multimedia II: Digital Video and Audio (4)
(has prerequisites that are not included in the program)

COMM 3100 Television Production/Direction (4)

COMM 3101 Television Pre-production (4)

COMM 3102 Television Post-production (4)

ENGL 2070 Beginning Workshop in Fiction (4)

THEA 1020 Discover Acting (3) or THEA 2005 Acting
Fundamentals: Improvisation (3)

THEA 3050 Teleplay Acting and Production Workshop (4)

THEA 3052 Acting for the Camera (4)

Certificate Program

The certificate program in Creative Video consists of 27 units.

I. Required Courses (11 units)

COMM 3100 Television Production/Direction (4)
ENGL 2070 Beginning Workshop in Fiction (4)
THEA 1020 Discover Acting (3) or THEA 2005 Acting
Fundamentals: Improvisation (3)

II. Electives (16 units)

Select four courses from the following:

ART 3820 Multimedia II: Digital Video and Audio (4) (has
prerequisites that are not included in the program)
COMM 3101 Television Pre-production (4)
COMM 3102 Television Post-production (4)
THEA 3050 Teleplay Acting and Production Workshop (4)
THEA 3052 Acting for the Camera (4)



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Department Information

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PACE

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Program for Accelerated College Education
Academic Programs and Graduate Studies
Office: Meiklejohn Hall 4061
Phone: (510) 885-PACE (7223)
Fax: (510) 885-4785

Director: Deborah Baker

Assistant Director: Martha Lucero Wallace

PACE Advisors: Advising for PACE is done through the PACE Office.

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

PACE is an innovative program which enables adult working students to make accelerated progress toward a Bachelor of Arts degree with a major in either Human Development or Liberal Studies. PACE classes are the same as those taken by students pursuing their degrees through the traditional university format. The only difference is the carefully structured course sequence, as well as the flexible method of delivery which may include course materials on video, audiotape or online. The PACE Program is also available at the Contra Costa Campus in Concord and in partnership with Contra Costa College in San Pablo.

Convenient Locations

- *Main Hayward Campus*
- *Concord: Contra Costa Campus*
- *San Pablo: at Contra Costa College, 2600 Mission Bell Drive, San Pablo (Liberal Studies major only)*

Note: an additional \$30 off-campus instructional fee will be assessed for each course taken at San Pablo. Textbooks, media materials, and parking permits must be purchased at

Career Opportunities

Graduates in Human Development enjoy a wide variety of professional career opportunities. Among these are business, consulting, counseling and social services, probation/corrections, and education. The Human Development major is an excellent preparation for graduate programs in law, clinical psychology, public administration, and business administration.

Liberal Studies graduates go on to a broad range of careers and occupations in community services, business, and government. By completing additional requirements on the Credential Track, many enter the elementary (K-8) teaching profession. The Liberal Studies major is also excellent preparation for law school and graduate work in numerous fields such as public administration.

Features

PACE students are provided with 12 to 13 units per quarter. Classes are usually held one or two evenings per week and several all-day Saturdays per quarter. Saturday courses may consist of lectures, films, guest speakers, and group discussions.

Students who come into the program with all entry requirements met, including sufficient transfer units, can complete the B.A. in a minimum of seven quarters for the Liberal Studies General Track. Credential Track students will need additional coursework available during two Summer quarters.

PACE Priority: PACE courses are reserved for students formally admitted into the program. Priority registration will be given to students admitted into the program who register for PACE classes during the regular registration period. Non-PACE students may register at the start of the quarter on a space-available basis. Students who miss the first class meeting may be dropped.

Both Liberal Studies and Human Development majors have the opportunity to complete a Business Administration Minor through PACE by attending two summers. Liberal Studies majors may choose instead a Business Studies Option, Human Development Option, or another option or minor offered by the university. (Note the Business Option or Minor is not allowed for the Liberal Studies Credential Track as per the California State Commission on Teacher Credentialing.)

Preparation

The best preparation for entry into the PACE Program is normally the completion of lower division General Education requirements. PACE welcomes inquiries from community college counselors and prospective students. Pre-admission advising for potential transfer students is available provided that previous college transcripts are supplied. Specific entry requirements are:

1. Completion of 60 transferable semester units with a minimum GPA of 2.00.

2. Completion of the following specific course requirements with a grade of "C" or better:
 - Written communication
 - Oral communication (*Note: the Credential Track of the Liberal Studies major requires a course in public speaking.*)
 - Critical Thinking
 - A transferable Math or Statistics course
3. Lower-division General Education coursework will usually be sufficient for PACE admission. Consult your Human Development or Liberal Studies PACE advisor.

Admission

Application to the university is the first step. Call the PACE Office (510-885-PACE) for an application packet or for more information.

Admission applications should be marked "PACE" at the top of the first page. Students applying online (<http://csumentor.edu/AdmissionAppl>) should be sure to enter "PACE" next to the name of their intended major, either Human Development or Liberal Studies PACE. Two official copies of transcripts from all previous colleges must be sent to the Admissions Office.

Applications are evaluated for admission into the PACE Program; the student will be notified by mail. Students who have not yet completed PACE entry requirements are encouraged to do so and re-apply to the program by contacting the PACE Office.

Major Requirements

See the Human Development or Liberal Studies chapters in the undergraduate section of this catalog.



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Criminal Justice Administration

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Department Information

Department of Criminal Justice Administration
 College of Arts, Letters, and Social Sciences
 Office: Meiklejohn Hall 4069
 Phone: (510) 885-3590

Professors: Benjamin G. Carmichael, Marc G. Neithercutt, Patricia L. Zajac (Chair)

Assistant Professors: Thomas W. Cadwallader, Silvina Ituarte

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

The Department of Criminal Justice Administration offers an undergraduate program designed for the development of knowledge and understanding of practices, theory, and concepts of justice administration, as well as to prepare students for professional careers in justice administration, law enforcement, and corrections. The major includes two specialized options and the student selects one depending on her/his career interest.

The Law Enforcement and Administration option affords the opportunity to work in government agencies and private organizations offering challenging positions in crime prevention, investigation, and control. It is designed for students interested in careers with federal, state, and local law enforcement agencies, or in law enforcement within the private sector. Employment opportunities include administrators of institutional programs, consultants to groups in mobilizing resources to combat social problems, and social scientists working toward understanding individual and group behavior and social control by means of law.

The Corrections option is designed for students interested in careers in probation, parole, correctional institutions, and affiliated forms of work. It primarily focuses on probational services

including investigation of case histories, assessment of treatment needs, advisement to the court, and the operation of diverse types of correctional programs.

Many local, state, federal and private agencies employ Cal State Hayward criminal justice graduates. Senior majors may qualify for internship placement in criminal justice agencies throughout the Bay Area.

Local level agencies include municipal police departments, county sheriffs' offices, probation departments, halfway and pre-release houses, group homes, crisis centers, juvenile halls, welfare fraud units, computer crime analysis, and retail and industrial security agencies. State level agencies include: the Highway Patrol, Department of Corrections, Department of Motor Vehicles, and Departments of Justice, Fish and Game, and Forestry. Federal level agencies include the Border Patrol; F.B.I.; Secret Service; Bureau of Alcohol, Tobacco and Firearms; Internal Revenue Service; National Park Service; Customs; Postal Inspection Service; and Federal Prisons.

Career Opportunities

Battered Shelter Counselor • Community Agency Counselor • Community Service Coordinator • Consumer Affairs Director • Corrections Officer • Crisis Counselor • Deputy Insurance Commissioner • Equal Opportunity Representative • FBI Agent • CIA Agent • Group Worker • Insurance Investigator • Investigator • Parole Officer • Park Ranger • Police Administrator • Police Officer • Security Manager • Social Worker • Vocational Rehabilitation Officer

Preparation

It is strongly recommended that students complete the lower division (1000-2000) courses before taking the upper division courses.

Major Requirements (B.S.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 78 units; the B.S. degree requires a total of 180 units. Credit/No Credit (CR/NC) grading is not permitted for classes used to meet the major requirements.

- I. Lower Division (34 units)
(Lower division courses in the major can be satisfied by successful completion of equivalent courses at a community college.)

CRJA 2100 Elementary Criminal Law (4)
CRJA 2200 Basic Criminal Investigation (4)
CRJA 2400 Evidence in Corrections and Law Enforcement (4)
CRJA 2500 Administration of Justice (4)
CRJA 2600 Police Community Relations (4)
PSYC 1000 General Psychology (or one of 1001, 1005, 2004, or 2009) (5)
SOC 1000 Introduction to Sociology (or one of 1001, 1002,

2001, or 2002) (4)
STAT 1000 Elements of Probability and Statistics (5)

II. Upper Division Core (16 units)

CRJA 3200 Research Methods in Criminal Justice (4)
CRJA 3700 Ethics and Justice Administration (4)
CRJA 4127 Crime Theory (4)
POSC 3410 Law and Society (4)

III. Option (28 units)

Students select one option to complete. In addition to the 16 units of option core courses, 12 units of electives must be taken.

A. Law Enforcement and Administration Option Core (16 units)

Students who elect to take Option A must complete each of the following four courses:

CRJA 3300 Crime Prevention and Control (4)
CRJA 3400 Advanced Criminal Investigation (4)
CRJA 3610 Police Organization and Management (4)
CRJA 3800 Comparative Evidence and Its Evaluation (4)

Under this option, students must complete a total of 12 additional upper division units from the specialized elective area.

B. Corrections Option Core (16 units)

Students who elect to take Option B must complete each of the following four courses:

CRJA 3100 Corrections and Criminal Justice (4)
CRJA 4121 Probation and Parole (4)
CRJA 4123 The Crime Victim (4)
CRJA 4700 Community Based Corrections (4)

Under this option, students must complete a total of 12 additional upper division units from a specialized elective area.

C. Specialized Electives for Both Options (12 units)

Both Option A and Option B students must choose 12 units of elective coursework in a single specialized study area, provided that the course or courses chosen have previously not been taken as part of an option. Upon faculty advisement and approval, additional courses may also apply.

Area 1. Criminal Justice System

CRJA 3100 Corrections and Criminal Justice (4)
CRJA 3300 Crime Prevention and Control (4)
CRJA 3400 Advanced Criminal Investigation (4)
CRJA 3500 Criminal Identification (4)
CRJA 3610 Police Organization and Management (4)
CRJA 3800 Comparative Evidence and Its Evaluation (4)
CRJA 4121 Probation and Parole (4)
CRJA 4123 The Crime Victim (4)
CRJA 4124 Sex Crime Investigation (4)

CRJA 4125 Women in Criminal Justice (4)
CRJA 4126 Seminar in Criminal Justice Administration (4)
CRJA 4128 Internship in Criminal Justice (4)
CRJA 4700 Community Based Corrections (4)

Area 2. Offender Treatment/Reform

COMM 3520 Nonverbal Communication (4)
CRJA 3100 Corrections and Criminal Justice (4)
CRJA 4121 Probation and Parole (4)
CRJA 4123 The Crime Victim (4)
CRJA 4126 Seminar in Criminal Justice Administration (4)
CRJA 4128 Internship in Criminal Justice (4)
CRJA 4700 Community Based Corrections (4)
PSYC 4360 Psychopharmacology (4)
PSYC 4410 Abnormal Psychology (4)
PSYC 4610 Psychology of Personality (4)

Area 3. Legal Aspects

CRJA 3500 Criminal Identification (4)
CRJA 4126 Seminar in Criminal Justice Administration (4)
PHIL 3503 Philosophy of Law (4)
PHIL 3510 Human Rights and Social Justice (4)
POSC 3417 Survey of American Law (4)
POSC 3441 American Constitutional Law I (4)
POSC 3442 American Constitutional Law II (4)
POSC/PUAD 4450 Administrative Law (4)

Area 4. Social and Cultural Perspectives

ANTH 3720 Medical Anthropology (4)
COMM 3240 Public Opinion (4)
CRJA 4125 Women in Criminal Justice (4)
CRJA 4126 Seminar in Criminal Justice Administration (4)
E S 3700 Special Topics in Ethnic Studies (4)
MLL Three upper division courses in a single foreign language (4-4-4)
PHIL 3510 Human Rights and Social Justice (4)
PUAD 4800 Public Administration and Society (4)
PUAD 4830 Organization Theory and Human Behavior (4)
SOC 3520 Sociology of Minority Groups (4)
SOC 3730 Juvenile Delinquency (4)
SOC 3750 Alcohol and Drug Abuse (4)
SOC 4740 Criminology (4)

Area 5. Internship

At least two quarters (8 units) of approved Internship placement and CRJA 4126 Seminar in Criminal Justice Administration (4)

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University

Minor Requirements

Writing Skills requirement; and the residence, unit, and grade point average requirements.

The minor consists of 33 units. The purpose of the minor is to provide interested students with the opportunity to study the central areas of criminal justice. The selected courses will offer instruction in law, law enforcement, ethics, corrections and the courts. The minor allows those students with career plans in the social services and business administration to acquire knowledge of criminal justice, a career area with high employment prospects. Credit/No Credit (CR/NC) grading is not permitted for classes used to meet minor requirements.

- I. Lower Division (12 units)
 - CRJA 2100 Elementary Criminal Law (4)
 - CRJA 2200 Basic Criminal Investigation (4)
 - CRJA 2500 Administration of Justice (4)
 - II. Lower Division Statistics Requirement (5 units)
 - STAT 1000 Elements of Probability and Statistics (5)
 - III. Upper Division Requirements (16 units)
 - CRJA 3100 Corrections and Criminal Justice (4)
 - CRJA 3300 Crime Prevention and Control (4)
 - CRJA 3610 Police Organization and Management (4)
 - CRJA 3700 Ethics and Justice Administration (4)
-

Undergraduate Courses

The course prefix for the following courses is CRJA.

- 2100** Elementary Criminal Law (4)
[CAN AJ 4]
The nature and functions of criminal law and the principles and rules underlying its administration. Classification of criminal statutes and crimes. (Y)
- 2200** Basic Criminal Investigation (4)
[CAN AJ 8]
The principles and methods of investigation used to acquire and to disseminate information about crimes. (Y)
- 2400** Evidence in Corrections and Law Enforcement (4)
[CAN AJ 6]
The role of science and law in the utilization of physical and social evidence in justice administration. (Y)
- 2500** Administration of Justice (4)
[CAN AJ 2]
Survey of the various components of the American criminal justice system, emphasizing police, court and corrections administration. An historical, philosophical overview of justice administration. (Y)
- 2600** Police Community Relations (4)
The relationship between justice administration and the public with particular emphasis on police relations with

ethnic and sexual minorities, and juvenile and adult offenders. (Y)

- 3100** Corrections and Criminal Justice (4)
Legal aspects of juvenile and adult corrections. Investigative techniques in corrections, including probation and parole. Analysis of concepts of rehabilitation, punishment and revenge. (Y)
- 3200** Research Methods in Criminal Justice (4)
The application of scientific research methods to selected data and statistics in justice administration. Use of scientific methodology in interpreting crime and correctional data. Prerequisite: STAT 1000 or equivalent. (Y)
- 3300** Crime Prevention and Control (4)
Concepts of planning and implementation of crime prevention and control systems. The role of security in urban society and civilian involvement in crime prevention. (Y)
- 3400** Advanced Criminal Investigation (4)
A continuation of CRJA 2200. The exploration of investigative problems in major crimes. Analysis of role of criminal investigator and the legal use of scientific aids to investigation. Case history, examination and analysis. Prerequisite: CRJA 2200 or consent of instructor. (Y)
- 3500** Criminal Identification (4)
Personal identification in criminal and civil investigation. Photography in criminal identification, classification and filing of fingerprints. Handwriting and voice identification. Identification of the unknown dead and skeletal remains. (Y)
- 3610** Police Organization and Management (4)
Application of principles of organization and management to the study of police agencies and crime investigation; relationship of police agencies to other public agencies. (Y)
- 3700** Ethics and Justice Administration (4)
The development and application of social theories to the study and analysis of ethical decision-making; studies dealing with problems of integrity through organization, management, and leadership, with emphasis on public agencies, particularly the criminal justice system.
- 3800** Comparative Evidence and Its Evaluation (4)
The forensic comparative process; studies of microscopic characteristics of various types of physical evidence. Topics include firearms and tool identification, impression evidence, technical photography and preparation of laboratory findings for court. (Y)
- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated once. A maximum of 8 units of CRJA 3898 and/or 4128 may be applied to

electives in the major. Prerequisites: at least a 2.0 GPA; departmental approval of activity; junior or senior standing. (A)

- 3999** Issues in Criminal Justice (4)
Readings, discussion, and research on contemporary and/or significant issues in criminal justice. May be repeated for credit when content varies.
- 4121** Probation and Parole (4)
Historical and theoretical perspectives on the organization and functions of probation and parole. Emphasis on the process and function of the resocialization and reorganization of offender. Special study of probation and parole as services within the criminal justice system; principles and practices at county, state and federal levels.
- 4123** The Crime Victim (4)
The criminal justice system from the perspective of the victim and the victim's needs/concerns. Various facets of victimology including: victimization data, victim compensation, psychological impacts of crime on victims, and alternatives to current remedies.
- 4124** Sex Crime Investigation (4)
Theoretical foundations related to sexual crimes. Basic skills necessary to investigate sexual assault cases, collection and preserving physical evidence, interviewing and interrogation of subjects and victims, and successful preparation of cases for presentation. (Y)
- 4125** Women in Criminal Justice (4)
Women as victims, offenders and prisoners; gender sentencing differentials; women in criminal justice professions such as policing, corrections, and courts.
- 4126** Seminar in Criminal Justice Administration (4)
Intensive seminar on selected issues in criminal justice administration. May be repeated for a maximum of 12 units when content differs. Prerequisite: consent of instructor.
- 4127** Crime Theory (4)
Major social, psychological and biological theories of crime causation. Historical and current applications of theory to justice administration and offender treatment and rehabilitation.
- 4128** Internship in Criminal Justice (4)
Practical experience in a department-approved criminal justice agency (public or private). Academic assignments integrated with volunteer or paid activities. Prerequisite: departmental approval of activity. Junior or senior standing. A maximum of 8 units of 3898 and/or 4128 may be applied to electives in major.
- 4700** Community Based Corrections (4)
The role of local, state and federal government in the development of community-based correctional programs. Alternatives to incarceration of the criminal. Topics include

halfway houses of correction, community furlough and ex-offender employment. (Y)

4900 Independent Study (1-4)



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Department Information

Program Description

Philosophy

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Department of Philosophy
 College of Arts, Letters, and Social Sciences
 Office: Meiklejohn Hall 4006
 Phone: (510) 885-3225, FAX: (510) 885-2123

Professor Emeritus: Paul C. Bassen

Professors: Marek W. Bielecki, William J. Langan (Chair)

Assistant Professors: Jennifer L. Eagan, Terrence M. Kelly, Roberta L. Millstein

Lecturers: Russell Abrams, Ted Stolze

Please consult the 2006-2007 online catalog for any changes that may occur.

The Department of Philosophy offers programs leading to a B.A. degree major in Philosophy in two different areas, one in philosophy proper, the other in religious studies. Through a broad range of courses in either program, the student encounters the great ideas of our heritage, both Western and Eastern, and gains a knowledge of the foundation of almost all other subjects.

Many different kinds of students choose the major in philosophy proper. Some intend to become professional philosophers or to do graduate work in philosophy. Others take philosophy as a preparation for another professional area. Traditionally, for example, philosophy has been one of the chief roads to professional law schools. Philosophy also serves as a good general liberal arts education. Many of the long-established university disciplines are founded on philosophical principles: political science, sociology, education, aesthetics, physics, and other subjects.

As is true of those selecting the regular major in Philosophy, a great variety of concerns motivates students to choose the Option

Career Opportunities

in Religious Studies. The aim of many religious studies students is to prepare for entrance into theological seminary. Others are attracted to the program because of their interests in the history of Western culture, in comparative religion, or in such subjects as the psychology of religion or the sociology of religion. Again, like the regular major in philosophy, the Religious Studies Option serves as a good liberal arts education.

Analyst • Business Executive • Clergy • Critic • College Professor
• Customer Service Representative • Editor • Employee
Assistance Representative • Foreign Service Officer • Journalist •
Personnel Representative • Philosopher • Lawyer •
Professor/Teacher • Public Relations Specialist • Salesperson
Stockbroker • Theologian • Writer

Major Requirements (B.A.)

Please consult an advisor in the Department of Philosophy for clarification and interpretation of your major requirements. The Philosophy major consists of 60 units; the B.A. degree requires a total of 180 units.

I. Core Courses (32 units)

Required Courses (24 units)

PHIL 3100 Ethics (4)

PHIL 3305 Fundamental Questions: Self, Nature, and God (4)

PHIL 3311 Metaphysics (4)

PHIL 3602 Modern Philosophy (4)

PHIL 3604 Roots of Contemporary Philosophy (4)

PHIL 4606 Seminar in Philosophy (4)

Epistemology Elective (4 units)

Select one course from the following:

PHIL 3301 Theory of Knowledge (4)

PHIL 3321 Philosophy of the Human Sciences (4)

PHIL 3332 Philosophy of Science (4) (required for students pursuing the Science, Technology and Values option.)

Social and Political Diversity Elective (4 units)

Select one course from the following:

PHIL 3150 Contemporary Ethics (4)

PHIL 3403 Philosophies of the East (4)

PHIL 3502 Social and Political Philosophy (4) (required for students pursuing the Law, Human Rights, and Social Justice option.)

PHIL 3720 Feminist Philosophy (4)

II. Options (20-28 units)

Students must complete the requirements for at least one option and may choose to complete additional options if they wish.

A. Classical Philosophy Option (20-28 units)

PHIL 3601 Ancient and Medieval Philosophy (4)

PHIL 3603 Kant and Idealism (4)

PHIL 3605 Studies in Contemporary Philosophy (4)

Epistemology and Metaphysics (0-4 units)

PHIL 3301 Theory of Knowledge (4) (may also count as an Epistemology elective in the Core)

Value Inquiry (8 units)

PHIL 3201 Aesthetics (4)

PHIL 3925 Moral Values in the Modern World (4)

Asian Philosophy (0-4 units)

Select one of the following:

PHIL 3403 Philosophies of the East (4) (may also count as a Social and Political Diversity elective in the Core)

PHIL 3410 Comparative Themes in Eastern and Western Philosophy (4)

B. Law, Human Rights and Social Justice Option
(24-28 units)

PHIL 3503 Philosophy of Law (4)

PHIL 3510 Human Rights and Social Justice: Cultural Groups and Women in the U.S. (4)

PHIL 3511 Philosophy of Human Rights and Global Justice (4)

Applied Ethics (8 units)

Select two courses from the following:

PHIL 3151 Environmental Ethics (4)

PHIL 3152 Biomedical Ethics (4)

PHIL 3153 Biology and Ethics (4)

PHIL/MGMT 3560 Business and Professional Ethics (4)

Social and Political Philosophy (4-8 units)

Select two courses from the following:

PHIL 3321 Philosophy of the Human Sciences (4) (may also count as an Epistemology elective in the Core)

PHIL 3325 Cultural Studies (4)

PHIL 3335 Science, Technology and Values (4)

PHIL 3536 Economic Justice (4)

PHIL 3720 Feminist Philosophy (4)

PHIL 3925 Moral Values in the Modern World (4)

One of the following lower division courses may be counted towards fulfillment of this requirement:

PHIL 1101 Contemporary Social and Ethical Issues (4)

PHIL 2020 Self, Family, Culture (4)

PHIL 2027 Law, Economics and Justice (4)

PHIL 2028 Philosophy, Technology, and Culture (4)

PHIL 2029 Philosophical Perspectives on the Problem of Evil (4)

C. Religious Studies Option (24-28 units)

PHIL 3400 Philosophy of Religion (4)

PHIL 3401 Contemporary Religious Thinkers (4)

PHIL 3601 Ancient and Medieval Philosophy (4)

Select four courses from the following (12-16 units):

PHIL 3214 Philosophy and Myth in Latin American Literature (4)
PHIL 3403 Philosophies of the East (4) (may also count as a Social and Political Diversity elective in the Core)
PHIL 3410 Comparative Themes in Eastern and Western Philosophy (4)
PHIL 3411 Jewish Philosophy (4)
PHIL 3417 The Philosophy of Islam (4)

One of the following lower division courses may be counted towards fulfillment of this requirement:

PHIL 1401 Religions of the World (4)
PHIL 2029 Philosophical Perspectives on the Problem of Evil (4)

D. Science, Technology and Values Option (24 units)

PHIL 3331 History of Science (4)
PHIL 3335 Science, Technology and Values (4)

Nature of Knowledge (8 units)

Select two courses from the following:

PHIL 3301 Theory of Knowledge (4)
PHIL 3321 Philosophy of the Human Sciences (4)
PHIL 3341 Philosophy of Cognition and Artificial Intelligence (4)

Applied Ethics (8 units)

Select two courses from the following:

PHIL 3151 Environmental Ethics (4)
PHIL 3152 Biomedical Ethics (4)
PHIL 3153 Biology and Ethics (4)

One of the following lower division courses may be counted towards fulfillment of this requirement:

PHIL 1103 Science, Ethics, and Technology (4)
PHIL 2028 Philosophy, Technology and Culture (4)

E. Special Option (20-28 units)

An option designed by the student and his or her advisor, consisting of a coherent selection of courses with an identifiable theme substantially different from those offered above. Must be approved by the department chair.

III. Electives (0-12 units)

Upper division Philosophy courses including those not chosen from the above lists to bring total units in the major to 60 units.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in

Minor Requirements

the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

- I. Cognitive Science Minor (28 units)

The cognitive science minor consists of 28 units, with at least 20 units from two or more departments other than the student's major. The 28 units must include at least 12 units of the core courses. The remaining units must be selected from the listed electives.

 - A. Core (12 units)

At least 12 units selected from the following courses:
ANTH 1800 Introduction to Anthropological Linguistics (4)
One lower division programming course: CS 1020, or 1160 (4)
CS 4810¹ Artificial Intelligence (4)
PHIL 3341 Philosophy of Cognition and Artificial Intelligence (4)
PSYC 4740¹ Psycholinguistics (4)
 - B. Electives (16 units)

ANTH 3800 Language and Culture (4); BIOL 4510¹ Neurobiology (4); CS 3120¹ Programming Language Concepts (4), 4110¹ Compiler Design (4), 4170¹ Theory of Automata (4); ENGL 3005¹ Study of Language (4); HDEV 4510 Cognitive Development (4), 4520 Language Acquisition and the Symbolic Function (4); PHIL 3002 Modern Logic (4), 3301 Theory of Knowledge (4), 3305 Fundamental Questions: Self, Nature, and God (4), 3332 Philosophy of Science (4); PSYC 4210¹ Theories of Learning (4), 4220¹ Cognitive Processes (4), 4320¹ Physiological Psychology (4), 4345¹ Sensation and Perception (4)
- II. Philosophy Minor (28 units)

One of the following (4 units):
PHIL 3100 Ethics (4)
PHIL 3305 Fundamental Questions: Self, Nature, and God (4)

Two courses in the history of Western philosophy, from the following (8 units):
PHIL 3601 Ancient and Medieval Philosophy (4)
PHIL 3602 Modern Philosophy (4)
PHIL 3603 Kant and Idealism (4)
PHIL 3604 Roots of Contemporary Philosophy (4)
PHIL 3605 Studies in Contemporary Philosophy (4)

Four additional philosophy courses, of which at least three must be upper division (16 units)
- III. Religious Studies Minor (36 units)
 - A. Core (12 units)

PHIL 1401 Religions of the World (4)

PHIL 3400 Philosophy of Religion (4)
PHIL 3401 Contemporary Religious Thinkers (4)

B. Electives in Philosophy (12 units)

Two courses in the history of western philosophy, chosen from the following (8 units):

PHIL 3151 Environmental Ethics (4), 3601 Ancient and Medieval Philosophy (4), 3602 Modern Philosophy (4), 3603 Kant and Idealism (4), 3604 Roots of Contemporary Philosophy (4), 3605 Studies of Contemporary Philosophy (4)

One additional course relevant to religious studies (4 units)

C. Electives in Supporting Fields (12 units)

Three courses, chosen from the following:

ANTH 3840 Magic, Witchcraft and Religion (4); ENGL 4720 Mythology (4); E S 3310 Native American World View (4); HIST 3114 History of Early Christianity (4), 3123 History of Medieval Christianity (4); HDEV 3600 Development of Religious and Secular World Views (4); SOC 3610 Sociology of Religion (4); WOST 3510 Women in Myth and Prehistory (4)

Area I (4 units)

One lower division Philosophy (PHIL) course with consent of advisor (4)

Area VII Credential Track or Area VI General Track (24 units)

One course from the following (4 units):

PHIL 3605 Studies in Contemporary Philosophy (4), 3701 Philosophy of Education (4), 4606 Seminar in Philosophy (4), 4912 Senior Project (4)

Five additional Philosophy courses (excluding PHIL 1000, 1001, and 3002) at least four of which must be upper division (20 units).

The course prefix for the following courses is PHIL.

Lower Division Critical Thinking Courses

1000 Workshop in Clear Thinking (4)
Development of clarity and focus in thinking, with attention to rigor, modes of explanation, validity of reasoning, etc. (A)

1001 Introduction to Logic (4)
[CAN PHIL 6]
Beginning study of the forms of valid inference, including informal fallacies, syllogistic logic and symbolic logic. (A)

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Lower Division Philosophy Courses

- 1101** Contemporary Social and Ethical Issues (4)
Topics of contemporary concern, e.g. human rights, roots of social injustice, affirmative action, sexism and racism. May be repeated for credit when content varies. (Y)
- 1103** Science, Ethics, and Technology (4)
The ethical implications of various technologies, such as biotechnology, medical technologies, environmental technologies, and informational technologies.
- 1401** Religions of the World (4)
Comparative study of religions from around the world, such as Hinduism, Buddhism, Taoism, Judaism, Christianity and Islam. (Y)
- 1605** Introduction to Asian Thought (4)
The thought of China, India, and Japan, past and present, as expressed in philosophical texts.
- 2020** Self, Family, Culture (4)
Normative and descriptive approaches to understanding diverse ways in which Self dwells in Family and Community. Emphasis on methodological similarities and differences between philosophical and non-philosophical approaches as a way of preparing the ground for a meaningful interdisciplinary encounter.
- 2027** Law, Economics, and Justice (4)
The normative dimensions of the relationship between law and economics. Free market and welfare state arrangements evaluated in terms of leading theories of justice.
- 2028** Philosophy, Technology, and Culture (4)
Explores the philosophical issues raised by the impact of technology on culture including ethical issues raised by mass culture and the impact of technology on philosophical worldviews.
- 2029** Philosophical Perspectives on the Problem of Evil (4)
The moral, hermeneutic, and epistemological issues raised by the problem of evil. The Holocaust as a historical locus of reflection.
- 2040** Early Modern World Philosophies (4)
Evolution of religious and philosophical traditions of early modern Europe, Middle East, and Asia. Impact of Islam on Judeo-Christian thought; philosophical debates regarding conquest and colonization of the Americas; changing perspectives on race and gender; the Enlightenment in global perspective.
- 2605** Asian Thought (4)
Buddhist thought of India, Southeast Asia, and Japan as expressed in its philosophical texts, visual art and music, and literature; demonstration of the interconnections

among these disciplines.

- 2606** Asian Thought II (4)
The thought of India, China, Southeast Asia, and Japan as expressed in its philosophical texts and visual arts, with special attention to their interconnections. Cross-listed with ART 2606.

Upper Division Critical Thinking Courses

- 3002** Modern Logic (4)
Advanced course in symbolic logic. Students without a mathematical background are encouraged to first take PHIL 1001. (Y)
- 3010** Critical Legal Reasoning (4)
Development of ability to think clearly and rationally with focus on legal reasoning. Argument by analogy, use of precedent, interpretation of court opinions, and LSAT preparation.

Upper Division Philosophy Courses

- 3100** Ethics (4)
Major theories about ethics or morality and their relation to different social systems, institutions and cultures of the world. (Y)
- 3150** Contemporary Ethics (4)
Problems and theories in contemporary ethical and moral thinking, such as: knowledge, multicultural education and relativism; fairness and affirmative action policies; violence, social injustice and freedom; and distributive justice, racism and sexism. May be repeated for credit when content varies. (Y)
- 3151** Environmental Ethics (4)
Philosophical conceptions of nature and the environment, and human responsibilities towards it, drawn from different historical and cultural traditions. (Y)
- 3152** Biomedical Ethics (4)
Ethical issues in biology and medicine, such as euthanasia, abortion, truth-telling, genetic engineering, cloning, distribution of medical resources. (Y)
- 3153** Biology and Ethics (4)
Conceptual and ethical issues arising from new developments in biology. Topics may include cloning, genetic engineering, biodiversity, the evolution/creation debate.
- 3201** Aesthetics (4)
Theories of art, such as imitation, formalism and expressionism; the contrast between representational and abstract art. (Y)
- 3213** Ethics in Literature (4)

Fiction, film, and philosophy are the materials for this exploration of different accounts of morality. The fictional sources, from ancient through modern times, provide examples. Any necessary background to philosophical reading supplied in lectures. (Y)

- 3214** Philosophy and Myth in Latin American Literature (4)
Philosophical themes, including idealism and the search for enlightenment, as illustrated in selected works of Latin American and some Mexican-American fiction. The cosmological book of the Maya, Popol Vuh, critically examined as literary philosophy, along with contemporary interpretative essays.
- 3216** Philosophy and Science Fiction (4)
Philosophical views about topics contained implicitly in science fiction writing and film.
- 3230** Art and Philosophy of the East (4)
An interdisciplinary investigation of the relationship between art and philosophy of Asia, with particular emphasis on Hinduism and Buddhism. Team taught by faculty from the Art and Philosophy departments, Cross-listed with ART 3230.
- 3301** Theory of Knowledge (4)
An exploration of such issues as skepticism, relativism, truth, and the nature of understanding. May be repeated for credit when content varies. (Y)
- 3305** Fundamental Questions: Self, Nature, and God (4)
Topics such as the mind-body problem, freedom versus determinism, and the nature of truth, faith, and reason.
- 3311** Metaphysics (4)
An exploration of the nature of matter, mind, space, time, truth, and the real. May be repeated for credit when content varies. (Y)
- 3321** Philosophy of the Human Sciences (4)
Philosophical study of theories, methods and problems in the social and behavioral sciences. May be repeated for credit when content varies. (Y)
- 3322** The Phenomenon of Language (4)
The phenomenon of language, including the languages or discourses employed by various disciplines that study it, such as linguistics, anthropology, psychology, sociology, and philosophy itself. (Y)
- 3325** Cultural Studies (4)
Analysis of philosophical problems and assumptions raised by the study of culture, including, but not limited to, the relations between reason, human freedom and culture. May be repeated once for major credit when content varies.
- 3331** History of Science (4)

A general survey of the history of science, including origins of scientific thought, the scientific revolution, the legacy of Darwin, and selected topics from nineteenth and twentieth century science. Cross-listed with HIST 3331. (W)

- 3332** Philosophy of Science (4)
The nature of scientific explanation, scientific methods, and conceptual revolutions in science. (Sp)
- 3335** Science, Technology and Values (4)
Nature of scientific reasoning and its relation to technology. Historical development of modern technology. Examples of technological systems: communications, data processing, materials, energy generation. Impact on the environment and on human society. Relation to moral reasoning. Cross-listed with SCI 3335.
- 3341** Philosophy of Cognition and Artificial Intelligence (4)
Philosophical study of the nature of cognition and of human and machine intelligence. Explores such questions as: "What is thinking?" "What is intelligence?" "Can computers understand ordinary language?" Recent trends and prospects of the quest for truly intelligent machines. (Y)
- 3400** Philosophy of Religion (4)
Philosophical issues such as the existence of God, the problem of evil, the paradox of free will, the nature of religious experience and mysticism. May be repeated for credit when content varies. (Y)
- 3401** Contemporary Religious Thinkers (4)
The religious philosophies of one or more major thinkers of the Twentieth Century from different cultures or religious traditions of the world. May be repeated for credit when content varies. (Y)
- 3403** Philosophies of the East (4)
Eastern thought as expressed in its great religious philosophies such as Confucianism, Taoism, Hinduism and Buddhism. (Y)
- 3410** Comparative Themes in Eastern and Western Philosophy (4)
Critical and comparative study of themes from Western philosophy and from Indian, Chinese and other Eastern philosophies. May be repeated for credit when content varies. (Y)
- 3411** Jewish Philosophy (4)
Readings on themes of Jewish philosophy including suffering, evil, love, alterity or otherness, and the question of Jewish identity.
- 3417** The Philosophy of Islam (4)
Islamic cosmology as articulated in the Quran, the teachings of Muhammad, Muslim law, and major Muslim philosophers. (Y)

- 3502** Social and Political Philosophy (4)
Intensive study of the philosophical theories underlying or justifying public policy issues, such as individual freedom and government protection of the rights of others; freedom of speech and religious, racial or sexual prejudice; affirmative action and reverse discrimination; and violence, personal responsibility and the roots of social injustice. (Y)
- 3503** Philosophy of Law (4)
Introduction to the main schools of jurisprudence and legal philosophy. Cross-listed with POSC 3503. (Y)
- 3510** Human Rights and Social Justice: Cultural Groups and Women in the U.S. (4)
Philosophical perspectives on human rights and social justice as they apply to the lived experiences of cultural groups and women in the U.S. (A)
- 3511** Philosophy of Human Rights and Global Justice (4)
Explores human rights theory and its global application from a philosophical perspective. Considers whether the following concepts can be applied globally: the nature of rights, individualism, liberalism, the social contract, cosmopolitanism, postmodernity, multiculturalism, materialism, and the nature of power.
- 3536** Economic Justice (4)
Ethical issues arising from economic practices and social structures. Topics may include globalization, fair contracts, discrimination, economic inequality and the relationship between markets and democracy.
- 3560** Business and Professional Ethics (4)
Team-taught by a philosopher and a social scientist. Explores current ethical issues in business and other professions: preferential hiring vs. equal opportunity, environmental regulation vs. property rights, truthfulness in business communications, economic efficiency vs. social responsibility. Cross-listed with MGMT 3560.
- 3601** Ancient and Medieval Philosophy (4)
Western philosophy from the ancient Greeks (including Socrates, Plato and Aristotle) through the philosophers and theologians of the Middle Ages (including St. Augustine and St. Thomas Aquinas). (F)
- 3602** Modern Philosophy (4)
Seventeenth and eighteenth century Western philosophy, especially rationalism (Descartes, Spinoza, Leibniz) and empiricism (Locke, Berkeley, Hume). (W)
- 3603** Kant and Idealism (4)
Kant, nineteenth century German idealists, especially Hegel, and reactions to them. (Sp)
- 3604** Roots of Contemporary Philosophy (4)
Study of one or more twentieth century philosophical traditions, such as logical positivism, analytic philosophy (including Wittgenstein), pragmatism, existentialism,

phenomenology, process philosophy, the Frankfurt School.
May be repeated for credit when content varies. (F)

- 3605** Studies in Contemporary Philosophy (4)
Various figures or topics in contemporary philosophy. May be repeated for credit when content varies. (W)
- 3701** Philosophy of Education (4)
Philosophical analysis of contemporary theories and methods of education through examination of major works offering contrasting perspectives on the nature of knowledge, competing value systems, and ethical and multicultural concerns in the educational process. Seminar approach emphasizing student participation and presentations. (Y)
- 3711** Philosophical Dialogue (1)
Dialogue between faculty and students on a range of philosophical topics. May include periodic guest speakers. May be repeated up to three times for credit.
- 3720** Feminist Philosophy (4)
Major themes, theories, and different schools of feminist philosophy; the influences of Marxism, psychoanalysis, existential phenomenology, postmodernism, and theories of difference, with special reference to American feminist thought.
- 3925** Moral Values in the Modern World (4)
A problems-oriented course in ethics focusing on issues of current moral concern, e.g., abortion, affirmative action, animal rights, feminism, euthanasia.
- 3999** Issues in Philosophy (4)
Readings, discussion, and research on contemporary and/or significant issues in philosophy. May be repeated for credit when content varies.
- 4606** Seminar in Philosophy (4)
Intensive study of an individual philosopher, school, movement or problem in philosophy. May be repeated for credit when content varies. (Sp)
- 4900** Independent Study (1-4)
- 4912** Senior Project (4)
Supervised research and preparation of an essay on a significant philosophical problem. Prerequisite: consent of a faculty member.

Footnote

- 1** Has prerequisites not included in program.



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Economics

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Department Information

Department of Economics
College of Business and Economics
Office: Music and Business Bldg. 2583
Phone: (510) 885-3339

Professor Emeritus: Jay L. Tontz

Professors: James C. W. Ahiajpor, Charles W. Baird (Co-Chair), Alexander E. Cassuto, Gregory B. Christainsen, Leo Kahane, Shyam J. Kamath, Anthony K. Lima, Jane E. Lopus, Nan L. Maxwell (Co-Chair), Lynn C. Paringer, Stephen Shmanske, David J. St. Clair,

Lecturer: M. David Yaar

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

The Economics major prepares the student for a broad variety of careers including those in law, journalism, banking and insurance, government, teaching, and research. In addition, the study of economics has become essential in today's dynamic and complex business environment.

An economics education provides the student with a logical way of approaching various problems and issues and provides qualitative skills valued highly by employers. The student learns techniques for analyzing contemporary economic problems and develops the ability to exercise sound judgement in evaluating public policy issues. Many of these skills are useful in daily decision-making irrespective of career choice. The broad background developed with the Economics major encourages the student to become an interested, understanding observer of the

Career Opportunities

events of today's and tomorrow's world.

Analyst • Business Executive • Economist • Employment Researcher/Planner • Financial Consultant • Foreign Service Officer • Financial Analyst • Management Analyst • Market Research Analyst • Policy Analyst • Professor/Teacher • Public Policy Analyst • Securities Analyst • Statistical Analyst • Statistician • Stockbroker

Features

The weekly Workshop in Economics Research (ECON 4895) provides a forum for presenting and debating faculty research and for inviting U.S. and international specialists in economics and management to discuss their research and published work. Some of the visiting speakers are sponsored by the Smith Center for Private Enterprise Studies which was started with a donation of more than \$1,000,000 from Owen and Erma Smith of Castro Valley. (The Smith Center also awards scholarships to selected Cal State Hayward economics majors who wish to pursue Ph.D. studies in economics.) Undergraduate Economics students are required to attend the workshop for three quarters for credit, usually in the senior year.

Preparation

For Advanced Placement course equivalencies, see Registration chapter.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 60-101 units; the B.A. degree requires a total of 180 units. Students receiving a B.A. degree major in Economics from this university must complete one of the following four options: Accounting, General Economics, Social Science Economics, or Statistical Economics.

Accounting Option (100-101 units)

The Accounting option provides students with general exposure to the operation of the external environment to the firm (the economy) while also providing them with the accounting tools necessary to operate in a wide variety of private organizations and to obtain a C.P.A.

Note: Academic Renewal is allowed only once per Accounting option course for students pursuing the Accounting option.

- I. Lower Division Core (25 units)
 - PC proficiency test
 - ACCT 2251 Financial Reporting and Analysis I (4)
 - ECON 2301 Principles of Microeconomics (4)
 - ECON 2302 Principles of Macroeconomics (4)

MATH 1810, 1820 Mathematics for Business and Social

Sciences I, II or MATH 1304, 1305 Calculus I, II (8)

STAT 2010 Elements of Statistics for Business and Economics (5)

[a CAN STAT 2 course and STAT 2011 (1) will substitute for STAT 2010]

II. Upper Division Core (48 units)

Note: Students must complete MKTG 3495 no later than the beginning of their Senior year (135 units) as a prerequisite to taking any upper division core courses and/or elective courses in the Accounting option.

ACCT 3170 Information Technology in Business (4) or ACCT 4704 Financial Reporting Systems: Design and Implementation (4)¹

ACCT 3211 Intermediate Financial Accounting I (4)
ACCT 3212 Intermediate Financial Accounting II (4)

ACCT 3200 Accounting for Management Decision-Making (4) or ACCT 3230 Cost Management (4)²

ACCT 3220 Tax Accounting: Fundamentals and Individuals (4) or ACCT 4220 Tax Accounting: Corporate Tax (4)³

ECON 3000 Micro-Economic Theory (4)
ECON 3005 Macro-Economic Theory (4)
ECON 3310 Money, Banking, and Financial Intermediaries (4)
ECON 3370 Public Sector Economics (4)
ECON 4000 Seminar in Micro-Economic Theory (4)
ECON 4400 Introduction to Econometrics (4)

ECON 4700 International Trade (4) or ECON 4705 International Finance (4)

III. Electives (27-28 units)

Upper Division Accounting (16 units)

Select four ACCT 3000-4000 level accounting courses beyond those listed as required (excluding ACCT 3228, 3898, 4226, 4227, 4900, 4915).

Upper Division Economics (11-12 units)

Select three upper division economics courses, excluding ECON 3551, but including 3 units of ECON 4895 as one course.

General Economics Option (72-73 units)

I. Lower Division Core (21 units)

ECON 2301 Principles of Microeconomics (4)
ECON 2302 Principles of Macroeconomics (4)

MATH 1810, 1820 Mathematics for Business and Social Sciences I, II or MATH 1304, 1305 Calculus I, II (8)

STAT 2010 Elements of Statistics for Business and Economics (5)

[a CAN STAT 2 course and STAT 2011 (1) will substitute for STAT 2010]

II. Upper Division Core (28 units)

Complete the following courses as soon as possible after the lower division core has been satisfied.

ECON 3000 Micro-Economic Theory (4)
ECON 3005 Macro-Economic Theory (4)
ECON 3170 History of Economic Thought (4)
ECON 3310 Money, Banking, and Financial Intermediaries (4)
ECON 4000 Seminar in Micro-Economic Theory (4)
ECON 4400 Introduction to Econometrics (4)
MKTG 3495 Business Communication (4)

Note: Students completing a double major in Economics and Business Administration may substitute ECON 3551 for ECON 3000 and an additional upper division Economics elective for ECON 4000.

III. Electives (23-24 units)

Select 23-24 additional units to include:

ECON 4895 Workshop in Economic Research (1) (Must be taken 3 times, preferably during Senior year)

Five upper division Economics courses, excluding ECON 3551.

Social Science Economics Option (60-61 units)

The Social Science Economics option provides an avenue for students interested in the social science aspects of economics and provides a rigorous and well-rounded economics program that emphasizes its social science underpinnings.

I. Lower Division Core (17 units)

ECON 2301 Principles of Microeconomics (4)
ECON 2302 Principles of Macroeconomics (4)
MATH 1130 College Algebra (4)
STAT 1000 Elements of Probability and Statistics (5)

II. Upper Division Core (24 units)

ECON 3000 Microeconomic Theory (4)
ECON 3005 Macroeconomic Theory (4)
ECON 3170 History of Economic Thought (4)
ECON 3310 Money, Banking, and Financial Intermediaries (4)

SOC 4111 and 4112 Methods of Sociological Research I and II (4, 4) or HIST 3010 Historical Writing (4) and POSC 3300 Voting and Public Opinion (4)

Note: SOC 4111 has a prerequisite of SOC 1000 (4) and HIST 3010 has a prerequisite of HIST 1000 (4)

III. Electives (19-20 units)

Upper Division Economics (11-12 units)

Select three upper division economics courses, excluding

ECON 3551, 3898, and 4900. May include 3 units of ECON 4895 as one course.

Upper Division Social Science (8 units)

Select two courses from the following:

HIST 3017 The Twentieth Century (4)
POSC 3521 Politics of the Global Economy (4)
POSC 3704 Marxism in Theory and Practice (4)
POSC 3800 Public Policy Analysis (4)
SOC 3880 Work and Professions (4)
SOC 3890 Sociology of Organizations (4)

Any upper division ethnic studies, history, political science, or sociology course with consent of advisor.

Statistical Economics Option (67-68 units)

The Statistical Economics option is intended for students who wish to pursue graduate studies in economics. It will also appeal to students who are interested in statistics, but want a more applied focus to their degree.

I. Lower Division Core (16 units)

ECON 2301 Principles of Microeconomics (4)
ECON 2302 Principles of Macroeconomics (4)
MATH 1304, 1305 Calculus I, II (8)

II. Upper Division Core (32 units)

ECON 3000 Micro-Economic Theory (4)
ECON 3005 Macro-Economic Theory (4)
ECON 3310 Money, Banking, and Financial Intermediaries (4)
ECON 4000 Seminar: Micro-Economic Theory (4)
ECON 4400 Introduction to Econometrics (4) or STAT 4601 Regression (4)
STAT/MATH 3401 Introduction to Probability Theory I (4)
STAT/MATH 3502 Statistical Inference I (4)
STAT 3900 Data Analysis using Statistical Packages (4) or
STAT 4950 Advance Statistical Packages for Data Analysis (4)

Notes:

STAT/MATH 3401 and 3502 can replace STAT 2010 as a prerequisite to ECON 4400. [a CAN STAT 2 course and STAT 2011 (1) will also substitute for STAT 2010]

STAT 4601 has two prerequisites: STAT/MATH 3503 (4) and STAT 4000 (4).

III. Electives

Upper Division Economics (11-12 units)

Select three upper division economics courses, excluding ECON 3551, 3898, and 4900. May include 3 units of ECON 4895 as one course.

Statistics (8 units)

Select two courses from the following:

STAT/MATH 3402 Introduction to Probability Theory II (4)

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

The minor consists of 37 units. Please note: A student cannot have both a Managerial Economics option under the Business Administration major and an Economics minor.

I. Lower Division (17 units)

- MATH 1130 College Algebra (4)
- ECON 2301 Principles of Microeconomics (4)
- ECON 2302 Principles of Macroeconomics (4)
- STAT 1000 Elements of Probability and Statistics (5)

II. Upper Division (20 units)

Complete the following courses as soon as possible after the lower division requirements have been satisfied:

- ECON 3000 Micro-Economic Theory or ECON 3551 Managerial Economics and Business Strategy (4)
 - ECON 3005 Macro-Economic Theory (4)
 - ECON 3310 Money, Banking, and Financial Intermediaries (4)
 - Two elective courses in Economics (ENGR/ECON 3140 may be substituted for one) (8)
-

Business Economics Option

An option in Business Economics is provided in the Business Administration major for business students with an interest in economics. (See Business Administration.)

Economics Option: Liberal Studies

Area I (8 units)

- ECON 2301 Principles of Microeconomics (4)
- ECON 2302 Principles of Macroeconomics (4)

Area VII Credential Track or Area VI General Track (24 units)

- ECON 3000 Micro-Economic Theory (4)
- ECON 3005 Macro-Economic Theory (4)
- Four additional upper division Economics courses (excluding ECON 3551) (16)

Undergraduate Courses

The course prefix for the following courses is ECON.

- 1000** Economics of Public Issues (4)
Examination of selected current public issues; e.g., shortages of food and fuel, pollution, slums, airline fares, stagflation, income distribution, and the function of property rights. Designed for non-economics majors and not open to students who have taken ECON 2301. (F, W, Sp)
- 1180** Income, Wealth, and Poverty (4)
Broad-based examination of theories that are used to explain how income is generated and distributed. Theories of income determination within market-based economies to explain income differentials, inequalities, wealth, and poverty at both the individual and country levels.
- 1190** Philosophy, Law, and Economics (4)
Introduction to the many interdependencies among philosophy, law, and economics; the role of property rights in a market economy; social problems arising from defective legal concepts; historical development of thinking on law and economics from Ancient Rome to the present.
- 2301** Principles of Microeconomics (4)
[CAN ECON 4]
Basic micro-economic concepts; introductory analysis of the determination of prices and output in different market situations; public policy. Prerequisites: sophomore standing and either credit for intermediate algebra or satisfactory score on the Entry-Level Math (ELM) Test. (A)
- 2302** Principles of Macroeconomics (4)
[CAN ECON 2]
Basic macro-economic concepts; introductory analysis of the determination of national income and employment; money and banking; fiscal policy in a global context. Prerequisite: either credit for intermediate algebra or satisfactory score on the Entry-Level Math (ELM) Test. (A)
- 3000** Micro-Economic Theory (4)
Analysis of supply and demand; production and costs; price and output determination; factor pricing and income distribution; optimum resource allocation. Prerequisites: MATH 1130 and ECON 2301 with grade not lower than a "C". (W)
- 3005** Macro-Economic Theory (4)
Measurement and analysis of the determination of national income and employment; general price level; stabilization and growth. Prerequisites: ECON 2301, 2302, with grade not lower than a "C" in 2302. (A)
- 3140** Engineering Economy (4)
(See ENGR 3140 for course description.)
- 3150** Economic History of the United States (4)
The development of the American economy and economic institutions; emphasis on factors affecting economic growth, problems, and policies.

- 3170** History of Economic Thought (4)
The key theories and individuals in the history of economic thought including Adam Smith, David Ricardo, and Karl Marx. Prerequisites: ECON 2301 and 2302.
- 3190** Market Processes: Theory and Applications (4)
Austrian School analysis of socio-economic phenomena including methodology of the social sciences, theory of subjective value, entrepreneurship, competition as a discovery procedure, spontaneous orders, the division of knowledge, the capital structure, and trade cycles. Historical applications used throughout. Prerequisites: ECON 2301, 2302 or consent of instructor.
- 3200** Comparative Economic Systems (4)
Comparative study of different economic systems proposed or used to deal with the economic organization of society. Prerequisite: ECON 2301.
- 3310** Money, Banking, and Financial Intermediaries (4)
Essentials of commercial and central banking; financial intermediaries; monetary policy. Prerequisite: ECON 3005 or consent of instructor. (A)
- 3370** Public Sector Economics (4)
Public sector economics; taxation, welfare economics, public goods, the rationale of government activity and collective choice. Prerequisites: ECON 2301 and 2302.
- 3375** Public Choice: The Economics of Politics (4)
Economic theory applied to political institutions and decision-making within governments. Allocations under various property right systems; coalitions and voting behavior; theory of constitutions; theory of bureaucracy; political economy of income redistribution, crime, violence, discrimination, federalism, nationalism, anarchy. Prerequisite: ECON 2301.
- 3500** Regional and Urban Economics: Survey (4)
Economic analysis as applied to urban and regional economic problems and policies. Prerequisite: ECON 2301. (W)
- 3551** Managerial Economics and Business Strategy (4)
The actions and reactions of business firms and consumers in a variety of market environments, emphasizing their strategies for optimization. Prerequisites: ECON 2301, and STAT 2010 (or CAN STAT 2 and STAT 2011). Prerequisite or concurrent: MATH 1820 or 1305. Course not recommended for Economics majors.
- 3680** Labor Economics (4)
Theory of the operation of labor markets, with the application of this theory to current manpower problems and the level of employment. Prerequisite: ECON 2301.
- 3685** Law and Economics of Labor Institutions (4)

Development of the labor sector in the American economy with emphasis on labor institutions, labor legislation, and public policy toward labor organizations. Prerequisite: ECON 2301.

- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities within the quarter enrolled. May be repeated for up to 8 units. No units may be counted toward the Economics major or minor. Prerequisites: At least 2.0 GPA; departmental approval of activity. Credit/No Credit grading only. (A)
- 3999** Issues in Economics (4)
Readings, discussion, and research on contemporary and/or significant issues in economics. May be repeated for credit when content varies.
- 4000** Seminar in Micro-Economic Theory (4)
Readings and discussion of advanced topics in analysis of market behavior, factor pricing and income distribution, general equilibrium, capital and interest, and property rights. Prerequisite: ECON 3000. (Sp)
- 4306** Environmental Economics (4)
Readings, reports and discussion on economic aspects of environmental problems and alternative proposed solutions: pollution, congestion, population. Prerequisite: ECON 2301. (Sp)
- 4315** Monetary Theory (4)
Review of current literature on the demand for and supply of money; effects of monetary policy on inflation, unemployment, interest rates, and balance of payments. Prerequisite: ECON 3310.
- 4400** Introduction to Econometrics (4)
Applications of statistical techniques to obtain quantitative estimates of relationships suggested by economic analysis. Prerequisites: ECON 2301, 2302, STAT 2010.
- 4520** Industrial Organization and Public Policy (4)
Factors determining industrial organization and economic behavior; operation of antitrust laws; public regulation. Prerequisite: ECON 3000 or 3551.
- 4590** Selected Topics in Economic Analysis (4)
Application of economic analysis to past/contemporary economic issues. With department permission, may be repeated once for credit with a different instructor or different topics. Prerequisites: ECON 2301 and 2302 or consent of instructor.
- 4700** International Trade (4)
Comprehensive coverage of the modern theory of international trade, foreign investment, the nature and effects of protection, multinational enterprise, world economic growth and international trading systems. Prerequisites: ECON 2301, 2302.

- 4705** International Finance (4)
Comprehensive coverage of the organization, operation and theory of foreign exchange markets, Eurocurrency and offshore financial markets, balance of payments and international adjustment, international capital flows and different types of international monetary systems.
Prerequisites: ECON 2301, 2302. (formerly ECON 4105)
- 4710** International Economic Development (4)
The factors and theories underlying international economic development with a focus on the nature and causes of development in specific areas and nations in Africa, Asia, Europe, North America and South America. Prerequisite: ECON 2301. (formerly ECON 4110)
- 4895** Workshop in Economic Research (1)
Workshop activity in the preparation, presentation, and evaluation of student and faculty research projects. Content varies. May be repeated each quarter for credit.
Prerequisite: at least junior standing. (F, W, Sp)
- 4900** Independent Study (1-4)
-

Footnotes

- ¹If ACCT 3170 is selected as a required course, ACCT 4704 may be selected as an elective. If ACCT 4704 is selected as a required course, ACCT 3170 may be selected as an elective.
- ²If ACCT 3200 is selected as a required course, ACCT 3230 may be selected as an elective.
- ³If ACCT 3220 is selected as a required course, ACCT 4220 may be selected as an elective. If ACCT 4220 is selected as a required course, ACCT 3220 may be selected as an elective.



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Department Information

Department of Physics
College of Science
Office: North Science 231
Phone: (510) 885-3401

Professor Emeritus: Daryl W. Preston

Professor: Robert H. Good (Chair)

Associate Professor: Gary S. Weston

Assistant Professors: David P. Landhuis, E. Jason Singley

Lecturer: Louis A. Villanueva

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

In physics, one attempts to discover, formulate, explain, and apply the basic laws of nature. You could be a physicist and work in areas as diverse as astrophysics, relativity, properties of materials, or the standard model of fundamental particles and interactions. Principles of physics provide the foundation for other sciences as well as engineering. Some of the examples of modern technological development from the application of physical principles include radio and television, computers, laser scanners, and communication by fiber optics. In addition, physicists explore problems in astronomy and theories for the origin and evolution of the universe.

The Bachelor of Science degree major program is designed to give students an understanding of the fundamentals of physics including concepts of atomic and nuclear physics, classical mechanics, wave motion and sound, electromagnetism and optics, heat and thermodynamics, relativity, quantum mechanics, and elementary particles and their interactions.

Career Opportunities

Aerodynamist • Astronomer • Biochemical Engineer • Electric Power Administrator • Geologist • Geophysicists • Laboratory Assistant • Laser Technician • Metallurgist • Meteorologist • Mineralogist • Oil Well Manager • Park Ranger • Petrologist • Pharmacologist • Pollution Control Technician • Seismologist • Stratigrapher • Technical Writer • Thermodynamic Physicist

Features

With relatively small classes and teaching as a major emphasis of faculty members, the physics major involves a considerable amount of individualized instruction. In addition, research done by faculty members often includes student participation.

Hands-on experience is the central theme of the programs and a full range of equipment including microcomputers exists in the department for use in laboratory experiments and classroom demonstrations. Upper division students use modern equipment to conduct experiments in such areas as fiber optics, laser spectra, atomic and molecular spectra, the Zeeman effect, Compton scattering, the Hall effect, the Franck-Hertz experiment, and gamma-ray spectra.

Physics majors have an opportunity to be inducted into the national physics honors society, Sigma Pi Sigma. Additionally, students may join the Society of Physics Students (SPS).

Preparation

For Advanced Placement course equivalencies, see Registration chapter.

Major Requirements (B.S.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 104 units; the B.S. degree requires a total of 180 units.

- I. Lower Division (41 units)
 - PHYS 1001, 1002, 1003 General Physics (5, 5, 5)
 - CHEM 1101, 1102 General Chemistry (5, 5)
 - MATH 1304, 1305, 2304 Calculus I, II, III (4, 4, 4)
 - MATH 2101 Elements of Linear Algebra (4)
- II. Upper Division (63 units)
 - MATH 3331 Differential Equations (4)
 - MATH 4361 Partial Differential Equations (4)
 - PHYS 3101, 3102 Analytic Mechanics I, II (3, 3)
 - PHYS 3151, 3152 Thermal and Statistical Physics I, II (3, 3)
 - PHYS 3180 Computational Physics (4)
 - PHYS 3280 Electronics (4)
 - PHYS 3281 Experimental Physics (4)
 - PHYS 3283 Advanced Laboratory (4)
 - PHYS 3301, 3302, 3303 Quantum Mechanics I, II, III (3, 3, 3)
 - PHYS 4001, 4002, 4003 Electromagnetism I, II, III (3, 3, 3)

PHYS 4250 Selected Topics or PHYS 4850 Undergraduate Research (3)
 PHYS 4600 Solid State (3)
 PHYS 4700 Modern Optics (3)

Sample Program

<i>Fall</i>	<i>Winter</i>	<i>Spring</i>
First Year (41 units)		
PHYS 1001 (5)	PHYS 1002 (5)	PHYS 1003 (5)
MATH 1304 (4)	MATH 1305 (4)	MATH 2304 (4)
CHEM 1101 ¹ (5)	CHEM 1102 ¹ (5)	BIOL 1001 ¹ (4)
Second Year (20 units)		
MATH 3331 (4)	MATH 2101 (4)	MATH 4361 (4)
	PHYS 3280 (4)	PHYS 3180 (4)
Third Year (23 units)		
PHYS 3101 (3)	PHYS 3102 (3)	PHYS 3281 (4)
PHYS 3301 (3)	PHYS 3302 (3)	PHYS 3303 (3)
	PHYS 4250 (1)	PHYS 4600 (3)
Fourth Year (24 units)		
PHYS 3151 (3)	PHYS 3152 (3)	PHYS 4003 (3)
PHYS 3283 (4)	PHYS 4002 (3)	PHYS 4700 (3)
PHYS 4001 (3)	PHYS 4850 (1)	PHYS 4850 (1)

Total Units: 104, plus BIOL 1001 (4)

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

The minor in physics is designed to provide a general background in physics for students majoring in other areas. It is of particular value to students majoring in such sciences as biology, chemistry, computer science, geology, and mathematics. A minor in physics will broaden student's understanding of physical science and will expand employment opportunities, including teaching at the secondary school level. The minor consists of 44-47 units.

MATH 1304, 1305, 2304 Calculus I, II, III (4, 4, 4)

PHYS 1001, 1002, 1003 General Physics (5, 5, 5) or PHYS 2701, 2702, 2703 Introductory Physics (4, 4, 4)

Undergraduate Courses

PHYS 3101 Statics and Dynamics (4)
PHYS 3280 Electronics and Semiconductor Manufacturing (4)
PHYS 3301 Quantum Mechanics I (4)
PHYS 4001 Electromagnetism I (4)
Another upper division physics course (4)

The course prefix for the following courses is PHYS.

- 1001**, General Physics (5 each)
1002, [CAN PHYS SEQ B = PHYS 1001, 1002, 1003]
1003 All major fields of physics are covered in this sequence. This sequence is designed for physics, physical science, geology (B.S.), and chemistry (B.S.) majors. MATH 1304, 1305, 2304 are corequisites or prerequisites. Each course is a prerequisite of the one following. Four hrs. lect., 3 hrs. lab., each. (1001: F; 1002: W; 1003: Sp)
- 1001 Newtonian Mechanics and Oscillations
- 1002 Thermodynamics and Electromagnetism
- 1003 Optics and Modern Physics
- 1500** How Things Work (4)
A conceptual look at how popular and common things work, what they mean in an everyday way, and how they all fit together in one working unit. Not for physics major credit.
- 1600** Evolution of the Universe (4)
Construction of an evolutionary synthesis and history from the Big Bang to the present. A model of events for the formation of the universe, our solar system, and the earth. Not for physics major credit.
- 1700** Elementary Physics (4)
A non-mathematical survey of the basic physical laws (rules) of nature with emphasis on the origin, meaning, significance, and limitations of these laws. Topical areas include mechanics, wave motion, electricity and magnetism, heat and thermodynamics, relativity, quantum theory, and elementary particle theory. Not applicable to the physics major. (A)
- 1780** Elementary Physics Laboratory (1)
A lab designed to accompany PHYS 1700 and to introduce students to some equipment used in physics. The experiments are hands-on activities in mechanics, wave motion and sound, temperature and heat, electricity, light, and radioactivity. Not applicable to the physics major. Three hrs. lab. (A)
- 1800** Astronomy (4)
A descriptive survey of astronomy, astrophysics, and cosmology. Emphasis is on the physical nature and evolution of galaxies, stars, and planets. Not applicable to the physics major. (A)

- 1880** Astronomy Laboratory (1)
A lab designed to accompany PHYS 1800 and PHYS 3700. Experiments are hands-on activities involving positions and motions of the moon, planets, and stars. Some night observations are included. Not applicable to the physics major. Three hrs. lab. (A)
- 2005** The Science of Energy (4)
A descriptive course covering energy resources, production, and consumption in the 21st century. Energy input and output of physical systems such as household appliances and modes of transportation. Not for physics major credit. (W)
- 2021** Physics in the 21st Century (4)
A descriptive survey of state-of-the-art topics in physics, projected research, and their impact on life in the 21st century. Topics selected from such areas as atomic physics, astrophysics, optical engineering, high-energy and particle physics, telecommunication, nuclear science, and condensed matter. Not for physics major credit.
- 2701,** Introductory Physics (4 each)
2702, [CAN PHYS SEQ A = PHYS 2701, 2702, 2703]
2703 A three-quarter sequence in general physics, designed primarily for students taking the B.S. biological sciences (including pre-professional students), chemistry (B.A.), and geology or for non-science majors requiring a good foundation in physics. Knowledge of algebra and trigonometry required. For students who are not majoring in physics. Three hrs. lect., 3 hrs. lab each. (2701: F, W; 2702: W, Sp; 2703: Sp, Su)
- 2701 Force, Mass and Motion
Prerequisite: Trigonometry or MATH 1300.
- 2702 Heat, Sound, Electricity and Magnetism
Prerequisite: PHYS 2701.
- 2703 Light and Modern Physics
Prerequisite: PHYS 2702.
- 3101** Analytic Mechanics I (3)
Review of Newtonian mechanics. Hamilton's Principle. Lagrangian and Hamiltonian formalisms, with applications. Generalized coordinates. Central forces. Prerequisite: PHYS 1003. (F)
- 3102** Analytic Mechanics II (3)
Particles and rigid bodies. Oscillations and waves. Fluids. Prerequisite: PHYS 3101; prerequisite or co-requisite: MATH 3331. (W)
- 3151** Thermal and Statistical Physics I (3)
The laws of thermodynamics, states of matter, kinetic theory, introduction to statistical mechanics. Prerequisite: PHYS 1003.
- 3152** Thermal and Statistical Physics II (3)

Canonical and other ensembles. Quantum gases and phase transitions. Prerequisite: PHYS 3151; prerequisite or co-requisite: MATH 3331.

- 3180** Computational Physics (4)
Computer programming and numerical techniques relevant to physics. Data acquisition and analysis. Prerequisite: PHYS 1003; prerequisite or co-requisite: MATH 3331. Two hrs. lect., 6 hrs. lab. (Sp)
- 3250** Modern Physics (4)
An introduction to relativity, quantum nature of radiation, wave properties of particles, atomic and nuclear physics, and elementary particles. Prerequisite: PHYS 1002. (F)
- 3280** Electronics (4)
Hands-on introduction to analog and digital circuits and components commonly found in laboratory electronics. Prerequisite: PHYS 1003 or consent of instructor. Cross-listed with ENGR 3280. Two hrs. lect., 6 hrs. lab.
- 3281** Experimental Physics (4)
Experiments in various fields of physics. Experimental design. Computer interfacing. Written and oral reports. Laboratory safety. Prerequisite: PHYS 3280 or consent of instructor. Two hrs. lect., 6 hrs. lab.
- 3283** Advanced Laboratory (4)
Experimental projects, including optical and solid state physics topics. May be repeated for credit. Prerequisite: PHYS 3280. Two hrs. lect., 6 hrs. lab.
- 3301** Quantum Mechanics I (3)
Introduction to Schrodinger's equation and the mathematical formalisms of quantum mechanics. Prerequisite: PHYS 1003.
- 3302** Quantum Mechanics II (3)
Applications of Schroedinger's equation. Angular momentum. Prerequisite: PHYS 3301; prerequisite or co-requisite: MATH 3331.
- 3303** Quantum Mechanics III (3)
Approximation methods and further applications of quantum mechanics. Prerequisite: PHYS 3302; prerequisite or co-requisite: MATH 4361.
- 3700** The Big Bang and Other Cosmologies (4)
A descriptive course on the cosmological origin and evolution of the universe. Historical review of cosmological models and discussion of current theories. Stellar and galactic origin and evolution, stellar energy, the early universe, open and closed universes, and the search for extra-terrestrial life. (A)
- 3800** Achievements of Women in Science (4)
(See BIOL 3800 for course description.)
- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes

academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 8 units. A maximum of 4 units will be accepted toward the physics major; a maximum of 2 units will be accepted toward the minor. CR/NC grading only. Prerequisites: at least a 2.0 GPA; departmental approval of activity.

- 3999** Issues in Physics (4)
Readings, discussion, and research on contemporary and/or significant issues in physics. May be repeated for credit when content varies.
- 4001** Electromagnetism I (3)
Study of electricity and magnetism leading to Maxwell's equations in vacuum. Prerequisite: PHYS 1003. (F)
- 4002** Electromagnetism II (3)
Materials and boundary value problems. AC circuits. Prerequisite: PHYS 4001; prerequisite or co-requisite: MATH 3331. (W)
- 4003** Electromagnetism III (3)
Electromagnetic radiation. Relativity in electromagnetism. Prerequisite: PHYS 4002; prerequisite or co-requisite: MATH 4361. (Sp)
- 4250** Selected Topics (1-3)
Various subjects and projects providing an extension of the physics curriculum. May be repeated for credit, up to a total of 3 units for any combination of PHYS 4250 and 4850. Prerequisite: PHYS 1003.
- 4600** Solid State (3)
Crystals and bonding. Waves in lattices. Electron gas and energy levels. Semiconductors and superconductors. Prerequisite: PHYS 3302.
- 4700** Modern Optics (3)
Introduction to photonics. Lasers and fibers. Non-linear optics and electro-optics. Prerequisite: PHYS 4002.
- 4850** Undergraduate Research (1-3)
Research leading to a formal report, under the direction of a faculty member. May be repeated for credit, up to a total of 3 units for any combination of PHYS 4250 and 4850. Co-requisites: PHYS 3281 and 3283. Three to nine hrs. act./lab.
- 4900** Independent Study (1-4)

Footnote

1This sequence satisfies the G.E. Natural Sciences cluster requirement for Physics majors. (BIOL 1001 is not part of the Physics major.)



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Department Information

Special Education Option: Liberal Studies

Educational Psychology

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- ▶ [Undergraduate Courses](#)

Department of Educational Psychology
College of Education and Allied Studies
Office: Art and Education Bldg. 369
Phone: (510) 885-3011

Professors Emeriti: Theodore G. Alper, Steven E. Crapo, Phyllis G. Kaplan, Donald P. McKillop, Harry M. Overline, Douglas G. Sprague

Professors: Jacki L. Anderson, Mary P. diSibio (Chair), Ann Halvorsen, Dan Romero, Arthurlene G. Towner

Associate Professors: Bonnie S. Ho, Greg Jennings

Assistant Professors: John M. Davis, Terry Soo-Hoo, Marcy E. Stites, Steve Williams

Lecturer: Maureen P. Kennedy

Please consult the 2006-2007 online catalog for any changes that may occur.

The department offers the core requirements for the Special Education Option in Liberal Studies, Area VII (see the Liberal Studies section for a full description of the Liberal Studies major; see Educational Psychology in the graduate section for descriptions of 5000-level courses).

Core Requirements (16 units)
(See the Educational Psychology chapter in the graduate section of this catalog for course descriptions.)

EPSY 5021 Introduction to Educating all Students in Diverse Classrooms (4)

EPSY 5125 Educational Practices: Mild-Moderate Disabilities (4)

EPSY 5126 Special Education Law and Program Design (4)

EPSY 5136 Educational Practices: Moderate-Severe Disabilities (4)

While the department offers primarily graduate courses, it also offers the following courses for undergraduates who are interested in Counseling, Clinical Child Psychology, and Educational

Undergraduate Courses

Psychology. Seniors interested in transitioning to a master's degree program in any of these areas may want to consider applying for graduate credit while still an undergraduate (see Baccalaureate Degree Requirements chapter). Courses listed at the 5000 and 6000 level under Educational Psychology in the Graduate section of this catalog may also be taken for graduate credit with the same approved petition, but instructor's approval is required prior to registration.

The course prefix for the following courses is EPSY.

- 1001** Career Planning for College Students (2)
For students who are unclear about their career goals. Discussion, individual and small group activities designed to increase students' self-knowledge in terms of interests, abilities, and values, as well as information about the world of work and effective decision making techniques. Credit/No Credit only. Not applicable to General Education-Breadth Requirements. (A)
- 2300** Strategies for Lifespan Mental Health (4)
Utilizing theory and research from mental health disciplines to develop strategies for maintaining psychological health and peak performance over the lifespan. The impact of relationships, self-concept, cognitions, emotions, spirituality, body image, and diverse cultural identities on mental health.
- 3999** Issues in Educational Psychology (4)
Readings, discussion, and research on contemporary and/or significant issues in educational psychology. May be repeated for credit when content varies.



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Political Science

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Department Information

Department of Political Science
 College of Arts, Letters, and Social Sciences
 Office: Meiklejohn Hall 4092
 Phone: (510) 885-3221

Professors: David Sadofsky Baggins, Michael E. Good, Sherman L. Lewis, Emily Stoper (Chair)

Associate Professor: Norman A. Bowen

Assistant Professor: Kim Geron

Lecturer: Wendy J. Sarvasy

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

The political science curriculum helps students to acquire an organized body of knowledge about government and to think analytically about public policy, law, and politics. The political science degree prepares graduates to enter careers in government, public service, public administration, public policy analysis, legislative advocacy, business, international relations, and teaching. Many Cal State Hayward political science graduates continue their academic careers in law school, or in the pursuit of graduate degrees in political science or public policy analysis.

Career Opportunities

Administrative Assistant • Attorney • Campaign Aide/Manager • Diplomat • FBI/CIA Agent • Foreign Service Officer • International Relations Specialist • Journalist • Labor Organizer/Union Representative • Law Clerk • Legislative Advocate/Lobbyist • Legislative Aide • Paralegal • Legal Assistant • Police Officer •

Politician • Polling Specialist • Private Investigator • Public Administrator • Public Information Officer • Research Specialist • Secret Service Agent • Teacher

Features

The political science major offers a Pre-Law option for students planning a career in law. The Public Affairs and Administration option is designed to meet the needs of students contemplating a career in public administration. The Political Science department offers a major, a minor, and a Liberal Studies option. Special features of the Political Science major include: the Intercollegiate Model United Nations Club; field trips to Sacramento and to State and Federal courts; guest political speakers; pre-law advising; local, Sacramento, Washington, and political campaign internships; College Democratic and Republican clubs; and the Political Science Club.

Preparation

For Advanced Placement course equivalencies, see Registration chapter.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The regular major consists of 56 units; the Pre-Law option consists of 64 units; the Public Affairs and Administration option consists of 65 units. The B.A. degree requires a total of 180 units.

The Traditional Political Science Major

I. Lower Division (8-16 units)

- A. POSC 1201 American Political Institutions (4)
POSC 1202 Public Policy/California Politics (4)

- B. Students may take an additional 0-8 units of lower division political science courses.

II. Upper Division (40-48 units)

- A. POSC 3030 The Study of Political Science (4)

- B. One course in each of the following five fields (20)

1. American Government and Public Administration (includes courses listed under Public Policy and Administration)
2. Public Law
3. Comparative Government and Politics
4. International Relations
5. Political Theory

- C. POSC 4910 Political Science Seminar (4)

- D. Twelve (12) to twenty (20) additional units from upper

division political science courses

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

Pre-Law Option

Also see "Pre-Law Students" later in this chapter.

Students taking this option will focus their coursework in legal studies. Completion of this program will lead to a B.A. degree, major in Political Science with an option in Pre-Law. The total required for the major with Pre-Law option is 64 units. The total required for the B.A. degree is 180 units.

Two quarters before you expect to graduate, complete a major check sheet and inquire about other requirements for graduation. The following is an outline indicating specific courses and options necessary for completing the option in pre-law.

I. Foundation Courses (24 units)

- POSC 1201 American Political Institutions (4)
- POSC 1202 Public Policy/California Politics (4)
- POSC 3030 The Study of Political Science (4)

One lower or upper division course in International Relations (4)

One lower or upper division course in Comparative Government (4)

One upper division course in Political Theory (4)

II. The Political and Policy Context of the Law (16 units)

Choose 16 units from the following:

H SC 3350 Health Legislation and Government Programs (4); MGMT 4500 Business, Government and Society (4); any Political Science course listed under the headings "American Government and Politics" or "Public Policy and Administration."

III. Public Law (20 units)

Choose 20 units from the following:

MGMT 2701 Legal Environment of Business (4); PHIL/POSC 3503 Philosophy of Law (4); any Political Science course listed under the heading "Public Law."

IV. Capstone (4 units)

- POSC 4910 Political Science Seminar (4)

Public Affairs and Administration Option

Students taking this option will concentrate their coursework in American political institutions, public policy, and administrative processes. Completion of this program will lead to a B.A. degree major in Political Science, with an option in Public Affairs and Administration.

Since several courses overlap (ECON 2301, 2302, ACCT 2210 or 2251, MGMT 4500), the department encourages students who pursue this option to consider combining it with the Minor in Business Administration.

The major with this option consists of 65 units; the B.A. requires a total of 186 units. The course requirements for this option are as follows:

I. Lower Division (21 units)

ECON 2301 (4)

ECON 2302 or POSC 1202 (4)

POSC 1201 (4)

One course from each group (9 units)

Group I: STAT 1000 or STAT 2010

Group II: ACCT 2210 or ACCT 2251

II. Upper Division (40 units)

Group I: Public Affairs and Administrative Process (at least 12 units)

ECON 3370; POSC 3800, 3870, 4445, 4861; PUAD 4800, 4830

Group II: Political Institutions and Processes (at least 8 units)

Any Political Science courses listed under the heading "American Government and Politics"

Group III: Public Affairs and Public Policy (8 units)

ECON 3375; HSC 3350; MGMT 4500; POSC 3505

Service Requirement (4 units)

May be fulfilled by taking POSC 3113, 3370, 3898 or another service course approved by the department chair.

Foundation Requirement (4 units)

POSC 3030 The Study of Political Science

Capstone Course (4 units)

POSC 4910 Political Science Seminar

Pre-Law
Students

The study of law is a postgraduate professional program, requiring three years of full-time study beyond the completion of the bachelor's degree. No specific pre-law undergraduate program is required for admission to law schools. However, students wishing to focus on legal studies at Cal State Hayward, may complete the Pre-Law option in the Political Science major.

Students intending to enter law school commonly complete undergraduate majors in political science, economics, business, or history. The pre-law student's undergraduate plan of study should include among its objectives a facility in the proper use of written and spoken English, a sampling of undergraduate law courses, one or more critical/logical thinking courses, and a basic understanding of government and economics. Some law schools recommend that students take a basic accounting course, particularly if they are interested in business or tax law.

Students planning to enter law school should consult a pre-law advisor. Dr. David Baggins of the Department of Political Science, who is an attorney, serves as the university pre-law advisor. Several other departments also have pre-law advisors.

Most accredited law schools require that applicants complete the Law School Admission Test. The LSAT is typically given in September, December, February, and June at one or more testing centers in the Bay Area. Pre-law students should obtain LSAT registration materials and law school applications early in their senior year. Copies of these materials can be secured from the Office of Assessment and Testing Services and from the Department of Political Science. The Political Science department library has a copy of the Law School Guidebook and many law school catalogs.

Minor Requirements

The minor consists of 24 units of Political Science courses of which at least 16 units must be in upper division. The purpose of the Minor in Political Science is to provide a general background in political science to complement majors in such areas as business administration, environmental studies, science, humanities, and the other social sciences. The student should consult with a Political Science department advisor or the chairperson in selecting courses.

Political Science Option: Liberal Studies

Area VII, Credential Track, or Area VI, General Track (24 units)

1. Four (4) units from the following:
POSC 1201 or its equivalent
2. Twenty (20) additional Political Science units of which sixteen (16) must be upper division

Undergraduate Courses

The course prefix for the following courses is POSC.

Lower Division Courses

- 1000** Introduction to Political Science (4)
Introduction to the study of politics and government, surveying the concepts and approaches of political science. (Y)

- 1201** American Political Institutions (4)
Development of political institutions and ideals in the U.S. Key elements of the political system, including the Constitution, Presidency, Congress, Courts, parties, elections, and bureaucracy. Combined with POSC 1202 meets code requirements in U.S. history, U.S. Constitution and California government. (A)
- 1202** Public Policy/California Politics (4)
Issues in American public policy, focusing on contemporary controversies (environment, poverty). California state and local government. Basic methodology including how to interpret public opinion data, electoral polls, statistics about public policy. Combined with POSC 1201, meets U.S. History, Constitution, and Institutions requirement. (A)
- 1500** Conflict in World Politics (4)
Causes of conflict. Topics include Iraq and Desert Storm, Bosnia, the Middle East, and Third World conflicts. Analysis of foreign aggression, civil war, terrorism, ethnic struggle, nationalism, boundary disputes, military force, sanctions, peacekeeping, mediation, disaster relief, and economic aid. (Y)
- 2410** Law and Society Across Disciplines (4)
Introduction to the American legal system. Evolution of values in the law; courts in the political system; policy impact of modern legal initiatives. Not open to those with credit for POSC 3410.

Upper Division Courses

American Government and Politics

- 3101** American Government in Simulation (4)
The institutions of the U.S. national government, such as the Congress, the courts and party conventions, studied through the use of simulations, both electronic and classroom, in which all students participate.
- 3111** The American Presidency (4)
Study of the American Presidency both historically and analytically with an emphasis on roles and powers; the struggle between the President and Congress; the leadership role of the President in government, political parties, and public opinion. (Y)
- 3112** Congress and the California Legislature (4)
Background and recruitment of Congressmen and state legislators, elections, the rules of the game, constituent representation, the committee system, leadership, relations with the Executive Branch, lobbyists, and reform proposals. Field trip to the California legislature. Emphasis on sources of information about Congress for the concerned citizen. (Y)
- 3113** Political Internship (2-4)
Practical experience on a legislative or executive staff or in a campaign organization. May be repeated once for credit

with permission of instructor. (F, W, Sp)

- 3120** State and Local Politics and Government (4)
The structures, processes, policies, political culture and power distributions of governments of states, cities, suburbs, small towns, metropolitan areas and neighborhoods. Special reference to California and San Francisco Bay Area institutions and problems. Satisfies the California state and local government code requirement. (Y)
- 3130** Urban Politics (4)
Styles and structures of city government; community power studies; community control and metropolitan government; problems of crime, welfare, finance, education, pollution, planning; emphasis on the Bay Area. (Y)
- 3150** Politics of California (4)
Political culture, electoral systems, and public policy in California. Field trip to the California Legislature. Satisfies code requirement in California state and local government. (Y)
- 3300** Voting and Public Opinion (4)
Nature and causes of voter turnout and vote choice. Determinants and effects of public opinion. Methodology used for measurement and analysis of these subjects. Prerequisite: STAT 1000 or 1100.
- 3310** Political Parties and Campaigning (4)
Party organizations in U.S. and California, historical changes in party operations, political machines and patronage, money in politics, party labels, the differences and similarities between the major parties, minor parties, the new style of campaigns, professional campaign management firms, the prospects for reform. (Y)
- 3330** Interest Groups, Lobbying, and Political Reform (4)
Private power and American public policy; the nature and sources, strategy and tactics of pressure group power in the American political process. Business, labor, agriculture, the professions, minority groups, and religion as organized groups influencing political decision making. (Y)
- 3333** Ethnic and Minority Politics (4)
Contemporary and historic analysis of ethnic and minority participation in the political process. Voting, elections, interest groups, political machines, office holders, activists, strategies, and common participatory patterns. Cross-listed with E S 3333.
- 3340** Women and Politics (4)
Public policy relating to American women; impact of the women's movement on public policy and political behavior; women as voters, political activists, political office-holders; the function of sex roles in the political system. (Y)
- 3360** Culture and Politics in the United States (4)
How political personality is formed by cultural experience

in the U.S. Influences such as generational effects, gender, region, ethnicity and sexual identity. News reporting, literature, movies and television as sources of the development of political personality.

Public Policy and Administration

- 3170** Public Policy and the Family (4)
The evolution of and current controversies over American government policies on the family, including abortion, family planning, marriage, divorce and custody, child care subsidies, wife battering, child abuse, and welfare. Impact of policies on the poor and minority groups, as well as on middle class whites. (Y)
- 3370** Citizen Action (4)
How can citizens help solve the most important problems of our society? Power, competition and compromise in democracy and reform; case studies. The flow from policy knowledge and values to advocacy and action.
- 3418** U.S. Immigration Policy and Law (4)
Development of U.S. immigration policy including theories, demographic trends, sources of immigration legislation, case law. Relationship of politics, policy, culture, social and economic status to racial and ethnic groups, women, and workers.
- 3419** Labor Policy and Law (4)
Historical development and changing fortunes of working class, trade unions, immigrant, and women workers. Growth among government workers and declining numbers in private industry. U.S. Government's labor laws and judicial interpretation for private and public sectors.
- 3800** Public Policy Analysis (4)
Surveys the formulation, implementation, and impact of public policy dealing with social and economic problems. Examines and evaluates the causes and content of government policy in various areas such as civil rights, social welfare, urban affairs, crime, education, health, environment, energy, taxation. (Y)
- 3870** Public Personnel Management (4)
Politics, history, values and contemporary issues related to employment in the public sector. Topics include discriminatory practices, affirmative action efforts, training and development programs, comparable worth pay systems, collective bargaining, and constitutional rights of employees. (Y)
- 4171** Public Policy and the Environment (4)
Politics of human-environment relationships. Sustainability, biodiversity, population, consumption, technology, energy, water, resources, recycling, pollution, and urban systems. Cultural values, paradigm change, science, risk analysis, market pricing, competition of networks, and citizen action. Significant written assignment integrates theory and practice. (Y)

- 4172** Public Policy and Health (4)
Research and reports on the development and administration of public policy with regard to medicine and health care; problems of organization and financing of health care services, health insurance, medical research, and health worker programs in the United States. (Y)
- 4445** Bureaucratic Politics and Administrative Law (4)
Politics of bureaucracy, government regulations, administrative law, exploration of the content, and structure of public administration. Public finances, human resource management, workplace discrimination, ethics, regulation within institutions. Cross-listed with PUAD 4445.
- 4861** Politics of Budgeting (4)
Politics and governmental budgeting; executive-legislative relationships, interest group activities, and citizen demands; the budget as an instrument for management, planning, and policy-making at federal, state, and local levels. (Y)

Comparative Government and Politics

- 3201** Political Systems of Western Europe (4)
The governments and politics of Great Britain, France, Germany, and other Western European nations. Development and expansion of the European Union. (Y)
- 3204** Political Systems of Asia (4)
An analysis of politics in selected Asian countries. The degree of emphasis on particular countries and areas such as China, India, Japan, and Southeast Asia varies. (Y)
- 3222** Government and Politics of Eastern and Central Europe (4)
The politics of the formerly communist states of Eastern and Central Europe. Countries covered include Russia, Ukraine, Poland, Romania, the Balkans and others. New democratic institutions and economic development. Links with Western Europe. (Y)
- 3230** Government and Politics in the Middle East (4)
Introduction to the study of contemporary politics in the Middle East. Comparative approach, analyzing the political, social, religious and economic aspects of the area.
- 3260** Government and Politics of Africa South of the Sahara (4)
The governments of the nations of Africa south of the Sahara, with special reference to comparative colonial policies, nationalist movements, political parties, and the problems of nation building; comparative economic systems and the roll of the military. (Y)
- 3280** Political Systems of Latin America (4)
Political development, instability, and revolution in a comparative framework. Case studies of political

development in major countries; group conflicts, ideology, administrative problems, and the role of violence. (Y)

- 3290** Comparative Law (4)
Examination of essential features of law and their impact upon society using a comparative method. Incorporation of comparative legal theory of various legal systems, and how legal institutions express diverse civilizations.

Public Law

- 3410** Law and Society (4)
Rise of the American legal system and evolution of values in the law. Courts in the political system and the policy impact of modern legal initiatives. (F, W, Sp)
- 3417** Survey of American Law (4)
The basic elements of the American legal system, its essential values, and its impact on society. Personal injury, contracts, criminal law, regulation, and international law. Emphasis on case law as the basis for exploring the legal system. (Y)
- 3418** U.S. Immigration Policy and Law (4)
Development of U.S. immigration policy including theories, demographic trends, sources of immigration legislation, case law. Relationship of politics, policy, culture, social and economic status to racial and ethnic groups, women, and workers.
- 3441** American Constitutional Law I (4)
The American Constitution as a model of government. The role of democracy, federalism, assumptions regarding human nature, citizenship, separation of powers, capitalism, and issues of empire building. (Y)
- 3442** American Constitutional Law II (4)
The Bill of Rights as interpreted by Court decisions since its adoption. Topics include freedom of speech, religion, equal protection, and personal privacy. Emphasis on the relationship among rights, politics, judicial behavior and public policy. (Y)
- 3460** Environmental Law (4)
Legislative, judicial, and administrative controls over public and private actions impacting on the environment. Examination of statutory, administrative, and judicial decisions relating to the environment and of government actors and agencies making these decisions. (Y)
- 3470** International Law (4)
The rules that govern governments and world bodies. Includes treaties, law of the sea, environmental protection, use of force, terrorism, and markets. Focus on the movement toward global community. Not open to students with credit for POSC 3951.
- 3503** Philosophy of Law (4)
(See PHIL 3503 for course description.)

- 4445 Bureaucratic Politics and Administrative Law (4)
(See the "Public Policy and Administration" section for course description.)

International Relations

- 3500 World Problems and Global Response (4)
Arms control, human rights, development, debt, women's rights, world population, environmental protection, and technology transfers. Analysis of key actors (United Nations, specialized agencies, national governments, non-governmental organizations) and policy alternatives. Student opportunity to work with local organizations. (Y)
- 3505 American Foreign Policy (4)
National security, economic and development assistance policies since World War II. Current policy choices and the constitutional conflict between Congress and the President. Rule of the State Department, the military, the CIA, and non-governmental organizations (labor, business, and veterans). (Y)
- 3508 Politics of Filipino-American Relations (4)
Filipino-American relations within the context of Filipino nationalism and America's rise as a superpower.
- 3510 War and Peace (4)
Major power security concerns, regional alliances, and Third World countries. Analysis of nuclear, chemical, biological, and conventional arms proliferation and arms control. Military doctrine and weapons systems, conflict resolution, peacekeeping, and peace movements. Student opportunity to work with local organizations. (Y)
- 3520 International Relations (4)
The conduct of relations among states. The international system, national power, sovereignty, nationalism, ideology; use of diplomacy, propaganda, economic influence, military force; problems of neocolonialism, multinational corporations, racial tensions, nuclear deterrence, war, the role of the United Nations. (Y)
- 3521 Politics of the Global Economy (4)
International trade and development assistance. Focus on GATT, the World Trade Organization, the G7 nations, and the International Monetary Fund. Problems of transnational corporations, labor standards, and migration. Global liberalism compared with collectivist economies. Ecological, participatory, regional and nationalist challenges. (Y)
- 3550 The United Nations and World Community (4)
Historical, institutional and theoretical background of the contemporary United Nations and related agencies; focus on participation of selected countries in the UN structure and operations with regard to current international problems and issues. May be repeated for credit by students participating in Model UN. (Y)

Political Theory

- 3030** The Study of Political Science (4)
(See the "General" section for course description.)
- 3703** American Political Thought (4)
Significant American political ideas and thinkers from the Pilgrims to the present. Includes, among others, Jefferson, Madison, Calhoun, King, and Gingrich. (Y)
- 3704** Marxism in Theory and Practice (4)
The writings of Marx and the characteristics of Marxism in the 20th century. (Y)
- 3711** Greek, Roman and Medieval Political Thought (4)
Major Western political ideas from the Greeks through the 15th century. Emphasis upon major political theorists in the development of classical Greek and Roman, Medieval Christian, and Renaissance political theory. (Y)
- 3713** Contemporary Political Thought (4)
Major Western political ideas in the 19th and 20th centuries. Emphasis upon central figures in the development of Democratic, Marxist, Socialist, and various other contemporary bodies of political theory. (Y)
- 3715** The State and the Family (4)
The relationship between the public and private spheres. The relationship between the state and family as perceived by political theorists. The home as a metaphor for public life; the patriarchal and other modes of government and the family; the interdependence of the family, the economy, and the state; the family as haven of resistance in a hostile political environment. Classical political theory texts and contemporary writings.
- 3716** Citizenship, Community, and Democratic Theory (4)
The duties and rights of citizenship, personal and ethnic identities, and evolving democratic theory. Specific issues raised by contemporary politics: national service, immigration policy models of citizenship participation, dismantling the welfare state, utopian and contemporary notions of community, and affirmative action. Classical and contemporary texts.
- 3717** Theories of Empire (4)
Major theories and debates about imperialism, its history, its modern manifestations, and its status and future in the post-Cold War era.

General

- 3030** The Study of Political Science (4)
History and assumptions of political science as a field; basic skills and methodology; ethics in politics,

administration and law; careers; personal learning goals; portfolios; Library tour.

- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 8 units. A maximum of 4 units will be accepted toward the Political Science major; a maximum of 4 units will be accepted toward the Political Science minor. Prerequisites: at least a 2.0 GPA; departmental approval of activity. (A)
- 3999** Issues in Political Science (4)
Readings, discussion, and research on contemporary and/or significant issues in political science. May be repeated for credit when content varies.
- 4900** Independent Study (1-4)
- 4910** Political Science Seminar (4)
Contributions of natural and social science theories, methods, results for political science; scope and method of political science; individual research on selected topics. Open to seniors only. Registration priority given to political science majors and minors. Prerequisite: POSC 3030. (Y)



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Department Information

UNDERGRADUATE PROGRAMS

Engineering

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- ▶ [Sample Program](#)
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Department of Engineering
 College of Science
 Office: ST 680
 Phone: (510) 885-2654

Professors: Joyendu Bhadury (joint appointment in Engineering and Management/Finance), Dean Fearn (joint appointment in Engineering and Statistics), Anthony Lima (Economics), Saeid Motavalli (Chair), Ytha Yu (Mathematics/Computer Science)

Associate Professors: Assim Sagahyroon (joint appointment in Engineering and Mathematics/Computer Science), Helen Zong

Assistant Professors: David Bowen, Roger Doering (joint appointment in Engineering and Mathematics/Computer Science), Assim Sagahyroon (joint appointment in Engineering and Mathematics/Computer Science), Eric A. Suess (joint appointment in Engineering and Statistics)

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

Industrial Engineering is the profession concerned with solving engineering problems by applying scientific logic and systems methodology and by utilizing information, energy, materials, facilities, and personnel most effectively. Its objectives are to improve quality, increase efficiency and reduce costs associated with the production of goods and services and to act as the interface between technology and humans. Engineering methods and practical knowledge are used in formulating decision models for the optimum application of engineering principles. The Industrial Engineering Program is accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, Telephone: (410) 347-7700.

Mission Statement

The Industrial Engineering program at California State University, Hayward provides a quality engineering education that prepares its graduates for employment related to their major and to have an aptitude for continued learning. The program provides students with technical and problem solving capabilities, and understanding of real-world business often through practical work experience, and excellent teamwork and communications skills. It promotes a high rate of student success in completing the program in a reasonable length of time and enables the transfer students to take no longer than native students in completing the upper division portion. Students graduate from the program with a high degree of satisfaction about their education. Faculty maintain a high level of currency in the discipline through a strong program of professional development and interaction with the Industrial Advisory Board.

Educational Objectives of the Engineering Program
The Department of Engineering provides a quality engineering education to produce graduates who:

- exhibit evidence of successfully applying their learned skills in their professional pursuits;
- have the enthusiasm and aptitude to continuously pursue learning;
- have the ability to communicate and work well on teams that include engineers and colleagues from other disciplines;
- are recognized as qualified engineers with high ethical standards.

Career Opportunities

Engineering Management • Industrial Engineer • Manufacturing Engineer • Quality Engineer • Project Manager • System Analyst

Features

Students may elect to prepare for a specific professional concentration by judicious selection of electives in consultation with their faculty advisors. Professional concentrations may include human factors engineering, systems engineering, and quality engineering. Students interested in Industrial Engineering at Cal State Hayward may complete the first two years at a local community college. In so doing, it is important to determine, prior to taking courses, if the community college courses chosen have been articulated with the Cal State Hayward Industrial Engineering curriculum projects will be offered in conjunction with local businesses.

Preparation

Prospective Engineering students should complete four years of high school mathematics, a year each of high school chemistry and physics with labs, and a computer programming course if available.

Major

Option in Industrial Engineering

Requirements (B.S.)

The major with this option consists of 142 units. The B.S. Degree requires 198 units.

- I. Lower Division (57 units)
 - CHEM 1601 Basic Chemistry for the Health Sciences (or 1605) (4)
 - CS 1160 Introduction to Computer Science and Programming Methods (4)
 - ECON 2301 Principles of Microeconomics (4)
 - ENGR 1010 Introduction to Engineering (2)
 - ENGR 1420 Engineering Graphics (2)
 - ENGR 2010 Electric Circuit Theory (3)
 - ENGR 2060 Materials Science (4)
 - ENGR 2070 Fundamentals of Manufacturing (2)
 - MATH 1304 Calculus I (4)
 - MATH 1305 Calculus II (4)
 - MATH 2304 Calculus III (4)
 - PHYS 1001, 1002, 1003 General Physics I, II, III (15)
 - PSYC 1005 General Psychology for Healthier Living (or one of 1000, 1001, 2004, or 2009) (5)

Most of the lower division ENGR courses are available at local community colleges. Community college students should take them prior to transferring to Cal State Hayward.

- II. Upper Division Core Requirements (73 units)
 - ENGR 3020 Work Design and Measurement (4)
 - ENGR 3140 Engineering Economy (4)
 - ENGR 3190 Human Factors Engineering (4)
 - ENGR 3841 Operations Research I (4)
 - ENGR 4080 Manufacturing Systems Engineering (4)
 - ENGR 4100 Production Planning and Control (4)
 - ENGR 4200 Systems Simulation (4)
 - ENGR 4280 Design and Management of Human Work Systems (4)
 - ENGR 4300 Quality Engineering (4)
 - ENGR 4350 Reliability Engineering (3)
 - ENGR 4430 Facilities Planning and Design (4)
 - ENGR 4440 Computer Integrated Manufacturing (4)
 - ENGR 4610 Senior Design I (3)
 - ENGR 4620 Senior Design II (3)
 - MATH 3331 Differential Equations (4)
 - PHYS/ENGR 3101 Statics and Dynamics (4)
 - STAT/ENGR 3601 Statistics and Probability for Science and Engineering I (4)
 - STAT/ENGR 3602 Statistics and Probability for Science and Engineering II (4)
 - STAT/ENGR 4603 Operations Research II (4)

- III. Electives (12 units)

Select four (4) units from the following:

BIOL 3020 Genetics, Evolution, and Humanity (4), 4020 Contemporary Human Biology (4); MATH 2101 Elements of Linear Algebra (4); MATH/CS 3750 Numerical Analysis I (4)

Select eight (8) units from the following:

CIS/ENGR 3281; ENGR 3090, 3898, 4090, 4180, 4330, 4900, 4990; MATH 4841; MGMT/ENGR 3110; MGMT/ENGR 3600; PHYS/ENGR 3280; or other 3000 and 4000 level

courses with department approval

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

Sample Program

Four-year Schedule for Engineering Majors with No Remediation

Freshman Year (49 units)

Fall Quarter (16 units)	Winter Quarter (16 units)	Spring Quarter (17 units)
<i>General Education</i> A1 COMM 1004 (4) B1 CHEM 1605 (4) [■] B4 MATH 1304 (4) [■] G1 GS 1011 (1) G4 LIBY 1010 (1)	<i>General Education</i> A2 ENGL 1001 (4) B3 CHEM/ ENGR 2060 (4) [■] F1 KPE Activity (1) G2 GS 1012 (1)	<i>General Education</i> A3 Critical Thinking (4) B2 PSYC 1005 (5) [■] F2 KPE Activity (1) G3 GS 1013 (1)
<i>Major</i> ENGR 1010 (2)	<i>Major</i> ENGR 1420 (2) MATH 1305 (4)	<i>Major</i> ENGR 2070 (2) MATH 2304 (4)

Sophomore Year (51 units) *Sports and Society or Urban City Issues Cluster*

Fall Quarter (17 units)	Winter Quarter (17 units)	Spring Quarter (17 units)
<i>General Education</i> C1 Humanities (4) D1 ECON 2301 [■] or COMM 2250 (4)	<i>General Education</i> C2 Humanities (4) D2 SOC 2001 or KPE 2700 (4)	<i>General Education</i> C3 Humanities (4) D3 ES 1200 or ECON 2301 [■] (4)
<i>Major</i> ENGR 3020 (4) PHYS 1001 (5)	<i>Major</i> ENGR 3140 [■] (4) (approved for Area D4) PHYS 1002 (5)	<i>Major</i> CS 1160 (4) PHYS 1003 (5)

Junior Year (49 units)

Fall Quarter (16 units)	Winter Quarter (17 units)	Spring Quarter (16 units)
<i>GE/Other</i>	<i>GE/Other</i>	<i>GE/Other</i>

F3 KPE Activity (1) ENGL 1002 (4) C4 Upper Division
F4 KPE Activity (1) Humanities (4)

<i>Major</i>	<i>Major</i>	<i>Major</i>
ENGR 2010 (3)	ENGR 4430 (4)	ENGR 4100 (4)
ENGR 3841 (4)	PHYS/ENGR 3101 (4)	ENGR 3190 (4)
MATH 3331 (4)	STAT/ENGR 3602 (4)	STAT 4401 (4)
STAT/ENGR 3601 (4)		

Senior Year (49 units)

Fall Quarter (16 units)	Winter Quarter (18 units)	Spring Quarter (15 units)
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<i>GE/Other</i>	<i>GE/Other</i>	
U.S. History/ Government (4)	U.S. History/ Government (4)	

<i>Major</i>	<i>Major</i>	<i>Major</i>
ENGR 4200 (4)	ENGR 4080 (4)	ENGR 4280 (4)
ENGR 4300 (4)	ENGR 4350 (3)	ENGR 4440 (4)
ENGR Elective (4)	ENGR 4610 (3)	ENGR 4620 (3)
	ENGR Elective (4)	ENGR Elective (4)

Undergraduate Courses

The course prefix for the following courses is ENGR.

- 1010** Introduction to Engineering (2)
Development of the industrial economy and the profession of industrial engineering. Concepts and principles of industrial organization and management. Survey of engineering techniques and areas of application in manufacturing and service systems. Career opportunities review. One hr. lect., 2 hrs. lab.
- 1420** Engineering Graphics (2)
Engineering drawing, computer-aided design, dimensioning, and tolerancing. Drawings of mechanical components. One hr. lect., 3 hrs. lab.
- 2010** Electric Circuit Theory (3)
Application of fundamental circuit laws and theorems to the analysis of DC and to steady-state single-phase and three-phase circuits. Prerequisite: PHYS 1002 (may be taken concurrently).
- 2060** Materials Science (4)
Structure of matter. Physical and mechanical properties of materials, including metals, alloys, ceramics, insulating materials, semiconductors, super semiconductors, and polymers. Equilibrium diagrams. Heat treatments, material selection, and corrosion phenomena. Prerequisites: CHEM 1601 or CHEM 1605, and MATH 1304. Three hrs. lect., 3 hrs. lab.
- 2070** Fundamentals of Manufacturing (2)
Traditional and non-traditional manufacturing processes.

Cutting tool analysis. Production methods. Prerequisite ENGR 1010 and 2060. One hr. lect., 3 hrs. lab.

- 3020** Work Design and Measurement (4)
Principles of work simplification and motion analysis. Recording of work flow and methods. Work measurement and standards, time study, synthetic data, predetermined time systems, and work sampling. Allowances and performance rating, productivity measures. Work design improvement. Military standards. Prerequisite: ENGR 2070. Three hrs. lect., 3 hrs. lab.
- 3090** Industrial Costs and Controls (4)
Estimation of manufacturing costs for production, planning, cost analysis, and cost control. Planning, budgeting, and control processes. Costs, accounting data, and analysis of variances for managerial control, inventory valuation, and decision-making. Techniques of forecasting, pricing, cost estimating, and cost reduction. Prerequisite: ENGR 2070.
- 3101** Statics and Dynamics (4)
(See PHYS 3101 for course description.)
- 3110** Applications of Decision-Making (4)
(See MGMT 3110 in Business Administration chapter for course description.)
- 3140** Engineering Economy (4)
Macroeconomic concepts such as inflation, interest rates, banking system, global trade, and exchange rates, Fundamental microeconomic concepts of supply and demand, opportunity costs, and comparative advantage. Economic analysis of engineering decisions. Determining rates of return on investments. Effects of inflation, depreciation, and income taxes. Application of basic principles and tools of analysis using case studies. Prerequisites: ECON 2301, MATH 1304. Cross-listed with ECON 3140.
- 3190** Human Factors Engineering (4)
Analysis of factors influencing the efficiency of human work. Data on the physical and mental capacities of persons, the physical environment, work organization, and the problem of aging. Human reactions and capabilities related to specific tasks and systems. Design of machines, operations, human computer interface and work environment to match human capacities and limitations, including the handicapped. Prerequisites: PSYC 1000 (or one of 1001, 1005, 2004, or 2009); STAT/ENGR 3601 or STAT 1000. Cross-listed with PSYC 3190.
- 3280** Electronics (4)
(See PHYS 3280 for course description.)
- 3281** Systems Analysis and Design (4)
(See CIS 3281 in Business Administration chapter for course description.)
- 3600** Theories of Management (4)
(See MGMT 3600 in Business Administration chapter for

course description.)

- 3601** Statistics and Probability for Science and Engineering I (4)
(See STAT 3601 for course description.)
- 3602** Statistics and Probability for Science and Engineering II (4)
(See STAT 3602 for course description.)
- 3752** Introduction to Digital Signal Processing (4)
(See CS 3752 for course description.)
- 3841** Operations Research I (4)
Theory and application of deterministic optimization techniques. Topics selected from project management, networks, linear programming, non-linear programming, game theory and dynamic programming. Prerequisite: MATH 2304
- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus activities. May be repeated for up to 8 units. A maximum of 4 units will be accepted toward the Engineering major. CR/NC grading only. Prerequisites: at least a 2.5 GPA, junior or senior standing, departmental approval of activity.
- 3999** Issues in Engineering (4)
Readings, discussion, and research on contemporary and/or significant issues in engineering. May be repeated for credit when content varies.
- 4080** Manufacturing Systems Engineering (4)
An introduction to manufacturing systems, basics of factory dynamics, variability in manufacturing, pull and push manufacturing systems, production scheduling, and supply chain management. Prerequisite: ENGR 3841
- 4090** Economic Decision Systems (4)
Economic evaluation of information for complex decisions. Analysis of risks and uncertainties. Bayes theory and models. Decision theory, sequential decisions, and value of information applied to financial evaluation and control. Major project justification procedures. Prerequisites: ENGR 3140, STAT/ENGR 3601.
- 4100** Production Planning and Control (4)
Inventory planning and control systems. Implementation of manufacturing resource planning including demand forecasting, production planning, master scheduling, bill-of-material, and inventory master file. Capacity requirements planning and shop floor control. Project management. Prerequisites: ENGR 2070, 3841; STAT/ENGR 3601.
Three hrs. lect., 3 hrs. lab.
- 4180** Product-Process Design (4)
Investigation of the product and process design cycle as a source of competitive advantage. Topics include functional maps, aggregate planning, cross-functional integration,

design for manufacturability, and the design-build-test cycle. Case studies and site visits used extensively to reinforce concepts presented in lectures and reading assignments. Prerequisites: ENGR 2070, 3140.

- 4200** Systems Simulation (4)
Design and analysis of manufacturing and service systems by simulation. Function of random variables. Random number and function generators, programming and characteristics of simulation languages. Three hrs. lect., 3 hrs. lab. Prerequisites: CS 1160, ENGR 3841, STAT/ENGR 3601.
- 4280** Design and Management of Human Work Systems (4)
Qualitative principles and techniques used to maximize labor productivity, employee satisfaction, and organizational performance in work settings. Topics include worker motivation and incentive systems, leadership, worker autonomy, work groups and participatory organizational structures including quality control circles, total productive maintenance teams, and socio-technical systems. Prerequisites: ENGR 3020, ENGR 3190.
- 4300** Quality Engineering (4)
Quality control, reliability, maintainability, and integrated logistic support. Statistical theory of process control and sampling inspection. Risks associated with decisions based on operating characteristics of control charts and sampling plans. Reliability and life testing methods. Economics of statistical QC. Prerequisites: ENGR 2070, STAT/ENGR 3601.
- 4330** Advanced Work Measurement (4)
Predetermined time systems. Time formulas. Standard data systems. Use of statistical methods. Standard data systems applied to clerical, manufacturing, and micro assembly. Developing and maintaining computerized systems. Prerequisites: ENGR 3020, CS 1160, STAT/ENGR 3601. Three hrs. lect., 3 hrs. lab.
- 4350** Reliability Engineering (3)
Reliability concepts and mathematical models, mechanical device reliability, electrical device reliability, systems reliability and maintainability, reliability data, assurance program elements. Prerequisites: ENGR 3841 and 4300.
- 4430** Facilities Planning and Design (4)
Design concepts and input requirements in planning and design of new or renovation of existing manufacturing systems. Product, process, and flow and activity analysis techniques. Flow lines and buffering techniques. Computer-aided layout design and evaluation. Design of handling systems. Math models of location problems. Prerequisites: ENGR 3020 and 3841. Three hrs. lect., 3 hrs. lab.
- 4440** Computer Integrated Manufacturing (4)
Introduction to automation, computer aided manufacturing, group technology, computer aided process planning,

cellular manufacturing, and an introduction to robotics.
Prerequisites: ENGR 2070 and 3140. Three hrs. lect., 2 hrs. lab.

- 4603** Operations Research II (4)
(See STAT 4603 for course description.)
- 4610** Senior Design I (3)
Development of technical writing and presentation skills through class discussions, proposal writing and presentations. Development of team skills through identification and development of team project proposal and through team building exercises. Utilization of engineering design process and project management techniques in proposal development. Introduction of engineering ethics through case studies. Prerequisites: Senior standing and departmental approval; prerequisites or co-requisites: any three of ENGR 4100, 4200, 4300, 4430.
- 4620** Senior Design II (3)
Utilization of industrial engineering skills and engineering design concepts including development of alternative solutions and economic analysis of alternatives to complete an industrial project. Prerequisite: ENGR 4610.
- 4835** Human-Computer Interaction (4)
(See CS 4835 for course description.)
- 4900** Independent Study (1-4)
- 4990** Special Topics for Upper Division Students (1-4)
Group study of a selected topic, the title to be specified in advance. Maximum of 4 units per quarter and 8 units total. Prerequisite: permission of instructor.

Footnote

- 1** Course satisfies a G.E. requirement and is also required in the major.



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Preprofessional Programs

► [Footnote](#)

Please consult the 2006-2007 online catalog for any changes that may occur.

The Medical Sciences

A student interested in entering medicine, dentistry, optometry, pharmacy, physical therapy, veterinary science, or allied health sciences should contact the Preprofessional Health Advisory Program at the Department of Physics office, SCN 231 (510-885-3401).

The Preprofessional Health Advisory Program at the Department of Physics office will direct the student to a preprofessional advisor to receive program information and individual counseling about meeting the requirements for admission to professional schools. The composite letter of evaluation, drafted by the preprofessional advisor and approved by the chair of the committee, represents the official campus analysis of the student for professional schools. If letters of evaluation from individuals are required or desired by a professional school, they are the responsibility of the student.

The required courses for the various professional fields do not comprise a major, therefore the student is free to select any major. Accordingly, in addition to the preprofessional advisor, each student must also select a major advisor on the same basis as do all other students at the university. Admission to professional schools is highly competitive. Consequently, the major selected should be one representing an alternate career objective satisfactory to the student.

Students intending to enter the medical or dental professions should plan on completing a baccalaureate degree with an appropriate academic major. Many premedical and predental students major in biological sciences or chemistry, but majors in the social sciences and the humanities are acceptable to medical and dental schools, provided the specified courses in science have been completed.

Admission to medical and dental schools is restricted to those students who have developed a facility in the use of English and in quantitative thinking, who have mastered the fundamentals of the physical and biological sciences, and who have studied in depth one of the major fields of knowledge.

Cal State Hayward is an official test center for the Medical College Admission Test (MCAT). The MCAT is administered twice yearly, in Spring and Fall, under the auspices of the Assessment & Testing Office. Premedical students are urged to schedule this test for Spring of their junior year.

The Dental Admission Test, required of all pre dental students, may be taken by application in Spring or Fall. Pre dental students should plan to take this test in Spring of their junior year. Contact the Assessment and Testing Office for further details.

Courses such as ANTH 3720 (Medical Anthropology), HSC (Medical Care in the U.S.), PHIL 3152 (Biomedical Ethics) and SOC 4720 (Medical Sociology) will be of value to students preparing for interviews at professional schools. Some of these courses may be counted for General Education, depending upon the major.

The sample programs below contain courses required by most professional schools and courses recommended as preparation for national tests. Consult a preprofessional advisor for program modifications.

Sample Programs for Preprofessional Students

Medicine (including allopathic, osteopathic, podiatric, and veterinary medicine)

First Year

<i>Fall Quarter</i>	<i>Winter Quarter</i>	<i>Spring Quarter</i>
CHEM 1101 (5)	CHEM 1102 (5)	BIOL 1401 (5)
MATH 1130 ¹ (4)	MATH 1300 (4)	CHEM 1103 (5)
ENGL 1001 ¹ (4)	ENGL 1002 (4)	MATH 1304 (4)

Second Year

<i>Fall Quarter</i>	<i>Winter Quarter</i>	<i>Spring Quarter</i>
BIOL 1402 (5)	BIOL 1403 (5)	BIOL 3121 (5)
CHEM 3301 (5)	CHEM 3302 (5)	CHEM 3303 (5)
MATH 1305 (4)		STAT 3031 (4)

Third Year

<i>Fall Quarter</i>	<i>Winter Quarter</i>	<i>Spring Quarter</i>
BIOL 3122 (4)	CHEM 3400 (4)	PHYS 2703 (4)
PHYS 2701 (4)	PHYS 2702 (4)	

Fourth Year

Completion of Major and General Education requirements.
Completion of courses (e.g., BIOL 3150 Principles of Physiology, CHEM 2200 Quantitative Analysis) required by particular professional schools.

Dentistry

First Year

<i>Fall Quarter</i>	<i>Winter Quarter</i>	<i>Spring Quarter</i>
CHEM 1101 (5)	CHEM 1102 (5)	BIOL 1401 (5)
MATH 1130 [□] (4)	MATH 1300 (4)	CHEM 1103 (5)
ENGL 1001 [□] (4)	ENGL 1002 (4)	PSYC 1000 (5)

Second Year

<i>Fall Quarter</i>	<i>Winter Quarter</i>	<i>Spring Quarter</i>
BIOL 1402 (5)	BIOL 1403 (5)	BIOL 3121 (5)
CHEM 3301 (5)	CHEM 3302 (5)	CHEM 3303 (5)
		STAT 3031 (4)

Third Year

<i>Fall Quarter</i>	<i>Winter Quarter</i>	<i>Spring Quarter</i>
BIOL 3122 (4)	CHEM 3400 (4)	PHYS 2703 (4)
PHYS 2701 (4)	PHYS 2702 (4)	

Fourth Year

Completion of Major and General Education requirements.
Completion of courses required by particular professional schools.

Allied Health Fields

The following programs are offered by the university in the allied health fields. The Department of Biological Sciences has an Option in Biomedical Laboratory Sciences (formerly Medical Technology) in its B.S. degree major. Options in Athletic Training, Exercise Physiology, Exercise Nutrition and Wellness, and Pre-Physical Therapy are available in the Department of Kinesiology and Physical Education. The Department of Nursing and Health Sciences has a B.S. degree major in Nursing and Health Sciences and an M.S. degree in Nursing. The graduate department of Educational Psychology has an M.S. in Counseling. Both B.S. and M.S. programs in Speech Pathology and Audiology are offered as well as a Clinical Rehabilitative Services Credential. The M.P.A. degree has an option in Health Care Administration. There is also an M.S. degree program in Health Care Administration offered by the Department of Nursing and Health Sciences and the Department of Public Administration. These programs are described in the alphabetical listing in this catalog. Please contact the appropriate departments and schools for additional information.

Certificate in Pre-Physical Therapy

The certificate requirements, as proposed, can be met by completing 79-80 units as shown below.

- I. Lower Division (60-61 units)
 - BIOL 1401 Molecular and Cellular Biology (5)
 - BIOL 1403 Animal Biology (5)
 - BIOL 2010 (or 2011), 2020 Human Physiology and Anatomy I, II (5, 4)

 - BIOL 2025 Introduction to Microbiology (5) or BIOL 4160 Medical Physiology (4)

 - CHEM 1101, 1102, 1103 General Chemistry (5, 5, 5)

PHYS 2701, 2702, 2703 Introductory Physics (4, 4, 4)
PSYC 1000 General Psychology (or one of 1001, 1005, 2004,
or 2009) (5)
STAT 1000 Elements of Probability and Statistics (5)

II. Upper Division (19 units)

KPE 3305 Structural Kinesiology (5)
KPE 3310 Biomechanics (5)
KPE 3320 Exercise Physiology (5)
PSYC 4410 Abnormal Psychology (4)

Field Observation and Voluntary Participation

Students enrolled in the program must complete one to three quarters of field observation and volunteer participation in physical therapy at cooperating agencies. Evidence of such fieldwork can be gained by liaison with appropriate personnel at these agencies.

Additional Courses

Additional courses may be needed to meet the requirements of specific programs in Physical Therapy. Examples are given below. Students are advised to consult a preprofessional advisor in the Department of Kinesiology and Physical Education for further information.

BIOL 4160 Medical Physiology (4)
CHEM 2301/2302 Survey of Organic Chemistry (4, 4)
KPE 4330 Clinical Exercise Physiology (4)
KPE 4340 Motor Development (4)
PSYC 4420 Developmental Psychology (4)
KPE 4000-level course on computer applications in kinesiology and physical education

Pre-Law Studies

The study of law is a postgraduate professional program, usually requiring three years of full-time study beyond the completion of the bachelor's degree. No specific pre-law undergraduate program is required for admission to law schools. However, for students wishing to focus on legal studies at Cal State Hayward, the Political Science Department has a Pre-Law option in the Political Science Major.

Students intending to enter law school commonly complete undergraduate majors in political science, economics, business, or history. The pre-law student's undergraduate plan of study should include among its objectives a facility in the proper use of written and spoken English, a sampling of undergraduate law courses, one or more critical/logical thinking courses, and a basic understanding of government and economics. Some law schools recommend that students take a basic accounting course, particularly if they are interested in business or tax law.

Students planning to enter law school should consult a pre-law advisor. Dr. David Baggins of the Department of Political Science, who is an attorney, serves as the university pre-law advisor. Several other departments also have pre-law advisors.

Most accredited law schools require that applicants complete the Law School Admission Test. The LSAT is typically given in September, December, February, and June at one or more testing centers in the Bay Area. Pre-law students should obtain LSAT

registration materials and law school applications early in their final year of college. Copies of these materials can also be secured from the pre-law advisor in the Department of Political Science and from the Office of Assessment and Testing, WA 438. The Political Science Department Library also has a copy of the Law School Guidebook and many law school catalogs.

Natural Resources

Students contemplating transferring to various programs in the College of Natural Resources and Sciences at Humboldt State University or the College of Natural Resources at the University of California, Berkeley, can complete a number of the prerequisite courses at Cal State Hayward.

As the requirements differ among the various programs and may change from time to time, it is important to check with the appropriate departments of Humboldt State and U.C. Berkeley about the current information. The following courses at Cal State Hayward serve as prerequisites for most of the Natural Resources majors: BIOL 1401-2-3, CHEM 1101-2-3, MATH 1300, and either PHYS 1101-2-3 or 2701-2-3.

Pre-Theological Studies

The American Association of Theological Schools recommends that students anticipating graduate theological education take a broad liberal arts program leading to the B.A. degree. Cal State Hayward recommends that pre-theology students complete the Religious Studies Option in the Philosophy Major. A reading knowledge of at least one language other than English is highly recommended. Students should elect courses which will sharpen their conceptual processes (logic, scientific method, literary or historical research) and should have more than an introduction to the world of people and ideas, the world of nature, and the world of human affairs. It is also possible to complete a minor in religious studies. (See the minor listed in undergraduate Philosophy chapter.) Students planning to enter theological schools should consult the Department of Philosophy (MI 4006) about their major and baccalaureate degree.

Footnote

- 1** See department for placement tests required prior to registration.



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English

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Department Information

Department of English
 College of Arts, Letters, and Social Sciences
 Office: Warren Hall UM79
 Phone: (510) 885-3151

Professors Emeriti: Zelda Boyd, Jacob Fuchs, Sara McAulay

Professors: Eileen Barrett, Charles DeBose, Jacqueline Doyle,
 Stephen D. Gutierrez, Kathleen Margaret Lant, E. J. Murphy,
 Alden Reimonenq, Marilyn N. Silva (Chair)

Associate Professor: Alison M. Warriner

Assistant Professors: Debra Barrett-Graves, Dennis M. Chester,
 Susan A. Gubernat, Eve M. Lynch, Margaret Tomlinson-Rustick,
 Ke Zou

Lecturers: Cynthia H. Andrzejczyk, Sartaz Aziz, Scott D. Bentley,
 Mary C. D'Allewa, Jeanne M. Ekdahl, Susan H. Fox, Eva V.
 Fuchs, Dorothy Gilbert, Kathleen R. Grow, Herman G. Haluza, Jr.,
 James P. Hausken, Rochelle M. Nameroff, Maureen C. Newey,
 Michael A. Rovasio, Paul E. White

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

Contrary to popular opinion, most students who major in English do not become public school teachers, although many do choose a career in teaching. Rather, English majors go into all areas of business and government and wherever else the ability to read and write the English language effectively leads to opportunities for advancement and success. The English major is a widely recognized and respected preparation for graduate degrees in

Career Opportunities

law, medicine, social services, and business. It also provides an excellent foundation for free-lance and broadcast journalism. The academic backgrounds of management personnel in private and public organizations attest to how appropriate the English major is for those who pursue careers in management and administration.

Advertising Copy Writer • Author/Critic • Bookstore Manager • Continuity Writer • Corporate Communications Director • Foreign Service Officer • Freelance Journalist/Writer • Greeting Card Editor/Writer • Lawyer • Librarian • Media Specialist • Newspaper Reporter • Public Information Officer • Publication Editor • Publicity Director • Publishing Agent • Radio/TV Agent • Script Writer • Teacher/Professor • Technical Writer

Preparation

For Advanced Placement course equivalencies, see Registration chapter.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 64-76 units; the B.A. degree requires a total of 180 units.

I. Core Curriculum (32 units)

(While ENGL 1001 and ENGL 1002 are not listed as core requirements in the major, they are prerequisites for core classes and campus graduation requirements.)

ENGL 2030 Introduction to Critical Writing on Prose Fiction (4)

ENGL 2040 Introduction to Critical Writing on Poetry (4)

ENGL 2050 Introduction to Critical Writing on Drama (4)

ENGL 3010 Modern English Grammar (4)

ENGL 3020 Advanced Expository Writing (4)

ENGL 4251 Introduction to Shakespeare (4)

One upper division English course in British Literature before 1900 (4)

One upper division English course in American Literature before 1900 (4)

II. Courses in Supporting Fields (0-12 units)

Majors must complete, with grades of C-/CR or better, one year of a college-level foreign language or must pass a translation test administered by the English Department.

III. Option Requirements (32 units)

The Department of English offers several options for degree candidates. Majors must choose one of the following options: British and American Literature, Creative Writing, Interdisciplinary Language and Literature Studies, Language and Discourse, and New Voices in English Literature.

A. British and American Literature (32 units)

ENGL 3080 Introduction to Critical Theory of Literature (4)
ENGL 4151 Introduction to Chaucer (4)

One upper division English course in Medieval or Renaissance literature (4)

One upper division English course in Restoration or 18th Century literature (4)

One upper division English course in British literature of the 19th Century (4)

One upper division English course in American literature of the 20th Century (4)

One upper division English course in the literature of an ethnic or cultural minority (4)

One upper division English course elective (4)

B. Creative Writing (32 units)

ENGL 2070 Beginning Workshop in Fiction (4)

ENGL 2075 Beginning Workshop in Poetry (4)

ENGL 3070 Intermediate Workshop in Fiction (4) or ENGL 3075 Intermediate Workshop in Poetry (4)

ENGL 3070 Intermediate Workshop in Fiction (a second time) (4) or ENGL 3071 Writing Women's Lives: A Workshop (4) or ENGL 3075 Intermediate Workshop in Poetry (a second time) (4)

ENGL 4070 Advanced Workshop in Fiction (4) or ENGL 4075 Advanced Workshop in Poetry (4)

ENGL 4090 Project and Portfolio (a capstone course) (4)

One upper division English course in literature or writing (4)

One upper division English course in the literature of the 20th century (4)

C. Interdisciplinary Language and Literature Studies (32 units)

In formal consultation with three professors—two from the English Department and one from a department other than English—and with the approval of the department chair, students may put together a program of 32 upper division units in literature, language, rhetoric, or writing drawn from various departments in the university (16 of these units must be in English).

D. Language and Discourse (32 units)

ENGL 3005 Study of Language (4)

ENGL 3015 Introduction to Phonology (4)

ENGL 3040 Linguistic History of the English Language (4)

ENGL 4010 Current Theories in Formal Grammar (4)

ENGL 4040 Language in the U.S.A. (4)

ENGL 4060 Topics in Language (4)

Minor Requirements

Two upper division English electives (8)
(Courses in language/linguistics from departments other than English may be used for these two elective courses with the permission of the department chair.)

- E. New Voices in English Literature (32 units)
ENGL 3080 Introduction to Critical Theory of Literature (4)
ENGL 3691 Black Literature I (4)
ENGL 3692 Black Literature II (4)
ENGL 4450 Studies in British Women's Literature (4) or
ENGL 4650 Studies in American Women's Literature (4)

One upper division course in the literature of the 20th century (4)

Two upper division courses in the literature of an ethnic or cultural minority (8)

One upper division elective (4)

I. English (32 units)

The minor in English consists of 32 units, excluding ENGL 1001 and 1002, approved by an English Department advisor.

At least one course in writing beyond the freshman level; after completing ENGL 1001, choose from ENGL 2030, 2040, 2070, 3003, 3020, 3070, 3075, 4070, 4075. (Apply units to either lower or upper division units below.)

English courses, excluding ENGL 1001 and 1002

Lower Division (0-12)

Upper Division (20-32)

II. Creative Writing (32 units)

Any candidate for the bachelor's degree (except for English majors with the Creative Writing option) may also elect to obtain a Minor in Creative Writing. After completing ENGL 1001, (s)he must complete 32 quarter units, approved by a Creative Writing advisor.

ENGL 2070 Beginning Workshop in Fiction (4)

ENGL 2075 Beginning Workshop in Poetry (4)

Select a minimum of 24 quarter units from:

ENGL 3070 Intermediate Workshop in Fiction (4)

ENGL 3071 Writing Women's Lives: A Workshop (4)

ENGL 3075 Intermediate Workshop in Poetry (4)

ENGL 4070 Advanced Workshop in Fiction (4)

ENGL 4075 Advanced Workshop in Poetry (4)

ENGL 4900 Independent Study in Creative Writing

(maximum of 4 quarter units) (1-4)

Upper division Modern American or British literature, or genre courses (4-8)

Note: Creative writing courses may be repeated for credit. See course descriptions for limitations.

English Option: Liberal Studies

Area VII, Credential Track, or Area VI, General Track
(24 units)

Twenty-four units of upper division English courses (except ENGL 3000, 3001, 3003 and those not used for areas I-VI on the major).

Single Subject Matter Preparation Program

See the Single Subject Matter Preparation Program chapter in the undergraduate section of this catalog for a description of the Single Subject Matter Preparation Program in English.

Competency Program In Written English

This program is designed for non-native speakers of English.

English Courses (19 units)

After completing all developmental coursework assigned as a result of scoring below 151 on the English Placement Test (EPT), students must complete, with grades of "A," "B," "C," or "CR," the following courses:

ENGL 0930 Basic Reading, Composition, and Grammar for Non-Native Speakers of English (4)

ENGL 1001 College Writing I (4)

ENGL 1002 College Writing II (4)

ENGL 1101 Adjunct Grammar Workshop and Lab for Non-Native Speakers of English I (1)

ENGL 1102 Adjunct Grammar Workshop and Lab for Non-Native Speakers of English II (1)

ENGL 3001 Writing for Proficiency for Non-Native Speakers of English (4) or SPPA 3005 Verbal American English Skills (4)

SPPA 0980 Speech Laboratory for Non-Native Speakers of English (1)

Undergraduate Courses

The course prefix for the following courses is ENGL.

Developmental Writing

Students should consult the section of the catalog entitled "Appropriate Coursework Based on EPT Results" for guidelines in choosing the proper developmental writing course(s). This appears in the Registration chapter at the front of this catalog.

0801, The Intensive Learning Experience in Writing I,
0802, II, III (4 each)

- 0803** A three-course sequence in basic (remedial) writing, mandatory for students who have scored 141 and below on the English Placement Test (EPT). The workshops focus on the practice of standard written English. Classes may not be used as prerequisites to the Competency Program in Written English for Non-Native Speakers of English. Units do not count toward the baccalaureate degree. Grading is A/B/C/NC only.
- 0804, 0805, 0806** ILE I, II, III in English for Non-Native Speakers (4 each)
- 0806** Mandatory three-course sequence for non-native speakers who score 141 or below on the EPT. Focus on reading, vocabulary, and writing skills. Students who make exceptional progress may have one of these classes waived. Units do not count toward baccalaureate degree. Grading A/B/C/NC only.
- 0811** Effective Reading Strategies (2)
Discussion and practice of strategies and techniques for reading academic material. CR/NC grading only. Units will not count toward the baccalaureate degree. Co-requisite: ENGL 0801 or 0804.
- 0910** Developmental Writing I (4)
A writing workshop preparatory to the written communication requirements, ENGL 1001 and 1002. Developing college essay writing skills, with special attention to style and usage. May be repeated twice, for a total of 12 units, with the permission and advice of the instructor or department. Class may not be used as a prerequisite to the Competency Program in Written English Proficiency for Non-Native Speakers of English unless 0988 is taken concurrently. Prerequisite: Total Score on EPT of 142-146. Co-requisite: ENGL 0988 if ESL. Units do not count toward baccalaureate degree. A/B/C/NC grading only.
- 0920** Developmental Writing II (4)
A writing workshop preparatory to the written communication requirements, ENGL 1001 and 1002. Developing college essay writing skills, with special attention to organization and development. May be repeated twice, for a total of 12 units, with the permission and advice of the instructor or department. Class may not be used as a prerequisite to the Competency Program in Written English for Non-Native Speakers of English. Units do not count toward baccalaureate degree. A/B/C/NC grading only. (A)
- 0930** Basic Reading, Composition, and Grammar for Non-Native Speakers of English (4)
Focus on reading academic texts and writing essays. Units do not count toward baccalaureate degree. Prerequisites: Satisfactory completion of 800- or 900-level classes except ENGL 0910 or 0920. A/B/C/NC grading only.
- 0989** Tutoring Support for ENGL 1001 (2)
Tutoring support course for first-year students with Total

scores of 147-150 on the English Placement Test. Serves students in ENGL 1001 classes linked to first-year G.E. clusters. CR/NC grading only.

Undergraduate

- 1001** **█** College Writing I (4)
[CAN ENGL 2]
An introduction to writing for academic purposes, critical analysis, and argumentation. May be repeated for credit, but only the first enrollment may be applied to the Written Communication G.E. requirement. Prerequisite: Total Score of 151 or above on the EPT or exemption from the EPT, ENGL 0910, or ENGL 0803. Co-requisite: ENGL 0989 if Total Score on EPT is 147-150.
- 1002** College Writing II (4)
Further work in expository writing with emphasis on argumentation and persuasion. Introduction to the preparation and writing of the research paper.
Prerequisite: ENGL 1001 with grade of "C-" or better. (A)
- 1014** Ancient Literature (4)
Readings in translation of literature of ancient world, including the cultures of the Middle East, Mediterranean, and Asia. Poetry, drama, and other genres written 1000 BC - 800 AD.
- 1101** Adjunct Grammar Workshop and Lab for Non-Native Speakers of English (1)
Focus on developing accuracy and style in written English. Co-requisite: Enrollment in ENGL 1001.
- 1102** Adjunct Grammar Workshop and Lab for Non-Native Speakers of English II (1)
Focus on developing accuracy and style in written English. Co-requisite: Enrollment in ENGL 1002.
- 2005** Grammar for Writers (4)
Instruction in the structure and style of the standard, literary English sentence. Review of traditional grammar and usage, with attention to the integration of the sentence into its logical and rhetorical contexts. (Y)
- 2008** Service Learning through Tutoring Composition (4)
Learning to tutor composition through University and community-based service; primarily in the Student Center for Academic Achievement and high schools. Prerequisite: ENGL 1001.
- 2010** Vocabulary Building (4)
Designed to help students build varied, precise vocabularies; introduces the historical development and present-day resources of the English vocabulary; special attention given to Latin and Greek word-building prefixes, suffixes and elements. Prerequisite: ENGL 1001. (Y)
- 2016** Grammar and Vocabulary for Writers (4)

Designed to help students develop accurate grammar and usage and build varied, precise vocabularies for writing proficiency.

- 2030** Introduction to Critical Writing on Prose Fiction (4)
The theory and practice of critical writing, based on readings in prose fiction. Prerequisite: ENGL 1002. (A)
- 2040** Introduction to Critical Writing on Poetry (4)
The theory and practice of critical writing, based on readings in poetry. Prerequisite: ENGL 1002. (A)
- 2050** Introduction to Critical Writing on Drama (4)
The theory and practice of critical writing, based on readings in drama. Prerequisite: ENGL 1002. (A)
- 2070** Beginning Workshop in Fiction (4)
[CAN ENGL 6]
Introduction to imaginative prose writing of various types with emphasis on basic narrative techniques. May be taken twice for credit. Prerequisites: ENGL 1002 and 2030, or permission of instructor. (A)
- 2075** Beginning Workshop in Poetry (4)
Introduction to poetry writing of various types with emphasis on basic techniques. May be taken twice for credit. Prerequisites: ENGL 1002 and 2040, or permission of instructor.
- 2600** Patterns of Immigration and Migration in U.S. Literature (4)
Literary works that represent the social, political, and cultural effects of immigration and migration in the U.S.
- 2745** Portrayal of American Groups through Film (4)
Portrayal of American groups in American cinema, 1950 to the present. Lectures/discussion with films; reading of scripts and essays about film.
- 2999** Literary and Cultural Responses to Technology (4)
The effects of science and technology on society as portrayed in 20th Century literature from Huxley and Orwell to Clark and Stephenson.
- 3000** Writing for Proficiency (4)
Regular practice in the writing skills necessary to reach the level of proficiency, determined by portfolio assessment, required for students to move forward to the next level writing course and completion of the University Writing Skills Requirement (UWSR). Some students may demonstrate a level of proficiency in their portfolio to complete the UWSR at the end of ENGL 3000. Credit unavailable through challenge. May be repeated, but only 4 units may be counted toward the baccalaureate degree. Not applicable to the General Education-Breadth requirements nor to the Liberal Studies major. Prerequisites: ENGL 1001, or equivalent, and junior standing. CR/NC grading only.

- 3001** Writing for Proficiency for Non-Native Speakers of English (4)
Instruction in this course is geared toward the needs of non-native speakers of English. Regular practice in the writing skills necessary to reach the level of proficiency, determined by portfolio assessment, required for students to move forward to the next level writing course and satisfaction of the University Writing Skills Requirement (UWSR). Some students may demonstrate a level of proficiency in their portfolio to complete the UWSR at the end of ENGL 3001. Credit unavailable through challenge. May be repeated, but only 4 units may be counted toward the baccalaureate degree. Not applicable to the General Education-Breadth requirements nor to the Liberal Studies major. Prerequisites: ENGL 1001, or equivalent, and junior standing. CR/NC grading only.
- 3003** Discursive Writing (4)
Theory and practice of expository writing; critical reading and evaluation of formal and informal prose. No credit toward English major or General Education requirements. Designed for non-English majors to satisfy the University Writing Skills Requirement (UWSR). Prerequisites: Junior standing; either C- (CR) or better in ENGL 3000 or 3001, or score of 7 on the Writing Skills Test. (A)
- 3005** Study of Language (4)
Theory of language and communication; role of language in the personal and social development of the fully "human" being; origins, development, acquisition, and diversity of language; nature and function of symbolic systems; phonology, morphology, syntax, orthography, sign language, and semantics. Prerequisite: ENGL 1001 (Y)
- 3010** Modern English Grammar (4)
A traditional philological description of the structure of standard written English. Prerequisites: ENGL 1001 and junior standing. (Y)
- 3015** Introduction to Phonology (4)
An introduction to the methods that linguistics use to describe the sound systems of the languages of the world. Particular emphasis given to English sound patterns. Prerequisite: ENGL 1001. (Y)
- 3020** Advanced Expository Writing (4)
An advanced course in the theory and practice of expository writing. Fulfills the University Writing Skills Requirement for students who began work on the present degree before Fall Quarter, 1985. Prerequisite: ENGL 1002 and junior standing. (Y)
- 3025** Introduction to Technical and Professional Writing (4)
Overview of technical, professional, and workplace writing. Emphasis on finding and evaluating information, creating well-crafted, user-oriented documents, and using suitable applications to make information available in appropriate

formats. Ethics of technical writing and writing in a multicultural context. Prerequisite: ENGL 1002.

- 3040** Linguistic History of the English Language (4)
A linguistic approach to the origin and development of English, and its relations to cognate languages.
Prerequisites: ENGL 1001 and junior standing. (Y)
- 3045** Advanced Studies in English Vocabulary (4)
Advanced studies in English vocabulary: etymology, synonymy, word-formation, and meaning-development. Particular attention to Latin and Greek etymology. Course offered in both classroom and online formats. Consult *Class Schedule* for details. May be repeated once for credit when content differs.
- 3050** Language and Gender (4)
Critical analysis and discussion of gender as it shapes and is reflected in spoken and written discourse.
Prerequisites: ENGL 1001 and junior standing.
- 3070** Intermediate Workshop in Fiction (4)
Imaginative prose writing, with emphasis on theory and techniques. Classroom analysis of student manuscripts and published stories; individual conferences.
Prerequisites: ENGL 2070 and consent of instructor. May be repeated twice for maximum total credit of 12 units. (Y)
- 3071** Writing Women's Lives: A Workshop (4)
Explores forms of personal narrative, with emphasis on students' own writing. Reading includes journal entries, letters, and autobiographical writings by a diverse cross-section of American women. Prerequisite: ENGL 1002 and junior standing.
- 3075** Intermediate Workshop in Poetry (4)
Practice in form and technique; weekly manuscripts, class criticism, editorial conferences. Prerequisites: ENGL 2075 and consent of instructor. May be taken three times for credit. (Y)
- 3080** Introduction to Critical Theory of Literature (4)
Examination and application of major critical approaches to literary analysis and interpretation. Prerequisites: English 2030, 2040, 2050 (or equivalents), and upper division standing in the English major.
- 3400** Masterworks of British Literature (4)
A selection of major works, in verse, drama, and prose fiction, from British literature of all ages, medieval to modern. Prerequisite: ENGL 1001 or equivalent.
- 3600** Masterworks of American Literature (4)
A selection of works, in verse, drama, and prose fiction, from American literature of all periods, colonial to modern. Prerequisite: ENGL 1001 or equivalent.
- 3650** Women and Literature (4)
Literary works written by women and/or images of women

in literature by both female and male authors. The writings of North American authors of various ethnic and cultural backgrounds. (Y)

- 3660** Native American Literature (4)
Native American myth, legend, and folklore, as well as nineteenth- and twentieth-century writing by Native Americans.
- 3670** Asian/Filipino American Literature (4)
Five writers whose heritage is Asian/Filipino, but who are writing fiction or poetry in California.
- 3680** Hispanic/Latino/U.S. Literature (4)
A survey of Latino American writing in the United States.
- 3691** Black Literature I (4)
A comprehensive history of Black writing in America from the beginnings to 1930. Cross-listed with E S 3691.
Prerequisites: ENGL 1001 and junior standing. (Y)
- 3692** Black Literature II (4)
A comprehensive history of Black writing in America from 1930 to the present. Prerequisites: ENGL 1001 and junior standing. (Y)
- 3700** Classical Literature (4)
Readings in classical literature in translation: epic, lyric, satirical, and dramatic poetry of the Greeks and Romans.
Prerequisites: ENGL 1001 and junior standing. (Y)
- 3715** Dante's World I (4)
Interpretation and discussion of the main literary, mystical, and historical themes of Dante's *Inferno*. The work is read in translation, but with close reference to the original.
- 3716** Dante's World II (4)
Interpretation and discussion of the main literary, mystical, and historical themes of Dante's *Purgatorio* and *Paradiso*. The work is read in translation, but with close reference to the original.
- 3720** Renaissance Humanism (4)
The contribution of classical learning to the European Renaissance. Prerequisites: ENGL 1001 and junior standing. (On demand)
- 3725** Petrarch and Boccaccio (4)
The legacy of Petrarch and Boccaccio. Study and interpretation of major literary themes in the works of Petrarch (*Lyric Poems*) and Boccaccio (*Decameron*) and their influence on the humanistic and Renaissance movements.
- 3730** The Neo-Classical Tradition (4)
The development of the neo-classical spirit in Western literature of the 17th and 18th centuries, with special reference to the literatures of France and England.
Prerequisites: ENGL 1001 and junior standing. Cross-listed with MLL 3730. (On demand)

- 3740** The Romantic Era: 1770-1830 (4)
The dominant themes and styles of romanticism, with readings from major writers. Prerequisites: ENGL 1001 and junior standing. (On demand)
- 3745** The Gothic (4)
The endangered heroine in English Gothic literature from *Castle of Otranto* to *Rebecca*.
- 3760** Literature of the Twentieth Century (4)
Major movements in recent European and American literature, with emphasis on a major figure or figures. Prerequisites: ENGL 1001 and junior standing. (On demand)
- 3770** Gay and Lesbian Literature (4)
Study of literary works written by and about gays and lesbians.
- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 8 units. A maximum of 8 units will be accepted toward the English major; a maximum of 4 units will be accepted toward the English minor. CR/NC grading only. Prerequisites: at least 2.0 GPA; departmental approval of activity. (A)
- 3999** Issues in English Language and Literature (4)
Readings, discussion, and research on contemporary and/or significant issues in English language and literature. May be repeated for credit when content varies.
- 4000** Seminar in English Education (2)
The integration of language, literature, and composition studies in the secondary-school curriculum, with on-site observation and supervised group discussion. Prerequisite: instructor's permission and junior standing.
- 4005** Informational and Instructional Technology in the English Classroom (2)
The technological resources currently available to English teachers including word-processing, data base, and spread sheet programs. Students learn to use grade-book and test-generation programs and other interactive technologies. They evaluate the effectiveness of Laser disk, CD ROM, and other technologies. Prerequisite: ENGL 4000.
- 4010** Current Theories in Formal Grammar (4)
Introduction to current theories in the study of formal grammar. Prerequisite: ENGL 3010.
- 4040** Language in the U.S.A. (4)
Overview of the language situation in the U.S.A. Regional, social and ethnic dialects. Stylistic variation, Spanish-English code switching/mixing. African American language. Pidgin-creole varieties. Implications for teaching and learning. Prerequisite: ENGL 1001 or junior

standing.

- 4050** Introduction to Second-Language Acquisition (4)
Introduction to current theories of second-hand language acquisition and to the application of these theories to second-language instruction. Designed primarily for students in the Single Subject-Matter Preparation Program in English. Prerequisites: ENGL 3005, 3010.
- 4060** Topics in the Study of the English Language (4)
Intensive study of a single aspect of the English language, or of a group of closely related aspects. Students may repeat ENGL 4060 for a maximum of 12 units, when the content differs. Prerequisite: ENGL 1001. (Y)
- 4070** Advanced Workshop in Fiction (4)
Writing of long and short fiction. For the prospective professional writer. Prerequisites: ENGL 3070, and consent of instructor. May be repeated twice for a maximum of 12 units. (Y)
- 4075** Advanced Workshop in Poetry (4)
Writing of poetry. For the prospective professional poet. Prerequisites: ENGL 3075 and/or consent of instructor. May be repeated twice for a maximum credit of 12 units. (Y)
- 4090** Project and Portfolio (4)
Preparation of a collection of new and revised work in fiction, drama, or poetry, to be read and approved by two creative writing instructors. Prerequisites: ENGL 4070 and permission of instructor.
- 4151** Introduction to Chaucer (4)
A close reading of *The Canterbury Tales* with appropriate attention to its cultural context. Prerequisite: ENGL 2040 and junior standing.
- 4251** Introduction to Shakespeare (4)
The dramatic conventions of the Shakespearean theatre; the Renaissance intellectual background; a survey of representative plays and poems. Prerequisite: ENGL 2040 and 2050. (A)
- 4260** Milton (4)
A study of Milton's poetry and selected prose. Prerequisite: ENGL 2030 and 2040. (Y)
- 4325** Studies in 18th-Century British Literature (4)
Intensive study of selected authors or topics of the Restoration and Neo-Classic periods. Prerequisite: ENGL 2030 and 2040. (Y)
- 4411** Studies in Early 19th-Century British Literature (4)
Intensive study of selected authors or topics of the Romantic period. Prerequisite: ENGL 2030 and 2040. (Y)

- 4412** Studies in Late 19th-Century British Literature (4)
Intensive study of selected authors or topics of the Victorian period. Prerequisite: ENGL 2030 and 2040. (Y)
- 4450** Studies in British Women's Literature (4)
Intensive study of British women authors throughout the centuries. Prerequisites: ENGL 2030 and 2040.
- 4635** Studies in Mid-19th-Century American Literature (4)
Intensive study of selected authors and topics of mid-19th century America. Prerequisite: ENGL 2030 and 2040. (Y)
- 4636** Studies in Late 19th-Century American Literature (4)
Intensive study of selected authors and topics from the Civil War to 1914. Prerequisite: ENGL 2030 and 2040. (Y)
- 4637** Studies in 20th-Century American Literature (4)
Intensive study of selected authors and topics from 1914 to the present. Prerequisite: ENGL 2030 and 2040. (Y)
- 4650** Studies in American Women's Literature (4)
Intensive study of selected U.S. women authors throughout the centuries. Prerequisites: ENGL 2030, 2040.
- 4710** Bible for Students of Literature (4)
Major events, characters, themes, and phases of the authorized (King James) version of the Bible and the influence of these upon the literature and language of the English-speaking peoples.
- 4720** Mythology (4)
Cosmologies and cosmogonies: readings from literatures of the Orient, the Near East, the Mediterranean, and Europe. Prerequisites: ENGL 1001 and junior standing. (Y)
- 4740** History of Children's Literature (4)
History of children's literature to 1900--Literature for children from 1600 to 1900. Diverse literary and pictorial techniques; the cultural values that shape selected works for children. Prerequisites: ENGL 1001 and junior standing. (Y)
- 4741** Children's Literature in the 20th Century (4)
Literature for children in the 20th century, and beyond. Diverse literary and pictorial techniques; the cultural values that shape selected works for children. Prerequisite: ENGL 4740.
- 4742** The Fairy Tale (4)
Literary and oral traditional fairy tales, from the "classics" of children's literature to contemporary revisions. Prerequisites: ENGL 1001 and junior standing.
- 4743** Children's Folklore (4)
The politics and poetics of children's own storytelling and

speech play, including songs, riddles, legends, and jokes. May be repeated with consent of instructor. Prerequisites: ENGL 1001 and junior standing.

- 4745** Film Criticism (4)
Lecture/discussion with films. Written critical resumes of the work of American and international writer-directors. Study of film scripts, emphasizing characterization, themes, and techniques. Prerequisite: ENGL 1001. (Y)
- 4750** Multi-Ethnic Children's and Adolescent Literature (4)
Multi-ethnic literature for children and/or young adults. May include novels, short stories, film, and personal narratives. Topics will vary: consult the department. May be repeated for credit. Cross-listed with E S 4750. Prerequisites: ENGL 1001 and junior standing.
- 4760** Gender and Sexual Identity in Adolescent Literature (4)
How 19th- and 20th-century American authors of young adult literature have incorporated debates concerning gender and sexual identity into their work.
- 4770** Fiction and Fantasy for Children and Young Adults (4)
The uses of and attitudes towards fiction and fantasy for children. Genres such as the adventure story, science fiction, and animal fantasy. Prerequisites: ENGL 1001 and junior standing.
- 4780** Special Topics Children's Literature (4)
Intensive study of authors, genres, or movements in literature for children and/or young adults. Topics will vary: consult the department. May be repeated for credit. Prerequisites: ENGL 1001 and junior standing.
- 4810** English Drama Before 1642 (4)
A history of the drama from its liturgical beginnings to the closing of the theaters. Prerequisite: ENGL 2040 and 2050. (A)
- 4827** 20th-Century Poetry (4)
A study of representative British and American poets from 1914 to the present. Prerequisite: ENGL 2040 or consent of instructor. (Y)
- 4831** British Novel Before 1800 (4)
Development of the British novel from its beginnings through the 18th century. Prerequisite: ENGL 2030 and 2040. (Y)
- 4832** British Novel, 1800-1914 (4)
Development of the British novel through the Romantic and Victorian periods and up to the beginning of World War I. Prerequisite: ENGL 2030 and 2040. (Y)
- 4833** British Novel from 1914 to 1945 (4)
A study of the development of the 20th century British novel from World War I through World War II.

Prerequisites: ENGL 1001 and junior standing. (Y)

- 4840 The Short Story (4)
Development of the modern short story in America and Europe. Prerequisite: ENGL 2030. (A)
- 4860 American Fiction to 1914 (4)
The development of American fiction from Cooper to Dreiser, including Poe, Hawthorne, Melville, Twain, James, and others. Prerequisites: ENGL 2030 and 2040. (Y)
- 4870 The American Novel, 1914-1945 (4)
Development of the 20th century American novel from World War I through World War II. Prerequisites: ENGL 1001 and junior standing. (Y)
- 4874 The American and British Novel, 1945-1975 (4)
Development of the American and British novel in the post-war period, 1945-1975. Prerequisite: ENGL 2030. (A)
- 4876 Current American and British Novel (4)
Development of the British and American novel since 1975. Prerequisite: ENGL 2030. (Y)
- 4890 Senior Seminar in English (4)
Development of the English major portfolio and preparation for exit examination in the option. Prerequisites: English major and Senior standing.
- 4900 Independent Study (1-4)

Footnote

¶ Students should consult the section of the *University Catalog* or *Class Schedule* dealing with the English Placement Test (see Registration chapter in the *University Catalog*) before registering for English 1001. Because this is the freshman-level, transferable composition course (for California community colleges, colleges, and universities), students enrolling in the course should, at the time of entry, be able to write brief essays showing adequacy in (1) selection of a controlling idea appropriate to the given writing task; (2) coherent development of that idea to a reasoned conclusion; (3) use of sentences that demonstrate some structural variety and that contain language appropriate to the audience and purpose, and (4) control of the conventions of standard, written English (relative freedom from errors such as fragments, run-together sentences, faulty agreement, and improper pronoun reference) and of mechanics (capitalization, spelling, and punctuation). The work of the course is to strengthen these skills by extensive practice in the writing of expository essays suitable for college-level credit. Students deficient in these prerequisite skills will be advised to take developmental writing courses before enrolling in English 1001.



HOME



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Psychology

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Department Information

Department of Psychology
 College of Science
 Office: South Science 229
 Phone: (510) 885-3484

Professors Emeriti: Stuart T. Klapp, Roy T. Matsumoto, Joan E. Sieber, Arnold E. Stoper

Professors: Nancy S. Harrison, Marvin Lamb (Chair), Fred I. Leavitt, Eleanor K. Levine, John D. Lovell, Alan Monat, Michael E. Patch, Gene Steinhauer

Associate Professors: David A. Sandberg, Mary Kay Stevenson-Busemeyer

Lecturers: Felix A. Herndon, Suzanne M. McTighe, Gretchen M. Reeve-Manning, Steven P. Ross

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

Psychology is the science of behavior and mental processes. Many psychologists work primarily with people to understand how they think, respond to stress, learn and forget, develop into unique personalities, and interact with one another. Others study the behavior and nervous systems of animals in order to find general principles that apply across species. Psychologists apply their knowledge to do therapy and counseling, to improve practices in schools, prisons, and rehabilitation centers, and to enhance performance in industry, business, and the professions.

The Psychology department offers a major in both the Bachelor of Arts (B.A.) and the Bachelor of Science (B.S.) degrees. These are

basic programs; to become a "psychologist" requires graduate training.

The B.A. program is appropriate for most psychology students. It provides a basic understanding of human behavior and motivation that is valuable in many careers in business, government, and education. It also provides the background expected for entry into graduate programs in clinical psychology, counseling psychology, school psychology, health psychology, social psychology, or experimental psychology.

The B.S. programs are designed for more specialized purposes. Students in the B.S. program must select one of the two options in that program: Industrial/Organizational Psychology or Ergonomics and Human Factors. The option in Industrial/Organizational Psychology provides preparation for careers related to business, with an emphasis on personnel management. The option in Ergonomics and Human Factors provides preparation for careers in the design of work environments to take account of human limitations and strengths, for example, the design of equipment (computers, aircraft, automobiles) or the design of industrial procedures.

In Psychology's minor program, students can choose courses to complement training in business, communication, health and medicine, law and criminology, statistics, biology, and many other fields. The department also offers a Psychology option of the Liberal Studies major. Of special interest to students in that program might be our courses in developmental psychology, personality, cognitive processes, and learning.

Career Opportunities

B.A.: Clinical/Counseling/Child Psychologist • Community Mental Health Employee • Experimental Psychologist • Human Service Worker • Police/Probation Officer • Recreation Worker • School Counselor • Social Worker • Special Education Teacher • Substance Abuse Counselor

B.S.: Advertising Account Executive • Business Executive • Career Counselor • Employee Counselor and Trainer • Human Resource Specialist • Personnel Representative • Program Evaluator • Public Relations Specialist

Features

The Psychology department's facilities include a fully equipped computer lab, an animal lab, and several labs for studying human behavior. These facilities support an unusual and important characteristic of the department - its emphasis on hands-on student involvement in the study of human and animal behavior through participation in laboratory courses and faculty research, in field trips, and in community volunteer placements.

Both the Psychology Club and Psi Chi (national honor society in psychology) provide opportunities for students to get together to hear speakers and to discuss topics such as career and graduate school opportunities.

All courses required for the psychology B.A. major are offered in

the evening program over each three-year cycle. However, the range of choices and flexibility of scheduling is more limited in the evening program. Evening courses fulfilling requirements of the B.S. degree major, option in Industrial/Organizational Psychology, are offered at the Contra Costa Campus.

Preparation

For Advanced Placement course equivalencies, see Registration chapter.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 68 units; the B.A. degree requires a total of 180 units.

- I. Core Requirements (32 units)
 - BIOL 1001 (or one of 1003, 1005, 2001, 2002, 2003, or 2004), 1002 (or 1004 or 2005) ¹ Introduction to Biology, Lab (5)
 - PSYC 1000 General Psychology (or one of 1001, 1005, 2004, or 2009) (5)
 - PSYC 3090 Methods of Investigation in Psychology (4)
 - PSYC 3100 Experimental Psychology (5)
 - PSYC 4200 Conditioning and Learning (4)
 - STAT 1000 ² ³ Elements of Probability and Statistics (5)
 - STAT 3010 Statistical Methods in the Social Sciences (4)

- II. Breadth Requirements (20 units)

One from each line required:

 - PSYC 3200, 3210, or 3220 (testing/survey and test construction/individual differences) (4)

 - PSYC 3500, 4420, or 4610
(social/developmental/personality) (4)

 - PSYC 4220, 4345, or 4740
(cognitive/sensory/psycholinguistics) (4)

 - PSYC 4310, 4320, or 4360
(comparative/physiological/heredity/ psychopharmacology) (4)

 - PSYC 4210, 4390, or 4620 (theories of learning/history and systems/theories of personality) (4)

- III. Laboratory Requirements (4 units)

Any two required:

Two different courses from those listed below. Although courses in this series may be repeated for unit credit, two different courses are required in the Psychology major.

 - PSYC 4800 Human Learning and Cognition Laboratory(2)
 - PSYC 4801 Learning and Motivation Laboratory (2)
 - PSYC 4802 Sensation and Perception Laboratory (2)
 - PSYC 4803 Physiological Psychology Laboratory (2)
 - PSYC 4804 Social and Personality Laboratory (2)
 - PSYC 4806 Developmental Psychology Laboratory (2)

Major Requirements (B.S.)

IV. Elective Requirements (12 units)

Twelve additional units of permissible upper division psychology courses; or STAT 4000 and eight additional units of upper division psychology courses. A maximum of four units from each repeatable course (PSYC 4800, 4801, 4802, 4803, 4804, 4806, 4890, and 4900) may be used toward satisfying this requirement.

Students in the B.S. degree program must select either the Industrial/Organizational Psychology option or the Ergonomics and Human Factors option. The major with the option in Industrial/Organizational Psychology consists of 87 units; the major with the option in Ergonomics and Human Factors consists of 90-94 units; the B.S. degree requires a total of 180 units.

I. Industrial/Organizational Psychology Option (87 units)

A. Core Requirements (51 units)

- MGMT 3600 Theories of Management (4)
- PSYC 1000 General Psychology (or one of 1001, 1005, 2004, or 2009) (5)
- PSYC 3090 Methods of Investigation in Psychology (4)
- PSYC 3100 Experimental Psychology (5)
- PSYC 3400 Ergonomics and Human Factors (4)
- PSYC 3500 Social Psychology (4)
- PSYC 3540 Groups and Organizations (4)
- PSYC 4200 Conditioning and Learning (4)
- PSYC 4500 Industrial Psychology (4)
- STAT 1000 Elements of Probability and Statistics (5)
- STAT 3010 Statistical Methods in the Social Sciences (4)

Two courses from PSYC 4800, 4801, 4802, 4803, 4804, 4806, 4808, Advanced laboratories (4)

B. Area Requirements (24 units)

Industrial: Selection and Performance Appraisal Group (12 units)

Select 12 units from the following:

- PSYC 3200 Psychological Tests (4)
- PSYC 3210 Principles of Survey and Test Construction (4)
- PSYC 3230 Applied Measurement (4)
- PSYC 3240 Decision Theory (4)

Organizational: Management, Training and Work Motivation Group (12 units)

Select 12 units from the following:

- MGMT 3610 Human Resources Management (4)
- MGMT 4618 Human Resources Training and Development (4)
- PSYC 3010, 3011, 3012, 3013 Industrial Psychology Modules (4)
- PSYC 3250 Behavior Modification (4)
- PSYC 3520 Interpersonal Processes (4)

PSYC 3550 Social Influence and Change (4)
PSYC 4300 Motivation (4)

C. Electives (12 units)

Select 12 additional units from permissible upper division Psychology courses or the courses listed below if not already used in "B" above. (*Note: Courses designated as "Not applicable to the Psychology major" may not be used toward satisfying this requirement.*)

ACCT 2210 Accounting for Non-Business Majors (4)
MGMT 3610 Human Resources Management (4)
MGMT 3680 Industrial Relations (4)
MGMT 4615 Compensation and Benefits (4)
MGMT 4618 Human Resources Training and Development (4)
STAT 3510 Sampling Procedures for Surveys (4)
STAT 3900 Data Analysis Using Statistical Packages (4)
STAT 3910 Statistical Software Design (4)
STAT 4000 Analysis of Variance in the Behavioral Sciences (4)
STAT 4515 Applied Multivariate Analysis (4)
STAT 4610 Introduction to Nonparametric Statistical Methods (4)

II. Ergonomics and Human Factors Option (90-94 units)

Students in this option are urged to complete a minor in Statistics, Computer Science, Mathematics, or Physics. Courses can be counted simultaneously toward a minor and a major.

A. Psychology Requirements (54 units)

PSYC 1000 General Psychology (or one of 1001, 1005, 2004, or 2009) (5)
PSYC 3090 Methods of Investigation in Psychology (4)
PSYC 3100 Experimental Psychology (5)

PSYC 3240 Decision Theory (4) or PSYC 4220 Cognitive Processes (4) or PSYC 4740 Psycholinguistics (4)

PSYC 3400 Ergonomics and Human Factors or ENGR 3190 Human Factors Engineering (4)

PSYC 3420 Stress and Coping (4)

PSYC 3500 Social Psychology (4) or PSYC 3540 Groups and Organizations (4)

PSYC 4200 Conditioning and Learning (4)
PSYC 4320 Physiological Psychology (4)
PSYC 4345 Sensation and Perception (4)
PSYC 4500 Industrial Psychology (4)

Advanced Labs: Two different courses from PSYC 4800, 4801, 4802, 4803, or 4804 (4)

Approved Internship: PSYC 4430 Fieldwork in Community Psychology (4) or PSYC 4900 Independent Study (4)

- B. Other Requirements (28-32 units)
C S 1160 Introduction to Computer Science and Programming Methods (4)

Complete the following courses (24-28 units):

MATH 1300[□] Trigonometry and Analytic Geometry (4)
PHYS 2701, 2702, 2703, or PHYS 1001, 1002, 1003[□]
(12-15)
STAT 1000 and 3010 or STAT 3502 and 3503 (8-9)

- C. Elective Concentration (8 units)
Two additional courses, both from the same group:

Computer Science Group: CS 2360 and four additional units in CS courses.

Engineering Group: ENGR 3020 Work Design and Measurement (4) and ENGR 3090 Industrial Costs and Controls (4)

Mathematics Group: MATH 1304 (4) and 1305 (4) Calculus I and II

Psychology Group: Eight units of permissible upper division psychology courses in addition to those used to fulfill the other requirements in this major.

Statistics Group: Eight units of upper division statistics courses, not including STAT 3010, 3502, or 3503

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

The minor in Psychology is designed to provide a general background in psychology to complement training for careers in business and industry, biology, the medical professions, law or criminology, communication, and many other professions. See a psychology department advisor for help in selecting courses to complement your program. The minor consists of 29-35 units.

PSYC 1000 (or one of 1001, 1005, 2004, or 2009) (5)
PSYC 1100 or 3090 (4)

Twenty additional units selected from courses meeting the Elective Requirements in the description of the B.A. major, or PSYC 3100 plus 12 additional units from courses meeting these Elective Requirements. (Notice that PSYC 3100 has 8-9 additional units of prerequisites. See the course description.)

Psychology
Option: Liberal
Studies

Undergraduate
Courses

Area I (10 units)

- PSYC 1000 General Psychology (or one of 1001, 1005, 2004, or 2009) (5)
STAT 1000 Elements of Probability and Statistics (5)

Area VII, Credential Track, or Area VI, General Track (24-25 units)

- Either PSYC 1100 Critical Thinking in Psychology (4) or PSYC 3090 Methods of Investigation in Psychology (4)

One of concentrations (A), (B) or (C) below (20-21 units):

- A. Twenty units of upper division coursework in Psychology selected from the B.A. major (20)
- B. PSYC 4430 Psychology in the Community (4)
Sixteen units of upper division coursework in Psychology selected from the B.A. major (16)
- C. STAT 3010 Statistical Methods in the Social Sciences (4)
PSYC 3100 Experimental Psychology (5)
Twelve units of upper division coursework in Psychology selected from the B.A. major (12)

The course prefix for the following courses is PSYC.

1000 General Psychology (5)
[CAN PSY 2]

An introduction to the scientific study of basic processes underlying human and animal behavior; sensation and perception, learning and thinking, motivation, and emotion. Not open to those with credit for PSYC 1001, 1005, 2004, or 2009. (F, W, Sp)

1001 General Psychology and Society (5)

An introduction to the scientific study of basic processes underlying human and animal behavior, sensation and perception, learning and thinking, motivation and emotion, as it relates to the individual and society. Not open to those with credit for PSYC 1000, 1005, 2004, or 2009.

1005 General Psychology for Healthier Living (5)

An introduction to the scientific study of basic processes underlying human and animal behavior; sensation and perception, learning and thinking, motivation, and emotion. Emphasis on psychological aspects of health. Not open to those with credit for PSYC 1000, 1001, 2004, or 2009.

1100 Critical Thinking in Psychology (4)

The role of critical thinking in the scientific study of behavior. Inductive and deductive use of experiments by which selected problems are investigated with emphasis on experimental design and common logical fallacies in interpreting empirical data. Not applicable to Psychology majors. (F, W, Sp)

- 1350** Personal Growth and Effectiveness (4)
Selected topics in personal growth, effectiveness and empowerment. Applications to everyday situations. Cannot be used to satisfy a psychology major requirement. Students may not receive credit for both PSYC 1300 and 1350.
- 2004** General Psychology and Energy (5)
An introduction to the scientific study of basic processes underlying human and animal behavior, sensation and perception, learning and thinking, motivation and emotion, as it relates to matters of energy. Not open to those with credit for PSYC 1000, 1001, 1005, or 2009. Four hrs. lect., 2 hrs. act.
- 2009** General Psychology and Science in the 21st Century (5)
An introduction to the scientific study of basic processes underlying human and animal behavior, sensation and perception, learning and thinking, motivation and emotion, as it relates to science in the 21st century. Not open to those with credit for PSYC 1000, 1001, 1005, or 2004. Four hrs. lect., 2 hrs. act.
- 2420** Stress and Coping (4)
Survey of theories and research about stress and coping; applications, e.g., illness, death/dying, the work place, and natural disasters. Cannot be used to satisfy a psychology major requirement. Students may not receive credit for both PSYC 2420 and 3420.
- 3010** Introduction to Industrial Psychology (1)
Preparation for entering today's changing work environment, using psychological principles to foster productivity, and choosing and developing one's career options within the Industrial/Organizational Psychology Option. Psychology majors can only apply this course to their major requirements in the Option in Industrial/Organizational Psychology.
- 3011** Resources for Industrial Psychologists (1)
Introduction to courses, books, news media, professional associations, networks, internships, special projects and other university and industry resources useful in creating a career in industrial psychology. Psychology majors can only apply this course to their major requirements in the Option in Industrial/Organizational Psychology.
Prerequisite: PSYC 3010.
- 3012** Industrial Psychologists as Trainers (1)
Characteristics of valid training in the work environment, models of training, psychological theories and methods applied to training and evaluation. Areas in which training functions are currently most needed; examples of training in sales, service, and ethics and regulations. Sources of further coursework, individual study and experience in training roles are suggested. Psychology majors can only apply this course to their major requirements in the Option in Industrial/Organizational Psychology.

- 3013** Industrial Psychology and Employee Ethics (1)
Introduction to the roles of industrial psychologists in developing, interpreting, disseminating, and enforcing standards of ethical and legal conduct within the work environment. How training, compensation, and job description influence the ethics and legality of employee behavior. Psychology majors can only apply this course to their major requirements in the Option in Industrial/Organizational Psychology.
- 3090** Methods of Investigation in Psychology (4)
Experimental, correlational, and observational methods in the study of psychology with selected examples.
Prerequisite: PSYC 1000 (or one of 1001, 1005, 2004, or 2009). (Y)
- 3100** Experimental Psychology (5)
A laboratory course in the development, design, and execution of psychological experiments, the analysis of data, and the writing of formal research reports.
Prerequisites: PSYC 3090 or 1100; STAT 3010, or STAT 3502, or MGMT 3100. Three hrs. lect., 6 hrs. lab. (F, W, Sp)
- 3190** Human Factors Engineering (4)
(See ENGR 3190 for course description.)
- 3200** Psychological Tests (4)
Introduction to selecting and evaluating standardized tests of aptitude, achievement, personality, and other human traits. Validity, reliability, generalizability, and ethics.
Prerequisites: PSYC 1000 (or one of 1001, 1005, 2004, or 2009); STAT 1000, and STAT 2010, or STAT 3010. (Y)
- 3210** Principles of Survey and Test Construction (4)
Construction of survey and test instruments; use of focus groups; sampling; data collection including interviewing and other survey research techniques; data analysis; interpretation and presentation of results. Prerequisites: PSYC 1000 (or one of 1001, 1005, 2004, or 2009); STAT 1000, and STAT 2010 or STAT 3010.
- 3220** Psychology of Individual Differences (4)
Survey of human traits (including intelligence), and examination of evidence for differences among individuals differing in sex, age, personality, race, etc. Consideration of social implications. Prerequisites: PSYC 1000 (or one of 1001, 1005, 2004, or 2009); STAT 1000 and STAT 2010, or STAT 3010, or STAT 3031.
- 3230** Applied Measurement (4)
An introduction to applied measurement. Unidimensional scaling, multidimensional scaling, and policy modeling techniques. Relevance to marketing, industrial psychology and perceptual processes. Prerequisites: PSYC 3200 or PSYC 3210 or consent of instructor.
- 3240** Decision Theory (4)
An introduction to the literature and methods of decision science. The theory and decision strategies, with examples

across many applications. Focus on descriptive as opposed to normative models. Students will study decision strategies and methods of modeling preference structures. Prerequisites: PSYC 1000 (or one of 1001, 1005, 2004, or 2009) and STAT 1000 or equivalent.

- 3250** Behavior Modification (4)
The extension of principles and concepts emerging from the experimental analysis of behavior to problems of behavior modification outside the laboratory. Prerequisite: PSYC 1000 (or one of 1001, 1005, 2004, or 2009).
- 3300** Psychology of Essential Life Issues (4)
Topics of everyday concern, including self-image, sexuality, death, happiness, personal effectiveness, and love. CR/NC grading only. Psychology majors can take this course for university credit, but cannot use it to satisfy a major requirement. Prerequisite: PSYC 1000 (or one of 1001, 1005, 2004, or 2009) or consent of instructor.
- 3305** Mental Health and Diversity (4)
Impact of cultural and linguistic diversity on the promotion of mental well-being and the prevention of mental disorders. Cannot be used to satisfy a Psychology major requirement.
- 3400** Ergonomics and Human Factors (4)
Human factors in tasks involving attention, decision making, and other complex responses. Current findings, methods of research, and applications in industry and other man-machine situations. Prerequisite: PSYC 1000 (or one of 1001, 1005, 2004, or 2009). (Y)
- 3410** Psychology of Women (4)
Critical examination of data affecting views of and by women, including: socialization of sex-roles, rape, marriage, the family, career barriers, development of stereotypes. Psychology majors can take this course for university credit, but cannot use it to satisfy a major requirement. Prerequisite: WOST 1000 or upper division standing.
- 3420** Stress and Coping (4)
A systematic look at the major theories and research about stress and coping, with discussion of applications. Stress and coping will be examined in the context of everyday situations, e.g., illness, death and dying, and the workplace. Students may not receive credit for both PSYC 2420 and 3420. Prerequisite: PSYC 1000 (or one of 1001, 1005, 2004, or 2009).
- 3500** Social Psychology (4)
Current theory and research on the individual in society, small groups, and interpersonal interaction. Socialization, social structure, attitude formation, and social identity. Prerequisite: PSYC 1000 (or one of 1001, 1005, 2004, or 2009). (Y)
- 3520** Interpersonal Processes (4)
Selected topics on the development and maintenance of

dyadic relationships; interpersonal attraction through behavior exchange, verbal and nonverbal communication, strategic social behavior and the resolution of conflict. Prerequisite: PSYC 1000 (or one of 1001, 1005, 2004, or 2009).

- 3540** Groups and Organizations (4)
The behavior of individuals in modern groups and organizations: work groups, universities, and other bureaucracies. Emphasis on theories of problem solving to create satisfying, effective, productive environments within organizations. Prerequisite: PSYC 1000 (or one of 1001, 1005, 2004, or 2009).
- 3550** Social Influence and Change (4)
Selected topics in the use of persuasion and social power to effect both behavioral compliance and attitude change: Includes problems of effective leadership and intervention as well as resistance to change in applied settings. Prerequisite: PSYC 1000 (or one of 1001, 1005, 2004, or 2009).
- 4200** Conditioning and Learning (4)
Basic principles and results of conditioning and learning experimentation. Prerequisite: PSYC 3090 or 1100. (Y)
- 4210** Theories of Learning (4)
Survey of theories of learning with emphasis on experimental work arising from them; their underlying assumptions, strengths and weaknesses, practical implications, and methodological approaches to research problems. Prerequisite: PSYC 4200. (Y)
- 4220** Cognitive Processes (4)
Selected topics in thinking and information processing in humans, e.g., problem solving, language, memory and forgetting, concept formation, attention, creativity, imagery, etc. Various theories and selected experiments are described, analyzed and interpreted. Prerequisite: PSYC 1000 (or one of 1001, 1005, 2004, or 2009); PSYC 3090 or 1100 strongly recommended. (Y)
- 4300** Motivation (4)
Nature of primary and secondary drives. Critical analysis of the concept of motivation in relation to behavior, learning, and performance. Prerequisite: PSYC 4200. (Y)
- 4310** Comparative Psychology (4)
Survey of the similarities and differences in sensory systems, learning, motivation, social organization, and development of closely related and relatively unrelated animals, including the human species. Prerequisite: PSYC 1000 (or one of 1001, 1005, 2004, or 2009); PSYC 3090 or 1100 strongly recommended. (Y)
- 4320** Physiological Psychology (4)
The biological foundations of human and animal behavior, including physiological processes related to sensory and motor activity, perception, learning, thinking, motivation, and emotion. Prerequisite: PSYC 1000 (or one of 1001,

1005, 2004, or 2009). (Y)

- 4345** Sensation and Perception (4)
The function of the eyes, ears, and other sense organs in bringing information about the world to the brain. The use of this information in perceiving objects and events.
Prerequisite: PSYC 1000 (or one of 1001, 1005, 2004, or 2009).
- 4360** Psychopharmacology (4)
Classification of psychoactive drugs, principles of action, development and testing, effects and dangers, users and abusers, treatment abuse, therapeutic use. Prerequisite: PSYC 1000 (or one of 1001, 1005, 2004, or 2009); PSYC 3090 or 1100 strongly recommended.
- 4390** History and Systems of Psychology (4)
Survey of historical developments in the emergence of modern scientific psychology. Contemporary theoretical systems discussed with emphasis on how they approach the recurring problems of psychology. Prerequisites: 16 units of upper division psychology and senior standing.
- 4410** Abnormal Psychology (4)
The concepts of normality, abnormality, and psychopathology. Symptom syndromes of neurosis, psychosis, and other behavior abnormalities. Methodological problems in the investigation of mental illness and psychotherapy. Prerequisite: PSYC 1000 (or one of 1001, 1005, 2004, or 2009). (Y)
- 4420** Developmental Psychology (4)
Psychological development across the life span. Affords a developmental perspective of perception, cognition, language, and of emotional, social, and personal behavior. Prerequisite: PSYC 1000 (or one of 1001, 1005, 2004, or 2009); PSYC 3090 or 1100 strongly recommended. (Y)
- 4430** Fieldwork in Community Psychology (4)
Work in community agencies. Weekly seminars relate psychological principles to practice. Psychology majors can take this course for university credit, but cannot use it to satisfy any major requirement except as an internship in the Ergonomics and Human Factors option, B.S. degree major. May be repeated once for credit. CR/NC grading only. Prerequisites: Consent of instructor. One hr. lect., 6 hrs. act.
- 4440** Child Psychopathology (4)
Survey of psychiatric disorders affecting children and adolescents. Emphasis is on diagnostic criteria; biological, psychological, and sociocultural causes; and treatment implications.
- 4500** Industrial Psychology (4)
Applications of industrial psychology concepts and methods to actual cases (e.g., hiring, evaluation, motivation, training, compensation, safety, marketing, total quality management, stress management, morale, ethics/dishonesty, reorganization, human factors). Lecture,

case study, individual and group projects. Prerequisite: Senior standing in Industrial/Organizational Psychology option. Not open to students with credit for PSYC 4820.

- 4610** Psychology of Personality (4)
Critical review of method and content in the study of personality. Historical development of the field, with attention to recent applications of scientific method to problems of personality. Prerequisite: PSYC 1000 (or one of 1001, 1005, 2004, or 2009); PSYC 3090 or 1100 strongly recommended. (Y)
- 4620** Theories of Personality (4)
Undergraduate seminar: survey and analysis of some major theories of personality, including systematic analysis of theory construction. Prerequisite: PSYC 4610, or consent of instructor.
- 4630** Introduction to Psychotherapy and Clinical Methods (4)
The clinical area of applied psychology, including review of concepts involved in the interview process, principles of psychotherapy, and methods of clinical research. Prerequisite: PSYC 4410 or 4610.
- 4660** The Psychology of the Healthy Personality (4)
Topics include models of psychological health, maintenance of health across the life span, and the dilemmas women and minorities face in maintaining health in the face of discrimination. Prerequisite: PSYC 1000 (or 1005) or consent of instructor.
- 4740** Psycholinguistics (4)
Basic psychological aspects of human verbal behavior and related phenomena. The acquisition and development of language, perception of language, and effect of language on thought. Prerequisite: PSYC 1000 (or one of 1001, 1005, 2004, or 2009); PSYC 3090 or 1100 strongly recommended.
- 4800** Human Learning and Cognition Laboratory (2)
Selected experiments in human learning, verbal learning, abilities, and problem solving. Experiments will be designed, executed, analyzed, and reported. May be repeated up to three times for credit. [□] Prerequisites: PSYC 3100; and PSYC 4200, or 4220, or 4740. Six hrs. lab.
- 4801** Learning and Motivation Laboratory (2)
Selected experiments in conditioning, learning and motivation, with an emphasis on subhuman species. Experiments will be designed, executed, analyzed and reported. May be repeated up to three times for credit. [□] Prerequisites: PSYC 3100 and 4200. Six hrs. lab.
- 4802** Sensation and Perception Laboratory (2)
Selected experiments from psychophysics, perception, vision, audition, and olfaction. Experiments will be designed, executed, analyzed, and reported. May be repeated up to three times for credit. [□] Prerequisites: PSYC 3100; and PSYC 4320 or 4345. Six hrs. lab.

- 4803** Physiological Psychology Laboratory (2)
Selected experiments in physiological processes, related sensory and motor activity. Experiments will be designed, executed, analyzed, and reported. May be repeated up to three times for credit.¹ Prerequisites: PSYC 3100 and 4320. Six hrs. lab.
- 4804** Social and Personality Laboratory (2)
Selected experiments in social psychology and personality problem areas. Experiments will be designed, executed, analyzed, and reported. May be repeated up to three times for credit.² Prerequisites: PSYC 3100; and PSYC 3500 or 4610. Six hrs. lab.
- 4806** Developmental Psychology Laboratory (2)
Selected experiments from a human developmental perspective. Experiments will be designed, executed, analyzed, and reported. May be repeated up to three times for credit.³ Prerequisites: PSYC 3100 and 4420. Six hrs. lab.
- 4808** Industrial Psychology Laboratory (2)
Selected experiments in industrial psychology, tests and surveys, and decision-making. Experimental will be designed, executed, analyzed, and reported in APA format. May be repeated up to a maximum of 8 units for credit. Prerequisites: PSYC 3100 and one of the following: PSYC 3210, 3240, or 4500. Six hrs. lab.
- 4835** Human-Computer Interaction (4)
(See CS 4835 for course description.)
- 4890** Undergraduate Seminar (2)
An undergraduate seminar on current topics in psychological research. Topics will vary each quarter.
Prerequisite: senior standing in Psychology or consent of instructor.
- 4900** Independent Study (1-4)

Footnotes

¹May also be used to satisfy the General Education Requirement in Life Science.

²May also be used toward satisfying the General Education Requirement in Mathematics.

³May be taken CR/NC.

⁴Students with appropriate background can go directly to MATH 1304. These students are excused from MATH 1300.

⁵MATH 2304 is required as a prerequisite to PHYS 1003.

⁶Although courses in the 4800-4806 series may be repeated for credit, two different courses are required for

the psychology major.



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Environmental Science

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College of Arts, Letters, and Social Sciences:
Department of Geography and Environmental Studies

College of Science: Departments of Biological Sciences, Chemistry and Biochemistry, and Geological Sciences

Office: Department of Biological Sciences, SC N 429
Phone: (510) 885-3471

Professor: Susan Opp (Biological Sciences)

Associate Professors: Joy Andrews (Chemistry and Biochemistry), Michael Lee (Geography and Environmental Studies), Jeffery Seitz (Geological Sciences)

Director: Susan Opp (Biological Sciences)

Please consult the 2006-2007 online catalog for any changes that may occur.

The Bachelor of Science degree major in Environmental Science is an interdisciplinary program offered by faculty in the Departments of Biological Sciences, Chemistry and Biochemistry, Geological Sciences, and Geography and Environmental Studies. The major is administered by an Environmental Science Program Committee, consisting of one voting faculty representative selected by each department in the program, and a Program Director, chosen from among the representatives of the four participating departments. The purpose of the Environmental Science major is to provide interdisciplinary scientific preparation for students wishing to pursue knowledge and employment in the fields of environmental consulting, oversight, and research. Additional objectives of the program include partial satisfaction of the Single Subject Matter Preparation Program for a teaching credential in science and provision of sufficient depth of preparation for graduate studies in environmental sciences. In contrast to the B.A. degree major in Environmental Studies, the B.S. degree major in Environmental Science requires students to take a structured core of science courses from a variety of

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disciplines, as well as a specialized upper division option in biology, chemistry, geology, or environmental systems and resource management.

Air Quality Controller • Atmospheric Scientist • Biological Consultant • Bioremediation Consultant • Chemical Consultant • Ecosystem and Habitat Restoration • Environmental Consultant • Environmental Field or Lab Technician • Environmental Health Scientist • Environmental Manager • Environmental Policy Developer • Environmental Protection and Regulation Manager • Geochemist • Hazardous Waste Manager • Industrial Hygienist • Pollution Control Technician • Risk Manager • Soils Scientist • Solid Waste Manager • Technical Writer • Urban Planner • Waste Water Treatment Manager • Water Manager • Wildlife Manager

Advanced Placement

Students who earn a grade of 3 or higher on the College Entrance Examination Board's Advanced Placement Test in Environmental Science will be given 4 units of credit equivalent to ENVT 2000.

Major Requirements (B.S.)

It is important to consult an advisor in your major program for clarification and interpretation of your major requirements. The major in Environmental Science consists of 120-125 units; the B.S. degree requires a total of 180 units.

I. Course Prerequisites and Other Admission Requirements

Students entering the Environmental Science program as first year students are expected to have the same high school preparatory courses as other science majors. Admission to the degree program is open to all students admitted to Cal State Hayward. Transfer students may have lower division course deficiencies that must be completed after entry to the program. Continuation in the program is contingent on satisfactory progress in the university as described in the catalog. *Note: Students must meet with an Environmental Science advisor to discuss prerequisites and updates to course offerings.*

II. Lower Division Core (58 units)

BIOL 1402 Plant Biology (5)
BIOL 1403 Animal Biology (5)
CHEM 1101, 1102, 1103 General Chemistry (5, 5, 5)
CHEM 2301, 2302 Survey of Organic Chemistry (4, 4)
GEOG 2100 Physical Geography (4)
GEOL 2101 Physical Geology (or 2100) (5)
PHYS 2701, 2702, 2703 Introductory Physics (4, 4, 4)
MATH 1304 Calculus I (4)

III. Upper Division Core (28 units)

BIOL 3110 Principles of Ecology (4)
ENSC 4800 Seminar in Environmental Science (3)
ENVT 4100 Environmental Impact Analysis (4)

GEOG 3000 Resource Management (4)
GEOL 3030 Earth and Life Through Time (5)
GEOL 4320 Hydrogeology (4)
STAT 3010 Statistical Methods in the Social Sciences (4) or
STAT 3031 Statistical Methods in Biology (4)

IV. Electives (8 units)

Complete two electives from the following:

ECON 2301 Principles of Microeconomics (4)
ECON 4306 Environmental Economics (4)
HIST 3505 California Environmental History (4)
PHIL 3151 Environmental Ethics (4)
POSC 3460 Environmental Law (4)
POSC 4171 Public Policy and Environment (4)

V. Options

A student must declare an option by the time he/she has completed 44 units of the Core courses; this establishes the student's home department. Students may elect to change their option with the notification of their advisor and home department. Options are available in Biology, Chemistry, Geology, and Environmental Systems and Resource Management, and are designed to provide in-depth study of a specific field. Each option requires 27-31 units within the discipline, in a combination of required courses and electives. The student cannot use courses in the department of his/her option to satisfy G.E. requirements.

A. Biology (29 units)

BIOL 1401 Molecular and Cellular Biology (5)
BIOL 3405 Microbiology (6)
BIOL 3898 Cooperative Education (2)

Electives from the following courses or other approved courses (16 units by advisement):

BIOL 3115 Marine Biology (4) or M SC 4103 Marine Ecology (6), BIOL 3116 Freshwater Biology (5), 3121 Principles of Genetics (5), 3210 Woody Plants of California (4), 4200 Plant Taxonomy (4), 4300 General Entomology (4), 4560 Wildlife Ecology (4), 4570 Ichthyology (4), 4580 Natural History of the Vertebrates I (5), 4581 Natural History of the Vertebrates II (5); M SC 4104 Quantitative Marine Science (6), 4144 Biological Oceanography (6)

B. Chemistry (29 units)

CHEM 2200 Quantitative Analysis (5)
CHEM 3400 Introductory Biochemistry (4)
CHEM 4601 Environmental Chemistry I (4)
CHEM 4602 Environmental Chemistry II (4)

Electives from the following courses or other approved courses (12 units by advisement):

CHEM 3401 Introductory Biochemistry Lab (2), 3898 Cooperative Education (Internship) (2), 4900 Independent Study (1-4)

C. Environmental Systems and Resource Management (27-31 units)

ENVT 4910 Internship in Environmental Studies (3-4)

Three courses from the following (13-14 units by advisement):

GEOG 3410 Air-Photo Interpretation (4), 3605 Computer Cartography (5), 4425 Remote Sensing of Earth Environments (4), 4600 Introduction to Geographic Information Systems (5), 4605 Environmental Applications of GIS (5)

Three courses from the following (11-13 units by advisement):

BIOL/GEOG 4130 Biogeography (4); ENVT 4800 Senior Seminar in Environmental Studies (3); GEOG 3450 Literature and Research Aids (5), 4125 Field Course in Physical-Biotic Geography (4), 4320 Energy Resources and Management (4), 4350 Water Resources and Management (4); GEOL 3110 Principles of Geomorphology (4) or GEOG 3115 Physical Landscape Analysis (4)

D. Geology (29-30 units)

GEOL 3601 Mineralogy and Optical Crystallography (5)
GEOL 3700 Rocks (5)
GEOL 3801 Sedimentology and Stratigraphy (5)
GEOL 3810 Structural Geology (5)
GEOL 3910 Geologic Field Methods (3)

Electives from the following courses or other approved courses (6-7 units by advisement):

GEOL 3110 Principles of Geomorphology (4), 3400 General Oceanography (4), 4010 Introduction to Geophysics (5), 4900 Independent Study (1-4)

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The course prefix for the following courses is ENSC.

2800 Environmental Problems of California (4)
Human impact on the biologic and geologic environment in California. Resource needs, waste issues, species diversity, and ecosystem degradation.

3999 Issues in Environmental Science (4)
Readings, discussion, and research on contemporary and/or significant issues in environmental science. May be repeated for credit when content varies.

4800 Seminar in Environmental Science (3)
Advanced study of environmental issues based on papers presented by students. Topics to change with each course offering. Team-taught by faculty from different departments in Environmental Sciences. Prerequisites: completion of Environmental Sciences core and senior or graduate standing.

4900 Independent Study (1-4)



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Public Administration

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Department of Public Affairs and Administration
College of Arts, Letters, and Social Sciences
Office: Meiklejohn Hall 4124
Phone: (510) 885-3282

Professor Emeritus: Jong S. Jun

Professors: Carl J. Bellone, Jombo ("Jay") Umeh (Chair), Dvora Yanow

Associate Professor: George F. Goerl

Assistant Professors: Ann L. Cunliffe, Jennifer Eagan, Toni Fogarty, Frank E. Scott

Lecturer: Carol Edlund

Please consult the 2006-2007 online catalog for any changes that may occur.

The Department of Public Affairs and Administration offers primarily graduate courses. See the Health Care Administration and Public Administration chapters in the graduate section of this catalog. (*Note:* An undergraduate option in Public Affairs and Administration is offered by the Department of Political Science.) The Department of Public Affairs and Administration also offers the management courses for the B.A. degree major in Arts Administration (see the Arts Administration chapter in this catalog), and one undergraduate course in Health Care Administration (see the Health Care Administration chapter in the "Undergraduate Programs" section of this catalog).

The course prefix for the following courses is PUAD.

- 3999** Issues in Public Administration (4)
Readings, discussion, and research on contemporary and/or significant issues in public administration. May be repeated for credit when content varies.
- 4445** Bureaucratic Politics and Administrative Law

(4)
(See POSC 4445 for course description.)

- 4800** Public Administration and Society (4)
The historical and political context of public administration; politics and economics of public bureaucracy; managing governmental organizations; public finance and national economy; values, ethics, and public interest; interface between professional administrators and citizens. Prerequisite for "Classified Graduate" standing in the M.P.A. program. (A)
- 4830** Organization Theory and Human Behavior (4)
Classical and emerging theoretical perspectives on human organizations; organizational design and tomorrow's organizations; self and organization; environment and planned change; participative goalsetting and organizational effectiveness. Prerequisite for "Classified Graduate" standing in the MPA program. (A)
- 4900** Independent Study (1-2)



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Department Information

Department of Geography and
Environmental Studies
College of Arts, Letters, and Social Sciences
Office: Robinson Hall 220
Phone: (510) 885-3193; FAX: (510) 885-2353

Professor Emeritus: Herbert M. Eder

Professors: David J. Larson (Chair), Scott Stine

Associate Professors: Karina Garbesi, Michael Lee, Gang Li,
David Woo

Lecturer: Ellen L. Woodard

*Please consult the 2006-2007 online catalog for any changes that
may occur.*

Program Description

The Environmental Studies major is designed to provide an interdisciplinary and multidisciplinary overview of the environmental studies field, coupled with an in-depth study of one subfield. The core requires coursework in the sciences and social sciences and students may build options based on one or several related fields in these categories.

As part of the Environmental Studies major, students must select a 20-24 unit program of electives. Five options allow students latitude in providing specialization to a particular field of interest: Human Environment, Physical Environment, Ecology and Life Sciences, Environmental Health, and Land Use Planning and Management. Courses in these options must be distributed across three departments.

Environmental Studies majors are provided internship opportunities through assignments in public and private agencies on projects related to citizen action, environmental planning, or in

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research. Ten to twenty hours weekly are required. Supervision and evaluation are by agency personnel and the course is conducted by the instructor. The internship may be repeated once for credit.

Administrator • Citizen Activist • Consumer Affairs Specialist • Educator • Energy Impact Assessor • Environmental Auditor • Environmental Compliance Officer • Historic Preservationist • Journalist • Land Acquisition Analyst • Lawyer • Librarian • Mediator • Open Space and Recreation Planner • Solid Waste and Recycling Specialist • Water Control Inspector • Watershed Manager

Scholarship

Richard and Evelyn Thoman Scholarship in Geography and Environmental Studies

One \$500 scholarship awarded for the academic year for full-time undergraduate or graduate studies. Awards are limited to students with upper division or graduate standing. A grade point average of 3.3 or higher is required, and demonstrated scholastic and creative ability in the field of Geography or Environmental Studies.

Advanced Placement

Students who earn a grade of 3 or higher on the College Entrance Examination Board's Advanced Placement Test in Environmental Science will be given 4 units of credit equivalent to ENVT 2000.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 94-103 units; the B.A. degree requires a total of 180 units.

- I. Lower Division (35-38 units)
 - BIOL 1001 (or one of 1003, 1005, 2001, 2002, 2003, or 2004) and 1002 (or 1004 or 2005) and BIOL 2030 (or 1402, or 1403 or 2040) (9-10)
 - CHEM 1000 or 1100 or 2001 or 2002 (4-5)
 - ECON 2301¹ (4)
 - ENVT 2000 (4)
 - GEOG 2100 or 2410 (4)
 - GEOL 1001 (or 1003 or 1004) and 1002 (6)
 - STAT 1000 or 2010 or C S 1020 or 1160 (4-5)
- II. Upper Division (39-41 units)
 - BIOL 3031 or 3110 (4)
 - ECON 4306 (4)
 - ENVT 4100, 4300, 4800, and 4910 (14-16)
 - GEOG 3000 (4)
 - GEOG 3450² (5)
 - POSC 3460 and 4171 (8)
- III. Program of Electives (20-24 units)

Students must select one of the following options. Five or six courses, totaling 20-24 units, distributed across at least three departments, in one of the following five options:

A. Ecology/Life Sciences

BIOL 3015 Natural History of Marine Organisms (4); BIOL 3031[□] Nature Study (4) or BIOL 3110[□] Principles of Ecology (4); BIOL 3115 Marine Biology (4), 3116 Fresh-Water Biology (5), 3210 Woody Plants of California (4), 4130 Biogeography (4); GEOG 4125 Field Course in Physical-Biotic Geography (4); MSC 4103 Marine Ecology (6); SOC 3100 Human Ecology (4)

B. Environmental Health

ANTH 1001 Humanity and Food (4), 3720 Medical Anthropology (4); BIOL 3070 Optimal Nutrition (4), 3410 Epidemiology (4), 4010 Microbes and Humanity (4); GEOG 3340 Urban Planning (4); HDEV 2001 Human Development in Contemporary Society (4); HSC 3200 Environmental Health (4); SOC 3100 Human Ecology (4)

C. Human Environment

ANTH 1000 Introduction to Anthropology (4), 1001 Humanity and Food (4), 1300 Introduction to Cultural Anthropology (4), 3000 Anthropology in the Modern World (4); GEOG 2300 Cultural Geography (4), 2310 Economic and Resource Geography (4), 3340 Urban Planning (4), 3360 Historical Geography of North America (4), 3505 Geography of California (4); HDEV 2001 Human Development in Contemporary Society (4); HSC 3200 Environmental Health (4); PSYC 3500 Social Psychology (4); REC 3700 Community Organization in the Urban Setting (4), 4700 Environmental Recreation (4); SOC 3100 Human Ecology (4), 3200 Social Demography (4), 4450 Urban Sociology (4); STAT 3010 Statistical Methods in the Social Sciences (4)

D. Land Use Planning and Management

GEOG 2100 Physical Geography (4), 2310 Economic and Resource Geography (4), 3000 Resource Management (4), 3115 Physical Landscape Analysis (4), 3340 Urban Planning (4), 3410 Air Photo Interpretation (4), 3505 Geography of California (4), 3600 Cartographic Principles and Graphic Communication (4), 4320 Energy Resources and Management (4), 4350 Water Resources and Management (4), 4425 Remote Sensing of Earth Environments (4); POSC 1400 Introduction to Public Affairs and Administration (4); POSC 3120 State and Local Politics and Government (4) or POSC 3130 Urban Politics (4), 3800 Public Policy Analysis (4), 4171 Public Policy and the Environment (4); PUAD 4800 The Study of Public Administration (4), 4830 Organization Theory and Human Behavior (4); REC 3700 Community Organizations in the Urban Setting (4), 4300 Physical Setting of Leisure Services (4), 4700 Environmental Recreation (4)

E. Physical Environment

GEOG 2100[□] Physical Geography (4), 3120 Climatic Change (4), 3115 Physical Landscape Analysis (4), 4125 Field Course in Physical-Biotic Geog. (4); GEOL 1201

Introduction to Oceanography (4) or GEOL 3400 General Oceanography (4); GEOL 2101 (or 2100) Physical Geology (5), 3030 Earth and Life Through Time (5), 3040 Fundamentals of Meteorology (4), 3100 Geology of the Western National Parks (4), 3110 Principles of Geomorphology (4); PHIL 3331 History of Science (4), 3332 Philosophy of Science (4)

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

The minor is designed to encourage and enable students enrolled in any major to organize their elective courses around a broad study of the environment and its problems from both a social and scientific perspective. The minor consists of 36 units arranged in an integrated pattern, as approved by an advisor. The core program includes three sequential courses (totaling 12 units) which are required of all students in the minor. The remaining 24 units are electives selected from the list below.

I. Core Courses (12 units)

ENVT 2000 Introduction to Environmental Studies (4)
ENVT 4300 Environmental Field Studies (5)
ENVT 4800 Senior Seminar in Environmental Studies (3)

II. Electives in Natural Science (8 units minimum)

Two courses outside the major department, chosen from the following list, which will be expanded as relevant new courses develop:

BIOL 3110 Principles in Ecology (4); GEOG 2100 Physical Geography (4), 3120 Climatic Change (4); GEOL 1001 Introduction to the Earth Sciences (or 1003 or 1004) (4), 1002 Environmental Geology Laboratory (2) and GEOL 1201 Introduction to Oceanography (4), 2101 Physical Geology (or 2100) (5), 3040 Fundamentals of Meteorology (4)

III. Electives in Social Science (8 units minimum)

Two courses outside the major department, chosen from the following list, which will be expanded as relevant new courses are developed:

ENVT 4100 Environmental Impact Analysis (4); GEOG 2300 Cultural Geography (4), 3000 Resource Management (4), 3340 Urban Planning (4); POSC 3460 Environmental Law (4), 4171 Public Policy and the Environment (4); SOC 3100 Human Ecology (4)

IV. Additional Electives (8 units minimum)

Chosen from list II or III (above) or from the following list and Independent Study projects. No more than 5 units may be in

Environmental Studies Option: Liberal Studies

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the department of the undergraduate major:

BIOL 3031 Nature Study (4), 3115 Marine Biology (4), 4010 Microbes and Humanity (4), 4130 Biogeography (4); GEOG 2310 Economic and Resources Geography (4), 3320 Geography of World Agriculture (4), 3340 Urban Planning (4), 4320 Energy Resources and Management (4), 4350 Water Resources and Management (4); GEOL 3400 General Oceanography (4); MSC 4103 Marine Ecology (6); SOC 3200 Social Demography (4), 4450 Urban Sociology (4)

Area III.B (4 units)

ENVT 2000 Introduction to Environmental Studies (4)

Area VII Credential Track, or Area VI, Liberal Arts Track (24 units)

ENVT 4100 Environmental Impact Analysis (4)

ENVT 4300 Environmental Field Studies (5)

ENVT 4800 Senior Seminar in Environmental Studies (3)

Twelve units selected from the following:

ECON 4306 Environmental Economics (4); ENVT 4910 Internship in Environmental Studies (2-4); GEOG 3000 Resource Management (4), 3115 Physical Landscape Analysis (4), 3120 Climatic Change (4), 3320 Geography of World Agriculture (4), 3340 Urban Planning (4), 3360 Historical Geography of North America (4), 3400 Field Geography of the San Francisco Bay Region (4), 4320 Energy Resources and Management (4), 4350 Water Resources and Management (4); GEOL 2300 Natural Disasters (4), 3030 Earth and Life Through Time (5), 3110 Principles of Geomorphology (4); HSC 3200 Environmental Health (4); POSC 3460 Environmental Law (4), 4171 Public Policy and the Environment (4); SOC 3100 Seminar in Human Ecology (4)

The course prefix for the following courses is ENVT.

- 2000** Introduction to Environmental Studies (4)
Survey of important local, national, and world environmental problems, emphasizing a multidisciplinary approach. (A)
- 3400** Environmental Resource Analysis (4)
Quantitative methods for environmental problem solving including unit analysis, computer aided analysis, common functions, statistics, and error analysis.
- 3999** Issues in Environmental Studies (4)
Readings, discussion, and research on contemporary and/or significant issues in environmental studies. May be repeated for credit when content varies.
- 4100** Environmental Impact Analysis (4)
The language and changing dynamics of the environmental review process. Contents and standards of environmental impact reports and their role in the planning process. (W)

- 4300** Environmental Field Studies (5)
Weekly visits to various sites throughout the Greater Bay Area to observe environmental processes. Natural areas, industrial facilities, environmentally related agencies. Prerequisites: ENVT 4100 and senior standing in Environmental Studies. One hr. lect., 8 hrs. field. (Sp)
- 4800** Senior Seminar in Environmental Studies (3)
Problem-oriented around selected topics of environmental concern, and requiring projects or reports. Prerequisites: ENVT 2000, 4300; restricted to seniors completing the major or minor in Environmental Studies. (Alt. Sp)
- 4900** Independent Study (1-4)
- 4910** Internship in Environmental Studies (2-4)
Assignments in public and private agencies on projects related to citizen action, environmental planning, or in research. Ten to twenty hours weekly. Supervision and evaluation by agency personnel and the course instructor. Students exchange ideas and experiences in weekly group sessions which are conducted by the instructor. May be repeated once for credit. Prerequisite: ENVT 2000 and consent of instructor.

Footnotes

- ¹ Prerequisite for ECON 4306
- ² Fulfills Writing Skills graduation requirement for students who began the degree in Fall 1985, or earlier.
- ³ If not taken as a required core course alternative.



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Department of Recreation and Community Services
 College of Education and Allied Studies
 Office: Art and Education Bldg. 246
 Phone: (510) 885-3043

Professors: Melany Spielman (Chair), Doris Yates

Lecturers: Ken Hanley, Andrea Laird, Michael Shumate

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

The Department of Recreation prepares students to become leaders in the leisure, hospitality, sector of their communities where they work to create opportunities for people to experience the highest quality of life possible. The purpose of the curriculum is to develop understanding of the importance of leisure in today's society. Students are provided educational opportunities which will develop their ability to organize, plan, and manage recreation, hospitality, and community service resources in diverse communities.

Leisure is the second largest income-producing sector in the world's economy and the recreation curriculum prepares students to be leaders in the development of this sector. The department's experiential learning philosophy helps students by creating learning experiences in which they are learning content while actually creating programs, events, and courses for the people they want to serve. Helping people achieve a more satisfying quality of life is the job of all leisure professionals. The recreation program prepares students to enter many different work settings as professionals upon graduation. Public recreation, hotels and restaurant management, recreation therapy, and

Career Possibilities

adventure/environmental recreation are just a few of the fields open to Recreation majors.

Adventure Recreation Specialist • Camp Counselor/Director • Commercial Recreation Assistant • Community Education Director • Community Recreation Supervisor • Convention Manager • Employee Fitness Director • Facility Manager • Industrial Recreation Leader • Military Recreation Specialist • Park Naturalist • Park Ranger • Recreation Program Director • Recreation Therapist • Resort Director • Senior Citizen Program Director • Student Activities Coordinator • Youth Sports Director

Features

The department offers many courses as short courses (weekend and five days in a row), or as online and/or distance learning courses. Classes are also offered in blocks, enabling you to come to campus only two days a week and complete all courses in the major. All courses are web-enhanced allowing students flexibility. The department is student-centered and works with you to help you achieve your goals in the most efficient manner.

Department faculty have developed an advisement program designed to assist you in making appropriate academic and career decisions. Faculty are knowledgeable about major requirements and overall university requirements for graduation. In addition, faculty provide information to students regarding career opportunities in recreation, leisure services, hospitality, park management, and community services.

Major Requirements (B.S.)

Consult an advisor in your major department for clarification and interpretation of your major requirements. The regular major consists of 89 units; the major with an option in Environmental Recreation consists of 101 units; the major with an option in Recreation Therapy consists of 106 units; the B.S. degree requires a total of 180 units.

- I. Core Requirements (61 units)
KPE 4650; REC 1000 (or 2400), 2200, 2500, 3000, 3300, 3700, 3800, 4000, 4005, 4100, 4300, 4890 or 4895, 4910 or 4911
- II. Recreation Electives (20 units)
Select 20 units from the following: HDEV 3800; PSYC 4410; REC 1001, 2100, 3200, 3202, 3205, 3305, 4010, 4600, 4601, 4605, 4705, 4900
- III. Performing Arts and Activities Requirements (8 units)
Activity courses must be in two or more of the following fields: Art, Mass Communication, Music, Kinesiology and Physical Education, Recreation and Community Services, Theatre Arts, or other approved activity area.

Suggested General Education or Free Elective

Options

Coursework

ACCT 2210, 2251, 2252; ANTH 3000, 3400 (has prerequisite), 3410, 3430, 3500, 3505, 3720, 3740, 3745, 3840; BIOL 3031, 3060, 3070, 3110; COMM 4510; CRJA 3300, 3610, 3700; ECON 3370, 3375; ENTR 2485 or approved substitute; EPSY 5021, 6124, 6137, 6786; ENVT 4100, 4300; E S 3180, 3305, 3800; GEOL 1001 (or 1003 or 1004), 1002, 2101 (or 2100), 3040, 3050, 3051; HSC 3200, 3300, 3350, 3400; HIST 3400, 3500, 3503; HDEV 3600, 3800, 3850, 4200, 4201; MGMT 2701, 3600, 3610, 3614; POSC 3120, 3130, 3170, 3330, 3800, 3870, 4171; PSYC 3220, 3400, 3420, 3500, 3520, 3540; PUAD 4800, 4830; SOC 3410, 3412, 3419, 3420, 3425, 3520, 3700, 3710, 3720, 3730, 3745, 3750, 4450, 4716, 4740, 4750; T ED 3500, 4320, 5021, 5180, 5240, 5241, 5242; WOST 3100, 3400

Environmental Recreation

The Environmental Recreation Option prepares students for professional positions in environmental, outdoor, and adventure recreation agencies. Courses will provide students with an awareness of career opportunities and the importance of the prudent use of outdoor recreation resources. Courses will enhance students leadership skills and improve verbal and non-verbal communication skills. Courses will cultivate management and administrative skill and allow students to participate and experience outdoor recreation. A major with this option consists of 101 units. In addition to courses required of all Recreation majors, students must complete the following:

- I. Required Courses (apply to Recreation electives in major)
 - REC 3305 Outdoor Living Skills (4)
 - REC 4705 Outdoor Adventure Recreation (4)
 - One upper division REC course covering environmental recreation, with consent of advisor (4)

- II. Communication Requirement
 - Select 4 units from the following:*

 - COMM 1000, 1004, 3510 (has prerequisite not included in option), 3520, 4830

- III. Environmental Knowledge
 - Select 8 units from the following:*

 - ANTH 3000, 3500; BIOL 3031, 3110; SOC 4450

- IV. Instruction and Leadership Requirement (4 units)
 - (apply to Recreation electives in major)*

 - Select one upper division REC course covering outdoor leadership skills and techniques, with consent of advisor (4)

- V. Development of Outdoor Recreation Skills Requirement
 - Select 4 units of REC courses covering outdoor recreation skills development, with consent of advisor (may apply to Performing Arts and Activities requirement in major).*

Recreation Therapy

The Recreation Therapy option is designed to prepare students majoring in Recreation to work with people who have special needs in clinical, residential, and community-based agencies. This option is specifically designed to meet the standards developed by the National Council for Therapeutic Recreation Certification (NCTRC) and the California Board of Park and Recreation Personnel Certification. Successfully completing this curriculum will provide students with knowledge competencies necessary to qualify for both the National and State Therapeutic Recreation Certification Exams. The Recreation major with an option in Recreation Therapy consists of 106 units; the B.S. degree requires a total of 180 units. In addition to courses required of all Recreation majors, students must complete the following:

I. Required Courses (39 of the 44 units apply to regular major requirements)

BIOL 2010 Human Physiology and Anatomy I (or 2011) (5)

HDEV 3800 Human Development and Interaction (4) (applies to Recreation electives)

PSYC 4410 Abnormal Psychology (4) (applies to Recreation electives)

REC 4600 Recreation Therapy Documentation and Assessment (4) (applies to Recreation electives)

REC 4601 Recreation Therapy Treatment and Program Planning (4) (applies to Recreation electives)

REC 4602 Advanced Recreation Therapy Modalities (3) (applies to Performing Arts/Activities requirement)

REC 4603 Recreation Therapy Programming (3) (applies to Performing Arts/Activities requirement)

REC 4605 Recreation Therapy: Diagnostic Groups (4) (applies to Recreation electives)

REC 4895 Recreation Therapy Intern Placement (1) (applies to Recreation core)

REC 4911 Recreation Therapy Internship and Senior Project (12) (applies to Recreation core)

II. Elective Courses

Select 12 units from the following:

CRJA 3100; EPSY 5021, 5610, 5620; HDEV 4300, 4400, 4510, 4700; PSYC 3220, 3250, 3420, 3500, 3520, 3550, 4300; SOC 3419, 3425, 3520, 3720, 3730, 3750, 4720, 4740

Minor Requirements

the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

Environmental Recreation (44-46 units)

Note: Courses marked by stars have prerequisites not included in minor.

- I. Core Requirements (16 units)
REC 2500 Program Fieldwork or ENVT 4910 Internship in Environmental Studies (4)
REC 3305 Outdoor Living Skills (4)
REC 4705 Outdoor Adventure Recreation (4)
One upper division REC course covering environmental recreation, with consent of advisor (4)
- II. Communication Requirement (4 units)
One course from:

COMM 1000 Public Speaking (4), 1004 Interpersonal Communication (4), 3510* Small Group Communication (4), 3520 Non-Verbal Communication (4), 4830 Intercultural Communication (4)
- III. Resource Management Requirement (4 units)
One course from:

ECON 4306* Environmental Economics (4); ENTR 2485 Establishing and Managing a Small Business (4); ENVT 4100 Environmental Impact Analysis (4), 4300 Environmental Field Studies (5); GEOG 2310 Economic and Resource Geography (4), 3000 Resource Management (4), 4320* Energy Resources and Management (4), 4350* Water Resources and Management (4); MGMT/ENGR 3600 Theories of Management (4); REC 3700 Community Organizations in the Urban Setting (4), 4000 The Administration of Leisure Services (4)
- IV. Environmental Ethics, Values and Philosophy (4 units)
One course from:

ENVT 2000 Introduction to Environmental Studies (4); PHIL 3151 Environmental Ethics (4); REC 1000 Nature and Scope of Recreation and Community Services (or 2400) (4), 3000 Philosophy of Leisure Studies (4)
- V. Environmental Knowledge (8-10 units)
Two courses from the following lists:

ANTH 1300 Introduction to Cultural Anthropology (4), 3000 Anthropology in the Modern World (4), 3500 North American Indians (4); BIOL 3015* Natural History of Marine Organisms (4), 3031* Nature Study (4), 3035* Endangered and Threatened Species in Bay Area and California (4), 3110* Principles of Ecology (4), 3115* Marine Biology (4),

3130* Principles of Evolutionary Biology (4), 4560* Wildlife Ecology (4);

GEOG 3400* Field Geography of the San Francisco Bay Region (4), 3505 Geography of California (4); GEOL 1001 Introduction to the Earth Sciences (or 1003 or 1004) (4), 2101 Physical Geology (or 2100) (5), 2300 Natural Disasters (4), 3030 Earth and Life Through Time (5), 3100 Geology of the Western National Parks (4), 3400 General Oceanography (4); GEOL/GEOG 3110* Principles of Geomorphology (4); SOC 3100* Seminar in Human Ecology (4), SOC 3431 Seminar in World Development (4), 4450* Urban Sociology (4)

VI. Instruction and Leadership (4 units)

One course from:

T ED 5413 Environmental Education in the Curriculum (4), 5414 Field Trips and Community Resources for Environmental Education (4), 6414* Organization of Resident Outdoor Education (4), 6416* Development of Environmental Education (4), 6417* Field Study in Environmental Education (4).

VII. Development of Outdoor Recreation Skills (4 units)

Select 4 units of REC courses covering outdoor recreation skills development, with consent of advisor.

Recreation (26-28 units)

I. Core Courses (14-16 units)

REC 1000 Nature and Scope of Recreation and Community Services (or 2400) (4)

REC 2200 Programming for Recreation and Community Services (4)

REC 2510 Community Service Learning (2) or REC 2500 Program Fieldwork (4)

REC 3000 Philosophy of Leisure Studies (4)

II. Electives (12 units)

Select three courses from the following:

REC 3200, 3205, 3700, 3800, 4000, 4100, 4300, 4600, 4605

Youth Services Administration

See Youth Services Administration chapter for minor requirements.

Certificate
Program

Youth Services Administration

See Youth Services Administration chapter for certificate program requirements.

Recreation Option: Liberal Studies

Undergraduate Courses

Area VII, Credential Track, or Area VI, General Track
(25 units)

REC 1000 Nature and Scope of Recreation and Community
Services (or 2400) (4)
REC 4890 Internship Placement Studies (1)
REC 4910 Recreation and Community Services Internship and
Senior Project (12)

Upper division courses in Recreation and Community Services
with approval of department advisor (8)

The course prefix for the following courses is REC.

1000 Nature and Scope of Recreation and Community
Services (4)
[CAN REC 2]

An introductory multi-disciplinary and multi-cultural investigation of the implications of recreation, leisure and learning in the development of individuals and communities. Effect of recreation and community services on human behavior including the effects of ethnicity, dominant culture, age and multi-cultural exposure on leisure participation. Survey of institutions and organizations providing recreation and community services to individuals and groups. Not open to those with credit for REC 2400.

1001 Personal Leadership Through Outdoor
Adventure Challenge (4)

Through experiential-based self-discovery and group dynamics, participation in individual and physical challenges, students develop team-building, goal-setting, problem-solving, decision-making skills, leadership, trust and self-esteem. Awareness of psychological, emotional and cultural barriers. Oral and written assignments required.

2100 Recreation and Youth (4)

Participation and non-participation of youth in recreation and related activities. Impact of environments and technology on behavior, decision making, life choices, self-esteem and attitudes. Effects of urban, suburban, and rural environments on discipline, cultural tolerance, and youth development.

2200 Programming for Recreation and Community
Services (4)

Emphasis on learning, appreciating and experiencing community recreation, education and service program activities including cultural arts and crafts, creative dramatics and dance, group singing, outdoor and social recreation activities. Factors influencing and planning processes and techniques. Planning and conducting activities for groups with special attention to people with disabilities and to ethnic and cultural diversity. (Y)

2300 Recreation and Healthy Communities (4)

Leisure issues, trends, and strategies influencing life satisfaction and community well-being. Impact of recreation participation on maintaining healthy minds and bodies. Role of cultural diversity, gender, ethics, spirituality, and strategies promoting positive individual and community health.

- 2400** Leisure, Self, and Society (4)
Multi-disciplinary, multi-cultural investigation of the impact of recreation, leisure, and learning on individual, community, and human behavior and development, including ethnicity, dominant culture, age, and leisure behavior. Leisure's impact on society and the quality of life. Not open to those with credit for REC 1000.
- 2500** Program Fieldwork (4)
Field experiences in recreation and community service agencies. Supervision of students by agency and university personnel. One hundred hours of field experience. Repeatable with department consent. CR/NC grading only.
- 2510** Community Service Learning (2)
Supervised leadership in community education/recreation agencies. Open to both majors and non-majors. Variable hour requirement depending on number of units enrolled. CR/NC grading only. Repeatable with department consent.
- 3000** Philosophy of Leisure Studies (4)
Analysis of the roots of current practices, theories and philosophies in the fields of leisure, recreation, human and community service agencies. Leisure cultural differences. Scope and function of adult and community education. Development of one's own philosophy.
- 3010** Service Learning in Schools and Communities (4)
Supervised service learning experience in schools and communities. In-depth study of pedagogical principles, including motivating learning, civic participation and responsibility, integrated learning, youth voice and choice, collaborative efforts, and systematic reflection. CR/NC grading only. May be repeated once for credit with consent of instructor. Cross-listed with T ED 3010. Two hrs. lect., 6 hrs. act.
- 3100** Lifelong Leisure Transitions (4)
Lifelong leisure behaviors and trends. Life transitions and implications for leisure behavior and recreation participation. Emphasis on recreation and education of the adult.
- 3200** Wellness Through Leisure (4)
Theories and concepts of wellness, health and self-efficacy. The importance of leisure, recreation, the environment, education and culture in the development of wellness. Self-responsibility in the pursuit of holistic wellness through leisure.
- 3202** Women and Leisure (4)
Exploration of women and their leisure and recreation

pursuits from a creative, historical and cultural perspective. Leisure's role in contributing to the quality of life of women. Women's leisure expression as a reflection of societal change.

- 3205** Volunteer Administration (4)
The skills necessary to manage volunteers and volunteer-based programs in youth and human service organizations. Volunteer recruitment, training, and retention; development and work of boards and committees; long-range planning, program development, public relations, and funding sources and community relations.
- 3300** Leadership in Recreation and Community Services (4)
Identification and analysis of successful leadership techniques. Emphasis on group work and dynamics, communication, budgeting and cultural and ethnic diversity. Leadership supervision of employees, volunteers, and clients using cooperative team building techniques.
- 3305** Outdoor Living Skills (4)
Introduction to backpacking equipment and clothing, map orientation, wilderness survival and first aid, trip planning and logistics. Practical outdoor experience in developing leadership, group dynamics, problem-solving, and team building skills. Requires one weekend backpacking trip. A miscellaneous course fee will be charged for materials (or facilities). Please consult the quarterly Class Schedule for the current fee. Three hrs. lect., 2 hrs. act.
- 3700** Community Organizations in the Urban Setting (4)
Identification and analysis of political, social and ecological resources that have an impact on community recreation and services. Impact of demographics on community services. Community survey methods and techniques.
- 3800** Introduction to Recreation Therapy (4)
Introduction to theory and techniques used in the practice of therapeutic recreation. Activity analysis, disability awareness, mainstreaming and integration, empowerment, learned helplessness, risk management, and quality assurance.
- 3999** Issues in Recreation and Community Services (4)
Readings, discussion, and research on contemporary and/or significant issues in recreation and community services. May be repeated for credit when content varies.
- 4000** The Administration of Leisure Services (4)
Techniques of organizational leadership. The skills and duties required of supervisors and administrators. The structure of leisure service agencies. Prerequisite: REC 1000.
- 4005** Computers in Recreation and Community Services (4)
Computer practicum for recreation and community

services. Includes program and facility management, league management, demographic and data review, desk top publishing for flyers, brochures and promotional materials.

- 4010** Facilitating Outdoor Leadership Programs and Adventure-Based Counseling (4)
Activity based experiential education teaching current principles, procedures, techniques and foundations in facilitating outdoor adventure-based counseling and leadership. Developing curriculum, group preparation, implementing and processing safe adventure experience through activity using campus low and high element ropes course. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee.
- 4011** Youth Development through Physical Education and Recreation (4)
Principles of working with elementary age children using sports and recreation to develop character and self-esteem. First part of course will encompass lecture/activities. Second part includes participation in youth programs. Written assignment required. May be repeated once for credit. Cross-listed with KPE 4011. Two hrs. lect., 4 hrs. act.
- 4100** Professional Issues in Recreation (4)
Issues having an impact on recreation and community service. Topics include, but are not limited to: ethics, diversity, multi-culturalism, at-risk youth, seniors, persons with disabilities, and environmental health and safety.
- 4300** Facilities Management and Administration (4)
Recreation and park facilities at the local and regional level. Risk and resource management, standards of care, feasibility studies, budget planning and design process, bond issues and needs assessment. Relationship of recreation to open space, urban sprawl, land and turf use. The role of recreation in the protection of resources.
- 4600** Recreation Therapy Documentation and Assessment (4)
Assessment procedures and instruments used to assure competence in assessment of client function in leisure. Documentation, assessment, regulations in different settings (i.e., community, hospital, and clinical settings), protocols and development of individual treatment plans. 50 hours practicum required.
- 4601** Recreation Therapy Treatment and Program Planning (4)
Theory, techniques and modalities used in recreation therapy. Foundations of leisure counseling and leisure education. Systems theory of program design including individual and group program plans, risk management and quality assurance. 50 hours of practicum required.
- 4602** Advanced Recreation Therapy Modalities (3)
Theory and application of leisure modalities including leisure education, activity adaptation, and equipment

modification. Repeatable once with consent of instructor.

- 4603** Recreation Therapy Programming (3)
Non-competitive activities to promote self-esteem and self efficacy. Active student learning and participation to demonstrate effective programming techniques. Repeatable once with consent of instructor.
- 4605** Recreation Therapy: Diagnostic Groups (4)
In-depth study of disabling conditions recreation therapists work with including brain injury, spinal cord injury, mental illness, stroke, cognitive difficulties, and challenges of aging. The ramifications of the disabilities on a person's mental, physical, emotional, social, and spiritual well-being. A-F grading only.
- 4705** Outdoor Adventure Recreation (4)
Lecture, discussion, and participation in outdoor recreation activities. Includes rock-climbing, sailing, sea kayaking, orienteering, hiking, and mountain biking. Classes on five Saturdays, dates and locations to be announced. A miscellaneous course fee will be charged. Consult the quarterly Class Schedule for the current fee. Three hrs. lect., 2 hrs. act.
- 4890** Internship Placement Studies (1)
Directed individual study of professional practices in recreation and community education agencies. Open only to students who plan to enroll in REC 4910 or 4911 during the following quarter. Prerequisite: minimum 2.0 GPA overall and in major. May be repeated with consent of instructor. CR/NC grading only.
- 4895** Recreation Therapy Intern Placement (1)
Directed individual study of professional practices in Recreation Therapy Agencies. Open only to students who plan to enroll in REC 4911 during the following quarter. Prerequisites: minimum 2.0 GPA overall and in major. May be repeated with consent of instructor. CR/NC grading only.
- 4900** Independent Study (1-4)
- 4910** Recreation and Community Services Internship and Senior Project (12)
Field experience in recreation or community education agency. Supervision by agency and university personnel. Minimum of 400 hours and senior project. Prerequisite: REC 4890, senior standing, consent of instructor and minimum 2.0 G.P.A. overall and in major. May be repeated with consent of instructor. CR/NC grading only.
- 4911** Recreation Therapy Internship and Senior Project (12)
Field experience in recreation therapy agency. Supervision by agency and university personnel. Minimum of 400 hours and senior project. Prerequisite: REC 4895, senior standing, consent of instructor and minimum 2.0 GPA overall and in major. May be repeated with consent of instructor. CR/NC grading only.



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Ethnic Studies

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Department Information

Department of Ethnic Studies
College of Arts, Letters, and Social Sciences
Office: Meiklejohn Hall 4099
Phone: (510) 885-3255

Professors Emeriti: Michael J. Clark, Roxanne Dunbar Ortiz

Professors: Colleen V. Fong, Carlos S. Navarro, Barbara Paige (Chair), Noel K. Samaroo

Assistant Professor: Nicholas Baham, III

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

The Department of Ethnic Studies is central to the university's commitment "to educational excellence for a diverse society." It offers a major, minors, and courses that are interdisciplinary in nature and provide a holistic approach to the study of the United States' multi-racial, multicultural, and multigender immigrant society. The department's faculty provide areas of study that integrate social science and literary theory, as well as anthropological and sociological concepts within a historical and humanistic perspective. The underlying goal of Ethnic Studies is to provide a better understanding of diversity in American culture and thought.

The Ethnic Studies major consists of a core of Ethnic Studies courses, support courses in other departments in the university, and Options in African American, Asian American, Mexican American/Latino, and Native American Studies. The curriculum is multidisciplinary as well as interdisciplinary. The major helps the student qualify for graduate work in social sciences, law, and humanities, and for work in municipal, state, and federal government. Of equal importance are the advantages the major provides to work in community service organizations concerned

Career Opportunities

with opportunities and problems of various ethnic and racial groups.

Affirmative Action Specialist • Business Executive • Community Development Specialist • Corporate Communications Director • Curator • Customer Service Representative • Employee Relations Representative • Employment Interviewer • Foreign Service Officer • Journalist • Immigration Specialist • Personnel Representative • Public Relations Representative • Salesperson • n Teacher • Trainer • Tutor • Writer

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 60 units; the B.A. degree requires a total of 180 units.

I. Core Courses (16 units)

- E S 1001 Ethnic Experience in America I: Minorities (4)
- E S 3000 Ethnic Writers (4)
- E S 3820 Race Matters (4)
- E S 4020 Senior Seminar (2)
- E S 4030 Senior Thesis (2)

II. Area Breadth Courses (12 units)

Choose three of the courses listed below in consultation with an advisor.

[One breadth area course (4 units) from another department can be chosen in consultation with an advisor. The course should be selected from a recommended list of courses that will be kept in the Ethnic Studies department.]

ENGL/E S 4750 Multiethnic Children's and Adolescent Literature (4); E S 1005 Viewing Diversity (4), 2002 Ethnic Experience in America II: Patterns of Immigration and Migration (4), 2130 Ethnicity and Humor (4), 2135 African American Spoken Word Performance (4), 3030 Immigrant and Refugee Women (4), 3110 Racism in America I (4), 3115 Racism in America II (4), 3290 Community Development (4), 3430 Interracial Sex and Marriage (4), 3700 Special Topics in Ethnic Studies (4), 3810 History of Minority Education (4); POSC/E S 3333 Ethics and Minority Politics; WOST/E S 3420 Minority Women in America (4)

III. Primary Option Area (20 units))

Choose one of the following options. Choose five courses in the option's area of study in consultation with an advisor.

[One course from another department (4 units) can be chosen in consultation with an advisor. The course should be selected from a recommended list of courses that will be kept in the Ethnic Studies department.]

A. African American Studies Option

ENGL 3692 Black Literature II (4); ENGL/E S 3691 Black Literature I (4); E S 1100 Introduction to African American Studies (4), 2100 Blacks in the Americas (4), 2125 The Black Aesthetic (4), 2135 African American Spoken Word

Performance (4), 2300 The Black Cinematic Tradition (4), 3105 African American Identity (4), 3120 The Civil Rights Movement (4), 3130 Slavery in America (4), 3145 African American Music (4), 3165 African American Sexuality (4), 3175 Blacks and the Criminal Justice System (4), 3180 The World of the Black Child (4); 3185 African American Religion (4), 3303 Contemporary African American Women Writers (4), 3405 African American Folklore (4); HIST/E S 3567 Blacks in the United States (4); SOC 3415 Sociology of the African American Family (4)

B. Asian American Studies Option

ENGL 3670 Asian/Filipino American Literature (4); E S 1500 Introduction to Asian American Studies (4), 2552 The Chinese Experience in the United States (4), 2555 Filipino Experience in the United States (4), 3551 Asian American Women and Men (4), 3555 Asian American Family Patterns (4)

C. Mexican American/Latino Studies Option

E S 1200 Introduction to Mexican American/Latino Studies (4), 3202 Latino Writers (4), 3210 Latinas in the United States (4), 3805 Mexican and Latin American Immigration (4), 4290 Latino Politics and Public Policy (4); HIST 3515 The Mexican American and the American Southwest (4); SOC 3416 Sociology of the Mexican American Family (4)

D. Native American Studies Option

ANTH 3500 North American Indians (4), 3505 Indians of California (4); ENGL 3660 Native American Literature (4); E S 1300 Introduction to Native American Studies (4), 3305 Contemporary Native American Life (4), 3310 Native American World View (4), 3330 Native American Liberation Movements (4), 3800 Peoples of Central America (4)

IV. Secondary Option Area (12 units)

Choose three courses in the option's area of study, in consultation with an advisor.

[One course from another department (4 units) can be chosen in consultation with an advisor. The course should be selected from a recommended list of courses that will be kept in the Ethnic Studies department.]

A. African American Studies Option

ENGL 3692 Black Literature II (4); ENGL/E S 3691 Black Literature I (4); E S 1100 Introduction to African American Studies (4), 2100 Blacks in the Americas (4), 2125 The Black Aesthetic (4), 2135 African American Spoken Word Performance (4), 2300 The Black Cinematic Tradition (4), 3105 African American Identity (4), 3120 The Civil Rights Movement (4), 3130 Slavery in the Americas (4), 3145 African American Music (4), 3165 African American Sexuality (4), 3175 Blacks and the Criminal Justice System (4), 3180 The World of the Black Child (4), 3185 African American Religion (4), 3303 Contemporary African American Women Writers (4), 3405 African American Folklore (4); HIST/E S 3567 Blacks in the United States (4); SOC 3415 Sociology of the African American Family (4)

- B. Asian American Studies Option
 ENGL 3670 Asian/Filipino American Literature (4); E S 1500 Introduction to Asian American Studies (4), 2552 The Chinese Experience in the United States (4), 2555 Filipino Experience in the United States (4), 3551 Asian American Women and Men (4), 3555 Asian American Family Patterns (4)
- C. Mexican American/Latino Studies Option
 E S 1200 Introduction to Mexican American/Latino Studies (4), 3210 Latinas in the United States (4), 3805 Mexican and Latin American Immigration (4), 4290 Latino Politics and Public Policy (4); HIST 3515 The Mexican American and the American Southwest (4); SOC 3416 Sociology of the Mexican American Family (4)
- D. Native American Studies Option
 ANTH 3500 North American Indians (4), 3505 Indians of California (4); ENGL 3660 Native American Literature (4); E S 1300 Introduction to Native American Studies (4), 3305 Contemporary Native American Life (4), 3330 Native American Liberation Movements (4)

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

African American Studies Minor (24 units)

The African American Studies minor offers the student majoring in another discipline the opportunity to obtain knowledge and understanding of America's largest racial minority and its relationship to the larger society. Students considering careers in teaching, government service, foreign affairs, business, health-science related fields, and law may find the minor compatible.

I. Lower Division (8 units)

Two of the following courses:

E S 1100 Introduction to African American Studies (4), 2100 Blacks in the Americas (4), 2125 The Black Aesthetic (4), 2300 Blacks in Film (4), 3105 African American Identity (4)

II. Upper Division (16 units)

A minimum of 16 units from the following:

E S 3105 African American Identity (4), 3120 The Civil Rights Movement (4), 3130 Slavery in the Americas (4); HIST/E S 3567 Blacks in the United States (4); PHIL 3510 Human Rights and Social Justice (4); SOC 3415 Sociology of the African American Family (4), 3520 Sociology of Minority Groups (4)

Minor Requirements

Asian American Studies Minor (24 units)

The Asian American Studies minor offers the student majoring in another discipline the opportunity to acquire knowledge and understanding of one of the major ethnic groups in the United States and its developing relationship to the larger society. Students considering careers in teaching, government service, foreign affairs, business, health-sciences related fields and law may find the minor compatible with their career goals.

I. Eight units from the following:

E S 1500 Introduction to Asian American Studies (4)

Plus one of the following:

E S 2552 Chinese Experience in the United States (4), 2555 Filipino Experience in the United States (4), 3551 Asian American Women and Men (4)

II. Eight units from the following:

E S 2552 Chinese in the United States (4), 2555 Filipinos in the United States (4), 3030 Immigrant and Refugee Women (4), 3551 Asian American Women and Men (4), 3555 Asian American Family Patterns (4); THEA 3311 Filipino Theatre (4)

III. Eight units selected with an advisor in Asian American Studies from the following list:

ANTH 3545 China (4), 3550 Japan; E S 1001 Ethnic Experience in America I: Minorities (4), 2002 Ethnic Experience in America II: Patterns of Immigration and Migration (4), 3000 Ethnic Writers (4), 3110 Racism in America (4), 3120 Civil Rights Movement (4), 3810 History of Minority Education (4); GEOG 3505 Geography of California (4), 3540 Geography of Eastern Asia (4), 3550 Geography of Southeast Asia (4); HIST 3312 Modern China (4), 3323 Modern Japan (4), 3500 History of California (4), 3503 History of San Francisco Bay Area (4); MLL 1601, 1602, 1603 Elementary Mandarin Chinese (4, 4, 4), MLL 1651, 1652, 1653 Elementary Filipino (4, 4, 4), MLL 1801, 1802, 1803 Elementary Japanese (4, 4, 4), MLL 1751, 1752, 1753 Elementary Vietnamese (4), MLL 2601, 2602, 2603 Intermediate Mandarin Chinese (4, 4, 4), MLL 2801, 2802, 2803 Intermediate Japanese (4, 4, 4); POSC 3204 Political Systems of Asia (4); WOST 3420 Minority Women in America (4)

Ethnic Studies Minor (24 units)

I. Core Courses (12 units)

E S 1001 Ethnic Experience in America I: Minorities (4)

E S 2002 Ethnic Experience in America II: Patterns of Immigration and Migration (4)

Either E S 3000 Ethnic Writers (4) or E S/WOST 3030 Immigrant and Refugee Women (4)

II. Electives

12 upper division units as approved by a member of the Ethnic Studies Department. (At least one course must be taken in three of the four existing major options: African American Studies Option, Asian American Studies Option, Native American Studies Option, and Mexican American/Latino

Studies Option.)

Mexican American/Latino Studies Minor (24 units)

The Mexican American/Latino minor offers the student majoring in another discipline the opportunity to acquire knowledge and understanding of one of the oldest, yet continuing, immigrant groups in the United States, and its developing relationship to the large society. Students considering careers in teaching, government service, foreign affairs, business, health-sciences related fields and law may find the minor compatible with their career goals.

- I. Sixteen units from the following core courses:
E S 1200 Introduction to Mexican American/Latino Studies (4)

Plus 12 units from the following:

E S 3000 Ethnic Writers (4), 3202 Latino Writers (4), 3210 Latinas in the United States (4), 3805 Mexican and Latin American Immigration (4), 4290 Latino Politics and Public Policy (4); HIST 3515 The Mexican-American and the American Southwest (4); SOC 3416 Sociology of the Mexican American Family (4)

- II. Eight units from the following courses:
(Eight units from the core list may be substituted for elective courses with approval of an Ethnic Studies advisor.)

ART 3055 Ancient American Art (4), 3010 Latin American Art (4); E S 1001 Ethnic Experience in America I: Minorities (4), 2002 Ethnic Experience in America II: Patterns of Immigration and Migration (4), 3105 Black Identity (4), 3120 The Civil Rights Movement (4), 3305 Contemporary Native American Life (4), 3310 Native American World View (4), 3800 Peoples of Central America (4); MLL 2401-2-3 Intermediate Spanish (4, 4, 4), 3461 Introduction to Spanish American Literature 1492-1900 (4), 3463 Introduction to Spanish-American Literature 1900-Present (4), 3495 Spanish-American Culture and Civilization (4); GEOG 3510 Geography of Mexico, Central America and the Caribbean Islands (4); HIST 3500 History of California (4); POSC 3150 Politics of California (4), 3333 Ethnic and Minority Politics (4)

Any course (including Special Topics, or Independent Study courses) approved by an Ethnic Studies advisor can be substituted for a core, or elective course.

Native American Studies Minor (24 units)

The Native American Studies minor offers the student majoring in another discipline the opportunity to acquire knowledge and understanding of the original peoples of the United States as well as the entire Western Hemisphere and Pacific. This academic minor addresses historical, political, cultural, and intellectual issues of Native nations, providing an interdisciplinary basis for understanding the historical and contemporary problems not only of Native peoples, but of the United States as a colonial and military power.

- I. Eight units from the following:
E S 1300 Introduction to Native American Studies (4)

African
American
Studies Option:
Liberal Studies

Ethnic Studies
Option: Liberal
Studies

Undergraduate
Courses

Plus one of the following:

ANTH 1000 Introduction to Anthropology (4), 1300 Introduction to Cultural Anthropology (4); E S 1001 Ethnic Experience in America I: Minorities (4), 1200 Introduction to Mexican American/Latino Studies (4); 2002 Ethnic Experience in America II: Patterns of Immigration and Migration (4), SOC 1000 Introduction to Sociology (4)

II. Twelve units from the following:

E S 3305 Contemporary Native American Life (4), 3310 Native American World View (4), 3330 Native American Liberation Movements (4), 3800 The Peoples of Central America (4)

III. Four units from the following:

ANTH 3500 North American Indians (4), 3505 Indians of California (4); E S 3000 Ethnic Writers (4), 3030 Immigrant/Refugee Women (4), 3110 Racism in America (4), 3120 Civil Rights Movements (4), 3202 Latino Writers (4), 3805 Mexican and Latin American Immigration (4); HIST 3500 History of California (4), 3511 The American West (4); T ED 5038 Multicultural Education (4)

Area VII, Credential Track, or Area VI, General Track (24 units)

E S 1100 Introduction to African American Studies (4)
HIST/E S 3567 Blacks in the United States (4)

Either E S 3110 Racism in America (4) or E S 3120 The Civil Rights Movement (4)

Three courses (12 units) from the following:

E S 3105 African American Identity (4), 3130 Slavery in the Americas (4), 3145 African American Music (4), 3165 African American Sexuality (4), 3180 The World of the Black Child (4), 3185 African American Religion (4)

Area VII, Credential Track, or Area VI, General Track (24 units)

E S 1001 Ethnic Experience in America I: Minorities (4)
E S 2002 Ethnic Experience in America II: Patterns of Immigration and Migration (4)

E S 3000 Ethnic Writers (4)

Three additional upper division Ethnic Studies courses, representing three of the following areas: African American Studies, Native American Studies, Asian American Studies, and Mexican American/Latino Studies (12 units)

The course prefix for the following courses is E S.

General Ethnic Studies Courses

- 1001** Ethnic Experience in America I: Minorities (4)
Historical and contemporary examination of the African American, Asian American, Hispanic American, and the Native American experience in America. A multidisciplinary survey of the immigration patterns, adaptations to Europeans, and present day cultural, social, and political conditions. (F, Sp)
- 1005** Viewing Diversity (4)
Basic social science approaches to the study of local, national, and global constructions and representations of cultural diversity.
- 2002** Ethnic Experience in America II: Patterns of Immigration and Migration (4)
A comparative approach to immigration and migration. The changing character of immigration and migration in the United States and its sociocultural and policy implications. Not open to those with credit for E S 1002.
- 2130** Ethnicity and Humor (4)
A comparative approach to the study of ethnicity and humor. Emphasis on shifting structural and cultural themes in American ethnic humor, from 1950 to the present.
- 3000** Ethnic Writers (4)
A critical examination of the novels of twentieth century minority American writers. Advanced principles of composition and style. Fulfills the University Writing Skills Requirement for students who began work on the present degree before Fall quarter 1985. Prerequisite: ENGL 1001 or equivalent. (Y)
- 3030** Immigrant and Refugee Women (4)
Changes and continuities in the lives of immigrant and refugee women, especially with reference to the conditions leading to their departure from their countries of origin and adaptation and resettlement in the United States. Cross-listed with WOST 3030.
- 3333** Ethics and Minority Politics (4)
(See POSC 3333 for course description.)
- 3420** Minority Women in America (4)
(See WOST 3420 for course description.)
- 3430** Interracial Sex and Marriage (4)
Interracial sex and marriage in the U.S. through literature and film. Themes/images will be placed within a larger historical context of shifting attitudes about race and gender.
- 3440** The Construction of Whiteness (4)
The evolution of whiteness as a social construct and the impact of race and ethnicity on issues of place, power, and identity in the United States.
- 3700** Special Topics in Ethnic Studies (4)
Topics of current interest in Ethnic Studies. May be

repeated for a maximum of 8 units. Prerequisite: Consent of instructor.

- 3810** History of Minority Education (4)
Interdisciplinary analysis of the development and the rise of a multi-ethnic society. Focus on the development of educational opportunities for minorities and women.
- 3820** Race Matters (4)
A social discourse on race. Course will examine discussions of race by important American writers and scholars and the extent to which these dialogues inform critical cultural and social issues and policies on race and ethnicity.
- 3999** Issues in Ethnic Studies (4)
Readings, discussion, and research on contemporary and/or significant issues in ethnic studies. May be repeated for credit when content varies.
- 4020** Senior Seminar (2)
A cross-discipline and interdisciplinary approach to theory and method. Emphasis on methodological and theoretical models that have shaped and informed the field of Ethnic Studies. Course will integrate a field learning component. Prerequisite: senior status.
- 4030** Senior Thesis (2)
A cross-disciplinary and interdisciplinary approach to theory and method. Emphasis on organization and writing of a major research paper. Prerequisite: E S 4020.
- 4750** Multi-Ethnic Children's and Adolescent Literature (4)
(See ENGL 4750 for course description.)
- 4900** Independent Study (4)

African American Studies Courses

- 1100** Introduction to African American Studies (4)
A historical, multidisciplinary overview of the field. Focus on the socio-political and cultural experience of African Americans in the United States. (Y)
- 2100** Blacks in the Americas (4)
The historical, cultural, socioeconomic and political dimensions of the Black presence in the Americas, i.e., North and South America, and the Caribbean; 1619 to date. Emphasis on cross-cultural analysis with the objective to further understand the present day dynamics among these diverse groups in the "New World." (A)
- 2125** The Black Aesthetic (4)
Survey of African American literature, music, dance, theatre, etc. Emphasis on black art forms in the Americas.
- 2135** African American Spoken Word Performance (4)
An interdisciplinary approach to African American oral

performance. The course will focus on African American spoken word genres (i.e., sermons, talkstory, dozens, slam poetry, etc.) as artistic and performance events.

- 2300** The Black Cinematic Tradition (4)
A critical examination of historically significant black films, from 1915 to the present. Comparative and interdisciplinary in approach. The impact of the minstrel theatre tradition on early black films, the role of independent film producers and directors in creating alternative and more multidimensional images of blacks, and the more recent crossover tradition in American films. Representative films from each decade.
- 3105** African American Identity (4)
A study of the unique psychology which evolved as a result of the Black experience in America and how it is related to the basic processes of human behavior. (Y)
- 3110** Racism in America I (4)
An examination of racist attitudes, behavior, and policies of America and Americans. (Y)
- 3115** Racism in America II (4)
A case study approach to race as a social construct, and its impact on American political and cultural life. Course will focus on the twentieth century, and significant shifts in public policy, racial identity questions, and general socio-cultural attitudes. E S 3110 recommended.
- 3120** The Civil Rights Movement (4)
The historical, socioeconomic and political development of the major civil rights movements in the United States. (Y)
- 3130** Slavery in the Americas (4)
The African slave trade and slavery. Emphasis on the relations among the institutions of slavery, racism and capitalism. (A)
- 3140** Racism and Sports (4)
Biographical approach to the study of racism in sports. The lives of significant African American sports figures as a backdrop for an examination of broader social, economic, and political issues.
- 3145** African American Music (4)
Organization and development of the types, forms and styles of music as they relate to the history of the African American. (Y)
- 3165** African American Sexuality (4)
The historical impact of African sexual attitudes and practices on both the European and the slave. The subsequent social and structural development in this society of contemporary African American sexual attitudes and behaviors. Within this context, a critical analysis of longheld African American sexual stereotypes and related problems. (Y)
- 3175** Blacks and the Criminal Justice System (4)

The increasing emphasis in the 1980's and 1990's on punishment rather than prevention in dealing with crime, and its impact on African Americans, particularly African American men. The criminalization of drug use, accelerated incarceration of African American males, and expansion of the prison system in the United States.

- 3180** The World of the Black Child (4)
The impact of a variety of socializing agents on the mental and emotional development of the Black child in this society. Emphasis on a critical examination of the growing body of research and related theory and its practical application to Black children.
- 3185** African American Religion (4)
Analysis of Black religion; its genesis, institutional structure, leadership recruitment function and relationship to other African American institutions. Emphasis upon religion as a major element of African American culture. (Y)
- 3303** Contemporary African American Women Writers (4)
Interpretation and discussion of literary works by contemporary African American women writers. Emphasis on the shifting trends in content, form, and structure.
- 3405** African American Folklore (4)
Survey of major genres of African American folk culture, i.e., tales, songs, jokes, etc. Focus on African American folk tradition, as artifact and performance form.
- 3567** Blacks in the United States (4)
(See HIST 3567 for course description.)
- 3691** Black Literature I (4)
(See ENGL 3691 for course description.)
- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 8 units. A maximum of 4 units will be accepted toward the Ethnic Studies major; a maximum of 4 units will be accepted toward the minor. CR/NC only. Prerequisites: at least a 2.0 GPA; departmental approval of activity. (A)

Asian American Studies Courses

- 1500** Introduction to Asian American Studies (4)
Introduction to the Asian American experience from an interdisciplinary perspective including: the popularized version of Asian Americans as a "model minority," the theoretical, the statistical, the historical, and the personal. Critical analysis and discussion of the position Asian Americans hold in society.
- 2552** The Chinese Experience in the United States (4)
Theoretical and descriptive study of the Chinese

experience in the United States from the nineteenth century "bachelor" societies to the most recent immigrants and refugees. Special attention given to diversity among Chinese Americans-by generation, social class, gender, year and condition of entry, and place of residence.

- 2555** Filipino Experience in the United States (4)
Historical and contemporary experiences of Filipinos in the United States within the context of American national and foreign policy from various theoretical and descriptive perspectives.
- 3551** Asian American Women and Men (4)
Through a survey of changing images and roles of Asian women and men in the United States, course explores how gender has been socially constructed. Conceptions of masculinity and femininity will be treated as relational and comparisons will be made between Asian Americans and other racial groups.
- 3555** Asian American Family Patterns (4)
The family is conceptualized as an adaptable institution. How changes in larger society-immigration, race relations, gender roles-affect the Asian family in the United States. Topics include "bachelor" communities, picture brides, and interracial relationships. Not open to students with credit for SOC 3417.
- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 8 units. A maximum of 4 units will be accepted toward the Ethnic Studies major; a maximum of 4 units will be accepted toward the minor. CR/NC only. Prerequisites: at least a 2.0 GPA; departmental approval of activity. (A)

Mexican American/Latino Studies Courses

- 1200** Introduction to Mexican American/Latino Studies (4)
A historical, multidisciplinary overview of the field. Focus on the socio-political and cultural experiences of Chicanos/Latinos in the United States.
- 3202** Latino Writers (4)
The writings, literary topics, and especially the novels of twentieth century Chicano writers.
- 3210** Latinas in the United States (4)
Examines historically, culturally, and theoretically the condition of Latinas in the United States.
- 3290** Community Development (4)
Supervised field work in Mexican American/Latino communities. Provides a variety of learning experiences in community agencies, organizations, or educational institutions. Regular meetings with faculty sponsor and written reports required. Repeatable for maximum 12 units

credit.

- 3805** Mexican and Latin American Immigration (4)
An examination of Mexican, Puerto Rican and Latin American immigration to the United States from a comparative political-economic perspective.
- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 8 units. A maximum of 4 units will be accepted toward the Ethnic Studies major; a maximum of 4 units will be accepted toward the minor. CR/NC grading only. Prerequisites: at least a 2.0 GPA; departmental approval of activity. (A)
- 4290** Latino Politics and Public Policy (4)
Contemporary social issues and public policy questions in the Mexican American/Latino community. Areas include race relations, immigration, feminization of poverty, education, housing, unemployment, juvenile delinquency, and criminal justice.

Native American Studies Courses

- 1300** Introduction to Native American Studies (4)
Survey of the Native American experience in North America. Topics covered: History, education, religion, socioeconomic conditions, and psychology. Results of cultural contact. (Y)
- 3305** Contemporary Native American Life (4)
Social and economic conditions of contemporary American Indian Life. Stereotypes, discrimination, poverty, and their effects on individuals. Contemporary social movements. (Y)
- 3310** Native American World View (4)
A comparative study of Native American belief systems, world views, and religions, analyzing their roles and importance in Indian life. (Y)
- 3330** Native American Liberation Movements (4)
Study of Native American movements aimed at liberation from the effects of European conquest. Social and political problems of political domination. Prerequisite: E S 1300 or consent of instructor.
- 3800** Peoples of Central America (4)
The developmental relationship between United States' communities of Central America origin and contemporary Central America. Focus on historical, socioeconomic, and cultural factors, as well as nationalistic movements, economic dependence, migration patterns (to the United States) and social change.
- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or

volunteer activities. May be repeated for up to 8 units. A maximum of 4 units will be accepted toward the Ethnic Studies major; a maximum of 4 units will be accepted toward the minor. CR/NC only. Prerequisites: at least a 2.0 GPA; departmental approval of activity. (A)

Footnote

- ❑ If not taken to fulfill (I.) above.



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General Information

Undergraduate Science (SCI) Courses

UNDERGRADUATE PROGRAMS

Science

- ▶ [General Information](#)
- ▶ [Undergraduate Science \(SCI\) Courses](#)

The College of Science offers interdisciplinary science courses that meet a variety of needs (General Education, Writing Skills, etc.). For general information regarding Science courses, contact the College of Science Office (North Science 131); Tel. (510) 885-3441. For information on the Science Single Subject Matter Preparation Program, see the [Single Subject Matter Preparation Program](#) chapter in this catalog.

The course prefix for the following courses is SCI.

- 1005** Technology and the Future (4)
Survey of social development of key technologies that shape our society and future. Historical development of technology and emphasis on future developments and emerging technologies. Scientific, environmental, and policy issues.
- 3010** Writing in Sciences (4)
Writing course designed to improve written composition of students majoring in science. Prerequisites: Junior standing; either C- (CR) or better in ENGL 3000 or 3001, or score of 7 or better on the Writing Skills Test, or satisfaction of the graduation writing assessment requirement (GWAR) at any CSU campus including the UWSR at Hayward.
- 3335** Science, Technology, and Values (4)
(See PHIL 3335 for course description.)
- 3999** Issues in Science (4)
Readings, discussion, and research on contemporary and/or significant issues in science. May be repeated for credit when content varies.
- 4900** Independent Study (1-4)





Department Information

UNDERGRADUATE PROGRAMS

Filipino and Filipino American Studies

- ▶ [Department Information](#)
- ▶ [Program Description](#)
- ▶ [Minor in Filipino and Filipino American Studies](#)

Filipino and Filipino American Studies Program
College of Arts, Letters, and Social Sciences
Office: Meiklejohn Hall 3089
Phone: (510) 885-4818

Professor Emeritus: Ricardo Singson (Small Business Institute)

Professor: Edgardo De La Cruz (Theatre and Dance)

Associate Professors: Cesar Maloles (Marketing and Entrepreneurship), Efren Padilla (Sociology and Social Services)

Director: Efren Padilla

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

The Filipino and Filipino American Studies Minor serves several purposes. First, this minor strengthens the study of Asian civilizations and U.S. ethnic minority groups at Cal State Hayward by focusing on Filipinos and Filipino Americans. Second, students interested in taking courses related to Filipino and Filipino American experiences will be able to count these courses toward a minor. Third, the minor provides a foundation of cultural and social knowledge for students who plan to take business courses which deal with Filipino American communities and/or who plan to participate in international student exchanges with universities in the Philippines. Currently, students may participate in exchange programs between Cal State Hayward and selected universities in the Philippines such as De La Salle University, University of Northern Philippines, Silliman University, and the University of the Philippines (Diliman).

Minor in Filipino and Filipino American Studies

The minor consists of a minimum of 28 units of coursework selected from the following lists of *core* and *elective* courses. No more than 18 units of coursework completed in a single department may be applied to the minor; and no more than 10 units of coursework applied toward a major may be counted for the minor. With the approval of the Filipino and Filipino American Studies advisor, a maximum of eight other appropriate units,

including independent study or directed research, may be substituted for the Electives requirement.

I. Core Courses (12 units)

SOC 3507 Filipino American Communities (4)

SOC 3510 Sociology of Identity (4)

SOC 3550 Filipino Labor/Immigration (4)

II. Electives (16 units)

ANTH 3710¹ Anthropology and Museums (4); COMM 4830 Intercultural Communication (4); ECON 4710¹ International Economic Development (4); ENGL 3670 Asian/Filipino American Literature (4); ENTR 4490¹ Practicum in Small Business Management (4); E S 2555 Filipino Experience in the U.S. (4), 3030 Immigrant and Refugee Women (4), 3551 Asian American Women and Men (4), 3555 Asian American Family Patterns (4); GEOG 3550 Geography of Southeast Asia (4); MKTG 4450¹ Marketing Seminar (4); MLL 1651² Elementary Filipino I (4), 1652² Elementary Filipino II (4), 1653² Elementary Filipino III (4); POSC 3204 Political Systems of Asia (4); SOC 3425 Prejudice and Discrimination (4), 3520 Sociology of Minority Groups (4); THEA 3233 Modern Philippine Dramatic Literature and Styles (4), 3311 Filipino Theatre (4); WOST 3550 Women, Work, and Family Life (4)

Footnotes

¹Requires Filipino and Filipino American content and approval of an advisor.

²Only one language course may be applied towards the Filipino and Filipino American Studies electives.



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Single Subject Matter Preparation Programs

- ▶ [English](#)
- ▶ [Mathematics](#)
- ▶ [Physical Education](#)
- ▶ [Science](#)
- ▶ [Social Science](#)

The following Single Subject Matter Preparation Programs in English, mathematics, physical education, science, and social science have been approved by the California Commission on Teacher Credentialing as alternatives to the subject matter examinations and as appropriate subject matter preparation for the Single Subject Teaching Credential.

Please consult the 2006-2007 online catalog for any changes that may occur.

English

Completion of the Single Subject Matter Preparation Program in English is certified by the Department of English. This program may be completed by students in any major but overlaps major requirements to the largest extent in English, but also in Mass Communication, Speech Communication, and Theatre Arts. The Single Subject Matter Preparation Program in English requires 78-95 units. For additional information, contact the Department of English (Warren Hall UM79; Tel. 510-885-3151).

- I. Core Curriculum (52 units)
 - ENGL 2030 Introduction to Critical Writing on Prose Fiction (4)
 - ENGL 2040 Introduction to Critical Writing on Poetry (4)
 - ENGL 2050 Introduction to Critical Writing on Drama (4)
 - ENGL 3005 Study of Language (4) or ENGL 3040 Linguistic History of the English Language (4)
 - ENGL 3010 Modern English Grammar (4)
 - ENGL 3020 Advanced Expository Writing (4)
 - ENGL 3080 Introduction to Critical Theory of Literature (4)
 - ENGL 4040 Language in the U.S.A. (4)
 - ENGL 4050 Introduction to Second Language Acquisition (4)
 - ENGL 4251 Introduction to Shakespeare (4)

Select one upper division course (4 units) in the literature of an ethnic minority from:

- ENGL 3670 Asian/Filipino American Literature (4), 3680 Hispanic/Latino/U.S. Literature (4), 3691 Black Literature I (4), 3692 Black Literature II (4)

Select one upper division course (4 units) in American

literature of the 19th and/or 20th centuries from:

ENGL 4635 Studies in Mid-19th-Century American Literature (4), 4636 Studies in Late 19th-Century American Literature (4), 4637 Studies in 20th-Century American Literature (4), 4860 American Fiction to 1914 (4), 4870 The American Novel, 1914-45 (4)

Select one upper division course (4 units) in British literature of the 19th and/or 20th centuries from:

ENGL 4411 Studies in Early 19th-Century British Literature (4), 4412 Studies in Late 19th-Century British Literature (4), 4832 British Novel, 1800-1914 (4), 4833 British Novel, 1914-1945 (4)

II. Practicum (4 units):

ENGL 4000 Seminar in English Education (2)
ENGL 4005 Informational and Instructional Technology in the English Classroom (2)

III. Supplementary Curricula (22-39 units)

Complete one of the following four supplementary curricula.

A. Supplementary Curriculum for English and Related Studies (36 units)

COMM 1000 Public Speaking (4) or COMM 1004 Interpersonal Communication (4)
COMM 2200 Introduction to Journalistic Writing (4)
ENGL 2070 Beginning Workshop in Fiction (4)
ENGL 3650 Women in Literature (4)
ENGL 4151 Introduction to Chaucer (4) or ENGL 4260 Milton (4)
ENGL 4710 Bible for Students of Literature (4) or ENGL 4720 Mythology (4)
ENGL 4745 Film Criticism (4)
THEA 2310 Interpretive Reading (4)

Select one course (4 units) in British or American literature of the 20th Century from:

ENGL 4827 20th-Century Poetry (4), 4874 The American and British Novel, 1945-75 (4), 4876 Current American and British Novel (4)

B. Supplementary Curriculum for Speech Communication (32 units)

COMM 1004 Interpersonal Communication (4)
COMM 3411 Argumentation and Debate (4)
COMM 3485 Voice and Speech Improvement (4)
COMM 3510 Small Group Communication (4)
COMM 4183 Speech and Debate Activities Workshop or
COMM 4350 Persuasive Speaking (4)
COMM 4830 Intercultural Communication (4)
COMM 4880 Communication and Conflict Resolution (4)

Choose one course (4 units) from the following :

COMM 4411 Principles of Argumentation (4), 4460 American Public Address (4), 4550 Communication Criticism (4), 4610 Rhetoric of Popular Culture (4), 4850 Gender and Communication (4), 4860 Ethnic Public Address (4)

- C. Supplementary Curriculum for Mass Communication (22 units)
 - COMM 3000 History of Mass Communication (4)
 - COMM 3010 News Reporting and Writing (4)
 - COMM 3110 Law of Mass Communication (4)
 - COMM 3220 Media Workshop: Print (2)
 - COMM 3310 Editing (4)
 - COMM 4010 Public Affairs Reporting (4)

- D. Supplementary Curriculum for Drama/Theatre (39 units)
 - THEA 1010 All the World's a Stage (or 1011) (4) or THEA 3225 Theatre Today (4)
 - THEA 2005 Acting Fundamentals: Improvisation (3)
 - THEA 3111 Stagecraft Techniques (4)
 - THEA 3112 Costume Techniques (4)
 - THEA 3113 Lighting and Sound Techniques (4)
 - THEA 4021 Play Direction: Sign and Symbol Theory in Production (4)

Select sixteen units minimum from the following list:
 THEA 3201 Classical Greek and Roman Drama (4), 3202 European Medieval and Renaissance Drama (4), 3203 Modern European Drama (4), 3207 Modern American Theatre (4), 3208 Postmodern Theatre (4), 3226 The Woman Artist (4), 3228 Women in Dramatic Literature (4), 3232 Modern Art and Theatre (4), 4375 Ethnic and Immigrant Theatre in the United States

Mathematics

Completion of the Single Subject Matter Preparation Program in Mathematics is certified by the Department of Mathematics and Computer Science. A student need not be a mathematics major to complete this program; however, students who complete the mathematics major with Option C (Mathematics Teaching) should find it relatively easy to meet the requirements of the program, as noted in the description of Option C requirements in the undergraduate Mathematics chapter. In addition to the required mathematics courses, a year of education courses and practice teaching is required before the California Secondary Teaching Credential in Mathematics can be granted. Seventy-three units are required in the Single Subject Matter Preparation Program in Mathematics. For additional information, contact the Department of Mathematics and Computer Science (North Science 335; Tel. 510-885-3414; E-mail: mathcs@csuhayward.edu).

- I. Core Mathematics (51 units)
 - MATH 1300 Trigonometry and Analytic Geometry (4)
 - MATH 1304 Calculus I (4)
 - MATH 1305 Calculus II (4)
 - MATH 2101 Elements of Linear Algebra (4)
 - MATH 2150 Discrete Structures (4)
 - MATH 2304 Calculus III (4)
 - MATH 3121 Abstract Algebra I (4)
 - MATH 3215 Geometry I (4)
 - MATH 3600 Number Theory (4)
 - MATH 4040 History of Mathematics (4)
 - MATH 4901 Senior Seminar (2)
 - STAT 2010 Elements of Statistics for Business and Economics

(5)
STAT 3401 Introduction to Probability Theory I (4)

II. Coursework Providing Breadth and Perspective (22 units)

Additional advanced courses that require calculus as a prerequisite (8 units):

MATH 3300 Analysis I (4)

MATH 3331 Differential Equations (4)

One course in computer science (4 units):

CS 1160 Introduction to Computer Science and Programming Methods (4)

Field experiences related to mathematics (2 units):

One course chosen from the following or 60 hours of field experience approved by the Mathematics Subject Matter Preparation Advisor:

MATH 3898 Cooperative Education (2)

MATH 4900 Independent Study [in Tutoring] (2)

Eight (8) units of additional coursework, chosen from the following or from other related courses approved by the Mathematics Subject Matter Preparation Advisor:

CHEM 1101 General Chemistry (5), 1102 General Chemistry (5), 1103 General Chemistry (5); CS 1020 Introduction to Computers, 2360 Programming Methodology and Introduction to Software Engineering (4), 2430 Computer Organization and Assembly Language Programming (4); ECON 2301 Principles of Microeconomics (4), 2302 Principles of Macroeconomics (4)

MATH 3100 Linear Algebra (4), 3122 Abstract Algebra II (4), 3301 Analysis II (4); 4215 Topics in Geometry (4); MGMT 3100 Introduction to Quantitative Methods in Business (5); PHIL 1001 Introduction to Logic (4), 3002 Modern Logic (4); PHYS 1001 General Physics (5), 1002 General Physics (5), 1003 General Physics (5); STAT/MATH 3502 Statistical Inference I (4)

Physical Education

Completion of the Single Subject Matter Preparation Program in Physical Education is certified by the Department of Kinesiology and Physical Education. The Single Subject Matter Preparation Program in Physical Education requires 91-95 units. For additional information, contact the Department of Kinesiology and Physical Education (Physical Education Bldg. 130; Tel. 510-885-3061).

Required Courses (91-95 units)

BIOL 2010 Human Physiology and Anatomy I (or 2011) (5)

DANC 3241 The Dance Experience (3)

EDUI 5090 Computer Applications for Educational Settings (4)

KPE 3072 Individual and Dual Sports (3)

KPE 3075 Aquatics and Outdoor Education (3)

KPE 3079 Combatives and Fitness Activities (3)

KPE 3080 Team Sports and Field Sports (3)

KPE 3300 Kinesiological Measurement (5)

KPE 3305 Structural Kinesiology (5)

Science

KPE 3310 Biomechanics (5)
KPE 3320 Exercise Physiology (5)
KPE 3330 Motor Learning and Control (5)
KPE 3700 History of Sport and Physical Education (4)
KPE 3740 Philosophical Foundations of Sport and Physical Education (4)
KPE 3750 Sport in Contemporary Society (4)
KPE 4004 Elementary School Physical Education (4)
KPE 4006 Secondary School Physical Education (4)
KPE 4008 Physical Education for Exceptional Individuals (4)
KPE 4031 Professional Field Experience II (2, 2)
KPE 4340 Motor Development (4)
KPE 4650 First Aid and Safety (4)

KPE activities (6-10)

At least one in each of swimming, combative, team, individual, fitness activities

At least one intermediate and one advanced activity

Completion of the Single Subject Matter Preparation Program in Science is certified by the College of Science. The program may be completed by students in any major, but will overlap major requirements to the largest extent in Environmental Science, Biological Science, Chemistry, Geology, and Physics. The Single Subject Matter Preparation Program in Science requires 89-112 units. A significantly revised Single Subject Matter Preparation Program in Science with concentrations in the four science subdisciplines is scheduled for implementation during the 2004-2005 academic year and will replace the current program. Prospective students must contact the Program Coordinator for program requirements.

For information regarding the Single Subject Matter Preparation Program in Science for prospective secondary school science teachers, contact the Single Subject Matter Preparation Coordinator, Diane Williams, in the Department of Geological Sciences (North Science 329; Tel. 510-885-4575).

I. Breadth Courses (60-63 units)

BIOL 1401 Molecular and Cellular Biology (5)
BIOL 1402 Plant Biology (5)
BIOL 1403 Animal Biology (5)
BIOL/CHEM/GEOL/PHYS 3800 Achievements of Women in Science (4)
CHEM 1101-2-3 General Chemistry (15)
GEOL 1001 Introduction to the Earth Sciences (or 1003 or 1004) (4)
GEOL 1002 Environmental Geology Laboratory (2)
MATH 1300 Trigonometry and Analytic Geometry (4) or MATH 1304 Calculus I (4)
PHIL/SCI 3335 Science, Technology and Values (4)
PHYS 1001-2-3 General Physics (15) or PHYS 2701-2-3 Introductory Physics (12)

II. Concentration (29-49 units)

Select ONE of the following concentrations: 1) Biological Sciences, 2) Chemistry, 3) Geoscience, or 4) Physics. *Course requirements for the concentrations may be obtained from the*

Social Science

Completion of the Single Subject Matter Preparation Program in Social Science is certified by the Department of History. The program may be completed by students in any major, but overlaps major requirements in several Social Science fields such as History, Political Science, Geography, and Economics. The Single Subject Matter Preparation program in Social Science requires 73 units. For additional information, contact Assistant Professor Jessica Weiss in the Department of History (Meiklejohn Hall 4031; Tel. 510-885-3239).

I. Core Curriculum (49 units)

History (24 units)

- HIST 1014 World Civilizations I (or 1017) (4)
- HIST 1015 World Civilizations II (or 2018) (4)
- HIST 1016 World Civilizations III (or 2019) (4)
- HIST 1101 History of the United States to 1877 (4)
- HIST 1102 History of the United States since 1877 (4)
- HIST 3500 History of California (4)

Political Science (8 units)

- POSC 1201 American Political Institutions (4)
- POSC 1202 Public Policy/California Politics (4)

Geography (4 units)

- GEOG 1000 Introduction to Geography (4)

Economics (8 units)

- ECON 2301 Principles of Microeconomics (4)
- ECON 2302 Principles of Macroeconomics (4)

Behavioral Science (4 units)

- One of the following: ANTH 1000, PSYC 1000 (or one of 1001, 1005, 2004, or 2009), SOC 1000 (or one of 1001, 1002, 2001, or 2002)

Capstone Course (1 unit)

- HIST 4500 The California History-Social Science Framework (1)

II. Breadth Requirements (24 units)

History (4 units)

- One of the following: HIST 3411, 3412, 3413, 3414, 3415, 3416, 3417

Political Science (4 units)

- One of the following: POSC 3111, 3112, 3410

Geography (4 units)

- One of the following: GEOG 3500, 3505

Multiculturalism (4 units)

- One of the following: E S 3810; SOC 3520; WOST/E S 3420

Electives (8 units)

Eight upper division units in one or more Social Sciences selected from the following departments: Anthropology, Economics, Geography and Environmental Studies, History, Human Development, Political Science, Psychology, Sociology and Social Services, Social Sciences courses in Ethnic Studies. These courses may not include courses used to satisfy requirements above.

III. Assessment Requirements

No more than 8 units may be taken on a CR/NC basis. No more than 8 units with a grade below "C" may be submitted in fulfillment of any program requirement. To successfully complete the program, a student must have a minimum 2.5 GPA in courses taken to fulfill program requirements or complete additional coursework to be determined by the program advisor. Students must successfully complete the "capstone course" in the final quarter of their participation in the program.



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Department Information

General Information

Undergraduate Courses

General Studies

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Academic Programs and Graduate Studies
 General Education Office: Warren Hall, LM 55
 Phone: (510) 885-2941

General Education Coordinator: Sally Murphy (Communication)

Please consult the 2006-2007 online catalog for any changes that may occur.

GS courses are interdisciplinary courses not housed in any department or college. They are primarily designed for General Education purposes.

The course prefix for the following courses is GS.

- 1010** General Education Activities (1)
 Integrates thematic and basic subject course content. Builds communities to support attainment of expected G.E. course outcomes through group and individual strategies. Identifies learning styles of individual students. Integrates academic support services. Must be taken three times for credit, once each quarter of the frosh year. A-F grading only. Two hrs. act.
- 1011** General Education Activities I (1)
 Orientation to the University and its services. Academic skill development in support of linked cluster course. Development of academic skills needed for success in college. Beginning development of students' portfolio. A-F grading only. Co-requisite: concurrent enrollment in linked Freshman cluster and skill courses. Two hrs. act.
- 1012** General Education Activities II (1)
 Academic skill development in support of linked cluster course. Continued development of student portfolio. Field trips. A-F grading only. Co-requisite: concurrent enrollment in linked Freshman cluster and skill courses. Two hrs. act.
- 1013** General Education Activities III (1)
 Academic skill development in support of linked cluster

course. Service learning or other activity complementary to cluster theme. Completion of student portfolio. Field trips. A-F grading only. Co-requisite: concurrent enrollment in linked Freshman cluster and skill courses. Two hrs. act.

- 3998** Honors Research (1-4)
Students in the University Honors Program work individually or in small groups with a faculty mentor on a research project. Maximum of 4 units applicable to degree. Prerequisites: admission to Honors Program, Junior standing or above.
- 3999** Honors Seminar (1)
Students in the University Honors Program present the results of their research projects to their peers. May be repeated once for credit. Prerequisites: admission to Honors Program, Junior standing or above, GS 3998.
- 4999** Senior Honors Thesis (1)
Writing of a senior honors thesis in preparation for graduation from the University Honors Program. Prerequisites: admission to Honors Program; GS 3998, 3999; Senior standing.



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Sociology

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Department Information

Department of Sociology and Social Services
 College of Arts, Letters, and Social Sciences
 Office: Meiklejohn Hall 3095
 Phone: (510) 885-3173

Professors: Diane R. Beeson (Chair), Benjamin P. Bowser, Benjamin G. Carmichael, Juan L. Gonzales Jr., Sonjia P. Redmond, Karl L. Schonborn, Young I. Song, Willem W. Van Groenou

Associate Professors: Nan P. Chico, Efren N. Padilla

Assistant Professors: Maxine Craig, Carl Stempel, Rebecca A. Van Voorhis

Lecturers: Vibha P. Chandra, John Dale, Michael K. Schutz

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

Cal State Hayward offers a major in Sociology that leads to the Bachelor of Arts degree. The major contains two options: (1) Sociology and (2) Social Services.

The Sociology option is designed for students with career interests in the public sector or business or entry into law school, public administration, or graduate work in Sociology. Sociology option students must take three of five courses in the area of social diversity. Any of the upper division courses offered by the department may be used to complete the additional 28 required units.

The Social Services option is designed to prepare students for beginning practice in a social services agency or going on to graduate study in social work, counseling or public administration. In the Social Services option, students take a variety of courses including two quarters of field placement, where they work for

Career Opportunities

credit in a social services agency.

The core requirements for all majors include courses in social theory and research methods. The research methods sequence includes training in applied social research and computer applications for the social sciences.

Correctional Officer • Criminologist • Employee Relations Representative • Employment Counselor • Human Resource Representative • Industrial Sociologist • Market Research Analyst • Migration Specialist • Occupational Analyst • Parole Officer • Public Health Statistician • Public Relations Representative • Research Assistant • Social Ecologist • Social Worker • Teacher • Urban Planner • Urban Sociologist • Vocational Rehabilitation Counselor

Features

The department faculty includes both sociologists and social workers who have expertise in the areas of family and interpersonal relationships, social theory, drug and alcohol abuse, applied social research, demography, aging, urban sociology, sports and leisure, sexuality, social conflict and violence, crime, international development, culture, social psychology, emotions, medical sociology, and minority and immigrant groups.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 61 units; the B.A. degree requires a total of 180 units.

- I. Lower Division (4 units)
SOC 1000 Introduction to Sociology (or one of 1001, 1002, 2001, or 2002) (4)
- II. Upper Division (52 units)
 - A. Core Requirements (12 units)
SOC 3310 Sociological Theory (4)
SOC 4111 Methods of Sociological Research I (4)
SOC 4112 Methods of Sociological Research II (4)
 - B. Option Requirement (40 units)
Elect Option 1 or Option 2
 1. *Sociology Option (40 units)*
 - a. Three of the following diversity courses (12 units):
SOC 3200 Social Demography (4)
SOC 3420 Social Inequality (4)
SOC 3425 Prejudice and Discrimination (4)
SOC 3520 Sociology of Minority Groups (4)
SOC 3710 Social Policy (4)
 - b. Option electives: complete 28 units from upper

division Sociology courses. Up to 12 units of upper division Statistics, selected under advisement, may be counted as Sociology electives.

2. *Social Services Option (40 units)*

SOC 3425 Prejudice and Discrimination (4) or SOC 3520 Sociology of Minority Groups (4)

SOC 3700 Introduction to Social Services (4)

SOC 3710 Social Policy (4)

SOC 3720 Human Behavior in the Social Environment (4)

SOC 4716 Social Work Methods (2)

SOC 4718 Field Practicum (4)

SOC 4719 Field Practicum Seminar (2)

Option electives: Complete 16 units from upper division Sociology courses. (Up to 8 units of upper division Statistics courses, selected under advisement, may be counted as Sociology electives.)

III. Courses in Supporting Fields (5-17 units)

STAT 1000 Elements of Probability and Statistics (5)

Option Electives (see above for Statistics substitutions for Sociology electives) (0-12)

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

The minor consists of 28 units and must be declared by the end of Junior year.

I. Lower Division (4 units)

SOC 1000 Introduction to Sociology (or one of 1001, 1002, 2001 or 2002) (4)

II. Upper Division (8 units)

SOC 3000 Introduction to Sociological Research (4)

SOC 3310 Sociological Theory (4)

III. Electives (16 units)

Select 16 units from any other 3000 or 4000 level sociology courses. (Any Statistics course may be substituted for one Sociology course.)

Sociology Option: Liberal

Area I (4 units)

SOC 1000 Introduction to Sociology (or 1001, 1002, 2001, or 2002) (4). *Note:* SOC 1000 should be taken at the Hayward campus or at a community college.

Area VII (Credential Track) or Area VI (General Track)
(24 units)

SOC 3310 Sociological Theory (4)

SOC 3000 Introduction to Sociological Research (4) or SOC

4111 Methods of Sociological Research I (4)

Four additional upper division Sociology courses (16)

The course prefix for the following courses is SOC.

1000 Introduction to Sociology (4)

[CAN SOC 2]

Introductory analysis of (a) the structure and functioning of human groups and (b) interrelations between groups; changes in (a) and (b). Not open to those with credit for SOC 1001, 1002, 2001, or 2002.

1001 Introduction to Sociology of Science and Technology (4)

Introductory analysis of (a) the structure and functioning of human groups and (b) interrelations between groups as affected by developments in science and technology; changes in (a) and (b). Not open to those with credit for SOC 1000, 1002, 2001, or 2002.

1002 Introduction to Sociology of Individual and Society (4)

Introductory analysis of (a) the structure and functioning of human groups and (b) interrelationships between groups emphasizing influences on the individual; changes in (a) and (b). Not open to those with credit for SOC 1000, 1001, 2001, or 2002.

2001 Introduction to Urban Sociology (4)

Introductory analysis of (a) the structure and functioning of human groups and (b) interrelations between groups with an emphasis on urban and city issues; changes in (a) and (b). Not open to those with credit for SOC 1000, 1001, 1002, or 2002.

2002 Introduction to Sociology of Law and Society (4)

Introductory analysis of (a) the structure and functioning of human groups and (b) interrelations between groups with an emphasis on the influence of legal and ethical issues; changes in (a) and (b). Not open to those with credit for SOC 1000, 1001, 1002, or 2001.

2510 Self, Family, and Culture (4)

Primary group relationships as influenced by cultural heritage, mass media, and economic and political circumstances. Methods of phenomenology and self-reflection in the search for effective responses to the challenges of our times.

3000 Introduction to Sociological Research (4)

Methodological problems in sociology in relation to the

analysis of social organizations; research strategies; utilization of associated laboratory exercises to illustrate the important aspects of the research process in sociology. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002). (Y)

- 3100** Seminar in Human Ecology (4)
Introduction to theory and research on human ecosystems, with their interrelated components of population, environment, technology, and organization. Forms of social organization which result from the interaction of the components. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002).
- 3200** Social Demography (4)
Population growth, distribution and composition. Introduction to population theories and analytic techniques. Individually supervised student projects. Three hrs. lect., 2 hrs. lab. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002).
- 3310** Sociological Theory (4)
Critical analysis of the works of leading sociological theoreticians from the middle of the 19th century to the present. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002). (Y)
- 3410** Sociology of the Family (4)
The family with respect to its institutional, organizational and interactional character. Comparative study and analysis. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002). (Y)
- 3411** Sociology of Gender (4)
Variations in sex roles with emphasis on sociological research. Social definitions of maleness and femaleness. Popular theories purporting the superiority of either gender. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002). (Y)
- 3412** Marriage and Sex (4)
Social norms and practices surrounding marriage, love, and sex in American society. Emphasis on premarital sex, mate selection, marital compatibility, marital power, and marriage in the middle and later years. (Y)
- 3413** Sociology of Parenting (4)
Exploration of practical and theoretical issues in contemporary parenting. Various approaches to childrearing examined and critiqued from a sociological perspective. Parent-child interaction, working mothers, nurturing fathers, single parenting, joint custody, family systems, blended families, and society's impact on parenting.
- 3415** Sociology of the African American Family (4)
Sociological analysis of the African American family and family life. Emphasis on sociological theory and research focusing on African American families and family life. Application of social systems approach emphasizing the

interrelationships of social and institutional structure with the various subsystems of the African American family. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002).

- 3416** Sociology of the Mexican American Family (4)
Family in Mexican American culture, the roles of family members in intracultural and intercultural relations. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002).
- 3419** Death and Dying (4)
Trends and patterns in death and dying including historical perspectives, death in popular culture, demography of death, medical technology and dying, dying patient's perspective, survivors, and ethical dilemmas of death and dying.
- 3420** Social Inequality (4)
Nature, origins, forms, and consequences of structured inequalities. Focus on the material circumstances, life styles, and life chances of social classes, including minorities. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002).
- 3425** Prejudice and Discrimination (4)
Identifying overt, covert, and subtle discrimination, prejudice, stereotyping, and scapegoating on the basis of such factors as race, sex, class, disability. Legislative and social policy remedies, outcomes.
- 3431** Seminar in World Development (4)
Critical review of social change and ideas about development as they affect villagers, the urban poor, ethnic and racial minorities, and military and industrial elites. The conflict between the rich and the poor in an international context.
- 3480** Violence and Conflict (4)
Conduct, causes, and consequences of violent conflicts between individuals, groups, organizations, communities, societies. Resolution techniques utilizing violence, nonviolence, mediation, peacekeeping. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002).(Y)
- 3500** Social Psychology (4)
Current theory and research on the individual in society, small groups, complex organizations, and interpersonal interaction. Socialization, social structure, attitude formation, and group structure. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002).
- 3505** Sociology of Emotions (4)
Theoretical and substantive issues in the sociology of emotions. Social psychological focus on the influence on emotional experiences of social structure and the reciprocal effects of emotional expression on social conditions. Particular attention to the role of emotions in strengthening or weakening social solidarity.

- 3507** Filipino American Communities (4)
Sociological analysis of the construction of Filipino American communities. Emphasis on the economic realities of Filipino American communities in the Bay Area.
- 3510** Sociology of Identity (4)
The social nature and bases of identity formation in groups and individuals, including the changing identities of race, ethnicity, nationality, gender, sexuality, consumption, and class. Historical perspective on the problematization of identity resulting from shifts in social, cultural, economic, technological, and power relations in the United States and the world including the phenomenon of transnationalism.
- 3520** Sociology of Minority Groups (4)
Sociological and social-psychological theories on minority status and minority relations with special emphasis on racial, ethnic and sexual minorities in the United States.
(Y)
- 3525** The African American Male (4)
Sociological analysis of the adolescent African American male in the urban United State. Application of the social systems approach with special emphasis on the role of race, class, family, and institutional structures in the adolescent African American male. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002).
- 3550** Filipino Labor/Immigration (4)
Sociological analysis of Filipino labor and immigration. The impact on work and employment of global restructuring and postmodern condition on Filipinos particularly in North America.
- 3610** Sociology of Religion (4)
Functions of religion in society, the interrelations between religion and social structure, religious authority and leadership, the nature of religious movements.
Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002).
- 3620** Sociology of Education (4)
Institutional character of education; the relationship of education as a social institution to aspects of political, economic and family organization; social relations within the school; school culture and roles. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002).
- 3700** Introduction to Social Services (4)
Introduction to the contemporary and historical nature of social service agencies in the United States, and the delivery of services to children, families, the elderly, and other populations in need. Direct and indirect roles of workers in the social services and the profession of social work.
- 3710** Social Policy (4)
Contemporary and historical nature of social policy in the United States, emphasizing at-risk populations and disenfranchised groups. Social problems such as

homelessness, child abuse, poverty, and immigration. (Y)

- 3720** Human Behavior in the Social Environment (4)
Primary theories of human behavior and developmental stages across the life span. Special attention to the interplay between human development and social environment.
- 3730** Juvenile Delinquency (4)
Juvenile justice system and the theories seeking to explain juvenile delinquency. Various methods used to prevent, treat and rehabilitate youthful offenders. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002).
- 3745** Social Deviance (4)
Formation and composition of various subcultures whose norms and values conflict with those of wider society. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002).
- 3750** Alcohol and Drug Abuse (4)
Social issues involved in alcohol and drug abuse with assessment of sociological theories of drug abuse and prevention. Social problems associated with misuse of alcohol, narcotics, and other drugs. (Y)
- 3880** Work and Professions (4)
Research and theory on the social transformation of work and professions, structure of labor markets, occupational choice, work and social stratification, historical division of labor. Significance of race, ethnicity, gender, and age in relation to work and professions. Prerequisites: upper-division standing and SOC 1000 (or one of 1001, 1002, 2001, or 2002); or consent of instructor.
- 3890** Sociology of Organizations (4)
The structure and social dynamics of organizations. Social sources of stratification, cohesion, conflict and change within varying contexts such as business, government, religion, education, and politics. Prerequisites: upper-division standing and SOC 1000 (or one of 1001, 1002, 2001, or 2002); or consent of instructor.
- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 8 units. A maximum of 4 units will be accepted toward the Sociology major; a maximum of 4 units will be accepted toward the Sociology minor. CR/NR grading only. Prerequisites: at least a 2.0 GPA; departmental approval of activity.
- 3999** Issues in Sociology and Social Services (4)
Readings, discussion, and research on contemporary and/or significant issues in sociology and social services. May be repeated for credit when content varies.
- 4111** Methods of Sociological Research I (4)
The nature and application of the scientific method in social research. The use of different techniques for specific

problems; descriptive and analytical procedures employing the statistical, the historical, and comparative methods. Use of such research instruments as the interview, the questionnaire, and observation. Analysis of data and reporting of results. Individual projects. Two hours lect., 4 hrs. lab. Prerequisites: SOC 1000 (or one of 1001, 1002, 2001, or 2002); STAT 1000 (Y)

- 4112** Methods of Sociological Research II (4)
The design of sociological studies. Advanced problems of sampling and measurement. Individual projects and instruction. Two hrs. lect., 4 hrs. lab. Prerequisite: SOC 4111. (Y)
- 4400** Sociology of Culture (4)
Sociological analysis of historical and contemporary culture with attention to issues of culture and power, production of culture, status and cultural consumption, audience reception, and social change. Prerequisites: upper-division standing and SOC 1000 (or one of 1001, 1002, 2001, or 2002); or consent of instructor.
- 4450** Urban Sociology (4)
Development of metropolitan areas as distinctive patterns; problems presently facing this population in urban growth, transportation, race relations, poverty, housing, and education. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002). (Y)
- 4716** Social Work Methods (2)
Methods and skills of professional practice in preparation for Field Practicum, with emphasis on individuals, small groups, and communities from a transcultural perspective. Techniques of casework, group work, and community organization. Prerequisite: SOC 3700.
- 4718** Field Practicum (4)
Placement of students in suitable social services agencies with supervised instruction. Twelve hours per week required in placement. CR/NC grading only. Only open to Sociology majors with Social Services Option. Prerequisites: Senior standing, SOC 3700, SOC 4716, and consent of instructor. Must be taken concurrently with SOC 4719. (W)
- 4719** Field Practicum Seminar (2)
Bi-weekly seminar to be taken concurrently with SOC 4718. Relates field practicum experiences to social work practice and principles. Only open to Sociology majors with Social Services Option. Prerequisites: Senior standing, SOC 3700, SOC 4716, and consent of instructor. (W)
- 4720** Medical Sociology (4)
Sociocultural and interactional components in the etiology and treatment of illness (physiological, psychosomatic and "mental"); medical and paramedical professions. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002).
- 4730** Police and Society (4)

The role police play as agents of formal social control.
Emphasis on the relationship between police management
and social change.

- 4740** Criminology (4)
Meaning of crime, its origins and its functions; current
practices in respect to the identification and treatment of
criminal behavior. Prerequisite: SOC 1000 (or one of 1001,
1002, 2001, or 2002). (Y)
- 4750** Child Welfare (4)
Trends in public policy regarding programs for the
protection and care of the child in American society.
Conditions pertinent to the socialization of the child; the
implications of these conditions for the development of
such programs as foster care, adoptions, institutions,
school social work, and corrections. Prerequisite: SOC
1000 (or one of 1001, 1002, 2001, or 2002).
- 4800** Topics Seminar (4)
Contributions of sociological theories, methods, and
perspectives to selected topics beyond regular courses.
Requires individual research. May be repeated once for
credit with different topic. Prerequisites: upper-division
standing and SOC 1000 (or one of 1001, 1002, 2001, or
2002); or consent of instructor.
- 4900** Independent Study (1-4)



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Department Information

Department of Geography and Environmental Studies
 College of Arts, Letters, and Social Sciences
 Office: Robinson Hall 220
 Phone: (510) 885-3193; FAX: (510) 885-2353

Professor Emeritus: Herbert M. Eder

Professors: David J. Larson (Chair), Scott Stine

Associate Professors: Karina Garbesi, Michael Lee, Gang Li, David Woo

Lecturer: Ellen L. Woodard

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

Geography is the study of the spatial distributions and spatial relations within the human-environment system. Attention is focused on historic and contemporary human activities within the context of the physical-biotic and cultural environment, and on humanity as one of the major agents of change of the earth's surface. A curriculum in Geography helps students understand the world's landscape and how it has been transformed or altered by either the earth's natural processes or human modifications.

At Cal State Hayward, students can choose between a Bachelor of Science (B.S.) degree and a Bachelor of Arts (B.A.) degree with a major in Geography. A B.S. degree major is appropriately suited for students with career objectives in the professional field

Career Opportunities

of Geography. It is also highly recommended for those planning to enter a graduate school program in Geography. Obtaining a Bachelors of Arts degree major provides for a liberal education, and prepares students for positions in business, government, foreign service, and especially teaching. Combining geography with coursework in other social sciences or with other science fields is excellent preparation for teachers in secondary education. Both majors require 61 units, 16 lower division and 45 upper division.

Aerial Photo Interpreter • Agricultural Geographer • Archaeologist • Cartographer • Census Analyst • Climatologist • Community Development Specialist • Demographer • Ecologist • Economic Development Analyst • Environmental Analyst/Planner • Map Curator • Recreational Resource Planner • Soil Conservationist • Transportation Planner • Urban Geographer • Zoning Specialist/Surveyor

Features

With the arrangement of a faculty advisor, students in the Bachelor of Science program can select from the following fields of concentration: biogeography, cartography, cultural geography, economic geography, historical geography, history and philosophy of geography, physical geography, regional geography.

The department also offers a Certificate Program in Cartography and G.I.S. for those wanting to learn skills and methods in data collection, interpretation, and analysis as well as the design, compilation, production, and reproduction of maps.

Geographic internships are available. Individual students may be assigned to public, private, or volunteer agencies.

Scholarship

Richard and Evelyn Thoman Scholarship in Geography and Environmental Studies

One \$500 scholarship awarded for the academic year for full-time undergraduate or graduate studies. Awards are limited to students with upper division or graduate standing. A grade point average of 3.3 or higher is required, and demonstrated scholastic and creative ability in the field of Geography or Environmental Studies.

Major Requirements (B.A.)

The major consists of 61 units in geography; the B.A. degree requires a total of 180 units.

- I. Lower Division (16 units)
 - GEOG 2100 Physical Geography (4)
 - GEOG 2300 Cultural Geography (4)
 - GEOG 2310 Economic and Resource Geography (4)
 - GEOG 2410 Introduction to Maps (4)

- II. Upper Division (45 units)

GEOG 3400 Field Geography of the S. F. Bay Region (4)
GEOG 3450 Literature and Research Aids (5)

One Physical Course (4 units):
GEOG 3115 Physical Landscape Analysis

One Technical Course (4 units) selected from:
GEOG 3410 Air-Photo Interpretation
GEOG 3600 Cartographic Principles

One Cultural Course (4 units) selected from GEOG 3000-level courses with consent of advisor.

One Resource Course (4 units) selected from:
GEOG 3000 Resource Management
GEOG 3320 Geography of World Agriculture
GEOG 4320 Energy Resources and Management
GEOG 4350 Water Resources and Management

One Regional Course (4 units) selected from 3500 series, except GEOG 3525

Plus 16 units of electives in geography, including not more than 4 additional units in the 3500 series, and to include at least 8 units of the 4000-level series by advisement.

Note: The following courses or their equivalents have to be completed if a student in the B.A. program in Geography desires to enter the M.A. degree program in Geography:

GEOG 3410 Air-Photo Interpretation

GEOG 3600 Cartographic Principles

GEOG 3000-level course in applied field studies, with consent of advisor

III. Proficiency Requirements

Proficiency in reading a foreign language, at the first-year level, must be demonstrated by successful completion of a departmental examination; or proficiency in statistics, at the level of a 3000-series course, must be demonstrated by passing an examination set by the Statistics Department; or proficiency in Mathematics, at the level of Calculus III, must be certified by the Department of Mathematics and Computer Science. These examinations will be given once each quarter during the first week of instruction. Appropriate coursework will be recommended to students who do not pass an examination.

The major consists of 61 units in Geography; the B.S. requires a total of 180 units.

I. Lower Division (16 units)

GEOG 2100 Physical Geography (4)
GEOG 2300 Cultural Geography (4)
GEOG 2310 Economic and Resource Geography (4)

Major
Requirements
(B.S.)

GEOG 2410 Introduction to Maps (4)

II. Upper Division (45 units)

GEOG 3410 Air-Photo Interpretation (4)

GEOG 3450[□] Literature and Research Aids (5)

GEOG 3600 Cartographic Principles (4)

GEOG 3000-level course in applied field studies, with consent of advisor (4)

One Physical Course (4 units):

GEOG 3115 Physical Landscape Analysis

One Cultural Course (4 units) selected from the group comprising the 3300 series

One Field Course (4 units) selected from:

GEOG 4125 Field Course in Physical-Biotic Geography

GEOG 4325 Field Course in Cultural-Urban Geography

Two Regional Courses (8 units) selected from the 3500 series, except GEOG 3525

Plus 8 units of electives in Geography, in the 4000 series by advisement.

III. Proficiency Requirements

Proficiency in reading a modern language, at the first-year level, must be demonstrated by successful completion of a departmental examination; or proficiency in statistics, at the level of a 3000 series course, must be demonstrated by passing an examination set by the Statistics Department; or proficiency in Mathematics, at the level of Calculus III, must be certified by the Department of Mathematics and Computer Science. These examinations will be given once each quarter during the first week of instruction. Appropriate coursework will be recommended to students who do not pass an examination.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

The minor consists of 36 units.

GEOG 2100, 2300, 3410 (12 units)

Two regional courses (3500 series) from different instructors (8 units)

Four courses from one of the following groups (16 units):

Certificate in Cartography and GIS

Geography Option: Liberal Studies

Undergraduate Courses

A. Human Geography Option: GEOG 2310, 3300, 3320, 3360

B. Physical-Biotic Resources Option: GEOG 3115, 3120, 4320, 4350

The Cartography and GIS Certificate Program consists of 20 units. It is designed to prepare students in methods of data collection, interpretation, and analysis as well as the design, compilation, production, and reproduction of maps, thus enabling students to be current in the field of cartography.

Select at least 20 units from the following:

- GEOG 3410 Air-Photo Interpretation (4)
 - GEOG 3600 Cartographic Principles and Graphic Communication (4)
 - GEOG 3605 Computer Cartography (5)
 - GEOG 4425 Remote Sensing of Earth Environments (4)
 - GEOG 4600 Introduction to Geographic Information Systems (5)
 - GEOG 4605 Environmental Applications of GIS (5)
-

Area I (8 units)

Two of the following:

- GEOG 2100 Physical Geography (4), 2300 Cultural Geography (4), 2310 Economic and Resource Geography (4)

Area VII, Credential Track, or Area VI, General Track (24 units)

- GEOG 2410 Introduction to Maps (4)
- GEOG 3400 Field Geography of the San Francisco Bay Region (4)

Either GEOG 3500 Geography of the United States and Canada (4) or GEOG 3505 Geography of California (4)

One of the following (4 units):

- GEOG 3115 Physical Landscape Analysis (4), 4125 Field Course in Physical-Biotic Geography (4)

One of the following (4 units):

- GEOG 3320 Geography of World Agriculture (4), 3340 Urban Planning (4), 3360 Historical Geography of North America (4)

One of the following (4 units):

- GEOG 3000 Resource Management (4), 4320 Energy Resources and Management (4), 4350 Water Resources and Management (4)
-

The course prefix for the following courses is GEOG.

Introductory

- 2100** Physical Geography (4)
[CAN GEOG 2]
Major components of the physical environment, including landforms, climate, vegetation, and soils. Three hrs. lect., 2 hrs. act. (Y)
- 2200** Geography of Asian Americans (4)
Asian American settlement patterns in the United States. The socio-economic profile of Asian Americans based on census data. International migration models and the push-pull factors of Asian immigration to the United States. The impact of Asian immigration on the demographic dynamics of America.
- 2300** Cultural Geography (4)
[CAN GEOG 4]
Thematic introduction to the cultural systems operating to change the earth's surface; contemporary topics of human population, technology, social organization, spatial interaction, communication, and ideology. One half-day field trip required. (Y)
- 2310** Economic and Resource Geography (4)
Location and linkages of economic activities as they relate to resource management. How goods and services produced by and for humans are geographically organized. Special emphasis on the historical antecedents of contemporary economic processes and international issues. (Y)
- 2400** Geography of World Development (4)
Global wealth, poverty and inequality from a geographical perspective. Trends in important economic, environmental and sociocultural dimensions of world development. The who, why, and when and where aspects of the distribution of wealth at selected city, national and global scales.
- 2410** Introduction to Maps (4)
Reading and interpretation of commonly used maps; map appreciation, design, and evaluation; art of map-making. Two hrs. lect., 4 hrs. act. (Y)
- 3000** Resource Management (4)
The earth as a source of land, water, biotic, mineral and energy resources. The role of human populations in their use, development, and exploitation. (A)
- 3030** Exploring Geographic Information Systems (4)
Fundamentals of location-related information management, manipulation, and display. Usage of commercially available GIS software in business; education; and physical, social and life sciences. Two hrs. lect., 4 hrs. act.

Intermediate

- 3115** Physical Landscape Analysis (4)
The geomorphic evolution of the landscape with emphasis on the late Cenozoic. Processes and landscape histories, especially as they relate to climate and climatic change.

One all-day Saturday field trip required. Prerequisite: GEOG 2100. Two hrs. lect., 4 hrs. act. (Alt. Y)

- 3120** Climatic Change (4)
Late Cenozoic changes and variations in climate with emphasis on the geological, geomorphological, and biotic records. Causes (natural and anthropogenic) and consequences (natural and cultural) of climate change. Prerequisites: GEOG 3115 or 4130 or consent of instructor. (Alt. Y)
- 3320** Geography of World Agriculture (4)
Global agricultural systems and regions; environmental constraints and cultural practices; changing patterns of global and regional crop production.
- 3340** Urban Planning (4)
Overview of planning processes conducted at county and city levels. Includes legal background, administrative processes, planning issues, research methods and case studies. It is recommended that GEOG 3330 be taken before GEOG 3340.
- 3360** Historical Geography of North America (4)
Historical-geographic processes of exploration, migration, settlement, urbanization, cultural integration, land use and resource exploitation from the 15th through the 20th centuries. (Y)
- 3400** Field Geography of the San Francisco Bay Region (4)
A wide range of field experiences in observing, analyzing, and understanding the spatial aspects of physical and cultural interactions of the Bay Area as a region. Prerequisites: GEOG 2100 or 2300 or 2310. Eight hrs. act.
- 3405** Field Regional Geography (1)
Reconnaissance field study of geography of selected areas in California and adjoining regions. May be repeated but no more than two units may be applied to Geography major. Must be taken CR/NC. Thirty hrs. field/lab. (Y)
- 3410** Air-Photo Interpretation (4)
The principles of airborne remote sensing and image interpretation for environmental resource management. Hands-on experience in photogrammetric stereoscopy and image measurement of spatial data. Two hrs. lect., 4 hrs. act. (W)
- 3450** Literature and Research Aids (5)
Seminar in the basic geographical and environmental literature, source materials and research methods. Intensive exercises in both written and oral communication. Fulfills the University Writing Skills requirement for students who began work on the present degree before Fall Quarter, 1985.
- 3500** Geography of the United States and Canada (4)
Systematic analysis of the distinctive human-use regions of the United States and Canada emphasizing their character,

personality, and economic profile. Case studies of resource use dilemmas. (Y)

- 3505** Geography of California (4)
The natural and cultural processes which have shaped the landscape of contemporary California. California's varied environments, especially how they have been perceived, modified, and significantly altered by humans. (F, W, Sp)
- 3510** Geography of Mexico, Central America, and the Caribbean Islands (4)
Historical and contemporary overview of the Middle American region, including studies of the environment, human occupancy and settlement patterns, and economic activities; problems of resource utilization. (Y)
- 3515** Geography of South America (4)
Distinguishing characteristics among the Andean countries of Spanish heritage, the Guianas, and the largest country-Brazil. (Y)
- 3525** Geography of the California Wine Country (3)
The physical, historical, and economic bases of California's wine industry: growing regions, wine types, distribution of vineyards and wineries, and recent developments. Optional field trips. Those students over 21 years of age who wish to participate in wine-tasting will be charged a miscellaneous course fee. Please consult the quarterly *Class Schedule* for the current fee.
- 3526** Field Geography of the California Wine Country (1)
Three Saturday field trips to selected California wine producing regions. Must be taken CR/NC. Prerequisite: Concurrent or prior enrollment in GEOG 3525.
- 3540** Geography of East Asia (4)
East Asia as a geographic region, including cultural and economic reform, transformation of regional identity. Studies of contemporary China, Japan, South Korea, and Taiwan as modern industrial powers. Regional role in geopolitics and the global economy. (Y)
- 3550** Geography of Southeast Asia (4)
Physical resources, patterns of land use, economic development, and urbanization; problems and prospects of mainland and island countries from Myanmar to Indonesia and the Philippines. This region is an Islamic, Buddhist, Hindu, Christian cultural complex. (Y)
- 3600** Cartographic Principles and Graphic Communication (4)
Fundamentals of map design and production. Emphasis on the humanistic and technical aspects of cartography. The essence of the map communication theory and gestalt theory of human perception; effective symbolization of spatial data. One hr. lect., 6 hrs. act. (F)
- 3605** Computer Cartography (5)
Introduction to the principles of modern digital cartography.

Hands-on experience in computer mapping. Basic concepts, software, hardware of computer cartography; spatial data structure and database management; and lab-oriented software applications. Prerequisites: GEOG 2410 and 3600. Two hrs. lect., 6 hrs. act. (W)

- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 8 units. A maximum of 4 units will be accepted toward the Geography major; a maximum of 4 units will be accepted toward the Geography minor. CR/NC grading only. Prerequisites: at least 2.0 GPA; departmental approval of activity. (A)
- 3999** Issues in Geography (4)
Readings, discussion, and research on contemporary and/or significant issues in geography. May be repeated for credit when content varies.

Advanced

- 4125** Field Course in Physical-Biotic Geography (4)
Problems and methods in the analysis, mapping and interpretation of the physical and biotic landscape, stressing interrelationships and change through time. Prerequisite: GEOG 2100 and consent of instructor. Eight hrs. act. (Alt. Y)
- 4130** Biogeography (4)
(See BIOL 4130 for course description.)
- 4320** Energy Resources and Management (4)
Distribution of sources, production trends, use patterns, potentials of water, wind, volcanic, tidal, solar, and other sources of power; emphasis upon fossil fuels and nuclear energy. Prerequisite: GEOG 2310 (Y)
- 4330** Sustainable Development (4)
Oxymoron or achievable goal? The major forces that shape national resource and economic development. Case studies that examine experiences with bilateral and multi-lateral development assistance. The close relationship between sustainable development, economics, demography, resource geography and the environment. Prerequisite: GEOG 3000.
- 4350** Water Resources and Management (4)
The historical, geographical, legal, and economic bases for the distribution and allocation of water, stressing California and the arid West; the environmental impact of water use; past and current issues and controversies in water distribution and redistribution. (Y)
- 4355** Watershed Management (4)
Principles and practices of integrated watershed management with special focus on multiple use watersheds in urbanized settings. Land use factors that

affect watershed hydrology, principal water quality problems, physical solutions, partnership approaches, compatible uses, applications of GIS. Prerequisite: GEOG 3000. Three hrs. lect., 2 hrs. act.

4425 Remote Sensing of Earth Environments (4)
Introduction to remote sensing applications on earth resource management. Focus on non-photographic earth observation systems such as near-infrared, thermal-infrared, and radar. Principles of remote sensing; types of imaging systems; and digital image processing. Prerequisites: GEOG 3410 and consent of instructor. Two hrs. lect., 4 hrs. act. (Sp)

4600 Introduction to Geographic Information Systems (5)
Introduction to spatial database management technology using computers to capture, store, update, manipulate, analyze, and display geographically referenced information for decision-making purposes. Prerequisite: GEOG 3605. Two hrs. lect., 6 hrs. act. (W)

4605 Environmental Applications of GIS (5)
Interdisciplinary applications of GIS technology on the mapping, monitoring, analysis, management and conservation of environmental resources such as water, land use, agriculture and wildlife. Prerequisite: GEOG 4600. Two hrs. lect., 4 hrs. act. (Sp)

4900 Independent Study (1-4)

Footnote

1 Fulfills Writing Skills Graduation Requirement for students who began working on the degree in Summer 1985, or earlier.



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Special Majors and Certificates

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Department Information

Academic Programs and Graduate Studies
Office: Warren Hall 859
Phone: (510) 885-3716

Professor: Carl J. Bellone (Associate Vice President, Academic Programs and Graduate Studies)

Coordinator: Rosanne Harris

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

The purpose of the Special Major and the Special Certificate programs is to allow students, with the advice and approval of knowledgeable faculty and administrators, to design their own academic programs tailored to their unique needs and interests.

An essential feature of any Special Major program is its interdisciplinary nature. At least two separate degree-granting programs must be involved. An undergraduate Special Major must be approved no later than the time when the student has 60 quarter units of work remaining to complete for the degree including at least 40 units in the Special Major. This is to ensure that a significant portion of the program is planned in advance by the student and his/her faculty advisors. The diploma will read Special Major In (program title).

The Special Major program should not be seen as a device to avoid certain requirements of a regular major, nor as a means to gain admission to an impacted program. Likewise, a Special Major cannot be developed in areas such as architecture, agriculture, and home economics where the campus currently lacks the necessary faculty expertise and physical facilities. Finally, a Special Major is not a self-study, independent study, or external degree program.

Major Requirements

The university offers both the B.A. and B.S. degrees with a Special Major. There are no clearly defined differences between

(B.A./B.S.)

the two degrees, although B.S. degrees tend to be applied programs, while the B.A. is usually considered a liberal arts and social sciences degree. Normally, the type of degree awarded for a Special Major reflects the degrees offered by the involved departments. To be eligible for a Special Major, a student must have a cumulative GPA of at least 2.30. A Special Major must be a coherent program organized around a sound academic theme. The title of a Special Major should be short (three or five words) and should describe the central academic theme of the program, not the student's career objectives unless the two coincide.

A Special Major must be fully approved before the student has fewer than 40 quarter units to complete the major and 60 for the degree. A Special Major must contain at least 52 quarter units for the B.A. or 54 quarter units for the B.S. degree. The maximum number of quarter units for the Special Major is 93 units for the B.A. and 102 units for the B.S., of which at least 36 are upper division (junior/senior level). Coursework in at least two different disciplines is required. The B.A. and B.S. degrees with a Special Major require a total of at least 180 units.

Courses in the Special Major are not applicable to the General Education-Breadth Requirements. (However, previously completed transfer evaluations will not be reevaluated). A student can take courses for G.E. purposes in departments involved in the major. However, any individual course used for G.E. cannot also be used in the major, except for courses which are exempt under the G.E. policy. (See the B.A./ B.S. Degree Requirements chapter.) Only one course from a department involved in the major can be applied to G.E.

A Special Major must comply with the standard graduation requirements for all students listed in the catalog chapter entitled B.A./B.S. Degree Requirements. (These include minimum units in residence, minimum units of credit, minimum 2.00 grade point averages, the U.S. history and institutions requirement, and the Writing Skills requirement if the student started working on the present degree on or after Fall quarter, 1977.)

Procedure

A student who contemplates developing a Special Major must have an overall and CSUH grade point average of at least 2.30 ("C+," Satisfactory). Forethought and planning need to precede any formal action. An information hand-out is available from the Office of Academic Programs and Graduate Studies, WA 859, or by calling (510) 885-3716, or on the web at www.csu Hayward.edu/cap/ugspec.html.

The prospective Special Major student must prepare a one page prospectus of at least 200 words describing the theme or central academic focus of the proposed program (including the departments to be involved), the reasons why the objective cannot be fulfilled through a regular major, the academic and experiential background the student will bring to the program, the occupational goals of the student in relation to the proposal, the approximate time frame for completion of the major and the degree, and other pertinent information. A sample prospectus for a hypothetical Special Major is included in the information hand-out. The student must also contact three faculty advisors in the involved departments, secure their support, and nominate them as

his/her Special Major committee. (One of these faculty should be designated as chair of the committee.)

The prospectus and the names of the three faculty advisors (and their departments) must be submitted to the Special Major Coordinator in the Office of Academic Programs and Graduate Studies before the student has fewer than 40 units left to complete in the proposed major and 60 units in the degree.

If the proposal is found academically sound and logistically feasible by the Associate Vice President, the Academic Programs and Graduate Studies Special Major Coordinator will forward copies of it to the proposed faculty committee members along with an explanation of the Special Major policies and procedures, copies of the student's transcripts, and a form for development and approval of the specific program of courses.

The three-person committee and the student must meet at a mutually acceptable time to design the program (i.e. to prepare the list of required and elective courses). When this is done, the form is completed, signatures of approval are affixed, and it is returned to the Special Major Coordinator. The Special Major Coordinator circulates the proposal to the deans of the involved colleges for commentary. After reviewing any comments, the Associate Vice President will act on the proposal. If it is approved, a final copy is typed and the coordinator and the student sign it. When the student comes in to sign and receive a copy, a "Change of Major" form must also be signed. The student will also be informed of the college from which he/she will graduate.

General Education

All students must also complete the general education-breadth and other graduation requirements for the baccalaureate degree. Normally, courses used for the Special Major can not be used for G.E., but transfer G.E. evaluations will not be redone. Check your catalog or see an advisor at the University Advisement Center for more information.

Special Certificate

The purpose of a Special Certificate is to give the student an opportunity to design in advance, with university approval, a program that will be certified upon completion. To obtain an undergraduate Special Certificate, an undergraduate or graduate student must complete a program of at least 20 quarter-units in upper-division courses with a GPA of 2.00. The program must provide a logical and coherent pattern of preparation for a limited objective. The title of the proposed certificate should carry no connotation of meeting a licensing requirement for professional practice. The student's proposed program must be developed with, and approved by, a faculty member knowledgeable in the field being certified.

Note: To obtain a graduate Special Certificate, a graduate student must possess a bachelor's degree from an accredited institution and complete at least 20 quarter units, of which at least half must be at the graduate 6000-level, with a minimum GPA of 3.00. See the Special Majors and Certificates chapter in the graduate programs section of this catalog for additional information.

Procedure

The student develops a proposed program with the advice and approval of a faculty member knowledgeable in the field of study. The completed "Undergraduate/Graduate Special Certificate Proposal" (found at www.csuhayward.edu/cap/speccert.html), with advisor and student approval, is forwarded by the advisor to the dean of the college in which the preponderance of courses will be taken. If the dean approves, he or she signs and sends the proposal to the Special Major Coordinator in the Office of Academic Programs and Graduate Studies. The Special Major Coordinator then sends a copy of the proposal to each of the other three college deans. The deans have 10 working days to enter an objection. If none is received and the Associate Vice President, Academic Programs and Graduate Studies, judges the proposal to be sound, the program will be approved. If any college dean objects, he or she must file written objections with the Special Major Coordinator within the 10 days. These will be considered by the Associate Vice President in deciding whether or not to approve the program. The student is notified in writing by the Special Major Coordinator about the final action on his/her proposal. A copy of an approved program is filed in the student's folder in the Registrar's Office. Upon completion of the Special Certificate program, the student applies to the Registrar and pays the fee to receive the certificate.



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Geology

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Department Information

Department of Geological Sciences
College of Science
Office: North Science 329
Phone: (510) 885-3486

Professor: Detlef A. Warnke (Chair)

Associate Professor: Jeffery C. Seitz,

Assistant Professors: Mitchell Craig, Luther M. Strayer

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

Geology is the study of the earth and of life and the natural processes occurring in or on the earth through time. Along with studying the impacts of human activities on the environment, students can learn about the causes of earth processes such as earthquakes, volcanoes, the formation of mountains, the effect of erosion and deposition, and the formation of rocks and minerals and their uses. Coursework combined with observations on field trips provide Cal State Hayward students with an understanding of natural processes and the human impact on the environment.

The undergraduate degree programs consist of required courses plus electives designed to meet the needs of students with objectives ranging from employment at the Bachelor's degree level, through preparation for a secondary school teaching credential, to graduate study in Geology. A B.S. major in Geology is the primary, professional program in Geology, and serves as preparation for employment in the field, usually on a technical level; those wishing to do independent geological work should plan on graduate study. The B.A. degree major is designed for persons who do not necessarily plan to become professional

Career Opportunities

geologists or to go on to graduate work. (Note: Transfer from the B.A. to the B.S. program or vice versa can be accomplished.)

Engineering Geologist • Environmental Geologist • Geochemist • Geologist • Geophysicist • Hydrologist • Mineralogist • Paleontologist • Park Ranger • Petrologist • Seismologist • Soils Engineer • Stratigrapher • Oceanographer

Features

The Geological Sciences Department offers a five-week summer field course in the western United States. Many opportunities for field and laboratory research exist throughout northern California and elsewhere.

The Cummings Geology Club, a student organization, sponsors a variety of activities including speakers, field trips, employment workshops, and student-faculty gatherings. The club is an important part of department life, providing students with opportunities to make professional contacts, to explore graduate school and professional options, and to enjoy the company of others with similar interests. For more information, contact the faculty advisor or the current club president at (510) 885-3486.

Students completing the Geology major may apply four (4) units of mathematics and eight (8) units of chemistry (or physics) to the Natural Sciences and Mathematics requirement (Area B) in their General Education Requirements. (See the General Education Evaluator and Class Schedule for more information.)

Major Requirements (B.S.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 108 units; the B.S. degree requires a total of 180 units.

I. Core Courses (78-81 units)

CHEM 1101, 1102, 1103 General Chemistry (5, 5, 5)
GEOL 2101 Physical Geology (or 2100) (5)
GEOL 3030 Earth and Life Through Time (5)
GEOL 3601 Mineralogy and Optical Crystallography (5)
GEOL 3701 Igneous and Metamorphic Petrology (5)
GEOL 3801 Sedimentology and Stratigraphy (5)
GEOL 3810 Structural Geology (5)
GEOL 3910 Geologic Field Methods (3)
GEOL 4800 Seminar (2)
GEOL 4820 Field Geology (8)
MATH 1304, 1305 Calculus I and II (4, 4)
PHYS 1001, 1002, 1003 General Physics or PHYS 2701, 2702, 2703¹ Introductory Physics (12-15)

II. Electives (27-30 units)

Twenty-seven to thirty units, depending on physics sequence completed, from among the courses listed below. At least 10 units must be in 4000-level geology courses. Up to 12 of the elective units may be satisfied with appropriate courses in

Biological Sciences, Chemistry, Mathematics and Computer Science, Physics, and/or Statistics approved in advance by a faculty advisor.

GEOL 3110, 3200 (not more than 4 units), 3400, 4010, 4320, 4600, 4800 (not more than 2 units), 4850, 4900, 4910 (not more than 4 units for 4900 and 4910 combined)

Students interested in a specific subdiscipline (e.g., applied geology, oceanography, geochemistry) are urged to consult the appropriate departmental faculty advisor to ensure an appropriate choice of electives.

Note: Course substitutions made after arrival at Cal State Hayward must have prior written approval of the faculty advisor.

Major Requirements (B.A.)

The major consists of 72-75 units; the B.A. requires a total of 180 units.

I. Core Courses (56-59 units)

CHEM 1101, 1102, 1103 General Chemistry (5, 5, 5) and
PHYS 1700 Elementary Physics (4), 1780 Elementary Physics
Laboratory (1)

or

CHEM 1100 Introduction to College Chemistry (5) and
PHYS 2701-2-3 Introductory Physics (4, 4, 4)

GEOL 2101 Physical Geology (or 2100) (5)
GEOL 3030 Earth and Life Through Time (5)
GEOL 3601 Mineralogy and Optical Crystallography (5)
GEOL 3701 Igneous and Metamorphic Petrology (5)
GEOL 3801 Sedimentology and Stratigraphy (5)
GEOL 3810 Structural Geology (5)
GEOL 3910 Geologic Field Methods (3)
GEOL 4800 Seminar (2)
MATH 1300 Trigonometry and Analytic Geometry (4)

II. Electives (16 units)

Any additional geology courses at the 3000 and 4000 level, except GEOL 3040, 3050, 3051, 3100, and 3898. At least two courses must be at the 4000 level (no more than 4 units of GEOL 4900 may be applied).

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

The minor consists of 26-27 units.

I. Core Courses

- GEOL 2101 Physical Geology (or 2100) (5)
- GEOL 3030 Earth and Life Through Time (5)

II. Electives

- One lower division elective, GEOL 1002 or 1201 (2-4 units)
- Three upper division Geology electives, chosen with assistance of minor advisor (12-15 units)

Undergraduate Courses

The course prefix for the following courses is GEOL.

- 1000** Earth Systems Science (5)
Introduction to the nature and evolution of the solid Earth, hydrosphere, atmosphere and solar system. Emphasizes interdisciplinary thought and research. Not for Geology B.S./B.A. degree credit. Four hrs. lect., 3 hrs. lab; field trip(s).
- 1001** Introduction to the Earth Sciences (4)
Composition, structure and evolution of the earth. Interactions of lithosphere, hydrosphere, and atmosphere. Relations of geologic systems, hazards, and resources to human environment and future. Not open to those with credit for GEOL 1003 or 1004. (A)
- 1002** Environmental Geology Laboratory (2)
Investigations of environmental geologic problems in the greater San Francisco Bay area, including earthquake and volcanic hazards, flooding, landslides, and shoreline erosion. Not for Geology major credit. Prerequisite: GEOL 1001 (or 1003 or 1004), 2101 (or 2100), 2300 or 3300 or concurrent enrollment in any of these courses. One hr. lect., two hrs. lab activity. (A)
- 1003** How Earth Systems Work (4)
How the earth's lithosphere, hydrosphere, and atmosphere work and the earth's place in the universe. Not open to those with credit for GEOL 1001 or 1004.
- 1004** Evolution of Earth Systems (4)
The evolving systems of the earth, including processes of the lithosphere, hydrosphere, biosphere, and atmosphere. Not open to those with credit for GEOL 1001 or 1003.
- 1200** Elementary Oceanography (4)
Ocean currents, waves and tides, formation of ocean basins, estuaries, sediments, characteristics of sea water, and marine life. Three hrs. lect., 3 hrs. lab.
- 1201** Introduction to Oceanography (4)
Origin of ocean basins, nature of the sea floor, physical/chemical characteristics of sea water, ocean currents, marine life, relationships between humans and the sea. Not for Geology major credit. (A)
- 1202** Oceanography Laboratory (2)

Introductory laboratory exercises in principles of oceanography, including distribution of temperature and salinity, currents, sea-floor topography, bottom sediments, waves and tides, and beach dynamics. Not applicable to the Geology majors. Prerequisite: prior or concurrent enrollment in GEOL 1201. One hr. lect., two hrs. lab activity. (A)

- 2000** Introduction to the Geology of California (4)
The geologic history and development of California. Rocks, minerals and natural resources. Processes that shape California landforms. Plate tectonics, earthquakes, volcanism. Not for Geology major credit. (W)
- 2100** Fundamentals of Physical Geology (5)
Nature and distribution of earth materials and energy. The processes by which materials and resources are formed and the nature and development of the landscape. Not open to those with credit for GEOL 2101. Four hrs. lect., 3 hrs. lab.
- 2101** Physical Geology (5)
[CAN GEOL 2]
Nature and distribution of earth materials, the processes by which the materials are formed and altered, and the nature and development of the landscape. Not open to those with credit for GEOL 2100. Four hrs. lect., 3 hrs. lab.; one Saturday or Sunday field trip. (F, Sp)
- 2300** Natural Disasters (4)
Geologic processes and their effects on human populations. Topics include earthquakes, landslides, volcanic eruptions, coastal erosion, floods, atmospheric and water pollution. Not for geology major credit. Designed for Physical Science G.E. students. (Tent. Sp)
- 3030** Earth and Life Through Time (5)
Principles of interpretation of earth history. Study of plate tectonics and sea-floor spreading as related to the development of continents, ocean basins, and mountain belts. Origin, evolution and diversification of life through time. Prerequisite: GEOL 2101 (or 2100) or equivalent. Three hrs. lect., 6 hrs. lab.; field trip(s). (F)
- 3040** Fundamentals of Meteorology (4)
Utilization of physical science principles in the study of the structure and circulation of the atmosphere; weather and weather forecasting. Emphasis on aspects of interest to the prospective or in-service teacher. Not for Geology Major credit. Prerequisites: High school physics and chemistry or equivalents. (Y)
- 3050** Volcanoes and Plate Tectonics (4)
Relationship of volcanism to plate tectonics. Catastrophes and volcanic hazards. Processes and products at historically active volcanoes worldwide: lava flows and domes, avalanches and mudflows, air-fall tephra, and pyroclastic flows and surges. Not for Geology Major credit. Concurrent enrollment in GEOL 3051 recommended.

- 3051** Volcanoes Laboratory (2)
Crystals and igneous minerals, textures and structures of volcanic rocks, volcanic rock identification. Reading topographic and geologic maps. Geology and volcanic hazards at Cascade and other volcanoes. Not for Geology Major credit. Prerequisite: prior or concurrent enrollment in GEOL 3050. One hr. lect., 2 hrs. lab activity; field trips to active and ancient volcanoes.
- 3100** Geology of the Western National Parks (4)
The geologic history of western North America (from the Pacific Coast through the Great Plains) as interpreted from the outstanding features preserved in the national parks and selected other park service areas. Not for Geology major credit.
- 3110** Principles of Geomorphology (4)
Landforms as products of diastrophism, volcanism, and surficial processes; morphogenetic regions of the earth and the effect of climate on the processes that shape them; rates and stages of landscape evolution and their dependence on time, process and structure. Prerequisite: GEOL 2101 (or 2100) or equivalent. Three hrs. lect., 3 hrs. lab.; field trip(s). (Y)
- 3200** Regional Field Geology (1-2)
Reconnaissance field study of geology of selected areas in California and adjoining regions. May be repeated, but no more than 4 units may be applied to Geology major. Prerequisites: one introductory geology course and permission of instructor. CR/NC grading only. Thirty hrs. field/lab. per unit. (Y)
- 3400** General Oceanography (4)
Biological, chemical, geological, and physical characteristics of the sea, including geology of the ocean basins, marine ecosystems, and waves and currents. Prerequisite: GEOL 2101 (or 2100) or equivalent. Three hrs. lect., 3 hrs. lab.; field trip(s).
- 3601** Mineralogy and Optical Crystallography (5)
Principles of mineralogy, crystal symmetry, structure, and chemistry. Elements of optical crystallography utilizing indicatrix theory. Laboratory emphasizes physical properties and identification of minerals in hand sample and thin section. Prerequisites: introductory chemistry and GEOL 2101 (or 2100) or equivalent. Three hrs. lect., 6 hrs. lab/field.
- 3700** Rocks (5)
Characteristics, occurrence, and origin of igneous, sedimentary and metamorphic rocks. Petrogenesis under various pressure/temperature conditions. Geometry and architecture of sedimentary deposits. Classification and identification of rocks in laboratory and field. Not for geology major credit. Prerequisite: GEOL 3601. Recommended: some college chemistry. Three hrs. lect., 6 hrs. lab/field.
- 3701** Igneous and Metamorphic Petrology (5)

Characteristics, phase relations, and origin of igneous and metamorphic rocks. Plate-tectonic setting of magmatism and metamorphism. Laboratory emphasizes rock classification based upon hand-lens and microscopic examination of mineralogy and texture. Prerequisite: GEOL 3601 or equivalent. Three hrs. lect., 6 hrs. lab.; field trip(s). (W)

3800 Achievements of Women in Science (4)
(See BIOL 3800 for course description.)

3801 Sedimentology and Stratigraphy (5)
Depositional systems and sedimentary processes. Facies models, succession, age relationships, and correlation of strata. Petrology and provenance of sedimentary rocks. Prerequisites: GEOL 3030 and 3701. Three hrs. lect., 6 hrs. lab.

3810 Structural Geology (5)
Geometric, kinematic and dynamic analysis of structures of igneous, sedimentary and metamorphic rocks. Laboratory emphasis on descriptive geometry and stereographic solutions to structural problems; geologic maps and structure sections. Prerequisite: GEOL 2101 (or 2100) or equivalent. Three hrs. lect., 6 hrs. lab.; field trip. (Sp)

3898 Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 8 units. CR/NC grading only. May not be applied to Geology degree programs. Prerequisites: at least 2.0 GPA and departmental approval of activity. (A)

3910 Geologic Field Methods (3)
Introduction to geologic field methods and instruments, use of aerial photographs and topographic maps in geologic mapping, preparation of geologic maps of local areas. Prerequisites: GEOL 3701, 3801, and 3810 (any of these courses may be taken concurrently). One hr. lect., 6 hrs. field. (Sp)

3999 Issues in Geological Sciences (4)
Readings, discussion, and research on contemporary and/or significant issues in geological sciences. May be repeated for credit when content varies.

4010 Introduction to Geophysics (5)
Principles of geochronology; seismology, gravity and isostasy; terrestrial heat flow, magnetism and electricity. Collection and analysis of geophysical data. Prerequisites: GEOL 2101 (or 2100) and PHYS 2703 or equivalent. Three hrs. lect., 6 hrs. lab.; field trip required. (Alt. Sp)

4320 Hydrogeology (4)
The hydrologic cycle, from precipitation, evapotranspiration, infiltration and runoff, to surface and groundwater. Hydrograph analysis, stream gaging and discharge determination. Groundwater occurrence, movement and evaluation. Hydrologic regions of U.S.,

emphasizing the western states. Prerequisite: GEOL 2101 (or 2100) or equivalent. Field trip(s). Three hrs. lect., 3 hrs. lab. (W)

- 4410** Micropaleontology (3)
An in-depth study of the biostratigraphy, paleoecology, and taxonomy of various microfossil groups (Foraminifera, dinoflagellates, pollen, etc.). May be repeated for a maximum of six units. Prerequisite: GEOL 2101 (or 2100) or equivalent. Two hrs. lect., 3 hrs. lab.
- 4600** GIS for Earth Sciences (5)
An introduction to applications of Geographic Information Systems (GIS) to geology and other earth sciences. Designing, automating, and analyzing a spatial database; linking data sets; creating maps; generating reports and customizing ARC/INFO software. Prerequisite: GEOL 2101 (or 2100) or permission of instructor. Three hrs. lect., 6 hrs. lab.
- 4800** Seminar (2)
Critical, in-depth study of selected topics of current and classical research in geology; topics not repeated in two-year interval. May be repeated, but no more than 6 units may be applied to Geology major. Prerequisite: senior standing or permission of instructor. (Y)
- 4820** Field Geology (8)
Field laboratory application of techniques of geological mapping; compilation of detailed geological maps and reports. Recommended to be taken at end of junior year. Prerequisites: GEOL 3701, 3801 3810, and 3910 or equivalents and permission of instructor. Forty-eight hours a week for 5 weeks. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. (Su)
- 4850** Geological Field Studies in Hawaii (2)
Field study of geological features and processes of the Hawaiian Islands. Volcanism, coastal processes, geomorphology. May be repeated once for credit. Students will be responsible for all travel and lodging expenses. Prerequisites: GEOL 2101 (or 2100) or equivalent and permission of instructor. One hr. lect., 30 hrs. field/lab.
- 4900** Independent Study (1-4)
Must be taken CR/NC. (A)
- 4910** Senior Thesis (2)
Independent research project with a written thesis, digital map, or similar final product to be completed by students desiring to graduate with a B.S. in geology with research experience (see department for guidelines). CR/NC grading only. Prerequisites: senior level in Geology and thesis advisor's approval.

Marine Science Courses

(See the undergraduate [Marine Science](#) chapter for descriptions of the following courses.)

M SC 4141 Geological Oceanography (6)
M SC 4142 Physical Oceanography (6)
M SC 4143 Chemical Oceanography (6)

Footnote

¶ Students needing a relatively rigorous preparation in mathematics and physics (e.g., for graduate study) are strongly urged to complete the calculus-based physics sequence (PHYS 1001, 1002, 1003); this requires completion of the additional calculus course MATH 2304. The additional 4 units earned in calculus may be applied to elective requirement II.



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Speech Pathology and Audiology

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Department Information

Department of Communicative Sciences and Disorders
College of Arts, Letters, and Social Sciences
Office: Music and Business Bldg. 1099
Phone: (510) 885-3233

Professor Emeritus: William S. Rosenthal

Professors: Jan A. Avent, Norma S. Rees

Assistant Professors: Jillian Barrett, Patricia Lohman-Hawk, Janet P. Patterson, Robert C. Peppard

Adjunct Faculty: Susan Carlson, Audra Elliott, Bonnie Groth, Nidhi Mahendra, Shelley Simrin, Michaela Sullivan, Susan Walburn

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

Speech-language pathology and audiology are the professions which help adults and children overcome disabilities of speech, language, and/or hearing. These professions can satisfy a wide variety of career interests, including working in an allied medical profession, public service, government, education and private industry. Through research, these professions also contribute to our knowledge about human communication.

Many students select this degree program for professional training in speech-language pathology and audiology, others select this major because it seeks to develop student patterns of clear and logical thinking, planning, decision making and writing. Drawing from such academic disciplines as biology, psychology, sociology, linguistics, medicine, and the physical sciences, the program offers an interdisciplinary character that encourages and fosters

Career Opportunities

an emphasis on acquiring the broad knowledge of a liberal arts general education, as well as developing expertise in a single discipline. Many of our undergraduate majors have used these attributes to successfully pursue careers other than speech-language pathology and audiology, and have gone on to fields of education, finance, business, and government services.

Audiologist • Communications Specialist • Consultant • Professor/Teacher • Research Assistant • Speech-Language Pathologist • Clinical Supervisor

Features

The Speech Pathology and Audiology program operates the Center for Communicative Disorders, an on-campus facility which provides clinical services to speech, language, and hearing impaired individuals from Bay Area Communities. Students who are enrolled in the program do much of their initial observations and clinical training in this facility. The program also maintains a fully equipped speech and hearing sciences laboratory for students who wish to pursue research interests.

The Department of Communicative Sciences and Disorders offers the coursework required to qualify as a registered audiometrist in the public schools of the State of California.

The Bachelor of Science degree major in Speech Pathology and Audiology provides students with a background in theoretical and clinical areas fundamental to the understanding and management of communicative disorders and serves as the pre-professional training necessary for admission to graduate studies.

Students enrolled in this program are required to see their advisor each quarter prior to registration.

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 89 units; the B.S. degree requires a total of 180 units.

- I. Lower Division (20 units)
 - BIOL 1001 Basic Concepts in Biology (or one of 1003, 1005, 2001, 2003, or 2004), and BIOL 1002 Introduction to Biology Lab (or 1004 or 1005) (5)

 - BIOL 2010 Human Physiology and Anatomy I (or 2011) (5)
 - PSYC 1000 General Psychology (or one of 1001, 1005, 2004, or 2009) (5)
 - STAT 1000 Elements of Probability and Statistics (5)

- II. Upper Division (53 units)
 - SPPA 3852 Survey of Speech and Language Disorders - Part I (4)
 - SPPA 3853 Survey of Speech and Language Disorders - Part II (4)

Major Requirements (B.S.)

SPPA 3854 Anatomy and Physiology of Speech (4)
SPPA 3855 Introduction to Phonetics (4)
SPPA 3856 Observation of Clinical Procedures in
Communicative Disorders (1, 1)
SPPA 3859 Introduction to Audiology (4)
SPPA 4852 Clinical Methods and Procedures in
Communicative Disorders (2)
SPPA 4854 Diagnosis of Speech & Lang. Disorders (4)
SPPA 4855 Aural Rehabilitation (4)
SPPA 4856 Clinical Practicum in Speech Pathology and
Audiology (1)
SPPA 4859 Seminar in Speech Pathology & Audiology(4)
SPPA 4861 Introduction to Audiometry (4)
SPPA 4863 Phonological Disorders in Children (4)
SPPA 4865 Language Disorders in Children (4)
SPPA 4867 Introduction to Speech Science (4)

III. Elective Courses (16 units)

Each student enrolled in this major must complete 16 units of upper division courses in related disciplines; these courses are subject to adviser approval. Courses may be chosen from areas such as psychology, human development, linguistics and sign language. Students are responsible for any required prerequisites for elective courses.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

The minor consists of 32 units.

COMM 1004 Interpersonal Communication (4)
COMM 4810 Human Communication Theory (4)
SPPA 3852 Survey of Speech and Language Disorders - Part I
(4)
SPPA 3854 Anatomy and Physiology of Speech (4)
SPPA 3855 Introduction to Phonetics (4)
SPPA 3859 Introduction to Audiology (4)
SPPA 4854 Diagnosis of Speech & Language Disorders(4)
SPPA 4855 Aural Rehabilitation (4)

Speech Path/Audiology Option: Liberal Studies

Area II.B (5 units)

SPPA 3852 Survey of Speech and Language Disorders - Part I
(4)
SPPA 3856¹ Observation of Clinical Procedures in
Communicative Disorders (1)

Area VII, Credential Track, or Area VI, Liberal Arts Track (25 units)

SPPA 3853 Survey of Speech and Language Disorders - Part II
(4)

Basic Skills Courses

SPPA 3855 Introduction to Phonetics (4)
SPPA 3856¹ Observations of Clinical Procedures in
Communicative Disorders (1)
SPPA 3859 Introduction to Audiology (4)

Three courses selected from the following (12 units):

SPPA 3854 Anatomy and Physiology of Speech (4)
SPPA 4854 Diagnosis of Speech and Language Disorders (4)
SPPA 4855 Aural Rehabilitation (4)
SPPA 4861 Introduction to Audiometry (4)
SPPA 4863 Phonological Disorders in Children (4)
SPPA 4864 Fluency Dysfunctions (4)
SPPA 4865 Language Disorders in Children (4)

The course prefix for the following courses is SPPA.

0980 Speech Laboratory for Non-Native Speakers of English (1)
Discussion/laboratory course on oral competency for non-native speakers of English. Focus on articulation of speech sounds, stress, intonation, and vocal dynamics of American English. A/B/C/NC grading only. Units will not count toward the baccalaureate degree.

The course prefix for the following courses is SPPA.

3005 Verbal American English Skills (4)
Introduces non-native speakers of English to pronunciation, rate, pausing, rhythm, and vocal variability for individual and group interactions. Prerequisite: satisfactory completion of SPPA 0980 or permission of instructor.

3852 Survey of Speech and Language Disorders-Part I (4)
The nature of speech and language pathology. Acquisition of speech and language by children and deviations from normal speech and language patterns, e.g., disorders of language, articulation, voice, language difference in a multicultural society, and stuttering. To be taken concurrently with SPPA 3856. (F)

3853 Survey of Speech and Language Disorders-Part II (4)
Continuation of SPPA 3852. Topics include cerebral palsy, cleft palate, language learning disabilities, aphasia, and professional ethics. Prerequisite: SPPA 3852 or consent of instructor. To be taken concurrently with SPPA 3856. (W)

3854 Anatomy and Physiology of Speech (4)
Study of the anatomy, physiology, and neurology of the speech mechanism; respiration, phonation, articulation, and resonance with emphasis on normal processes. (Sp)

3855 Introduction to Phonetics (4)
Study of physiologic foundations of vowels, consonants,

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diphthongs in American English. Development of ability to transcribe phonetically speech dialects and various articulatory patterns. Three hours of auditory training in the Language Laboratory required weekly. (F)

3856 Observation of Clinical Procedures in Communicative Disorders (1)
Supervised observations, discussions, and written critiques of speech, hearing and language diagnosis and therapy. To be taken concurrently with SPPA 3852 and SPPA 3853. CR/NC grading only. Must be taken twice. May be repeated for credit with a limit of four total units, only two of which may be applied to the major. (A)

3859 Introduction to Audiology (4)
An overview of the profession of audiology. The anatomy and physiology of the auditory system, theories of hearing, auditory disorders, and the nature of sound. (F, W)

3898 Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 4 units. Not applicable to the Speech Pathology major; a maximum of 2 units will be accepted toward the Speech Pathology minor. CR/NC grading only. Prerequisites: at least a 2.0 GPA; departmental approval of activity. (A)

3999 Issues in Speech Pathology and Audiology (4)
Readings, discussion, and research on contemporary and/or significant issues in speech pathology and audiology. May be repeated for credit when content varies.

4852 Clinical Methods and Procedures in Communicative Disorders (2)
Basic principles of client treatment and management, including structuring the therapy session, designing therapy hierarchies, data collection, working with families, reinforcement and documentation. CR/NC grading only. Prerequisite: Prior or concurrent enrollment in SPPA 4856. (Y)

4853 Vocal Pathology and Rehabilitation (4)
Study of various functional and organic disorders, e.g., vocal nodules, spastic dysphonia, laryngeal cancer and contact ulcers. Principles and methods of intervention for vocal disorders found in adults and children. Prerequisites: SPPA. 3853, 3854, or consent of instructor. (F)

4854 Diagnosis of Speech and Language Disorders (4)
Theory and practice in the assessment of various pathologies of speech and language. Prerequisites: SPPA 3852, 3853, 3855, or consent of instructor. Two hrs. lect., 6 hrs. lab. (F, W)

4855 Aural Rehabilitation (4)
The study, analysis and application of various processes for developing and improving communication skills in hearing impaired children and adults. Current basic procedures in hearing aid evaluations. Prerequisite: SPPA

3859 and 4861, or consent of instructor. (F)

- 4856** Clinical Practicum in Speech Pathology and Audiology (1-5)
Development, implementation and evaluation of individualized therapy programs for clients in the Speech, Hearing and Language Clinic. Practice in report writing and oral case presentations. Prerequisite: SPPA 3852, 3853, 3855, and 4854 or consent of instructor. Each unit of clinic requires a minimum of 30 hours of client contact per quarter. (A)
- 4859** Seminar in Speech Pathology and Audiology (4)
Investigation of individual research projects in speech pathology and audiology. Reports to seminar of those investigations. Prerequisite: senior standing in Speech Pathology and Audiology, or consent of instructor. (Sp)
- 4861** Introduction to Audiometry (4)
Theory and application of the fundamentals of pure tone and speech audiometric procedures basic to identification audiometry and differential diagnosis of peripheral auditory disorders. Prerequisite: SPPA 3859. (Sp)
- 4862** Orofacial Anomalies (4)
Anatomy, physiology, diagnosis, and management of anomalous palatal conditions. Special consideration of speech therapy methods in cases of cleft palate and congenital palatopharyngeal incompetence. Case application of these procedures and appropriate counseling methods. Prerequisite: SPPA 3853. (Y)
- 4863** Phonological Disorders in Children (4)
Systematic study of articulatory disorders resulting from deviant phonological rule systems; critical review of traditional tests with emphasis on innovative evaluation and treatment procedures including distinctive feature theory. Prerequisite: consent of instructor. (Y)
- 4864** Fluency Dysfunctions (4)
Theories of etiology and therapeutic approaches to stuttering and cluttering disorders in adults and children. (Y)
- 4865** Language Disorders in Children (4)
Causes and treatment of language disorders in children. Students observe treatment; learn to collect and analyze language samples, and to write training programs. Prerequisite: consent of instructor. (W)
- 4866** Aphasia in Adults (4)
Analysis of historical and current information relating brain dysfunction and language disorders. Student observations; practice in administration, scoring, and interpretation of aphasia tests. Prerequisite: consent of instructor. (Y)
- 4867** Introduction to Speech Science (4)
Fundamentals of sound production and transmission as related to speech. Theory of speech production, perception, acoustic and physiologic phonetics, and

analysis of the acoustic properties of speech. Prerequisite:
SPPA 3854, 3855, or consent of instructor. (Sp)

4900 Independent Study (1-4)

Footnote

1 Enrollment in SPPA 3852 and 3853 requires concurrent enrollment in SPPA 3856.



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Department Information

General Information

Undergraduate Course

Health Care Administration

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Department of Public Affairs and Administration
College of Arts, Letters, and Social Sciences
Office: Meiklejohn Hall 4122
Phone: (510) 885-3282

Professors: O. Jay Umeh (Chair), Dvora Yanow

Assistant Professors: Ann L. Cunliffe, Toni F. Fogarty

Please consult the 2006-2007 online catalog for any changes that may occur.

While the program in Health Care Administration is an interdisciplinary graduate program leading to the M.S. in Health Care Administration, the following course is offered for undergraduates who may be interested in pursuing the master's degree in health care administration or who wish to learn more about health care systems. HCA 4200 is a prerequisite for "Classified Graduate" status in the M.S. in Health Care Administration program. The other foundation courses are PUAD 4830 Organization Theory and Human Behavior or MGMT 3614 Organizational Behavior, and STAT 1000 Elements of Probability and Statistics (or its equivalent). See the Health Care Administration chapter in the graduate section of this catalog for additional information.

The course prefix for the following course is HCA.

- 3999** Issues in Health Care Administration (4)
Readings, discussion, and research on contemporary and/or significant issues in health care administration. May be repeated for credit when content varies.
- 4200** Social Construction of Health Care (4)
The origin and structure of health care delivery systems. How ideas about health and medical care are anchored in social and cognitive relationships. The assumptions that inhibit systemic change and change strategies given these assumptions.



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Statistics

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Department Information

Department of Statistics
 College of Science
 Office: North Science 229
 Phone: (510) 885-3435

Professors: Dean H. Fearn, Elliott Nebenzahl, Julia A. Norton (Chair), Michael L. Orkin, Bruce E. Trumbo

Assistant Professor: Eric A. Suess

Lecturers: Ward A. Rodriguez, Clyde N. Sugahara

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

Statistics is the study of designing experiments and surveys, and evaluating the data obtained from them in a mathematical way. This rapidly growing science is widely used to make predictions about future events based on patterns observed in the past and to draw accurate inferences about large groups on the basis of a representative sample from the group. Economic forecasts and public opinion polls are examples of these kinds of statistical methods.

The methodology of statistics can be adapted to a wide spectrum of problems. Due to the extensive development of computers and the collection of large data banks, the need for statistical techniques has mushroomed in the past few decades. A society like ours, which has become increasingly dependent on its data, has a growing need for statisticians.

Career Opportunities

Actuary • Biostatistician • Business Executive • Census Analyst • Credit Analyst • Data Analyst • Economist • Financial Modeling Specialist • Forms Analyst • Information Systems Analyst • Insurance Agent • Market Researcher • Oddsmaker • Quality Control Specialist • Research Statistician • Sales Analyst • SAS Programmer • Statistician • Survey Designer • Systems Analyst • Teacher

Preparation

For Advanced Placement course equivalencies, see the Registration chapter.

The theory of statistics rests on a mathematical foundation. Even for statisticians whose primary interest is in applications, challenging mathematical problems arise continually. Calculus and computer programming are required for the major. An elementary course in linear algebra is highly recommended.

Courses in areas to which statistics is applied will also be helpful. Examples are business, biology, chemistry, geography, social sciences, psychology, and physics.

Community college students are advised to complete the sequence of elementary calculus and analytic geometry courses before transferring to Cal State Hayward. Another excellent lower-division requirement to complete before transferring is a course in introductory computer programming.

Honors in Statistics

Students earning a GPA of 3.6 or higher in courses comprising their major in Statistics will be awarded Honors in the degree provided the coursework applied toward the degree includes the courses listed in areas I and II below.

- I. Required Courses for Honors (16 units)
 - MATH 2101 Elements of Linear Algebra (4)
 - MATH 2304 Calculus III (4)
 - MATH 3100 Linear Algebra (4) or MATH 3300 Analysis I (4)
 - STAT 3402 Introduction to Probability Theory II (4)
- II. Required Honors Course (4 units)
 - STAT 4401 Introduction to Stochastic Processes (4) or STAT 4601 Regression (4) taken as a special honors course with permission of the instructor and the Director of the Honors Program.

Major Requirements (B.S.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 68 units; the B.S. degree requires a total of 180 units.

- I. Basic Requirements (16-26 units)
 - MATH 1304, 1305 Calculus I, II (4, 4)
 - [prerequisite: MATH 1300 (4) or equivalent]

One of the following (4 units):

CS 1020 Introduction to Computers (4) or CS 1160
Introduction to Computer Science and Programming
Methods (4)

One of the following (4-10 units including prerequisite course):

STAT 3010 Statistical Methods in the Social Sciences (4)
[prerequisite, STAT 1000 (5)] or STAT 3031 Statistical
Methods in Biology (4) or MGMT 3100 Quantitative
Methods in Business (5) [prerequisite, STAT 2010 (5)] or
MATH 2101 Elements of Linear Algebra (4) or MATH 2304
Calculus III (4)

II. Mathematical Statistics and Probability (32 units)

STAT/MATH 3401 Introduction to Probability Theory I (4)
STAT/MATH 3502, 3503 Statistical Inference I, II (4, 4)
STAT 3900 Data Analysis Using Statistical Packages (4) or
4950 Advanced Statistical Packages for Data Analysis (4)
STAT 4601 Regression (4)

Any 3 of the following courses (12 units):

STAT 3402¹ Introduction to Probability Theory II (4), 3415
Introduction to Decision Theory (4), 3510 Sampling
Procedures for Surveys (4), 3910 Statistical Software
Design (4) or 4910 Advanced Statistical Package Usage
(4), STAT/MATH 4401¹ Introduction to Stochastic
Processes (4); STAT 4515 Applied Multivariate Analysis
(4), 4610 Introduction to Nonparametric Statistical Methods
(4)

III. Area of Emphasis (20 units)

Complete one of the following:

1. Twenty units of approved mathematics or statistics courses
in addition to those used for the requirements in Sections I
and II. MATH 3100, Linear Algebra, or MATH 3300,
Intermediate Analysis, should normally be included in these
20 units. These courses are especially recommended for
students taking the mathematical statistics pattern, or
wishing to apply to the master's degree program in
Statistics. MATH 3100 or 3300 is required for students in
the departmental honors program.

2. Twenty units of approved courses in an approved area.
Areas currently approved include the following:
Anthropology, Biological Science, Business/Economics,
Chemistry, Computer Science, Geography, Geological
Sciences, History, Physics, Political Science, Psychology,
Sociology. For a complete list of currently approved areas,
contact the Department of Statistics.

To gain departmental approval, these courses must include
at least one upper division course and be judged to
constitute a coherent program of study. (With the approval
of the department, upper division Statistics courses, except
STAT 3001, 3010, and 3031, may be applied toward these
twenty units.)

Credit/No Credit Courses

It is the policy of the department that no course taken on a

"CR/NC" basis may be applied toward any of the requirements of Section II above. Individual petitions for waiver of this policy will be treated according to the same procedures as petitions to waive other degree requirements.

Double Major

A knowledge of statistical methods is of increasing importance to students in many areas, especially the physical, computing, decision, environmental, biological, political, and social sciences and administrative studies (including business, health care, and education). A second major in statistics along with a major in one of these areas may result in better preparation for employment or graduate study. The following three factors combine to make such a double major feasible in many cases:

1. The Statistics major allows for a relatively large number of completely unrestricted elective units. The student may elect courses required for the other major among these.
2. Up to twenty units in certain areas outside of Statistics may be applied toward the Statistics degree. (See Area of Emphasis requirement, III.2.)
3. Some other majors require Statistics courses that also count towards the Statistics major (e.g., STAT 2010, 3010, 3031, 3401, 3502, etc.).

To obtain an illustrative program contact the Statistics Department.

Note: If a student simultaneously completes requirements for two majors leading toward different degrees (e.g., B.S. major in Statistics and B.A. major in Sociology), only one degree (student's choice) is awarded. However, in all cases, the student's transcript carries a notation that both sets of major requirements have been met. Students are eligible for scholarships in both programs.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

The minor consists of 24-25 units; six courses not involving calculus prerequisites approved for all students in the minor are as follows:

One of the following courses:

- STAT 1000 Elements of Probability and Statistics (5), 2010
- Elements of Statistics for Business and Economics (5), 3031
- Statistical Methods in Biology (4)

Five of the following:

Certificate Program

STAT 2088 Games of Chance, Gambling and Probability (4), 3010 Statistical Methods in the Social Sciences (4), 3415 Introduction to Decision Theory (4), 3510 Sampling Procedures for Surveys (4), 3900 Data Analysis Using Statistical Packages (4), 3910 Statistical Software Design (4), 4000 Analysis of Variance in the Behavioral Sciences (4), 4515 Applied Multivariate Analysis (4), 4601 Regression (4), 4610 Introduction to Nonparametric Statistical Methods (4)

With the consent of a Statistics Department advisor, any upper division Statistics course with a calculus prerequisite may be substituted for any of the above courses.

Applied Statistics

The Certificate in Applied Statistics combines basic work in statistics, which is required for many majors and graduate degree programs, with additional coursework in applied statistics. The coursework is designed to broaden the abilities of scientists and social scientists who already have degrees, but who need more training in applying statistics to their research and employment activities.

The minimum required GPA for the awarding of the certificate is 2.0. Consult an advisor in the Department of Statistics for clarification and interpretation of requirements. The certificate consists of 24 units, plus 4-5 units of prerequisites. At least 4 units must be at the graduate level.

Prerequisites: STAT 3010 (requires STAT 1000); STAT 3031 (requires MATH 1130); STAT 3502 (requires MATH 1305 or MATH 1820).

A. Core Courses (12 units)

Applied Statistical Methodology (8 units)

Choose one of the following three pairs of courses:

STAT 3010 Statistical Methods in the Social Sciences (4) and either STAT 4000 Analysis of Variance in the Behavioral Sciences (4) or STAT 6010 Applied Analysis of Variance (4)

STAT 3031 Statistical Methods in Biology (4) and either STAT 4000 Analysis of Variance in the Behavioral Sciences (4) or STAT 6010 Applied Analysis of Variance (4)

STAT 3502 Statistical Inference I (4) and STAT 3503 Statistical Inference II (4)

Data Analysis Using Statistical Packages (4 units)

STAT 3900 Data Analysis Using Statistical Packages (4) or STAT 4950 Advanced Statistical Packages for Data Analysis (4)

B. Electives (12 units)

Choose from the following courses:

STAT 3415 Introduction to Decision Theory (4)
STAT 3510 Sampling Procedures for Surveys (4)

Statistics Option: Liberal Studies

STAT 3910 Statistical Software Design (4) or STAT 4910²
Advanced Statistical Package Usage (4)
STAT 4515 Applied Multivariate Analysis (4) or STAT 6515²
Advanced Multivariate Analysis (4)
STAT 4601 Regression or STAT 6509² Theory and
Application of Regression (4)
STAT 4610 Introduction to Nonparametric Statistical Methods
(4)
STAT 4860-69 Undergraduate Seminar (2-4)
STAT 6020 Statistical Methods in Clinical Trials (4)

Area I (5 units)

Either STAT 1000 Elements of Probability and Statistics (5) or
STAT 2010 Elements of Statistics for Business and Economics
(5)

Area VII Credential Track or Area VI General Track (24 units)

Complete (1) or (2)

1. MATH 1110 The Nature of Mathematics (4) or MATH 1130
College Algebra (4) or MATH 1300 Trigonometry and Analytic
Geometry (4)

Five upper division Statistics courses (20 units) selected from:

STAT 3010 Statistical Methods in the Social Sciences (4)
STAT 3415 Introduction to Decision Theory (4)
STAT 3510 Sampling Procedures for Surveys (4)
STAT 3900 Data Analysis Using Statistical Packages (4)
STAT 4000 Analysis of Variance in the Behavioral Sciences
(4)
STAT 4610 Introduction to Nonparametric Statistical
Methods (4)

2. MATH 1810 and 1820 Mathematics for Business and Social
Sciences I, II (4 units each)

*Four upper division Statistics courses (16 units) chosen from
the list above.*

Students with calculus may substitute any upper division
Statistics course for any course above.

Students interested in elementary school teaching should pursue
the Liberal Studies Major and credential track (see the Liberal
Studies chapter in the undergraduate section of this catalog).
Those interested in secondary school teaching should complete
the Single Subject Matter Preparation Program in Mathematics
(see undergraduate chapter).

Undergraduate Courses

The course prefix for the following courses is STAT.

Information about Elementary Statistics Courses

Prerequisite: All introductory statistics courses require as a

prerequisite completion of the Entry Level Math (ELM) requirement.

First Statistics Course: The courses STAT 1000/3010 form a sequence and so STAT 1000 is the appropriate first course in many cases. Biology majors should take STAT 3031 as their first Statistics course. Business and Economics majors should take STAT 2010. Sociology majors who elect to take only one Statistics course should take STAT 1000. STAT 3401, STAT 3502, and STAT 3601 may be taken with no previous background in Statistics and are open to students with the appropriate Mathematics prerequisites.

Prohibitions: Students will NOT receive credit toward graduation for both STAT 1000 and 2010. STAT 1000 may not follow any upper division Statistics course. Business and Economics majors require STAT 2010 or STAT 3502 and so must not take STAT 1000 (unless substitution of 1000/3010 for 2010 or 3502 has been approved by the major department).

Substitutions: Some departments permit students with appropriate background or interests to substitute a more advanced course or pair of courses for a course(s) specified as required in the Catalog. Get advance written permission from your department before making any of the following substitutions: 2010 for 1000; 1000/3010 for 2010; 3401/3502 for 3601; 3502 for 3031; 3502 (plus 5 elective units) for 1000/3010; 3503 for 4000.

-
- 1000**  Elements of Probability and Statistics (5)
[CAN STAT 2]
Descriptive statistics (measures of central tendency, dispersion, correlation), elementary discrete probability distributions. Introduction to tests of statistical hypotheses. Prerequisite: completion of ELM requirement. (A)
- 2010**  Elements of Statistics for Business and Economics (5)
Introduction to modern probability, descriptive statistics, estimation, hypothesis testing, and linear regression. Applications to business and economics. Prerequisite: MATH 1304 or MATH 1810 (either may be taken concurrently) or consent of instructor. (A)
- 2011** Introductory Regression for Business and Economics (1)
Regression, including derivation and introduction to multiple regression. Computer aided computation, assumptions, and error analysis emphasized. Applications to business and economics. Prerequisite: STAT 1000 or equivalent, or MATH 1820. (A)
- 2088** Games of Chance, Gambling, and Probability (4)
A survey of popular gambling games, including dice games, card games, and horse racing, as an introduction to probability theory. Discussion of odds and gambling strategies. Not for Statistics major credit. Prerequisite: completion of ELM requirement. (Alt. Y)
- 3010**  Statistical Methods in the Social Sciences (4)

Standard scores, t scores, ranked data, linear regression, correlation, measures of association, the normal distribution and its uses, paired comparisons, the uses of chi-squared, and introduction to design of experiments. Prerequisite: STAT 1000 or equivalent. (F, W, Sp)

- 3031** Statistical Methods in Biology (4)
Basic probability and statistical concepts. Introduction to the analysis of variance, correlation, and simple linear regression. Nonparametric techniques with application to biology. Prerequisite: MATH 1130 or consent of instructor. (F, W, Sp)
- 3401** Introduction to Probability Theory I (4)
The theory of probability with applications to science and engineering. Sample spaces; random variables; joint, marginal, conditional distributions; expectations; important distributions (binomial, Poisson, normal, etc.); and moment generating functions. Cross-listed with MATH 3401. Prerequisite or concurrent: MATH 1305. (F, W, Sp)
- 3402** Introduction to Probability Theory II (4)
Generating functions and multivariate distributions. Conditioning. Chebyshev inequality and limit theorems. Multidimensional transformations of random variables. Derivation of t and F distributions. Uses of probability theory in mathematical statistics. Cross-listed with MATH 3402. Prerequisite: STAT/MATH 3401 or STAT/MATH 4412. (W)
- 3415** Introduction to Decision Theory (4)
Probability and conditional probability. Expectation and its application to decision making. Decision trees. Bayesian models and methods, comparison with classical methods, game theory. Prerequisite: STAT 1000 or STAT 2010. (Alt. Y)
- 3502** Statistical Inference I (4)
Random variables, sampling distributions (binomial, Poisson, normal, exponential), conditional probability. Estimation, hypothesis testing. Computer-aided computations. Topics include: t-tests, correlation, regression; proportions, chi-squared; ANOVA. Cross-listed with MATH 3502. Prerequisite: MATH 1305 or MATH 1820. (F, W)
- 3503** Statistical Inference II (4)
General linear hypothesis with emphasis on design and analysis of experiments. Data from science, engineering, and quality management. Factorial designs: random effects, nesting. Optional topics: incomplete blocks, missing data, analysis of covariance. Computer-aided analysis. Cross-listed with MATH 3503. Prerequisite: STAT 3502 or 3601. (W)
- 3510** Sampling Procedures for Surveys (4)
Detailed investigation of sampling methods. Design and comparisons of stratified, systematic, and cluster sampling procedures. Techniques of multistage and multiphase sampling. Prerequisite: STAT 1000 or equivalent. (Alt. Y)

- 3601** Statistics and Probability for Science and Engineering I (4)
Basic probability rules (independence, Bayes' Theorem), distributions (binomial, Poisson, normal, exponential), reliability. Descriptive, inferential statistics (control charts, estimation, hypothesis testing: one, two samples), correlation, regression. Emphasizes: computer analysis, simulation; science, engineering applications. Not open to those with credit for STAT/ENGR/MATH 3502. Cross-listed with ENGR 3601. Prerequisite: MATH 1305. (F, W)
- 3602** Statistics and Probability for Science and Engineering II (4)
General linear model with emphasis on design and analysis of experiments. Fixed and random effects and nested models. Power and sample size considerations. Emphasizes: computer analysis, simulation; science, engineering applications. Not open to those with credit for STAT/ENGR/MATH 3503. Cross-listed with ENGR 3602. Prerequisite: STAT/ENGR/MATH 3502 or STAT/ENGR 3601. (W)
- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 4 units. A maximum of 4 units will be accepted toward the Statistics major. Prerequisites: at least 2.0 GPA; departmental approval of activity.
- 3900** Data Analysis Using Statistical Packages (4)
Using computer packages (e.g., SPSS, SAS) and interpreting output. Data preparation, descriptive statistics, graphs, checks for normality, t-tests, F-tests, ANOVA, cross tabulations, chi-squared tests, correlation, and report preparation. Prerequisite: a previous course in statistics. (F, Alt. W)
- 3910** Statistical Software Design (4)
Writing microcomputer software useful for elementary statistical analysis and probability computations. Topics may include: statistical graphics, introductory spatial statistics, data files, simulations. Prerequisites: a previous Statistics course and skill in BASIC, C, or other language. (Y)
- 3999** Issues in Statistics (4)
Readings, discussion, and research on contemporary and/or significant issues in statistics. May be repeated for credit when content varies.
- 4000** Analysis of Variance in the Behavioral Sciences (4)
Review of elementary analysis of variance. Factorial analysis of variance, multiple comparisons, and repeated measures designs. Prerequisite: STAT 3010 or STAT 3031. (Sp)
- 4013** Statistics, Data Analysis, and Probability (4)

(See MATH 4013 for course description.)

- 4401** Introduction to Stochastic Processes (4)
Theory of stochastic models with applications to science and engineering. Markov processes. Elementary birth-death processes, queues. Limit theorems. Computer simulation. Applications: e.g., inventory models, reliability, epidemiology. Cross-listed with MATH 4401. Prerequisite: STAT/MATH 3401 or STAT/ENGR 3601. (Sp)
- 4412** Probability Theory (4)
Same spaces; random variables, joint, marginal, conditional distributions; expectations for modeling data; related use of computer packages; moment generating functions; transforming a random variable. Not open to those with credit for STAT/MATH 3401. Cross-listed with MATH 4412. Prerequisite: MATH 1305.
- 4515** Applied Multivariate Analysis (4)
MANOVA, repeated measures designs, discriminant functions. May include factor analysis, canonical correlation, and cluster analysis. Computer intensive with special emphasis on treatment of actual data. Written reports required. Prerequisites: STAT 3010 and 3900 (may be concurrent). (Alt. Y)
- 4601** Regression (4)
Computational methods in regression, including variable construction, and ANOVA. Selection methods. Attention to model assessment, graphical techniques, and assumption checking. Emphasis on real data from science, engineering, and business. Computer-assisted analysis. Report writing. Prerequisite or concurrent: STAT 3503 or STAT 4000. (Sp)
- 4603** Operations Research II (4)
Theory of stochastic models with applications to engineering. Markov processes, queues, birth-death processes. Operations research applications. Inventory models, risk theory, fatigue failure, and reliability. Computer simulation. Not open to those with credit for STAT/ENGR 3603 or STAT/ENGR/MATH 4401. Cross-listed with ENGR 4603. Prerequisite: STAT/ENGR 3602. (Sp)
- 4610** Introduction to Nonparametric Statistical Methods (4)
Nonparametric methods and distribution-free tests. Sign, Wilcoxon, rank-correlation, independence and randomness tests. Approximate distributions under the null hypothesis, treatment of ties, some estimation procedures. Emphasis on social science data. Prerequisite: STAT 3010. (Alt. Y)
- 4612** Statistical Inference in Practice (4)
Probability ideas essential to statistical inference. Estimation and hypothesis-testing for univariate and bivariate data. Individual projects involving computer-aided analysis of real data. Prerequisites: senior or graduate standing, an upper-division STAT course, and MATH 2304.

- 4860-** Undergraduate Seminar (4 each)
Seminar in probability and/or statistics on topics extending beyond regular courses. Variable content, units, and prerequisites specified at the time of offering. A total of up to 12 units of different topics may be taken for credit. (Y)
- 4869** Seminar in probability and/or statistics on topics extending beyond regular courses. Variable content, units, and prerequisites specified at the time of offering. A total of up to 12 units of different topics may be taken for credit. (Y)
- 4910** Advanced Statistical Package Usage (4)
Programming in an advanced statistical software package, producing reformatted data, advanced statistical analysis, and probability modeling. Topics may include graphics, spatial statistics, creating and managing data files, simulations, approximation algorithms. Prerequisites: STAT 3502, CS 1160. (Y)
- 4950** Advanced Statistical Packages for Data Analysis (4)
Programming and applying computer packages (e.g., SAS, S+). Data preparation and transformation, macros, descriptive statistics. Topics from diagnostics, t-procedures, ANOVA; nonparametrics; cross-tabulation, chi-squared, correlation, regression. Report writing. Prerequisite: STAT 3502. (Y)
- 4900** Independent Study (1-4)

Footnotes

- 1** These courses are especially recommended for students taking the mathematical statistics pattern.
- 2** May require additional prerequisites. May be taken if prerequisites are met.
- 3** Refer to "Information about Elementary Statistics Courses" section at the beginning of "Undergraduate Courses."



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Health Sciences

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Department Information

Department of Nursing and Health Sciences
College of Science
Office: North Science 143
Phone: (510) 885-3481

Professors: Brenda J. Bailey (Chair), Pamela Parlocha

Associate Professor: Pauline J. Kelzer

Assistant Professor: Juan A. Robles

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

Health, the second largest industry in the United States, employs over eight million workers. Physicians represent only 7% of this workforce, and there are over 200 other professions in the health sciences field. Many of these professions can be entered directly with a B.S. degree in Health Sciences. Other professions may require graduate training. Career opportunities and competition for admission to programs varies with each profession. Students should, therefore, plan carefully with a faculty advisor for career and training alternatives.

The B.S. degree with a major in Health Sciences offers a program of instruction with four elective areas of study (options). Students select one of these options to meet career needs and should seek faculty advising in making their selection.

Career Opportunities

By selecting one of the four elective areas of study, students can prepare for graduate study or for employment in an entry-level career position. Graduate study is available in several fields: the clinical health professions, community health education, epidemiology, health administration, planning, and other public health specialties. Graduates of the program are prepared to enter career positions in both governmental and non-governmental organizations. These include state and county health departments,

Major Requirements (B.S.)

hospitals, community clinics, health service agencies, nursing homes, environmental health agencies, insurance and pharmaceutical companies, and many other employment settings.

The major in Health Sciences consists of 124-159 units; the B.S. degree requires a total of 180-181 units. A student preparing for certain health professions may exceed 181 units.

- I. Lower Division Core (45-47 units)
 - ANTH 1000 Introduction to Anthropology (4) or SOC 1000 Introduction to Sociology (or one of SOC 1001, 1002, 2001, or 2002) (4)

 - BIOL 1001 Introduction to Biology (or one of 1003, 1005, 2001, 2002, 2003, or 2004) (4) and BIOL 1002 Introduction to Biology Lab (or 1004 or 2005) (1)

 - BIOL 2010 (or 2011), 2020 Human Physiology and Anatomy I, II (5, 5)

 - BIOL 2025 Introduction to Microbiology (5) or BIOL 3405 Microbiology (6) or BIOL 4010 Microbes and Humanity (4)

 - HSC 1000 Introduction to Health Professions Practice (4)
HSC 1100 Health: Maintenance of Wellness (or 2100) (4) or
KPE 1110 Concepts of Health (4)

 - NURS 2010 Principles of Nutrition and Medical Nutrition Therapy (4) or BIOL 3070 Human Nutrition (4)

 - PSYC 1000 General Psychology (or one of 1001, 1005, 2004, or 2009) (5)
STAT 1000 Elements of Probability and Statistics (5)

- II. Upper Division Core (43)
 - ANTH 3720 Medical Anthropology (4) or SOC 4720 Medical Sociology (4)

 - HSC 3200 Environmental Health (4)
HSC 3300 Medical Care in the US (4)
HSC 3350 Health Legislation and Government Programs (4)
HSC 3400 Individual and Community Mental Health (4) or
PSYC 4410 Abnormal Psychology (4)

 - HSC 3650 Consumer Health (4)
HSC 3800 Multicultural Issues in Health Care (4)
HSC 4010 Research and Program Evaluation in Health Science (4)
HSC 4500 Supervised Field Training and Writing (3)
HSC 4600 Systems Management (4)
HSC 4700 Senior Seminar (4)

- III. Options (36-69 units)

Choose one of the following four options in consultation with your faculty advisor. The choice of option should reflect your career goals and a willingness to acquire an in-depth knowledge of one area of the Health Sciences major.

A. Option in Administration: Management, Policy, Evaluation, Finance, Marketing (36 units)

Complete the following courses (20 units):

- ACCT 2210 Accounting for Non-Business Majors (4) or
- ACCT 2251 Financial Reporting and Analysis (4)
- ECON 2301 Principles of Microeconomics (4)
- ENTR 2485 Establishing and Managing a Small Business (4)
- MGMT 3600 Theories of Management (4)
- MKTG 3401 Marketing Principles (4)

An additional 16 units in management, policy, evaluation, finance, or marketing to be selected in consultation with faculty advisor:

B. Option in Health Careers/Professions Preparation (36-69 units)

1. Choose 36 units in preparation for programs in nursing, nutrition, chiropractic, occupational therapy, recreation therapy, respiratory therapy, social work, or criminal justice programs or careers. Suggested courses depend on career choice. Courses will be chosen from physical and social sciences, and arts and humanities in consultation with faculty advisor.

OR

2. Choose 64-69 units in preparation for programs in medicine, dentistry, pharmacy, dental hygiene, physical therapy, optometry or veterinary science.

BIOL 1401 Molecular and Cellular Biology (5), BIOL 1403 Animal Biology (5), plus one upper division lab course (4-5)

CHEM 1101-2-3 General Chemistry I, II, III (5 each)
CHEM 3301-2-3 Organic Chemistry I, II, III (5 each)

CHEM 3400 Introductory Biochemistry (4) or CHEM 4411-12 General Biochemistry (8)

MATH 1304 Calculus I (4)

PHYS 2701-2-3 Introductory Physics I, II, III (4 each)

C. Option in Education/Training/Facilitation: Community Health Education (37 units)

This option will prepare you for a national exam and potential certification as a Community Health Educator Specialist.

- BIOL 3060 Human Sexuality (4)
- BIOL 3121 Principles of Genetics (5)
- BIOL 3410 Epidemiology (4)
- BIOL 4430 Immunology (4)
- NURS 4207 Principles of Community Health Nursing (2)

An additional 18 units of coursework to be selected in consultation with faculty advisor.

D. Option in Environmental Health and Safety: Non-technical Environmental Health and Safety Careers (36 units)

BIOL 3410 Epidemiology (4)
BIOL 4430 Immunology (4)

CHEM 1601(or 1605), 1602, 1603 Basic Chemistry for the Health Sciences (4 each)

ECON 1000 Economics of Public Issues (4) or ECON 2301 Principles of Microeconomics (4)

An additional 12 units of coursework such as BIOL 3032 Diversity of Organisms in Selected Habitats (4); COMM 2000 Mass Media in Society (4), 3240 Public Opinion (4), 3540 Business and Professional Presentations (4); ENVT 2000 Introduction to Environmental Studies (4), 4100 Environmental Impact Analysis (4); MKTG 3435 Environmental Marketing (4); POSC 3460 Environmental law (4), 3500 World Problems and Global Response (4), 3800 Public Policy Analysis (4), 4172 Public Policy and Health (4) or Continuing and Extended Education courses leading to a certificate in Hazardous Waste Management.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

Certificate in Pre-Physical Therapy

A certificate in Pre-Physical Therapy can be earned in conjunction with the major in Health Sciences. For additional information and a referral to a pre-professional adviser in physical therapy, contact the Department of Kinesiology and Physical Education at 885-3061.

Minor Requirements

The minor consists of 24 units. Complete 24 units of Health Sciences (HSC) prefix courses of which at least 12 units must be upper division. Specific courses related to a student's major and/or educational and career goals must be selected in consultation with a Health Sciences faculty advisor.

Undergraduate Courses

The course prefix for the following courses is HSC.

1000 Introduction to Health Professions Practice (4)
Professional practice in preventive, curative and rehabilitative health care services. Accreditation, certification and licensing standards. State and Federal

regulations on quality assurance and reimbursement policies.

- 1100** Health: Maintenance of Wellness (4)
Analysis and application of the Wellness concept for healthful living. Instruction in techniques and procedure for self-care, self-examination, emergency care and efficient utilization of the medical care system. Not open to those with credit for HSC 2100.
- 2001** Environmental Factors in Health (4)
Ecological principles applied to interactions between human and environmental systems and how each affects the health of the other. Strategies for preventing and managing environmental crises. Students may not receive credit for both HSC 2001 and 3200.
- 2100** Wellness and Our Genes (4)
Essential concepts in genetics that enable the construction of a personal wellness profile. Selected relationships between genes and health/illness. Not open to those with credit for HSC 1100.
- 2500** Principles of Personal Nutrition (4)
Consumer-oriented course on nutrition and food. Basic nutrients and food groups, food and health, food safety, food shopping. Not open to students who have credit for NURS 2010.
- 2510** Introduction to Peer Health Education (3)
Theory and practice of peer and community health education drawing from social science and public health disciplines. Exploration of issues and strategies in community health education. Prerequisite: HSC 1100 or 2100 or equivalent, or permission of instructor.
- 2550** Peer Health Education Practicum (2-3)
Supervised practicum in Student Health Services. Sequel and companion course to HSC 2510. May be repeated once for credit. Prerequisite: HSC 2510. Six to nine hrs. week act.
- 3200** Environmental Health (4)
The relationship of the environment to people's health. Students may not receive credit for both HSC 3200 and 2001. (Y)
- 3300** Medical Care in the U.S. (4)
Introduction to the organization and function of medical care in the U.S. (Y)
- 3350** Health Legislation and Government Programs (4)
Current Federal and State health legislation, regulations, and standards, and their effect on professional practice. Historical development of various health programs and their current status. Prerequisite: HSC 3300. (Y)
- 3400** Individual and Community Mental Health (4)
An analysis of various concepts of mental health. The

application of intervention techniques. Prerequisite: PSYC 1000 (or 1005). (Y)

- 3650** Consumer Health (4)
Major health care consumer issues in an epidemiological context: health status, drug usage, health products across the life cycle, exercise and nutrition, diseases, complimentary healing systems. Interdependence of these issues with behavioral, political, economic, ecologic, and cultural factors. Prerequisite: BIOL 1001 or permission of instructor.
- 3800** Multicultural Issues in Health Care (4)
The complex transcultural issues surrounding delivery and acceptance of health care. Impact of cultural values and ethnicity on understanding health and illness, and the utilization of health care services. Concepts and definitions of culture, ethnicity, traditional health beliefs, health and illness. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002) or ANTH 1000 or permission of instructor.
- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 8 units. A maximum of 8 units will be accepted toward the Health Sciences major. CR/NC grading only. Prerequisites: at least a 2.0 GPA; departmental approval of activity. (A)
- 3999** Issues in Health Sciences (4)
Readings, discussion, and research on contemporary and/or significant issues in health sciences. May be repeated for credit when content varies.
- 4010** Research and Program Evaluation in Health Science (4)
Use of scientific research methods to evaluate efficacy of public health prevention programs. Computer lab time included. Prerequisites: all 3000-level courses in Health Science, 24 elective units in option area, and permission of instructor. (Y)
- 4500** Supervised Field Training and Report Writing (3)
A supervised internship field experience in a health or health-related setting. Prerequisites: graduating senior status, completion of all major requirements except HSC 4700, completion of all elective units, and permission of instructor. Ninety hours fieldwork total. (Y)
- 4600** Health Systems Management (4)
Theory and practice of managing integrated systems. Critical review of key changes in evolution of health care organizations. Impact of changes on functions of management; approaches to governing health care organizations. Prerequisites: all HSC courses numbered lower than 4500 and permission of instructor.
- 4700** Senior Seminar (4)
Capstone course. Integration and synthesis of knowledge, skills and internship work. Prerequisites: graduating senior

status, completion of all Health Science courses required for the major and 28 elective units in option area, and permission of instructor. (Y)

4900 Independent Study (1-4)



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Department Information

General Information

Undergraduate Courses

Teacher Education

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Department of Teacher Education
College of Education and Allied Studies
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Professor Emerita: Margaret C. Desmond

Associate Professor Emerita: JoAnn Aiello Hatchman

Professors: Antonio Andrade, Joan D. Davenport, Phillip E. Duren
Jean L. Easterly, Bijan Gillani, James L. Shanker, David R.
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Associate Professors: Valerie Helgren-Lempesis, Lettie Ramirez

Assistant Professors: Li-Ling Chen, Denise Fleming, Shira
Lubliner, James M. Mitchell, David A. Nickles, Catherine F. Reed,
Linda Smetana, Craig Wilson

Lecturers: Gary Amado, John M. Chavez, John Dunford, Harold L.
Erickson, Joan C. Ernst, Leo J. Hinkel, Sybil M. Hoffman, Alice
Kam, Kenneth Kaufman, R. Arthur Lopez, Elizabeth M. McCarthy,
Shannon Merrill, Ethel M. Murphy, Norma Quan, Suzanne
Sullivan, Gilbert C. Yee

The Department of Teacher Education offers primarily post-baccalaureate and graduate courses. See Teacher Education in the Post-baccalaureate and Graduate section of this catalog.

The course prefix for the following courses is T ED.

These undergraduate courses may be taken to enhance teaching skills and give potential master's degree or teaching credential candidates additional experience working with children and young adults.

- 1000** Teachers for Tomorrow, Phase I (3)
Introduction to, and counseling for, the field of teaching. Directed observations, assistant teaching, lectures, discussions, and reporting related to pre-school, elementary, secondary and non-school educational

settings. For juniors and seniors in high school who are recommended by their teachers.

- 3001** Exploring Education (3)
Introduction to the field of teaching. Reports and discussions related to directed observations of preschool, elementary and secondary classrooms, and non-school educational settings. Examination of changing issues in education and their implications for future teaching practices and theories. Two hrs. lect., 2 hrs. act. (A)
- 3005** Intermediate Field Experience in the Elementary School A (1)
Observation and participation in an elementary school classroom in second quarter of blended Multiple Subject Credential/Liberal Studies Major program. Reports and discussion on issues raised. Prerequisite: admission to blended Multiple Subject Credential/Liberal Studies Major Program. CR/NC grading only. Two hrs. act.
- 3006** Intermediate Field Experience in the Elementary School B (1)
Observation and participation in an elementary school classroom in third quarter of blended Multiple Subject Credential/Liberal Studies Major program. Reports and discussion on issues raised. Focus on classroom management. Prerequisite: T ED 3005. CR/NC grading only. Two hrs. act.
- 3010** Service Learning in Schools and Communities (4)
(See REC 3010 for course description.)
- 3500** Introduction to Early Childhood Studies (4)
A survey of the methods and programs used to study and/or influence the development of young children. (Y)
- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with offcampus paid or volunteer activities. May be repeated for up to 4 units. No units may be counted toward credential programs. CR/NC grading only. Prerequisites: at least 2.75 GPA; departmental approval of activity.
- 3999** Issues in Teacher Education (4)
Readings, discussion, and research on contemporary and/or significant issues in teacher education. May be repeated for credit when content varies.
- 4041** Advanced Tutoring Methods in Reading, Writing and Learning Skills (4)
An introduction to the theories and methods of tutoring reading, writing, and learning skills at the college level. Analysis of receptive and expressive language and learning skills and their application to the content areas. Development of tutor communication skills and diagnostic/prescriptive tutoring methods. Prerequisite: T ED 4040. Two hrs. lect., 4 hrs. tutoring. (Y)

4042 Advanced Tutoring Methods in Mathematics and Science (4)

An introduction to the theories and methods of tutoring mathematics and science at the college level. Analysis of the critical thinking, learning skills, and problem solving strategies required in math and science. Development of tutor communication skills and diagnostic/prescriptive tutoring methods. Prerequisite: T ED 4040. Two hrs. lect., 4 hrs. tutoring. (Y)

4320 Art Skills for Teachers (4)

Designed specifically for teachers with little or no art experience. Work in drawing, printmaking, weaving, papier maché, puppets, masks, batik, tie dyeing, lettering. Suggestions for translating teacher skills into activities for children. May be taken twice for credit. A miscellaneous course fee will be charged. Please consult the quarterly *Class Schedule* for the current fee. (F, W, Sp)

4900 Independent Study (1-4)



HOME



HELP

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History

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Department Information

Department of History
 College of Arts, Letters, and Social Sciences
 Office: Meiklejohn Hall 4036.
 Phone: (510) 885-3207; FAX: (510) 885-4791

Professor Emeritus: Richard J. Orsi

Professors: Dee E. Andrews (Chair), Richard A. Garcia, Gerald S. Henig, Henry F. Reichman

Associate Professors: Pablo Raul Arreola, Jr., Sophia Lee

Assistant Professors: Deana L. Heath, Nicole C. Howard, Robert A. Phelps, Nancy M. Thompson, Jessica Weiss

Lecturers: Roger L. Baldwin, Jeffrey M. Burns, Richard B. Speed, Terry P. Wilson

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

Students who pursue work in History benefit in a variety of ways. Their studies afford them entree to the riches of the recorded past and understanding of the process of historical change. At the same time, a History major enables them to develop critical reading and writing skills which are valuable in life and in any employment field they choose to enter.

Career Possibilities

Archivist • Attorney • Corporate Historian • Curator • Diplomat/Foreign Service Officer • Government Service • International Relations Specialist • Journalist • Legal Assistant • Librarian • Museum Worker • Professor • Politician • Public Administrator • Researcher • Teacher • Writer

Features

The B.A. degree major in History requires 60 units in History, 16 at the lower division and 44 at the upper division level. Foundation courses (20 units) provide an introduction to the methods and purposes of historical study, historical writing, and a survey of world history. Concentration requirements (16 units) permit specialization in a particular area, while elective courses (16 units) provide additional breadth. Capstone courses in historiography and historical method acquaint students with the theory and history of historical study and provide opportunities for the student to engage in original historical research.

Preparation

Students planning to major in History should pay particular attention to the lower division requirements in the major: some of these may be satisfied before coming to Hayward.

Advanced Placement: Students who score a "3," "4," or "5" on the College Entrance Examination Board's Advanced Placement Test in European History will be granted 8 units of credit for HIST 1015 and HIST 1016 which count towards the lower division requirements in the History major. Students who earn a "3," "4," or "5" on the College Entrance Examination Board's Advanced Placement Test in U.S. History will receive 8 units of credit equivalent to HIST 1101 and 1102. Credit will apply to the U.S. history and U.S. Constitution requirements for graduation, but not to the California state and local government requirement. An additional course is required to complete the California state and local government requirement.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 60 units; the B.A. degree requires a total of 180 units.

I. Core Curriculum (36 units)

A. Foundation Courses (28 units)

The following courses should be taken as early in the major as possible:

- HIST 1000 The Nature of the Study of History (4)
(Transfer students who arrive with four upper division History courses or courses equivalent to HIST 4030 and 4031 may substitute an upper division History course for HIST 1000.)
- HIST 1014 World Civilizations I (or 1017) (4)
- HIST 1015 World Civilizations II (or 2018) (4)
- HIST 1016 World Civilizations III (or 2019) (4)
- HIST 1101 History of the United States to 1877 (4)
- HIST 1102 History of the United States since 1877 (4)
- HIST 3010 Historical Writing (4)

B. Capstone Courses (8 units)

The following courses should be taken in the student's

final three quarters. All Foundation courses must be completed before enrollment in Capstone courses.

HIST 4030 Historiography (4)

HIST 4031 Historical Research Methods (4)

II. Concentration Requirements (16 units)

The Department of History offers several concentrations for degree candidates. Majors should choose one of the following concentrations: United States History, European History, Asian History, Latin American History, History of California and the American West. Students may also design a topical (e.g., women's history), geographic (e.g., Russian history), or period (e.g., ancient and medieval history) concentration of their own with the advance written approval of the department chair.

A. United States History

1. Two courses (8 units) from the following: HIST 3411, 3412, 3413, 3414, 3415, 3416, 3417
2. Two courses (8 units) from the following: HIST 3500, 3503, 3505, 3511, 3515, 3530, 3540, 3547, 3550, 3553, 3567, 3568, 3570, 3571, 3572, 3575, 3802

B. European History

1. Two courses (8 units) from the following: HIST 3107, 3108, 3127, 3128, 3130, 3150, 3160, 3170
2. Two courses (8 units) from the following: HIST 3003, 3005, 3017, 3020, 3114, 3123, 3124, 3125, 3222, 3223, 3224, 3230, 3331, 3801

C. Asian History

Four courses (16 units) from the following: HIST 3020, 3302, 3305, 3307, 3311, 3312, 3313, 3322, 3323, 3325, 3803

D. Latin American History

Four courses (16 units) from the following: HIST 3600, 3605, 3620, 3622, 3632, 3804

E. History of California and the American West

1. HIST 3500, 3511 (8)
2. Two courses (8 units) from the following: HIST 3503, 3505, 3515, 3530, 4032

III. Electives (16 units)

Four upper division courses (16 units) in History. These must include at least one course from each of at least two different concentration areas outside the student's concentration. HIST 3400 may not be counted towards the major.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation that are

Minor Requirements

described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

The minor consists of 36 units. HIST 3400 may not be counted towards the minor.

- I. Lower Division (16 units)
 - HIST 1000 The Nature of the Study of History (4)
 - HIST 1014 World Civilizations I (or 1017) (4)
 - HIST 1015 World Civilizations II (or 2018) (4)
 - HIST 1016 World Civilizations III (or 2019) (4)
 - II. Upper Division (20 units)
 - A. HIST 3010 Historical Writing (4)
 - B. Area Requirements
 - A minimum of four units of upper division History courses in each of the following areas: (1) Europe, (2) United States, and (3) Latin America or Asia (12)
 - C. One of the following:
 - HIST 4030 Historiography (4)
 - HIST 4031 Proseminar in Historical Method (4)
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History Option: Liberal Studies

Area VII, Credential Track or Area VI, General Track (24 units)

- HIST 3500 History of California (4)
- HIST 4031 Proseminar in Historical Method (4)

Four additional courses in History, at least three of which must be upper division, and which represent at least two of the following fields: Europe, the United States, Latin America, and Asia. HIST 1101 and 1102 may not be counted towards the option. (16)

Undergraduate Courses

The course prefix for the following courses is HIST.

Lower Division Courses

- 1000** The Nature of the Study of History (4)
A seminar dealing with the nature of historical argument, interpretation, evidence and sources. Introduction to research methods, library and Internet resources, bibliographic techniques, and historical writing. (A)
- 1014** World Civilizations I (4)
[CAN HIST SEQ C = HIST 1014, 1015, 1016]

To ca. 800. Neolithic revolution. River Valley civilizations: Egypt, Mesopotamia, India, China. Ancient Hebrews. The Mediterranean: Hellenic, Hellenistic, and Roman civilizations. Emergence and spread of Christianity and Islam. Gupta India. Not open to those with credit for HIST 1017. (A)

- 1015** World Civilizations II (4)
[CAN HIST SEQ C = HIST 1014, 1015, 1016]
Ca. 800 to ca. 1700. Empires and civilizations: Sung China, Japan, West Africa, Byzantium, Abbasid Iraq and Islamic Spain, Aztecs and Incas, Christian Europe and feudalism. Eurasian migrations. European self-transformation and expansion. Monarchic states and market economies. Scientific revolution. Not open to those with credit for HIST 2018. (A)
- 1016** World Civilizations III (4)
[CAN HIST SEQ C = HIST 1014, 1015, 1016]
Ca. 1700 to present. European absolutism. Enlightenment and democratic revolutions. Industrial capitalism and social transformation. Liberalism, conservatism, nationalism, socialism. Imperialism in East Asia, India, Middle East, Africa. Second scientific revolution. World Wars, Communism, Fascism. Cold War and end of colonialism. Not open to those with credit for HIST 2019. (A)
- 1017** Ancient World Civilizations (4)
An overview of ancient world civilizations throughout the medieval period. Egypt, Mesopotamia, India, China. Ancient Hebrews. Hellenic, Hellenistic, and Roman civilizations and the emergence and spread of Christianity and Islam. Not open to those with credit for HIST 1014.
- 1101** History of the United States to 1877 (4)
[CAN HIST 8 = HIST 1101; CAN HIST SEQ B = HIST 1101, 1102]
A survey of the development of the American nation from colonial times to the close of Reconstruction. This course, when combined with credit for History 1102, meets statutory requirements in U.S. History, U.S. Constitution, and California State and Local Government. (A)
- 1102** History of the United States since 1877 (4)
[CAN HIST 10 = HIST 1102; CAN HIST SEQ B = HIST 1101, 1102]
A survey of American history from Reconstruction to the present. This course, when combined with credit for History 1101, meets statutory requirements in U.S. History, U.S. Constitution, and California State and Local Government. (A)
- 2018** Cultures in Contact: The Medieval and Modern World, 611 to 1700 (4)
An overview of the transition from the relatively isolated societies that existed during the middle ages to the increasingly globalized and interconnected early modern world; the most significant developments in political organization, economics, religion, and culture that occurred. Not open to those with credit for HIST 1015.

- 2019** The Modern World from 1700 to the Present (4)
An overview of world civilizations from 1700 to present and the most significant developments that occurred in political organization, economics, religion, and culture, emphasizing theme of global wealth, poverty and inequality. Not open to those with credit for HIST 1016.

Upper Division Courses

Europe

- 3003** The History of Utopia (4)
The Utopian tradition in Western political thought, philosophy, science fiction, art, and film: fantasy worlds and nightmare societies from Plato's Republic to the late 20th century. (Not open to students with credit for G S 4324 or HIST 3950.)
- 3005** Frankenstein: The Making of a Myth (4)
Mary Shelley's classic tale Frankenstein against the background of the Romantic movement. The Frankenstein story in literature, film, and other forms of popular culture as a critical insight into modern science and technology.
- 3020** Modern Imperialism and Colonialism (4)
Consolidation, management, and disintegration of European empires in the nineteenth and twentieth centuries. Impact of imperialism and colonialism on Europe and colonized societies, focusing on South Asia and Africa.
- 3107** History of Ancient Greece (4)
From the Bronze Age to Alexander the Great. The Homeric World; the development of the city-state; classical thought and culture; the Persian and Peloponnesian Wars; the rise of Macedon.
- 3108** History of Ancient Rome (4)
Politics and society in Rome from foundation to AD 565. Etruscans; Republic and Punic Wars; Julius Caesar; Age of Augustus, and the pax Romana; paganism and Christianity; barbarian incursions; decline of empire in the West. Not open to those with credit for HIST 3109 or 3110.
- 3114** History of Early Christianity (4)
Topics of study include the Jewish and Roman backgrounds, the historical Jesus, the influence of Paul, and the development of Christian institutions in the first four centuries.
- 3123** History of Medieval Christianity (4)
The Christian faith and its institutions from ca. 500 to ca. 1500: development of church hierarchy, monasticism, conflicts between secular and ecclesiastical authority, the medieval university, theology, maintaining an orthodox faith, and Christianity as perceived and practiced by ordinary Christians.
- 3124** Women in Classical Antiquity (4)

Role and status of women from the rise of civilization in Egypt and Mesopotamia to the decline of the Roman Empire. Women's political, economic, religious, domestic, and educational spheres. Impact of cultural definitions of the feminine on the lives of men and women.

- 3125** Women in Medieval and Early Modern Europe (4)
Women's political, economic, religious, domestic, and educational spheres in medieval and early modern Europe. Includes primary sources and emphasis on historical interpretation.
- 3127** Europe in the Early Middle Ages (4)
European society and politics, 300-1150. Fall of Rome; Germanic kingdoms; Benedictine monasticism; rise of the papacy; pagans and conversion; Carolingian Renaissance; Viking invasions; Gregorian Reform.
- 3128** Europe in the Later Middle Ages (4)
European society and politics, 1150-1400. Popular religion; the Crusades; heresy and the Inquisition; kings and law; growth of towns and trade; bubonic plague and dissolution of the medieval order.
- 3130** Renaissance and Reformation Europe (4)
Europe, 1350-1550. Politics, economics, arts, humanism, and science in the Renaissance; the Protestant and Catholic Reformations. Not open to those with credit for HIST 3131.
- 3150** Early Modern Europe, 1550-1789 (4)
Wars of religion, constitutional and absolutist struggles and the resulting political philosophies; age of exploration and discovery; intellectual and technological effects of the scientific revolution; age of Enlightenment.
- 3160** Europe in the 19th Century (4)
The Revolutionary and Napoleonic legacy; Romanticism, Liberalism, and Socialism; the Revolutions of 1830 and 1848; Nationalism and the consolidation of states; Darwinism and its social ramifications; European imperialism and the First World War. (Y)
- 3170** Europe in the 20th Century (4)
Europe's tumultuous century. Two World Wars; rise and fall of fascism and Communism; decolonization; changing attitudes toward social class, sexuality, and the family. (Y)
- 3222** Imperial Russia from Peter the Great to Lenin (4)
The tsarist empire from Peter's accession in 1682 to the collapse of 1917. Absolutism under Peter and Catherine the Great, serf emancipation and "Great Reforms," rise of liberal, socialist, and nationalist opposition. Emphasis on origins of the revolution.
- 3223** History of the Soviet Union (4)
The revolutionary movement in Russia, Marxism-Leninism, the Provisional Government and the Bolshevik coup, domestic and foreign affairs under Lenin and his

successors.

3224 The Cold War (4)
History of the Cold War from 1939 to the fall of the Berlin Wall in 1989.

3230 The Scientific Revolution (4)
Major developments in science from the medieval period through the seventeenth century. Special attention to questions scientists asked, the methods they employed, and the institutional frameworks in which Copernicus, Galileo, Harvey, Bacon, Newton and others worked.

3331 History of Science (4)
(See PHIL 3331 for course description.)

3801 Topics in European History (4)
Reading, discussion, and research on selected topics in European history. Repeatable for credit when content is different.

Asia

3302 Modern East Asia Through Film (4)
Individualism, gender relations, family life, nationalism, and imperialism in 19th and 20th century China, Japan, and Korea through films produced in East Asia and elsewhere.

3305 Modern India (4)
History, culture and political economy of the Indian subcontinent from the seventeenth century to present. Decline of Mughal empire, British colonial conquest, anti-colonial resistance, nationalism and religious identity, Gandhi, independence, post-colonial India, Pakistan, and Bangladesh.

3307 Modern India through Film (4)
The history of nation, class, caste, gender, sexuality, community, and diaspora as documented in Indian film. Special focus on Bollywood. Weekly readings and discussions.

3311 Traditional China (4)
China from classical antiquity to the 19th century; intellectual trends, political developments, and social changes.

3312 Modern China (4)
China from the Opium War to 1949. The collapse of imperial China, Western incursions, the emergence of modern culture, and the roots of the Communist revolution.

3313 People's Republic of China (4)
The socialist experience in China from 1949 to the present: the leadership of Mao Zedong, the Cultural Revolution, and changes in urban and rural areas in the post-Mao era.

3322 Early Japan (4)

Cultural, social, and political history of Japan to 1800. The aristocracy, the samurai, and the impact of Asian continental culture.

- 3323** Modern Japan (4)
Japan as an industrial and imperialist power from traditional foundations to defeat in World War II. Modern culture, party politics, and social problems.
- 3325** Postwar Japan (4)
The political, social, and cultural dimensions of Japan's transformation from defeated nation in 1945 to world economic power today.
- 3803** Topics in Asian History (4)
Reading, discussion, and research on selected topics in Asian history. Repeatable for credit when content is different.

United States

- 3400** America to 1900 (4)
Survey from colonial times to 1900. For partial fulfillment of subject matter preparation in history and social science for the multiple-subject teaching credential. Not for history major credit. (Y)
- 3411** Colonial America (4)
Development of the British mainland colonies from frontier societies to the Age of the American Revolution. Topics include Native American background, European expansion, regional variation, mercantilism, slavery, cultural diversity, and the rise of colonial political institutions. (Y)
- 3412** The American Revolution (4)
The creation of the American republic, 1763-1800. Imperial politics, loyalism, and the war; postwar changes in constitutions, politics, slavery, gender relations, and the frontier. (Y)
- 3413** The New Republic (4)
The expansion of the new republic, 1800-1850. Democratic politics, early industrialization, the Cotton South, reform movements, the Mexican-American War, and California. (Y)
- 3414** Civil War and Reconstruction (4)
The Civil War and American society, 1850-1877. Causes, content, and consequences of America's bloodiest conflict. (Y)
- 3415** America in the Age of Empire (4)
The rise of imperial America, 1877-1920. Industrialism, mass immigration, urbanization, populism, progressivism, foreign expansion, and World War I. (Y)
- 3416** The Great Depression and World War II (4)
The modernization of the United States, 1920-1945. The modernist 1920s, origins and impact of the Great

Depression, the New Deal, mass culture, World War II and mass mobilization. (Y)

- 3417** Cold War America (4)
The United States in the postwar era, 1945-1989. Prosperity, anticommunism, the Civil Rights Movement, Vietnam and the 1960s, Watergate, internationalism, and the end of the Cold War. (Y)
- 3500** History of California (4)
California history from early days to the present, emphasizing the influence of geography, natural resources, and a growing population. Satisfies requirement in California state and local government. (A)
- 3503** History of the San Francisco Bay Area (4)
The settlement of the Bay Area from the Indian period through the twentieth century, stressing the influence of natural environment, population growth, ethnic assimilation, transportation, urbanization, and economic development on the evolution of a regional culture.
- 3505** California Environmental History (4)
California environmental history from the Indian period to the present. Varying interactions between human societies and the natural environment, the deterioration and exhaustion of natural resources, and recent efforts to promote greater environmental balance.
- 3511** The American West (4)
Westward expansion of the United States from 1763 to 1900; development of western states and effect on the history of the nation. (Y)
- 3515** The Mexican-American and the American Southwest (4)
The historical evolution of northern Mexico. Acquisition of the Southwest by the United States. Social, economic, and political development of region, with emphasis on the role and social condition of the Mexican-American people. (Y)
- 3530** The Shaping of North America, 1492-1850 (4)
Major topics in the formation of North American societies, including Native American peoples, impact of European expansion, Africans in the West Indies, environmental transformation, creation of U.S. and California. Visual documentation of North American cultures.
- 3540** The Making of the U.S. Constitution (4)
Seminar in the political and social significance of the Constitution. Ideas and personalities behind the formation of the Constitution, the ratification debates, and the adoption of the first 10 amendments.
- 3547** The United States and Modern War (4)
The experience of United States men and women in modern war from 1861 to the present. Why people go to war, soldiers' daily life, combat experiences, technology of warfare, life on the homefront, and war in literature and film.

- 3550** The History of U.S. Foreign Relations (4)
Selected problems of American foreign relations, including the American Revolution, expansion and conflict, isolationism and internationalism, the Cold War and terrorism. Consideration of the State Department and of diplomatic practice in their historical context.
- 3553** Modern American Thought and Culture (4)
Intellectual, political, and cultural ideas, ideologies, and movements in twentieth-century United States. Focus on Progressivism, Pragmatism, the Romantic Left, Socialism, Unionism, Utopianism, Liberalism, the New Left, and Conservatism.
- 3567** Blacks in the United States (4)
Political, economic, social, and cultural history of African-Americans in the United States since 1619. A comparison of the African-American experience with the experiences of other Americans. Cross-listed with E S 3567. (A)
- 3568** Blacks in the West (4)
A social, political, economic, and cultural history of blacks in the Western United States from Estevanico to the present. Topics include black settlement patterns, black occupational status, blacks in myth and reality, twentieth century migration, and protest and reform.
- 3570** The Family and Sexuality in American History (4)
Development and diversity of family life in U.S. from pre-colonial beginnings to present. Regional and racial family patterns; responses to urbanization and industrialization; African American families during and after slavery; development of companionate family; changing role of families.
- 3571** Women in America to 1890 (4)
Survey of women and gender in the social, economic, and political life of the U.S. to 1890. (A)
- 3572** Women in America since 1890 (4)
Survey of women and gender in the social, economic, and political life of the U.S. since 1890.
- 3575** Baseball in America (4)
The history of baseball and its role in American Society. 19th Century origins of the game, the major and minor leagues, amateur baseball from universities to prisons, the Negro leagues and integration, labor relations and cultural influences.
- 3580** Lincoln and His Times (4)
Lincoln and his personality in the context of antebellum and Civil War America.
- 3802** Topics in United States History (4)
Reading, discussion, and research on selected topics in United States history. Repeatable for credit when content is different.

Latin America

- 3600** Colonial Latin America (4)
Relations among the colonists, Crown, Church, and Indians during and after the Spanish conquest. The catastrophic fall in the Indian population, the rise of the great estate, and the decline of Iberian power in the New World at the end of the eighteenth century. (Y)
- 3605** Modern Latin America (4)
Latin American history from 1810 to 1950. Emphasis on process of independence, state formation, national consolidation, and neocolonialism in the nineteenth century. The rise of nationalism and social revolution after 1910. (Y)
- 3620** The Cuban Revolution and Latin America (4)
Castro's Revolution in Cuba and its impact on Latin American politics and relations with the United States. Influence of fidelismo on social reform, revolution, and counter-revolution. (Y)
- 3622** Mexico Since 1810 (4)
The development of Mexico from the wars of independence; evolution of political, economic, and social institutions.
- 3632** Film and Society in Latin America (4)
Film as a reflection of major themes and issues in Latin America, e.g., slavery and race relations, women's role in society, emergence of the military as a dominant political force, U.S. attitudes toward Latin America.
- 3804** Topics in Latin American History (4)
Reading, discussion, and research on selected topics in Latin American history. Repeatable for credit when content is different.

General

- 3010** Historical Writing (4)
Writing and rewriting historical essays, reviews, and research papers through study of selected historical topics. Emphasis on argument, organization, and form. Prerequisite: HIST 1000. (A)
- 3017** The Twentieth Century (4)
World history from WWI to Soviet collapse, focusing on diplomacy, economics, and political/social trends. The world wars, Russian revolution and Stalinism, fascism and Nazism, Chinese Revolution, Cold War, decolonization and end of Western hegemony, globalization of world economy. (Y)
- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or

volunteer activities. May be repeated for up to 5 units. A maximum of 5 units will be accepted toward the History major. Prerequisites: at least 2.0 GPA; departmental approval of activity. (A)

- 3999** Issues in History (4)
Readings, discussion, and research on contemporary and/or significant issues in history. May be repeated for credit when content varies.
- 4030** Historiography (4)
Development of historical writing from antiquity to present. Emphasis on Herodotus, Thucydides, St. Augustine, Vico, Hegel, Marx, and 20th century historians. Survey of other significant historians. Prerequisite: senior standing and HIST 1000, 1014-15-16, and 3010 or consent of instructor. (A)
- 4031** Historical Research Methods (4)
Introduction to historical research through preparation of research paper based on primary sources. Prerequisite: senior standing. HIST 1000, 1014-15-16, and 3010 or instructor's consent. Liberal Studies History Option students may waive prerequisites but should complete other history option courses first. (A)
- 4032** Introduction to Public History (4)
The use of historical theory and method in non-academic settings, including museums, archives, consulting organizations, historical societies, government agencies, business, and historical preservation projects. Field trips to selected non-academic settings.
- 4500** The California History-Social Science Framework (1)
Content review of California K-12 History-Social Science Framework for prospective teachers. Enrollment only in final quarter of Subject Matter Preparation Program in Social Science. No credit for History major or minor. (A)
- 4710** History and Trends in Nursing (4)
Survey of the development of modern nursing. Emphasis on social trends that have influenced the development of nursing; the Judeo-Christian tradition; the military heritage; the women's movement; developments in health care delivery. (Y)
- 4900** Independent Study (1-4)
Supervised study. Prerequisite: consent of instructor. (A)



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Theatre Arts

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Department Information

Department of Theatre and Dance
 College of Arts, Letters, and Social Sciences
 Office: Robinson Hall 220
 Phone: (510) 885-3118

Professors: Regina Cate, Edgardo de la Cruz, Thomas C. Hird (Chair), Rhoda Helfman Kaufman, Roderic M. Prindle

Lecturer: Laura E. Ellis

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

The Department of Theatre and Dance provides comprehensive pre-professional training in the areas of acting, directing, dance, design, and theatre technology. The primary goal of the program is to develop artists whose performance skills and creativity are supported by a sound background in history, literature, and aesthetics. In an environment designed to encourage creativity and self expression, each student has opportunities to participate in various specializations within the major--acting, costuming, dance, directing, scenery, lighting design, or management. Students perform regularly in a variety of theatre and dance productions in the university's two performance facilities.

Theatre Arts graduates acquire a range of skills. This enables them to pursue different professional options. Many have entered advanced studies in nationally recognized universities and conservatories. Some have chosen careers in teaching, while others have gone directly into theatre or dance performance. Employers in other professions desire Theatre Arts graduates for their team skills, their imaginative approach to problems, and their ability to communicate creatively.

Career Opportunities

Actor/Actress • Broadcast Technician • Business Agent • Choreographer • College Student Services • Comedian • Corporate Officer • Costume Designer • Costume Technician • Dancer • Director • Drama or Dance Teacher/Professor • Dramaturg • Lighting Technician • Make-Up Artist/Specialist • Non-profit Manager • Performing Arts Fundraiser • Playwright • Producer • Recreation Supervisor • Sales Manager • Set Decorator • Set Designer • Sound Technician • Stage Manager • Theatre Critic • Theatre Technician • Theatre Manager

Features

The Department of Theatre and Dance produces approximately 12 plays and dance concerts during the year (including summer). The selection of plays exposes students in design, acting, directing, stage management, and technical theatre to a wide variety of styles, periods, and genres from Shakespeare to David Mamet and from Greek Tragedy to Modern Drama.

The department has several performance groups. Musical Theatre, Dance Touring, Children's Theatre, and Improvisation add to a varied and challenging performance schedule. A special feature of the Children's Theatre production each year is the opportunity for students to perform and serve as technical crew for up to 20 performances. This gives the student the experience of a "long run" show.

The Highlands Summer Theatre program is designed to give students a chance to test themselves and their art. The fully functioning theatre environment becomes a career choice experiment for the beginning artist, a proving ground for artist-in-training, and a place for both to develop and refine skills. All company members register for the 8 unit Summer Theatre course.

The Theatre and Dance Department is fortunate to have excellent facilities including the 480 seat University Theatre, the flexible Studio Theatre, scene shop, costume shop, twelve-station drafting room, acting studio, green room, make-up room, dressing rooms with lockers and showers, and a spacious Dance Studio.

Major Requirements (B.A.)

The Theatre Arts major consists of 75-110 units, depending upon whether or not students choose an option. The Theatre Arts major without an option consists of 75 units. The B.A. degree requires a total of 180-181 units.

- I. Beginning Electives (16 units)
Complete eight technique courses in the first two years as follows: three Acting, three Dance, and two Technology and Design courses numbered below 2999, as defined by the Subject Area Course List.

Complete three show assignments in the first two years as follows: three Production and Performance courses (THEA 1490 through 1499 and THEA 2490 through 2499) as defined by the Subject Area Course List.

THEA 2001 Survey of Basic Theatre Techniques (2)

At the beginning of the third year, majors take this course to assess their knowledge and skills in preparation for upper division courses. Students prepare a portfolio covering work in their first- and second-year courses and production. Students who enter with an adequate portfolio may challenge the course. Obtain written outcomes and department portfolio standards from the department office.

II. Common Core (30 units)

DANC 1200 Exploring Creativity (4)

DANC 3251 Movement Analysis (4)

DANC 3252 Dance Through the Ages (4)

THEA 3253 Theatre Through the Ages (4)

THEA 3254 Scenery, Lighting, and Sound Concepts (4)

THEA 3255 Costumes and Makeup Concepts (4)

THEA 3256 Directing: Text to Stage (3)

THEA 3257 Design for Stage (3)

III. Advanced Electives (19 units)

Theatre History and Literature Elective (4 units)

One additional course in Theatre History and Literature (or) Dance History. Students who intend to complete the Dance Option should take DANC 4201.

Advanced Technique Elective (6 units)

Two additional courses in advanced technique. Take courses numbered 3000 or above in ONE area of emphasis: Acting, Dance, or Technology and Design.

Production and Performance (9 units)

At least three Production and Performance courses, numbered 3000 and above, covering at least three show assignments during the final two years.

IV. Culmination and Assessment (10 units)

Each student must complete a Senior Culmination Project to include either a performance project in the Senior Festival, a written thesis, or a substantial internship. Students may substitute internship credit or thesis-related Independent Study credit for their Senior Festival courses.

THEA 4151 Senior Festival Preproduction (3)

THEA 4152 Senior Festival Performance (3)

THEA 4155 Career Management Issues in Theatre Arts (4)

V. Options (13-35 units)

Options provide the opportunity to explore a specialized mode of theatre arts beyond the level of the basic emphasis required to graduate. Options allow sufficient depth of study to prepare for graduate school or entry-level work in a semi-professional company and involve additional work beyond the major requirements listed above. An Option is not required. The department's graduates have found work in professional nonprofit companies after completing an internship as part of their CSUH program. The additional work required for an option will prove useful in obtaining a quality internship or graduate school placement, so we recommend that students complete most of their option before seeking an internship.

Acceptable courses are listed in the Subject Area Course List.

A. Acting (18 units)

Total major units with this option: 93.

History and Literature (4 units)

Complete a third course in Theatre History and Literature.

Foundational Technique (2 units)

Complete two additional Acting technique courses 2999 or below.

Advanced Technique (12 units)

Complete four additional advanced Acting courses 3000 or above.

B. Dance (13-15 units)

Total major units with this option: 88-90.

Foundational Technique (0-2 units)

Complete two additional Dance courses, if required, to meet the following goals.

Goals: One course of beginning technique in three different dance techniques; one course of intermediate technique in two different dance techniques.

Advanced Technique (13 units)

Complete three to four additional advanced Dance technique courses numbered 3000 or above.

C. Directing (22-26 units)

Total major units with this option: 97-101.

History and Literature (8 units)

Complete two additional courses in Theatre History and Literature. Selections must be approved by chair and advisor in advance.

Foundational Technique (2 units)

Complete one additional Acting Technique course numbered 2999 or below (1).

Complete one additional Technology and Design Foundation Technique course numbered 2999 or below (1)

Advanced Technique (6-8 units)

Complete two additional Technology and Design Advanced Technique courses numbered 3000 or above (6-8).

Production and Performance (6-8 units)

Complete two additional Production and Performance assignments. Selections must be approved by the chair and advisor in advance.

D. Musical Theatre (32-35 units)

Total major units with this option: 107-110 units.

Dance (8-9 units)

DANC 2120, 2121, 2122 Musical Theatre Dance A, B, C

(6)

Select one course (2-3 units) from the following:

DANC 2123, 2124 Musical Theatre Dance D, E (2 each);
DANC 3171, 3172, 3173 Advanced Jazz Dance I, II, III (3 each)

Advanced Musical Theatre Technique (18 units)

THEA 2041, 2042, 2043 Musical Theatre Techniques A, B, C (9)

THEA 4041, 4042, 4043 Musical Theatre Ensemble A, B, C (9)

Production and Performance (6-8 units)

Complete two additional performances in a Musical Theatre role (6-8). Selections and courses must be approved by the chair and advisor in advance.

Note: The following Music courses are highly recommended, but not required, for the Musical Theatre Option:

MUS 1027, 1028, 1029 Sightsinging I, II, III (3) (Success in sightsinging requires previous experience reading music.)

MUS 1031, 1032, 1033 Music Theory I, II, III (12)

E. Technology and Design (20-22 units)

Total major units with this option: 95-97.

History and Literature (4 units)

Complete a third course in Theatre History and Literature (4)

Foundational Technique (2 units)

Complete two additional Technology and Design courses, numbered 2999 and below (2).

Advanced Technique (8 units)

Complete two additional Technology and Design courses, numbered 3000 or above (8).

Production and Performance (6-8 units)

Complete two additional Production and Performance assignments (6-8). Selections must be approved by the chair and advisor in advance.

F. Theatre and Dance for Children and Community (24 units)

Total major units with this option: 99.

Emphasis Courses (20 units)

Complete five courses from the related Subject Area Course List (20).

Production and Performance (4 units)

Complete one additional production assignment in Technology and Design (4). Selections must be approved by the chair and advisor in advance.

G. Theatre: History and Literature (24 units)
Total major units with this option: 99. *All selections must be approved by the chair and advisor in advance.*

History and Literature (8 units)

Complete two additional courses in Theatre History and Literature (8).

English (8 units)

Complete two History and Literature courses: ENGL 3000 or above (8).

Production and Performance (8 units)

Complete two additional Production and Performance assignments (8).

Subject Area Course Lists

Acting

Technique Courses

THEA 3031 Advanced Acting: Essentials
THEA 3032 Advanced Acting: Problems
THEA 3033 Advanced Acting: Auditioning and Talent Analysis
THEA 3052 Acting for the Camera
THEA 2016, 2017, 2018 Stage Movement A, B, C
THEA 2026, 2027, 2028 Improvisation A, B, C
THEA 2031, 2032, 2033 Stage Voice A, B, C

Dance

DANC 2023 Dance Fitness
DANC 2030 Fundamentals of Modern Dance
DANC 3022 Improvisation and Beyond
DANC 3215, 3216, 3217 Dance Touring I, II, III
DANC 3220 Dance Composition and Production I
DANC 3426 Collaborative Dance Theatre
DANC 4220 Dance Composition and Production II

Beginning Technique Courses

DANC 1002 Country Western Line Dance
DANC 1019 African Dance
DANC 1131, 1132, 1133 Beginning Hip Hop Dance I, II, III
DANC 1141, 1142, 1143 Beginning Modern Dance I, II, III
DANC 1171, 1172, 1173 Beginning Jazz Dance I, II, III
DANC 1181, 1182, 1183 Beginning Ballroom Dance I, II, III
DANC 1191, 1192, 1193 Beginning Ballet Dance I, II, III

Intermediate Technique Courses

DANC 2030 Fundamentals of Modern Dance
DANC 2141, 2142, 2143 Intermediate Modern Dance I, II, III
DANC 2171, 2172, 2173 Intermediate Jazz Dance I, II, III
DANC 2181, 2182, 2183 Intermediate Ballroom Dance I, II, III
DANC 2191, 2192, 2193 Intermediate Ballet Dance I, II, III

Advanced Technique Courses

DANC 3141, 3142, 3143 Advanced Modern Dance I, II, III
DANC 3171, 3172, 3173 Advanced Jazz Dance I, II, III
DANC 3440 Modern Technique

Dance History Course
DANC 4201 Dance in Modern Society

Musical Theatre

THEA 2041, 2042, 2043 Musical Theatre Techniques A, B, C
THEA 4041, 4042, 4043 Musical Theatre Ensemble A, B, C
DANC 2120-2125 Musical Theatre Dance A, B, C, D, E, F

Production and Performance

THEA 1490, 2490, 3490, 4490 Costume or Backstage Activity A-D
THEA 1492, 2492, 3492, 4492 Stage Crew Activity A-D
THEA 1493, 2493, 3493, 4493 Production Staff Activity A-D
THEA 1494, 2494, 3494, 4494 Festival Activity A-D
THEA 1495, 2495, 3495, 4495 Studio Production Activity A-D
THEA 1496, 2496, 3496, 4496 International Touring Activity A-D
THEA 1498, 2498, 3498, 4498 Summer Theatre Practicum A-D
THEA 1499, 2499, 3499, 4499 Production Practicum A-D

Technology and Design

Foundation Technique Courses

THEA 2421 Wood Scenery: Walls and Levels
THEA 2422 Costume Technique
THEA 2423 Lights: Hanging and Focus
THEA 2424 Sound: Recording
THEA 2425 Stage Effects
THEA 2426 Scenery Painting
THEA 2427 Stage Welding
THEA 2428 Sound: PA

Advanced Technique Courses

THEA 3170 Technical Production
THEA 3422 History of Costume
THEA 3423 Non-Western Costume
THEA 3424 Scene Painting and Graphic Language
THEA 4418 Advanced Makeup and Maskmaking

Theatre and Dance for Children and Community

DANC 2020 Rhythm and Music for Dance
DANC 3235 Dance for Children
DANC 3241 The Dance Experience
THEA 3610 Interpretation of Children's Literature and Story Telling
THEA 3650 Dramatic Activities for Children
THEA 3660 Children's Theatre Performance
REC 1000 Nature and Scope of Recreation and Community Services
REC 3000 Philosophy of Leisure Studies
REC 3700 Community Organizations in the Urban Setting

Theatre History and Literature

ENGL 2040 Introduction to Creative Writing on Poetry
ENGL 2050 Introduction to Creative Writing on Drama
ENGL 3650 Women and Literature

ENGL 3760 Literature of the Twentieth Century
ENGL 4251 Introduction to Shakespeare or ENGL 4720
Mythology
ENGL 4450 Studies in British Women's Literature
ENGL 4637 Studies in 20th-Century American Literature
ENGL 4840 The Short Story
THEA 3202 European Medieval and Renaissance Drama
THEA 3203 Modern European Drama
THEA 3207 Modern American Theatre
THEA 3226 The Woman Artist
THEA 4375 Ethnic and Immigrant Theatre in the United States

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

I. Theatre (29-34 units)

A. Fundamental Courses (4-9 units)

THEA 1020 Discover Acting (3) or two units in
Improvisation from THEA 2026-2028 (2)

THEA 2421, 2422, 2423, 2424, 2426 and 2428
Fundamental Backstage Technology (6)

Note: Students may challenge any or all of these courses by taking THEA 2001 Survey of Basic Theatre Techniques (2)

B. Core Courses (19 units)

DANC/THEA 1200 Exploring Creativity (4)
THEA 3253 Theatre Through the Ages (4)
THEA 3254 Scenery, Lights and Sound Concepts (4)
THEA 3255 Costumes and Makeup Concepts (4)
THEA 3256 Directing: Text to Stage (3)

C. Performance and Production Courses (minimum 6 units)

Three production assignments required. For each assignment, enroll for a minimum of two (2) units each from Theatre Production Activity courses by advisement.

II. Children's Theatre and Dance (32-33 units)

A. Fundamental Courses (7 units)

DANC 2020 Rhythm and Music for Dance (2)

Two units from the following (2):

THEA 2001 Survey of Basic Theatre Techniques (2)
THEA 2421-2428 Fundamental Backstage Technology (1 each)

Three units from the following; one unit must be at

intermediate level (3):

DANC 1141, 1142, 1143 Beginning Modern Dance I, II, III
DANC 1171, 1172, 1173 Beginning Jazz Dance I, II, III
DANC 1191, 1192, 1193 Beginning Ballet Dance I, II, III
DANC 2141, 2142, 2143 Intermediate Modern Dance I, II, III
DANC 2171, 2172, 2173 Intermediate Jazz Dance I, II, III
DANC 2191, 2192, 2193 Intermediate Ballet Dance I, II, III

B. Core Courses (19-20 units)

DANC/THEA 1200 Exploring Creativity (4)
DANC 3235 Dance for Children (4)

DANC 3251 Movement Analysis (4) or THEA 3256
Directing: Text to Stage (3)

THEA 3254 Scenery, Lights and Sound Concepts (4) or
THEA 3255 Costumes and Makeup Concepts (4)

THEA 3610 Interpretation of Children's Literature and Story
Telling (4) or THEA 3650 Dramatic Activities for Children
(4)

C. Performance and Production Courses (6 units)

THEA 3660 Children's Theatre Performance (4)

One additional production assignment required. Enroll for a
minimum of two (2) units from Theatre Production Activity
courses by advisement.

III. Dance Minor (34 units)

A. Fundamental Courses (6 units)

DANC 2020 Rhythm and Music for Dance (2)

Complete four units from the following (4):

THEA 2001 Survey of Basic Theatre Techniques (2)
THEA 2421-2428 Fundamental Backstage Technology (1
each)

B. Core courses (18 units)

DANC/THEA 1200 Exploring Creativity (4)
DANC 3251 Movement Analysis (4)
DANC 3252 Dance Through the Ages (4) or DANC 4201
Dance in Modern Society (4)

Complete six units of Composition and Production from the
following or other courses approved by Chair (6):

DANC 3220 Dance Performance, Composition, and
Production I (3)
DANC 3215, 3216, 3217 Dance Touring I, II, or III (3 each)
DANC 4220 Dance Performance, Composition, and
Production II (3)

C. Performance Competencies (6 units)

Students must complete the competencies listed below by
taking technique courses in ballet, modern, or jazz dance.

Two beginning classes (2 units)

Two intermediate classes (2 units)
One advanced class (2 units)

- D. Performance and Production Courses (4 units)
Two production assignments required. For each assignment, enroll for a minimum of two (2) units from Theatre Production Activity courses by advisement.

Theatre Option: Liberal Studies

Area V (4 units)
THEA 1010 All the World's a Stage (or 1011) (4)

Area VII, Credential Track, or Area VI, General Track (24 units)

THEA 2310 Oral Interpretation of Literature (4)

Four units of upper-division THEA coursework covering stagecraft techniques, selected with consent of advisor (4)

Four units of upper-division theatre/dance coursework covering technique, design and performance, selected with consent of advisor (4)

Twelve (12) units of upper division theatre coursework selected from:

- THEA 3201 Classical Greek and Roman Drama (4)
- THEA 3202 European Medieval and Renaissance Drama (4)
- THEA 3203 Modern European Drama (4)
- THEA 3207 Modern American Theatre (4)
- THEA 3225 Theatre Today (4)
- THEA 3610 Interpretation of Children's Literature and Storytelling (4)
- THEA 3650 Dramatic Activities for Children (4)

Dance Option: Liberal Studies

Area VII, Credential Track, or Area VI, General Track (24 units)

- A. Required courses (17 units):
- DANC 3220 Dance Performance, Composition and Production I (3)
 - DANC 3235 Dance for Children (4)
 - DANC 3241 The Dance Experience (3)
 - DANC 4201 Dance in Modern Society (4)

Three units of upper division DANC coursework covering movement analysis and awareness, selected with consent of advisor (3)

- B. Four units selected from:
- DANC 2020 Rhythm and Music for Dance (2)
 - DANC 4220 Dance Performance, Composition and Production II (3)
- Two units of upper division THEA coursework covering technique or costume, selected with consent of advisor (2)

- C. Performance competencies (3 units)

Undergraduate Courses

Two units selected from:

DANC 1121-2-3 Beginning Latin Dance I, II, III
DANC 1131-2-3 Beginning Hip Hop Dance I, II, III
DANC 1141-2-3 Beginning Modern Dance I, II, III
DANC 1171-2-3 Beginning Jazz Dance I, II, III
DANC 1181-2-3 Beginning Ballroom Dance I, II, III
DANC 1191-2-3 Beginning Ballet Dance I, II, III

One unit selected from:

DANC 2131-2-3 Intermediate Hip Hop Dance I, II, III
DANC 2141-2-3 Intermediate Modern Dance I, II, III
DANC 2171-2-3 Intermediate Jazz Dance I, II, III
DANC 2181-2-3 Intermediate Ballroom Dance I, II, III
DANC 2191-2-3 Intermediate Ballet Dance I, II, III

Theatre

The course prefix for the following courses is THEA.

- 1005** How to See a Play (4)
An introduction to contemporary drama on the stage. How the printed play is translated into visual and aural images. Attendance at selected theatre events is required. Recommended for non-majors. (A)
- 1011** All the World's a Stage: Gender in the Arts (4)
How diverse cultures throughout history have created theatre and art; how representative artists have mirrored the concerns of their times especially concerning gender; and, how theatre artists interpret their art. Not open to those with credit for THEA 1010.
- 1013** Ancient World Theatre (4)
Dramatic texts of ancient theatre, especially ancient Greek and Roman periods. Special emphasis on performance space, costumes, and masks. Exercises to reveal how theatre artists analyze literature.
- 1020** Discover Acting (3)
Introduction to acting techniques to improve self-expression and observation skills. An introductory acting course designed for non-majors. Suitable as an elective for those who work with people of all ages in education, recreation, business and mass communication. (W)
- 1200** Exploring Creativity (4)
(See DANC 1200 for course description.)
- 2001** Survey of Basic Theatre Techniques (2)
Review of beginning production techniques. Develop portfolio. Challenge by submission of portfolio. Provides individualized plan for those who need additional beginning technique in preparation for advanced courses. Prerequisite: completion of an appropriate plan of lower division courses or equivalent.
- 2016**, Stage Movement A, B, C (1 each)
2017, Fundamentals of negotiating performance spaces,
2018 developing audience-performer relationships, and

enhancing stage picture; 2017 includes focus, metaphor, and psychology; 2018 includes gesture, styles, genres, and costume manipulation. May be taken in any order. May be repeated once with departmental permission. A maximum of 1 unit may be applied towards the major. Two hrs. act.

- 2026, Improvisation A, B, C (2 each)
2027, Basic improvisation. Improves group awareness, self-confidence. Exhilaration of creating from nothing; 2027 focuses on complex formats and games, many from Theatresports; 2028 introduces principles of story and long-form, and culminates in performances. Beginners enter sequence fall or winter only. 2026 and 2027 may be repeated once; 2028 may be repeated, with only one attempt applicable to the major. Prerequisite: THEA 2026 or 2027 or equivalent experience required for THEA 2028. Four hrs. act.
- 2031, Stage Voice A, B, C (1 each)
2032, Fundamentals of voice production; 2031 includes warm-ups, resonance, articulation, emphasis, projection, and breath control; 2032 introduces Standard American Speech in use in classic repertoire; 2033 introduces personality, character, intention, strategy, and metaphor. May be taken in any order. May be repeated once with departmental permission. A maximum of 1 unit may be applied towards the major. Two hrs. act.
- 2041, Musical Theatre Techniques A, B, C (3 each)
2042, Song interpretation for musical theatre. Concentrates on dialogue to song transition, phrasing, emphasis, and focus. Includes basic moves of vaudeville, jazz, and ballroom dance. Introduction to musical theatre scores. Six hrs. act.
- 2051 Technology and Culture in Performance (4)
How performing arts at various times and places portray the relationship between technology and culture, including theatre, music, dance, film, video, Web, and visual arts. Assignments relate to completion of a media project.
- 2188 Summer Theatre Workshop (2-6 units)
Specialized workshop in specific performance or technical skill. Typically one to five weeks in length. Usually related to a special culminating performance or to a regular summer show. May be repeated three times for credit for a total of 24 units, with a maximum of 6 units applicable to the major. Four - twelve hrs. act.
- 2211 Asian Thought in Theatre (4)
Asian thought as portrayed in Asian Performance and the role of Asian thought and performance techniques in U.S. and world theatre.
- 2311 Children, War, and the Holocaust (4)
Poetry, prose and dramatic texts about the roles of children in war. Special emphasis on WWII and Holocaust. Influences of storytelling, oral presentation, and performance techniques on both development and

critical analysis of literature.

- 2421-** Fundamental Backstage Technology (1 each)
2428 Basic techniques of production for performance situations. Lights course includes stage and TV. Effects course includes pyro, fog, and releases. Open to non-majors. May be repeated once with advisement for a total of 2 units, with a maximum of 1 unit applicable to the Theatre Arts major. Two hrs. act.
- 2421 Wood Scenery: Walls and Levels
2422 Costume Technique
2423 Lights: Hanging and Focus
2424 Sound: Recording
2425 Stage Effects
2426 Scenery Painting
2427 Stage Welding
2428 Sound: PA
- 3000** Theory of Theatre Performance (4)
A series of theatre activities to demonstrate the nature and execution of theatre performance. Combines improvisation, physicalization of subtext, creative dramatic techniques, and explorations of collaborative performance. Three hrs. lect., 2 hrs. act.
- 3014** Truthful Acting (3)
Advanced techniques for acting believably and with powerful personal involvement in situation and character. Prerequisite: THEA 1020. Two hrs. disc., 2 hrs. act.
- 3030** Acting Skills for Business and Systems Management (4)
Creative methods for viewing situations from all sides, reaching conclusions, developing positions, and communicating views effectively. Roles managers play in collaboratively developing plans of action including those for sales and project development. Creative communication strategies. Three hrs. lect., 2 hrs. act. (Y)
- 3031** Advanced Acting: Essentials (3)
Elements of the art of acting, advanced vocabulary and craft, comparison of eastern and western approaches, historical overview. May be repeated once with different instructor. Prerequisite: THEA 2001 or 4 units of acting. Six hrs. act.
- 3032** Advanced Acting: Problems (3)
Developing better systems for achieving personal artistic goals. Helps individuals with their specific problems, provides solutions. May be repeated once with different instructor. Prerequisite: THEA 2001 or 4 units of acting. Six hrs. act.
- 3033** Advanced Acting: Auditions and Talent Analysis (3)
Audition techniques using monologues, scene work, and cold reading; developing headshots and resumes; selling oneself through analysis of one's talents. May be repeated once with different instructor. Prerequisite: THEA 2001 or

4 units of acting. Six hrs. act.

- 3050** Teleplay Acting and Production Workshop (4)
Producing original television movie for cable broadcast. Primarily advanced camera acting techniques, includes some studio operation. Some roles may be assigned during previous quarter to students in THEA 3052. May be repeated once for credit. Two hrs. lect., 4 hrs. act.
- 3052** Acting for the Camera (4)
Acting in television drama; preparation for interviews and other television appearances. Prepares students for acting and production opportunities in CSUH creative video courses. Recommended preparation: THEA 1020, COMM 3100, or ENGL 3077. May be repeated once for credit.
- 3061** Period Acting (2)
Stylized acting technique applicable to works from selected periods and locales. Emphasis on Western, but includes content from at least one non-Western genre. Consult instructor about specific content. Repeatable for credit; maximum of 4 units applicable to major. Prerequisite: any lower-division acting course. Four hrs. act.
- 3170** Technical Production (4)
Case studies in technical theatre production, including research, visualization, material selection, construction, and finishing. Scenery, rigging, and props. Open to non-majors. Repeatable. Two hrs. lect., 4 hrs. act. (Alt. F)
- 3201** Classical Greek and Roman Drama (4)
The historic development of early classical drama from the Greek period through the Roman, including the study of representative plays, theatre architecture, and production. Individual research on selected topics. (Alt. Y)
- 3202** European Medieval and Renaissance Drama (4)
The historic development of European drama from the Medieval period through the Italian Renaissance, Elizabethan period, and 17th Century, including the study of representative plays, theatre architecture, and production. Individual research on selected topics. (Alt. Y)
- 3203** Modern European Drama (4)
The historic development of European drama from 1800 to the present, including study of representative plays, physical aspects of the theatre, and production practices. Individual research on selected topics. (Alt. Y)
- 3207** Modern American Theatre (4)
Study of representative American playwrights and their theatre from 1920 to the present. Individual research on selected topics. (Alt. Y)
- 3208** Postmodern Theatre (4)
Development of postmodern theatre with its emphasis on the mixing of different styles and periods, its interspersing of multiple meanings in a text performance, and its self-consciousness about performance itself. Individual

research on selected topics. (Alt. Y)

- 3216** History of Musical Theatre (4)
Musical theatre from 1866 to the present; 19th-century minstrel and variety shows; the theatre of social change in the 20's and 30's; and "concept" musicals after 1970. Requires theatre attendance.
- 3225** Theatre Today (4)
Methods for developing a critical viewpoint on theatrical production through observation and analysis of production elements. Includes historical perspectives. Attendance at a variety of theatre events is required. May be used as major elective by advisement only. (F, Sp)
- 3226** The Woman Artist (4)
Roots of U.S. culture in roles of women artists, including traditional gender-based forms of art (weaving, ceramics, storytelling); the female body in theatre and plastic arts; women artists of Europe, Africa, Pacific Rim, Latin America, and U.S. Cross-listed with ART 3226. (Alt. Y)
- 3228** Women in Dramatic Literature (4)
Classic heroines and villains in world drama, including Medea, Lady Macbeth, and Miss Julie. Investigation of the profound and often contradictory view of women as seen by the world's greatest dramatists. Recommended for non-majors. (Alt. Y)
- 3230** Shakespeare on Film (4)
Selected plays of Shakespeare shown on film in class. Discussion of literature, interpretations, techniques and concepts of plays as adapted for film and historic setting. Attendance at one live performance may be required for comparative purposes.
- 3232** Modern Art and Theatre (5)
Survey of art and theatre from late 19th century to present, from Realism to Post-Modernist performance. Includes excursions to performances and art venues.
- 3233** Modern Philippine Dramatic Literature and Styles (4)
Philippine/Filipino-American dramatic literature as a reflection of Philippine history, social tensions, and political issues; the Filipino-American experience in drama; post-colonial critique of substance and aesthetics in original and translated dramatic texts.
- 3253** Theatre Through the Ages (4)
Historical development of classical drama of a specific period, usually either Greek/Roman or Medieval/Renaissance/Shakespeare; the evolving performance space and production technique; representative literature and its influence on world theatre; research on selected topics.
- 3254** Scenery, Lights, and Sound Concepts (4)
Techniques and principles of sets, lighting, and sound for the performing arts. Emphasizes design basics, tools,

construction methods, reading plans, hanging and focusing lights, sound PA and production, props, drafting floor plans, and practical projects. Two hrs. lect., 4 hrs. act.

- 3255** Costumes and Makeup Concepts (4)
Techniques and principles of costumes and makeup for the performing arts. Emphasizes design basics, clothing construction, research methods, rendering techniques, makeup theory, and practical projects. Two hrs. lect., 4 hrs. act.
- 3256** Directing: Text to Stage (3)
Transformation of text to stage images. Signs and symbols of production elements. Scrutinize arts and myth, experiment in deconstruction, collage, and *mise en scene*. Basic directing. Six hrs. act.
- 3257** Design for Stage (3)
Aesthetics and practice of scenography, lighting, and costume in the performing arts. Techniques of drawing, painting, model building, research, and light plots. Prerequisite: THEA 2001 or consent of instructor. Six hrs. act.
- 3310** Interpretation of Women's and Ethnic Literature (4)
Research, selection, and analysis of literature contributing to U.S. culture by women and ethnic minorities. Rehearsal and performance as Readers' Theatre. Two hrs. lect., 4 hrs. act. (W)
- 3311** Filipino Theatre (4)
A beginning to intermediate practicum in theatre of the Philippines. Literature, acting, and theatrical aspects; includes a performance. Repeatable once for credit. Two hrs. lect., 4 hrs. act. (Alt. Y)
- 3315** Multicultural Theatre Troupe (4)
Techniques for performing before multicultural audiences. Oriented for non-majors. Involves off-campus shows. Two hrs. discussion, 4 hrs. act.
- 3320** Improvisation Performance Group (3)
Perfecting "theatre sports," comedy improv, and serious topical improvisation styles for public performances on campus and at local colleges, high schools, and other organizations. Previous improv experience . May be repeated for credit up to a maximum of 6 units. Only 3 units applicable to major. Six hrs. act. (W or Sp)
- 3418** Stage Makeup I (2)
A study of the theories of stage makeup, with practical experience in the application of these theories. One hr. lect., 2 hrs. act. (W)
- 3422** History of Costume (4)
The historic development of Western costume from Egyptian to modern styles. (Alt. Y)

- 3423** Non-Western Costume (4)
The development of non-Western clothing and costume. The important influences of Chinese, Japanese, Indonesian, Indian, and African clothing on all cultures. Recommended for nonmajors. (Alt. Y)
- 3424** Scene Painting and Graphic Language (4)
Exploration of methods of scenic painting. Problems in rendering, models, and full scale painting using scenic color media, texture treatment, and light and shadow techniques. Two hrs. lect., 4 hrs. act. (Alt. Y)
- 3487** Voice for Shakespearean and Period Theatre (2)
Vocal techniques required for speaking in Shakespearean and other period plays. Four hrs. act.
- 3610** Interpretation of Children's Literature and Story Telling (4)
Techniques of story telling; selection and practice in reading poetry and prose for children. Suggested for elementary teachers and theatre majors. Two hrs. lect., 4 hrs act. (Alt. F, Su)
- 3650** Dramatic Activities for Children (4)
Creative dramatics as a tool for building and developing the creative capacities of children. Includes theatre games, improvisation, puppetry, mask making, and other drama activities. Two hrs. lect., 4 hrs. act. (Y)
- 3660** Children's Theatre Performance (4)
Theory and techniques of producing theatre for children, including preparation and rehearsal for annual production. May be repeated for credit up to a maximum of 6 units. Majors may substitute 8 units of THEA 3660 for THEA 3181. Two hrs. lect., 4 hrs. act. (W)
- 3898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 4 units. A maximum of 4 units will be accepted toward the Theatre Arts major; a maximum of 4 units will be accepted toward the Theatre minor. Prerequisites: at least a 2.0 GPA; departmental approval of activity. (A)
- 3999** Issues in Theatre (4)
Readings, discussion, and research on contemporary and/or significant issues in theatre. May be repeated for credit when content varies.
- 4021** Play Direction: Sign and Symbol Theory in Production (4)
Signs and symbols for use in production elements and fundamental play direction. Scrutiny of arts and myth, as well as experiments in deconstruction, collage, and *mise en scene*. Majors must have senior standing, others require permission of instructor. Two hrs. lect., 4 hrs. act. (W)

- 4022 One-Act Production (4)
Exercises in communication among directors, designers, and actors. The development of manifestos, points-of-view, and production concepts. Production methods and actual production. Two hrs. lect., 4 hrs. act. (Sp)
- 4041, Musical Theatre Ensemble A, B, C (3 each)
4042, Character and scene study for musical theatre.
4043 Concentrates on duets, trios, and group numbers. Introduction to musical theatre literature. Six hrs. act.
- 4151 Senior Festival Preproduction (3)
Preparation for senior culmination performing arts project. May substitute full-time internship in professional environment. Open to non-major performers and technicians with some experience. May repeat once; applicability of repeat to major requires Chair exception. Prerequisite: Majors - THEA 2001; others - consent of instructor. Six hrs. act.
- 4152 Senior Festival Performance (3)
Performance of senior culmination performing arts project. May substitute full-time internship in professional environment. Open to non-major performers and technicians with some experience. May repeat once; applicability of repeat to major requires Chair exception. Prerequisite: Majors - THEA 2001; others - consent of instructor. Six hrs. act.
- 4155 Career Management Issues in Theatre Arts (4)
How artists, in their careers, relate to management, industry, government, and society in general. Career management and arts administration topics. Commercial and non-profit business structures and methods.
- 4375 Ethnic and Immigrant Theatre in the United States (4)
How ethnic groups have used theatre as a secular ritual, a means of self-expression, and as a search for identity. Most attention to the theatre of African, Asian, and Latin Americans; Yiddish and Italian immigrants also covered. Particular emphasis on local theatre companies, including visits to see their productions.
- 4418 Advanced Makeup and Maskmaking (2)
Advanced study of makeup for the theatre. Special makeup effects and mask making, including construction techniques. Use of masks as visual art. Mask techniques for teachers. May be repeated once for credit. One hr. lect., 2 hrs. act. (Alt. Y)
- 4450 Internship Seminar in Applied Arts Administration (2)
Opportunity to integrate arts and administration coursework with observations made during internship experiences. Discussion and writing concerning how administrative processes vary between arts and organizations. Approved internship or similar experience must be in progress or completed. Repeatable for credit, only four units applicable to Arts Administration major.

Cross-listed with ART 4450 and MUS 4450. (W, Sp)

4900 Independent Study (1-4)

Activity Courses

1490- Theatre Production Activity Courses (2-8)

4499 Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499.

1490, 2490, 3490, 4490 Costume or Backstage Activity A, B, C, D (2 each)
Each course may be repeated twice for a total of 6 units for this series. Four hrs. act.

1492, 2492, 3492, 4492 Stage Crew Activity A, B, C, D (2 each)
Each course may be repeated twice for a total of 6 units for this series. Four hrs. act.

1493, 2493, 3493, 4493 Production Staff Activity A, B, C, D (3 each)
Each course may be repeated twice for a total of 9 units for this series. Six hrs. act.

1494, 2494, 3494, 4494 Festival Activity A, B, C, D (2 each)
Each course may be repeated twice for a total of 6 units for this series. Four hrs. act.

1495, 2495, 3495, 4495 Studio Production Activity A, B, C, D (4 each)
Each course may be repeated twice for a total of 12 units for this series. Eight hrs. act.

1496, 2496, 3496, 4496 International Touring Activity A, B, C, D (8 each)
Sixteen hrs. act.

1498, 2498, 3498, 4498 Summer Theatre Practicum A, B, C, D (8 each)
Sixteen hrs. act.

1499, 2499, 3499, 4499 Production Practicum A, B, C, D (4 each)
Each course may be repeated twice for a total of 12 units for this series. Eight hrs. act.

Dance

The course prefix for the following courses is DANC.

1002- Beginning Technique Classes (1 each)

1031 Each course may be repeated only once. Two hrs. act.

1002 Country Western Line Dance
1003 Folk Dance
1019 African Dance

- 1121- Beginning Technique Classes (1 each)
1193 Beginning dance techniques. Audition during first meeting to take course out of sequence. Not open to those with two units of credit for former courses in the same technique in the DANC 1000 series. Two hrs. act.

1121-2-3 Beginning Latin Dance I, II, III
1131-2-3 Beginning Hip Hop Dance I, II, III
1141-2-3 Beginning Modern Dance I, II, III
1161-2-3 Beginning Capoeira I, II, III
1171-2-3 Beginning Jazz Dance I, II, III
1181-2-3 Beginning Ballroom Dance I, II, III
1191-2-3 Beginning Ballet Dance I, II, III

- 1200 Exploring Creativity (4)
Theory of creative means used by artists throughout history to make art. Solo and collaborative stage performance exercises directed at releasing creative energies, expanding mental boundaries, and increasing the range of expressive means. Cross-listed with THEA 1200.

- 2003 Intermediate Folk Dance (1)
May be repeated only once. Two hrs. act.

- 2020 Rhythm and Music for Dance (2)
Study and exploration of common rhythmic and musical forms used for dance accompaniment. Composition of and improvisation to simple rhythmic scores. One hr. lect., 2 hrs. act. (Sp)

- 2023 Dance Fitness (2)
Conditioning the body through the use of weights, both free and Nautilus. Proper stretching techniques and dietary considerations. Repeatable for credit. Four hrs. act.

- 2030 Fundamentals of Modern Dance (2)
Students will be given opportunity to work on modern dance technique, improvisational skills and repertory. There will be a focus on the development of individual styles and performance techniques. Four hrs. act.

- 2120- Musical Theatre Dance A, B, C, D, E, F (2 each)
2125 Dance techniques, interpretation, and choreography applicable to musical theatre. Might concentrate on dance related to current production, but will expand to other fundamentals. May be taken in any order. Prerequisite: one quarter of Jazz Technique or consent of instructor. Four hrs. act.

- 2131- Intermediate Technique Classes (1 each)
2193 Intermediate dance techniques. Requires one year of beginning technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to those with two units of credit for former courses

in the same technique in the DANC 2000 series. Two hrs. act.

2131-2-3 Intermediate Hip Hop Dance I, II, III
2141-2-3 Intermediate Modern Dance I, II, III
2161-2-3 Intermediate Capoeira I, II, III
2171-2-3 Intermediate Jazz Dance I, II, III
2181-2-3 Intermediate Ballroom Dance I, II, III
2191-2-3 Intermediate Ballet Dance I, II, III

- 3021** Cultural Dance Forms (3)
Provides research skills and movement activities to inspire cross-cultural appreciation through dance. Audio-visual used to analyze, compare and contrast elements such as rhythm, symbolism, religion, dress, form, and function. Students share personal experiences and customs. Repeatable once for credit. Two hrs. lect., 2 hrs. act.
- 3022** Improvisation and Beyond (3)
Exploration of movement through improvisational techniques leading to dance making. Stepping stones to the development of choreography and performance. Fosters a supportive atmosphere while crafting dances through an individual approach. Six hrs. act.
- 3026** Jazz and Modern Dance (2)
Jazz and modern dance technique with repertory experience. Students will have experience in both styles and learn repertory. Performances at the end of quarter. Four hrs. act.
- 3030** Integrating Dance and Theatre (3)
Integrating modern dance with theatre techniques; creating text and performance pieces. Culmination performance. Repeatable for credit; 3 units applicable to major. One hr. lect., 4 hrs. act.
- 3141-** Advanced Technique Classes (3 each)
3173 Advanced dance techniques. Requires one year each of beginning and intermediate technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to those with two units of credit for the same technique in former DANC 3000 series. One hr. lect., 4 hrs. act.
- 3141-2-3 Advanced Modern Dance I, II, III
3171-2-3 Advanced Jazz Dance I, II, III
- 3215** Dance Touring I (3)
Beginning choreography, repertory and performance techniques. Produce original dances and perform in touring dance company, especially at local schools. Audition at first meeting for placement. One hr. lect., 4 hrs. act.
- 3216** Dance Touring II (3)
Intermediate choreography, repertory and performance techniques. Produce original dances and perform in touring dance company, especially at local schools. Audition at first meeting for placement. One hr. lect., 4

hrs. act.

- 3217** Dance Touring III (3)
Advanced choreography, repertory and performance techniques. Produce original dances and perform in touring dance company, especially at local schools. Audition at first meeting for placement. One hr. lect., 4 hrs. act.
- 3220** Dance Performance, Composition and Production I (3)
Introduction to basic compositional dance forms. Exploration, improvisation, selection and organization of choreographic material. May be repeated once for credit. Six hrs. act. (F)
- 3235** Dance for Children (4)
Theory and techniques for developing movement and expressive capabilities of the child through dance participation. Opportunities to work with children are provided. Prerequisite: beginning level dance course (e.g. DANC 1000 series) or consent of instructor. Three hrs. lect., 2 hrs. act. (F)
- 3241** The Dance Experience (3)
Study of dance theory and its development as a creative form and process; exploration of various dance forms, techniques and methods. Two hrs. lect., 2 hrs. act. (W)
- 3251** Movement Analysis (4)
How movement communicates and functions in society. Observation, analysis, coaching, and recording of movement; functional alignment (Feldenkrais, Ideokinesis); movement theory (Laban, Bartenieff); cross-cultural models. Helpful for actors, dancers, athletes, coaches, animators, and teachers. Prerequisites: THEA 2001, two quarters of any technique, or consent of instructor. Three hrs. lect., 2 hrs. act.
- 3252** Dance Through the Ages (4)
The history and evolution of dance from preliterate cultures and ancient civilizations to medieval and Renaissance periods, including anthropological and religious sources. Not open to students with credit for DANC 4200.
- 3426** Collaborative Dance and Theatre (3)
Collaborative theatre techniques to develop and produce a Spring Concert. Dance, music, and theatre utilized in the production with attention to the development of original score, choreography and text. Repeatable for credit. One hr. lect., 4 hrs. act.
- 3440** Modern Technique (3)
Intermediate and advanced skills in modern dance technique, improvisation and repertory. Attention given to development of individual styles and performance techniques. One hr. lect., 4 hrs. act.
- 3999** Issues in Dance (4)

Readings, discussion, and research on contemporary and/or significant issues in dance. May be repeated for credit when content varies.

- 4201** Dance in Modern Society (4)
The development of dance from the post-Renaissance period to the present, i.e., modern dance, black dance, men in dance, social dance, musical theatre and avant garde. Social, political, psychological, and spiritual influences. (Alt. Sp)
- 4220** Dance Performance, Composition and Production II (3)
Advanced work in compositional dance forms. Development of skills in group choreography and performing techniques. Emphasis on choreography as a creative art process. May be repeated once for credit. Prerequisite: DANC 3220 or consent of instructor. Six hrs. act. (W)
- 4900** Independent Study (1-4)



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Department Information

Program Description

Human Development

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Department of Human Development
College of Arts, Letters, and Social Sciences
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Professors: Carol S. Becker, Patricia Guthrie, Ann J. Meyer

Associate Professors: Rainer Bauer (Chair), Jiansheng Guo

Assistant Professors: Lynn Comerford, Jessica R. Goodkind, D. Xeno Rasmusson

Adjunct Professor: Laszlo P. Luka

Lecturers: Afshin M. Gharib, Richard A. Sprott

Please consult the 2006-2007 online catalog for any changes that may occur.

Human Development is an interdisciplinary field of academic study that has grown out of more traditional disciplines such as anthropology, biology, linguistics, psychology, and sociology. Students majoring in Human Development explore people's lives from conception and birth through old age and death. In their study of physical growth and change and the development of consciousness, knowledge, and relationships, they increase their understanding of themselves as well as of others in social, cultural, and historical terms.

In a world increasingly characterized by change, individuals are challenged to develop skills not directly addressed in traditional programs. Human Development majors concentrate on the development of self-awareness and on skills such as problem-solving, critical thinking, and written and oral communication. In addition to traditional forms of learning, students participate in group interaction, independent study, and field experience (here and/or in other countries). Students are educated to become

Career Opportunities

effective leaders and organizers, cooperative team members, and qualified researchers, who, while developing a compassionate understanding of others, continue their own personal development.

Graduates of the department work with people of all ages from different ethnic, cultural and/or socioeconomic backgrounds. Many graduates continue their education in areas such as counseling, psychotherapy, education, social work, business, public administration, law, medicine, theology, gerontology, and anthropology.

Human Development prepares students to work with children, adolescents, adults, and the aged; with exceptional people, handicapped or gifted; in areas such as health, education, welfare, and correctional facilities; in business and industry; in public organizations and private enterprises; in religious and secular institutions; as administrators, managers, consultants, counselors, educators, trainers, and many others.

Features

Human Development faculty members come from various disciplinary areas and have different orientations such as phenomenological, psychoanalytic, and structuralist. They engage in team teaching to help students understand differing disciplinary perspectives on the same topics. Small seminars, laboratory and field assignments encourage students to integrate their learning and develop their cognitive, interactional, and problem-solving abilities.

Seniors study in depth some aspects of human development that are of interest to them. The program is designed so that students can study in disciplines outside the department and apply units to the major.

Internships are available in Human Development. Supervised work experience integrates academic learning and field experience, and promotes development of students' professional activities. Internships are graded Credit/No Credit only and may be repeated for credit.

To facilitate university study for students with family and/or job responsibilities, 43 of the 60 upper division units are tape recorded so that students need attend only one evening course per week during the junior year and two evening courses total during the senior year for the major requirements. Other major course requirements are taped live and duplicated for evening students both here and at the Contra Costa Campus. Students may listen to these tapes on the Internet, at the Music Listening Room in the Hayward Library or the Contra Costa Campus Library, or have them duplicated for home use. Instructions for the tape duplication system are available in the department office.

The Department of Human Development also offers its major through P.A.C.E. (Program for Accelerated College Education). Working students with 86-90 lower division transferable quarter units can achieve a B.A. in Human Development in 7 quarters

Major Requirements (B.A.)

taking coursework evenings and Saturdays through the specially designed P.A.C.E. format. Contact the P.A.C.E. office at 885-7223 for further information.

The major consists of 80 units; the B.A. degree requires a total of 180 units.

I. Lower Division (20 units)

In preparation for the upper division program, students must take 20 units from any combination of the following categories, with no more than 12 units in any one category.

- A. Anthropology
- B. Human biology, including biochemistry, pharmacology
- C. Child development
- D. Economics, including demography & political science
- E. Ethnic or area studies, sign language, foreign language, computer language
- F. Human development
- G. Mathematics, statistics, philosophy, linguistics, communication science
- H. Psychology
- I. Sociology
- J. Speech pathology
- K. Additional categories (e.g., gerontology, developmental disabilities, phenomenology) may be approved by the department.

II. Upper Division (60 units)

A. Core Sequence (36 units)

- HDEV 3001, 3002, 3003 Behavioral and Biological Approaches in Human Development I, II, III (9 units)
- HDEV 3011, 3012, 3013 Socio-cultural and Experiential Approaches in Human Development I, II, III (9 units)
- HDEV 3021, 3022, 3023 Structure and Dynamics of Human Development I, II, III (9 units)
- HDEV 3031, 3032, 3033 Process of Human Development I, II, III (9 units)

B. Option or Specialized Sequence (12 units)

To meet the diversity of interest among Human Development majors, the department has designed four specialized options: Childhood, Adolescence, Adult Development, or Gerontology. Students meeting the requirements for an option will receive recognition on their academic record indicating their achievement in this specialty area. Each option is designed with a specialized sequence of courses (12 units) and 12 units of senior projects.

Adolescence Option

The Adolescence option focuses on issues arising during the teenage years, such as sex role development, career choice, pregnancy, drugs, and delinquency. Students who are thinking of careers in high school teaching, social work, counseling, and law will benefit from this option.

Select three courses from the following list for the specialized sequence (12 units):

BIOL 3060 Human Sexuality (4), 3070 Human Nutrition (4); COMM 4830 Intercultural Communication (4), 4850 Gender and Communication (4); E S 3105 African American Identity (4), 3165 African American Sexuality (4), 3310 Native American World View (4); HDEV 3800 Human Development and Interaction (4), 4325 Lesbian and Gay Lifespan Development (4), 4350 Intimate Relationships Throughout the Lifespan (4), 4870 Selected Topics in Human Development (If topic is related to adolescence) (4); KPE 4615 Exercise and Stress (4); PHIL 3150 Contemporary Ethics (4); PSYC 4660 The Psychology of the Healthy Personality (4); SOC 3411 Sociology of Gender (4), 3480 Violence and Conflict (4), 3520 Sociology of Minority Groups (4), 3730 Juvenile Delinquency (4), 3750 Alcohol and Drug Abuse (4), 4740 Criminology (4); WOST 3400 Women and Careers (4), 3530 Women and Their Bodies (4)

Adult Development Option

The Adult Development option is designed for those students who will be dealing with people ages 20-55 in career development, parenting and family life, mid-life transitions, empty-nest syndrome, and illness.

Select three courses from the following lists for the specialized sequence (12 units):

ANTH 3740 Cross-Cultural Studies in Child Rearing (4), 3745 Human Sexuality: Anthropological Perspectives (4); COMM 4500 Women in the Media (4), 4850 Gender and Communication (4); E S 3105 African American Identity (4), 3165 African American Sexuality (4), 3210 Latinas in the United States (4), 3551 Asian American Men and Women (4);

HDEV 3850 My Life and Development (4), 4325 Lesbian and Gay Lifespan Development (4), 4350 Intimate Relations throughout the Lifespan (4), 4870 Selected Topics in Human Development (4) (if topic is related to adult development)

POSC 3170 Public Policy and the Family (4), 3340 Women in Politics (4); PSYC 3410 Psychology of Women (4), 3420 Stress and Coping (4), 4620 Theories of Personality (4), 4660 The Psychology of the Healthy Personality (4); REC 3100 Lifelong Leisure Transitions (4), 3200 Wellness through Leisure (4), 3800 Introduction to Recreation Therapy (4)

SOC 3410 Sociology of the Family (4), 3411 Sociology of Gender (4), 3412 Marriage and Sex (4), 3413 Sociology of Parenting (4), 3415 Sociology of the African American Family (4), 3416 Sociology of the Mexican American Family (4), 3750 Alcohol and Drug Abuse (4), 4720 Medical Sociology (4); WOST 3400 Women and Careers (4), 3520 Mothers, Daughters, and Sons (4), 3530 Women and Their Bodies (4); WOST/E S 3420 Minority Women in America (4)

Childhood Option

The Childhood option covers the years from birth to 12 and consists of required courses, electives, and field experience that focus on the infant/child. This option is especially useful to those thinking of careers involving work with children, such as teaching, day care, and school counseling.

Select three courses from the following list for the specialized sequence (12 units):

ANTH 3740 Cross-Cultural Studies in Child Rearing (4); DANC 3235¹ Dance for Children (4); EPSY 5021 Introduction to Educating ALL Students in Diverse Classrooms (4); HDEV 4510 Cognitive Development (4), 4520 Language Acquisition and the Symbolic Function (4), 4710 The Child in the Family (4); KPE 4340¹ Motor Development (4); PSYC 4420 Developmental Psychology (4); SOC 3416¹ Sociology of the Mexican American Family (4), 4750 Child Welfare (4); SPPA 4865² Language Disorders in Children (4); T ED 3500 Introduction to Early Childhood Studies (4)

Gerontology Option

The Gerontology option focuses on life transition occurring during the latter stages of the human lifespan. Such developmental issues dealing with middle aged and elder individuals include the study of death and dying. The option is completed by fulfilling major requirements in the following manner:

Select three courses from the following list for the specialized sequence (12 units):

HDEV 4004 Current Issues in Aging (4) or 4005 Aging and Diversity (4) (if not used to satisfy requirements for Senior Projects); REC 3800 Introduction to Recreation Therapy (4), 4600 Recreation Therapy Documentation and Assessment (4); SOC 3419 Death and Dying (4); SPPA 4866² Aphasia in Adults (4)

Individualized Specialized Sequence

If students are not interested in an age-related option, they may plan an individualized Specialized Sequence. Students may select 12 units of upper division courses from across the university sharing a focus on some aspect of Human Development. This creative use of coursework can help students achieve a more advanced understanding of a particular facet of Human Development. Students may specialize in development in a sociocultural group, public administration, management, science, pre-law, a special aspect of, approach to, or problem area of development, etc. Field experience for credit is combined with academic study in a course such as HDEV 4860 (Internship in Human Development), and others. Courses outside of Human Development may be applied to general education requirements. Selection must be made under departmental faculty guidance.

In place of an age-related option, Human Development majors in PACE complete a specialized sequence consisting of E S 3120 The Civil Rights Movement, E S

3305 Contemporary American Life, and COMM 4860 Ethnic Public Address.

C. Senior Projects (12 units)

Adolescence Option Senior Projects (12 units)

HDEV 4400 Adolescence (4)
HDEV 4880 Senior Group Project (4)

Either HDEV 4890 Senior Individual Project (4) or HDEV 4891 Senior Research Seminar. (Students' Senior Project, HDEV 4890 or 4891, must deal with an aspect of adolescent development.)

Adult Development Option Senior Projects (12 units)

HDEV 4300 Adult Development (4)
HDEV 4880 Senior Group Project (4)

Either HDEV 4890 Senior Individual Project (4) or HDEV 4891 Senior Research Seminar. (Students' Senior Project, HDEV 4890 or 4891, must deal with an aspect of adult development.)

Childhood Option Senior Projects (12 units)

HDEV 4700 Childhood Development (4)
HDEV 4880 Senior Group Project (4)

Either HDEV 4890 Senior Individual Project (4) or HDEV 4891 Senior Research Seminar (4). (Students' Senior Individual Project, HDEV 4890 or 4891, must deal with a particular aspect of childhood development.)

Gerontology Option Senior Projects (12 units)

HDEV 4004 Current Issues in Aging (4) or HDEV 4005 Aging and Diversity (4) (if not used to satisfy requirement for Specialized Sequence)
HDEV 4880 Senior Group Project (4)

Either HDEV 4890 Senior Individual Project (4) or HDEV 4891 Senior Research Seminar (4). (Students' Senior Project, HDEV 4890 or 4891, must deal with a particular aspect of development during the later part of human life.)

Individualized Specialized Sequence Senior Projects (12 units)

Twelve units of individual and cooperative study on campus and in the field.

HDEV 4880 Senior Group Project (4)
HDEV 4890 Senior Individual Project (4) or HDEV 4891 Senior Research Seminar (4)
Four units of an upper division HDEV course (4)

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the U.S. history, U.S. Constitution, and California state and local government requirement; the University

Minor Requirements

Human Development Option: Liberal Studies

Undergraduate Courses

Writing Skills requirement; and the residence, unit, and grade point average requirements.

The minor is designed for students who will be working with people in their career choice areas and would profit from gaining a life-span perspective on their own lives as well as those of the people with whom they will be living and working. The minor consists of 28 units. Select 28 units from any 3000 or 4000 level Human Development courses.

Area VII, Credential Track, or Area VI, General Track (24 units)

Select two (2) of the following groups of courses (24 units):

Group One (12 units)

- HDEV 3001 Behavioral and Biological Approaches in Human Development I (3)
- HDEV 3011 Sociocultural and Experiential Approaches in Human Development I (3)
- HDEV 3021 Structure and Dynamics of Human Development I (3)
- HDEV 3031 Process of Human Development I (3)

Group Two (12 units)

- HDEV 3002 Behavioral and Biological Approaches in Human Development II (3)
- HDEV 3012 Sociocultural and Experiential Approaches in Human Development II (3)
- HDEV 3022 Structure and Dynamics of Human Development II (3)
- HDEV 3032 Process of Human Development II (3)

Group Three (12 units)

- HDEV 3003 Behavioral and Biological Approaches in Human Development III (3)
 - HDEV 3013 Sociocultural and Experiential Approaches in Human Development III (3)
 - HDEV 3023 Structure and Dynamics of Human Development III (3)
 - HDEV 3033 Process of Human Development III (3)
-

The course prefix for the following courses is HDEV.

(HDEV 3001, 3002, 3003, 3011, 3012, 3013, 3021, 3022, 3023, 4004, 4400, 4300, 4700 are also available through an audiotape service offered by the department.)

- 1200** Introduction to Human Development (4)
Introduction to the interdisciplinary study of human development. Exploring and using varied approaches to the problems of developmental transitions in diverse populations.

- 1301** The Human Condition (4)
Various attempts to find meaning in human existence from the perspectives of human development.
- 2010** Introduction to Early Childhood (4)
Current research methods and findings about the physical, emotional, and intellectual development of children from conception through age 5, with an emphasis on historical trends and cultural contexts.
- 3001** Behavioral and Biological Approaches in Human Development I (3)
Study of human development, utilizing concepts and methodologies of the behavioral and biological sciences. (F)
- 3002** Behavioral and Biological Approaches in Human Development II (3)
Continuation of HDEV 3001. Prerequisite: HDEV 3001. (W)
- 3003** Behavioral and Biological Approaches in Human Development III (3)
Continuation of HDEV 3002. Prerequisite: HDEV 3002. (Sp)
- 3011** Sociocultural and Experiential Approaches in Human Development I (3)
Basic concepts and methods in the study of sociocultural and experiential aspects of human development. (F)
- 3012** Sociocultural and Experiential Approaches in Human Development II (3)
Continuation of HDEV 3011. Prerequisite: HDEV 3011. (W)
- 3013** Sociocultural and Experiential Approaches in Human Development III (3)
Continuation of HDEV 3012. Prerequisite: HDEV 3012. (Sp)
- 3021** Structure and Dynamics of Human Development I (3)
The nature, characteristics, and study of human development: interdisciplinary analysis and integration. Concurrent enrollment in HDEV 3031 and concurrent or prior enrollment in HDEV 3001 and 3011 required. Three hrs. lect./disc. (F)
- 3022** Structure and Dynamics of Human Development II (3)
Continuation of HDEV 3021, which is prerequisite. Concurrent enrollment in HDEV 3032 and concurrent or prior enrollment in HDEV 3002 and 3012 required. (W)
- 3023** Structure and Dynamics of Human Development III (3)
Continuation of HDEV 3022, which is prerequisite. Concurrent enrollment in HDEV 3033 and concurrent or prior enrollment in HDEV 3003 and 3013 required. (Sp)

- 3031** Process of Human Development I (3)
Clinical study of developmental processes and their conceptualization in laboratory and field settings. Concurrent enrollment in HDEV 3021 required. (F)
- 3032** Process of Human Development II (3)
Continuation of HDEV 3031, which is prerequisite. Concurrent enrollment in HDEV 3022 required. (W)
- 3033** Process of Human Development III (3)
Continuation of HDEV 3032, which is prerequisite. Concurrent enrollment in HDEV 3023 required. (Sp)
- 3800** Human Development and Interaction (4)
Interdisciplinary methodologies (integrating sociocultural and biological perspectives) are examined and applied to understanding the human lifespan in interpersonal contexts.
- 3850** My Life and Development (4)
Autobiographical writings are constructed and examined through developmental and psychohistorical theories and methods. Prerequisite: consent of instructor. (Y)
- 3999** Issues in Human Development (4)
Readings, discussion, and research on contemporary and/or significant issues in human development. May be repeated for credit when content varies.
- 4004** Current Issues in Aging (4)
Through the exploration and use of interdisciplinary methodologies, issues in aging will be considered (e.g. social class, economics, biological changes, policies, individual differences).
- 4005** Aging and Diversity (4)
An interdisciplinary exploration of interaction between aging and race, ethnicity, and gender.
- 4300** Adult Development (4)
Normative life crises and transition in adulthood-affective, cognitive, cultural, economic, interpersonal, physiological, social, spiritual, vocational aspects. (Y)
- 4310** Human Development in the Changing Workplace (4)
A study of developmental issues that arise in contemporary work environments; creative professional identities under uncertain conditions of employment, reconciling adult commitments splintered by career demands, and developing interaction skills in work settings rich in human diversity; confronting work place inequalities.
- 4325** Lesbian and Gay Lifespan Development (4)
Introduction to theoretical models and research relevant to the development of lesbians and gay men. Stereotypes and myths which interfere with an informed understanding of these sexual minorities. Issues of gender identity, sexual orientation, sexuality, love relationships, friendship networks, family and community relations.

- 4350** Intimate Relationships Throughout the LifeSpan (4)
The essential nature of parent-child, friendship, and sexual love relations; the structure of these important intimate relations. Developmental changes in these three important relationships during childhood, adolescence, adulthood, and old age. (Y)
- 4360** Human Development in Cyberspace (4)
Reality of cyberspace: using the Internet and creating a virtual classroom, students investigate how technology changes in communication and learning impact development in their lives, work, and society. Three hrs. lect., 2 hrs. act.
- 4400** Adolescence (4)
Developmental issues arising during the teenage years-career choice, intimacy, biological changes, and attainment of cognitive, social, biological, and emotional maturity. (Y)
- 4510** Cognitive Development (4)
The development of cognitive functions from infancy through old age. (Y)
- 4520** Language Acquisition and the Symbolic Function (4)
An interdisciplinary study of the development of a first language and the biological, linguistic, cognitive, and social factors involved. Topics include the development of prelinguistic skills, semantics, syntax, discourse skills, and phonology, as well as an investigation of the theories and hypotheses proposed to account for acquisition. (F, W, Sp)
- 4700** Childhood Development (4)
The crucial period of rapid development from conception to pre-adolescence viewed from various perspectives: biological, psychoanalytic, cognitive-structural, stimulus-response, humanistic. Prenatal care and counseling, attachment-separation, parenting and institutional care. Prerequisites: HDEV 3033, 3800, or equivalent. (Y)
- 4710** The Child in the Family and in the Community (4)
Child development in a variety of familial, communal, and institutional settings. Problems of child abuse, divorce, foster care and adoption. (Y)
- 4860** Internship in Human Development (1-4)
Supervised work experience that integrates academic learning and field experience, and promotes development of students' professional activities. Prerequisite: instructor approval. Credit/No credit grading only; may be repeated for credit. (Y)
- 4870** Selected Topics in Human Development (4)
Seminar on selected area of study in human development. May be repeated with different topic. Prerequisites: senior standing and HDEV 3023. (Y)

- 4880** Senior Group Project in Human Development (4)
Problem solving and analysis: intensive cooperative study of selected problems. Prerequisites: HDEV 3001, 3002, 3003, 3011, 3012, 3013, 3021, 3022, 3023; or consent of instructor. (Y)
- 4890** Senior Individual Project in Human Development (4)
Independent work focused on specialized topic under faculty guidance. Prerequisites: senior standing and HDEV 3023 (Y)
- 4891** Senior Research Seminar (4)
Using various methodologies, students will individually collect and analyze data, write a research report, and hold interdisciplinary discussions regarding the advantages and limitations of various research methodologies. Prerequisite: HDEV 4880 (may be taken concurrently).
- 4900** Independent Study (1-4)

Footnotes

- 1** Has prerequisite(s) not included in program.
- 2** To be taken after or concurrently with HDEV 4520.
- 3** Prerequisite: consent of instructor.



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Undeclared Major

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- ▶ [Introduction](#)
- ▶ [Advising](#)
- ▶ [Choosing a Major](#)

Department Information

University Advisement Center
Office: Student Services Hub 1131
Phone: (510) 885-4682

Director: Mary Hubins

Please consult the 2006-2007 online catalog for any changes that may occur.

Introduction

The University Advisement Center (UAC) is the academic home for undeclared undergraduate students who are exploring their major options at California State University, Hayward. There are approximately 500-600 undeclared students enrolled each year, and most are freshmen and sophomores. Generally, it causes no problems if you wish to spend the first year or two of your academic career exploring interests and career options before choosing a major. In fact, students often change their majors one or more times before completing their degrees.

Advising

Academic advising is important for the long-term academic success of undeclared students. UAC advisors provide students with individualized advising appointments to assist them in choosing a major, selecting courses, making progress toward a degree, and understanding academic policies and procedures. Undeclared students may concentrate on satisfying their General Education requirements during the first two years, until a major is selected. These students should keep in mind, however, that no course with the same prefix as the student's major may be applied to General Education requirements, with the exceptions noted in the B.A./B.S. Degree Requirements chapter. Courses, however, that cannot be used to fulfill G.E. requirements are normally applicable to the major, so nothing has been lost.

Students pursuing the Nursing major usually enter Cal State Hayward as undeclared students. The Nursing major is the only impacted program on campus and has an additional admission process. Students may not initially declare nursing as their major unless they have been officially accepted into the program. Prior to acceptance, students are required to satisfactorily complete nine prerequisite courses, most of which can also be used to

Choosing a Major

satisfy General Education requirements. The UAC advisors can assist these "pre-nursing" students in course selection and academic planning in preparation for the major. See the Nursing chapter in the undergraduate section of this catalog for a description of the admission and program requirements for the Nursing major. If you have further questions regarding the Nursing major, however, it is best to contact the Department of Nursing and Health Sciences.

The UAC is the place for undeclared students to start exploring major options, since the goal of the academic advisors is to assist students in making well-informed decisions regarding major programs. Advisors encourage students to research the available majors by consulting the *University Catalog*, speaking with faculty, staff and/or advisors in major departments, and enrolling in introductory courses offered in the major programs of interest. The UAC also sponsors an annual Majors/Minors Fair to give students easy access to information from the various academic departments throughout campus. In addition, the UAC offers exploration workshops which provide undeclared students with the tools they need to narrow down their search and, eventually, to declare a major.

Undeclared students should consider all possibilities, as most major programs may not prepare students for a specific job, but instead will prepare them for the job market by developing transferable skills. Some students, therefore, may be referred to the Career Development Center (CDC), located in Warren Hall, room 509. At the CDC, students will find additional resources, including career counselors with whom they may discuss majors leading to specific careers; self-assessment testing to better understand their interests, values, and abilities; and a career library to aid their research into majors and careers.

What is important for undeclared majors to understand is that choosing a major is a process. Students must actively pursue experiences that will give them the information they need to choose their major. Also, choosing a major and a career are not the same thing. Many college graduates are employed in fields not directly related to their majors, and most people change careers more than once in their lifetime. Remember, the ultimate goal is to declare a major, and the UAC advisors are available to help students complete the process.



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Department Information

UNDERGRADUATE PROGRAMS

Humanities

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College of Arts, Letters, and Social Sciences
Office: Warren Hall 489
Phone: (510) 885-3105

Director: Vincenzo Traversa (Modern Languages and Literatures)

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Information

The College of Arts, Letters, and Social Sciences offers survey courses which are designed to provide students with a broad introduction to the humanities and to the study of Western Civilization.

Undergraduate Courses

The course prefix for the following courses is HUM.

- 1001** Humanities I (4)
Dawn of Western Civilization: Survey of major ideas, achievements, and failures of Greco-Roman antiquity and the Middle Ages examined from an historical perspective and based upon readings in literature and philosophy. Selections from Iliad, Aeneid, Oedipus Rex, Bible, Divine Comedy, Canterbury Tales, etc. (F)
- 1002** Humanities II (4)
Western Civilization in Transition: Survey of major ideas, achievements, and failures of the Renaissance, Reformation, and Enlightenment examined from an historical perspective and based upon readings in literature and philosophy. Selections from Petrarch, Erasmus, Machiavelli, Cervantes, Swift, Voltaire, Descartes, Luther, Locke, etc. (W)
- 1003** Humanities III (4)
Modern Western Civilization: Survey of major ideas, achievements and failures of 19th and 20th Century European and American civilization, based upon readings in literature and philosophy, and examined from an historical perspective that recognizes the changing roles of women and ethnic minorities and the interplay of various

social groups. (Sp)

- 3000** Literature of the Holocaust (4)
Study of literary works originating from personal experience and reflections concerning the Holocaust: the mass murder of the Jews of Europe during World War II. Authors include Primo Levi, Giuliana Tedeschi, and Elie Wiesel. (Alt. Y)
- 3999** Issues in Humanities (4)
Readings, discussion, and research on contemporary and/or significant issues in humanities. May be repeated for credit when content varies.



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Department Information

Program Description

University Honors Program

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University Honors Program Advisory Council
Academic Programs and Graduate Studies
Office: Warren Hall LM55
Phone: (510) 885-2941
E-mail: honorsprogram@csuhayward.edu

Director: Stevina Evuleocha (Marketing and Entrepreneurship)

Cal State Hayward has established a University Honors Program to provide outstanding students the opportunity to be challenged academically through taking special courses and sections, doing special projects, participating in honors seminars, and conducting independent study/research projects under the direction of a faculty mentor. University Honors students will be recognized on their record and at graduation, attend learning/cultural events for University Honors students and faculty, and receive special consideration in registration for University Honors-designated courses.

Admission

Admission to the program is open to: (a) undergraduate students admitted to the university with a minimum 3.60 GPA, and (b) students who have maintained a 3.60 GPA in their last 36 quarter (or equivalent semester) units of baccalaureate-level coursework. In addition, eligible students must have satisfied the EPT/ELM requirements.

Maintaining Membership

To remain in good standing in the program, students must complete at least four University Honors units per academic year with grades of "B" or better, and maintain a minimum GPA of 3.50 for all CSUH coursework taken subsequent to being accepted to the University Honors Program. Students who fail to meet the maintenance requirements for two consecutive quarters will be dropped from the program.

Types of University Honors Courses

University Honors courses are of several types:

- (a) regular classes in which the instructor agrees to design and grade a special extra project to be completed by the Honors

student,

- (b) one-unit seminar classes, restricted to University Honors students.
- (c) independent study/research classes at the upper division level in which a University Honors student works closely with a faculty member on a project.

Graduation from Honors Program

Students must complete a minimum of 21 University Honors units with a minimum GPA of 3.60 for all CSUH coursework taken subsequent to being accepted to the University Honors Program. University Honors students must be in the University Honors Program for at least one year and take the one-unit "Honors Seminar" to graduate from the program. "Honors" units will only be assigned upon completion of courses approved by the University Honors Program Director in which the student earns a "B" or better and completes an honors project to the satisfaction of the instructor of the course. University Honors courses may be in the student's major or minor, as well as in general education, and/or free electives. At least 8 honors units, however, must be taken outside the student's major. University Honors courses may not be taken "credit/no credit."

Additional Program Information

Priority Registration

All students in the University Honors Program shall have priority registration.

Special Recognition

University Honors students will receive special recognition at the Honors Convocation and/or at graduation. University Honors students will also receive recognition on their transcripts and their diplomas, as well as a certificate of recognition from the program..

Program Director

The director coordinates the development and maintenance of University Honors courses, as well as special learning/cultural events for University Honors students and faculty. The director tracks student progress and invites eligible students to join the program, giving notice to students who are failing to meet the maintenance requirements and removing students from the program who fail to meet the maintenance requirements after two quarters.



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Interdisciplinary Studies

- ▶ [Department Information](#)
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Department Information

College of Arts, Letters, and Social Sciences
Office: Warren Hall, Room 815
Phone: (510) 885-3161
Dean: Alden Reimonenq

Professor: William J. Langan (Philosophy)

General Information

The upper division courses INTD 3001-2-3 comprise a team-taught, interdisciplinary sequence of courses that offers an integrated approach to the upper division GE requirements, thereby providing more focus to the General Education package.

Undergraduate Courses

The course prefix for the following courses is INTD.

- 1301** The Human Condition (4)
Examines various attempts to find meaning in human existence from the perspectives of different disciplines and cultures.
- 3999** Issues in Interdisciplinary Studies (4)
Readings, discussion, and research on contemporary and/or significant issues in interdisciplinary studies. May be repeated for credit when content varies.





Urban Studies

- ▶ [Department Information](#)
- ▶ [Minor In Urban Studies](#)

Department Information

Department of History
College of Arts, Letters, and Social Sciences
Office: Meiklejohn Hall 4036
Phone: (510) 885-3207

Please consult the 2006-2007 online catalog for any changes that may occur.

Minor In Urban Studies

The minor in Urban Studies consists of a minimum of 24 units of work selected from the following lists of courses. No more than 9 units of work in a single department may be applied to the minor. With the approval of an Urban Studies advisor, a maximum of 2 other appropriate courses, including independent study or directed research, may be substituted for those below.

ANTH 4310 Field Course in Ethnography (5); CRJA 4700 Community Based Corrections (4); ECON 3370 Public Sector Economics (4), 3500 Regional and Urban Economics: Survey (4); ENVT 4100 Environmental Impact Analysis (4), 4300 Environmental Field Studies (5); E S 3290 Community Development (4); GEOG 3330 Urban Geography (4), 3400 Field Geography of the San Francisco Bay Region (5), 4325 Field Course in Cultural-Urban Geography (4);

HIST 3503 History of the San Francisco Bay Area (4), 3567 Blacks in the United States (4); POSC 3120 State and Local Politics and Government (4), 3130 Urban Politics (4), 3150 Politics of California (4), 3800 Public Policy Analysis (4); PUAD 4800 Public Administration and Society (4); REC 3700 Community Organizations in the Urban Setting (4), 4300 Facilities Management and Administration (4); SOC 3520 Sociology of Minority Groups (4), 3700 Introduction to Social Services (4), 3710 Social Policy (4), 4450 Urban Sociology (4)

Any new or transfer course judged by an Urban Studies advisor to have a significant urban studies content.

At least 18 units in the minor must be outside the student's major department.



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Program Information

Program Description

International Business Minor

International Business

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College of Business and Economics
Music and Business Bldg. 2571
Phone (510) 885-3311

College of Arts, Letters, and Social Sciences
Warren Hall (LM 69); Phone (510) 885-3390

Professor: Loretta Breuning (Management and Finance)

Associate Professor: Norman Bowen (Political Science)

Please consult the 2006-2007 online catalog for any changes that may occur.

The International Business minor is designed to provide you with a foundation in: (1) general business administration; (2) a specialty within business in finance, marketing, or personnel administration/industrial relations; (3) international business; and (4) international studies including languages and cultural and political background.

Coursework required for the minor has been combined into three modules: (A) Business Administration, (B) Specialty/International Business, and (C) International Studies. Students in Business Administration will have satisfied Module A as part of their Business Administration major and need only Modules B and C (a total of 40-48 units) to complete an International Business minor. Students in Arts, Letters, and Social Sciences with a major or minor in the Department of Modern Languages and Literatures, can easily have at least 24 units of Module C satisfied as part of their major or minor program, leaving them with Modules A and B, and possibly 8 units of C (a total of 40-48 units) to complete for an International Business minor.

All three modules must be satisfied. Business Administration majors substituting the minor for an option must take all coursework in the minor for a letter grade. Note that units taken to satisfy the requirements of a minor can be applied to General Education requirements wherever applicable as long as the units are outside the prefixes of the student's major. (Note: ACCT, CIS,

FIN, MGMT, MKTG, and TC are prefixes in the Business Administration major.)

Module A, Business Administration (24 units)

ACCT 2210 Accounting for Non-Business Majors (4), or ACCT 2251 Financial Reporting and Analysis I (4)

(Students intending to take only one course in Accounting should take ACCT 2210. Students intending to take further elective courses in Accounting or to attend graduate school in Economics, Law, or Business Administration should take ACCT 2251 in combination with completing ACCT 2252 as an elective outside the minor.)

ECON 2301 Principles of Microeconomics (4)

ECON 2302 Principles of Macroeconomics (4)

MGMT 3600 Theories of Management (4)

MGMT 4670 Multinational Business (4)

MKTG 3401 Introduction to Marketing Management (4)

Module B, Specialty/International Business (16 units)

I. Complete one of the three following specialty areas (8 units):

A. Finance

(Business Administration majors selecting the Finance specialty should choose two courses from FIN 3320, 4310, 4320 since they will be completing FIN 3300 as part of the upper division Business Administration core requirements.)

Required (4 units):

FIN 3300¹ Financial Management (4)

Choice of one (4 units):

FIN 3320¹ Financial Markets and Services (4), 4310¹ Investment Analysis (4), 4320¹ Problems in Corporate Finance (4)

B. Marketing

Required (4 units):

MKTG 3410 Advertising Management (4) or MKTG 4420 Sales Management (4)

Choice of one (4 units):

MKTG 3445¹ Marketing Research (4), 4420 Sales Management (4), 4425 Sales Training (4)

C. Human Resources Management (HRM)

(Business Administration majors selecting the HRM specialty should choose either MGMT 3610 and 4615 or MGMT 4680 and 4683 since they will be completing MGMT 3680 as part of the upper division Business Administration core requirements.)

Choice of one set (8 units):

1. MGMT 3610 Human Resources Management (4), and either 3680 Industrial Relations (4), or 4615 Compensation and Benefits (4);
 2. MGMT 3680 Industrial Relations (4), and another upper-division MGMT course covering collective bargaining, labor law, and/or labor relations, with consent of advisor (4)
- II. Select two courses from the following list, with one of the two courses being in the student's chosen specialty area (8 units):
- FIN 4375 International Business Finance (4); ECON 4700 International Trade (4); ECON 4705 International Finance (4) (Finance specialty); MGMT 4675 International Human Resources Management (4) (HRM specialty); or MKTG 4470 International Marketing (4) (Marketing specialty)

Module C, International Studies (24-32 units)

(All of the courses taken to satisfy items C II and C III in this module must have their content reaching primarily beyond the student's native culture and geographic region. A student's choices of language and area studies courses must relate to the same geographic region. Students whose native language is other than English may choose English as their second language, if their native language is determined by the committee administering the minor to have sufficient significance as a language of commerce. Students using English as their second language may make either U.S./Canada or Great Britain (not both) the focus of their C III coursework.)

- I. Choice of one of the following (4 units):
COMM 4830 Intercultural Communication (4); HIST 3550 The History of U.S. Foreign Relations (4); INTS 3100 Global Systems (4); POSC 3520 International Relations (4); SOC 3431 Seminar in World Development (4)
- II. Intermediate level competency in a modern language including a course in business terminology if available (0-24 units)
(Competency must be certified by the Cal State Hayward Department of Modern Languages and Literatures.
Competency-certified language units based on other than regular classroom transcript coursework or based on courses challenged for CR/NC will not count as part of the minimum 24 units required for Module C.)
- III. A minimum of 4 units in area studies, e.g., Latin America, Middle East, Northern Europe, Southeast Asia, with sufficient additional units in C III to bring the total acceptable credit units for Module C to a minimum of 24 units (4-20 units). (Courses for C III must be approved by the assigned International Business Minor advisor.)

- *A maximum of 48 units outside a Business Administration or Modern Language major is required.*

Footnote

1 Has one or more prerequisites not included in the minor.



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Women's Studies

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- ▶ [Minor in Women's Studies](#)
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- ▶ [G.E. Requirement](#)
- ▶ [Undergraduate Courses](#)

Department Information

Women's Studies Program
College of Arts, Letters, and Social Sciences
Office: Meiklejohn Hall 4099
Phone: (510) 885-3255

Professors Emerite: Roxanne Dunbar Ortiz (Ethnic Studies),
Yolanda Patterson (Modern Languages and Literatures), Helen
Schulak (Modern Languages and Literatures)

Professors: Carol Becker (Human Development), Patricia Guthrie
(Human Development and Women's Studies), Vincenzo Traversa
(Modern Languages and Literatures)

Lecturers: Donna Barnes, Dina Jarrah

Director: Patricia Guthrie

*Please consult the 2006-2007 online catalog for any changes that
may occur.*

General Information

Women's Studies is intended to increase a student's knowledge,
interest and appreciation of the needs, contributions, problems as
aspirations of women-and also of the way that gender shapes the
lives of both women and men. Women's Studies attempts to
illuminate the subject matter of much of the rest of the curriculum
from the double perspective of women and gender. The courses
emphasize cultural diversity. The minor prepares students for jobs
that specialize in serving women as consumers, as clients of
government programs, as political actors, etc. The program also
offers a Liberal Studies option in Women's Studies.

Minor in Women's Studies

No more than six units in the major department, nor more than 8
units of lower division courses may be applied to the minor. No
more than four units may be taken on a "CR/NC" basis.
Altogether, 24 units are required. Students who wish to minor in
Women's Studies should see the director as soon as possible.

- I. Core Courses (8-12 units)
WOST 1001 Perspectives on Women (4)
WOST 1002 Women in Contemporary Society (4)
WOST 3100 Seminar in Women's Studies (May be used twice in the minor with the consent of the Women's Studies Director provided the student has taken WOST 1001 or 1002.)

- II. Electives in Women's Studies (8-12 units)
Two or three courses with special reference to the status and problems of women selected from:

COMM 4500 Women in Media (4); ENGL 3650 Women and Literature (4); HIST 3124 Women in Classical Antiquity (4), 3571 Women in America to 1890 (4); POSC 3170 Public Policy and the Family (4), 3340 Women and Politics (4); PSYC 3410 Psychology of Women (4); SOC 3411 Sociology of Gender (4); WOST 2000 Internship in Women's Agencies (4), 3050 Feminist Theory (4), 3400 Women and Careers (4), 3420 Minority Women in America (4), 3500 Portrayal of Women in the Movies (4), 3510 Women in Myth and Prehistory (4), 3520 Mothers, Daughters and Sons (4), 3530 Women and Their Bodies (4), 4900 Independent Study (1-4)

- III. Elective in a Related Field
Four units should be selected with an advisor in Women's Studies from the following:

COMM 4500; ENGL 3650; HIST 3124, 3571; POSC 3170; PSYC 3410; SOC 3411; WOST 2000, 3400, 3420, 3500, 3510, 3520, 3530, or 4900 if not used to complete requirement II above.

ANTH 3110 Primate Social Behavior (4), 3400 Social Anthropology (4), 3740 Cross-Cultural Studies in Child-Rearing (4), 3745 Human Sexuality: Anthropological Perspectives (4); BIOL 3060 Human Sexuality (4); E S 3000 Ethnic Writers (4) (when emphasis is on women writers); 3810 History of Minority Education (4); HDEV 1200 Introduction to Human Development (4), 4300 Adult Development (4), 4400 Adolescence (4), 4700 Childhood Development (4); HIST 4710 History and Trends in Nursing (4); KPE 1018 Self Defense-Women (4);

MLL 4495 A Single Movement, Country, or Theme: Spanish American Literature (4) (when the theme focuses on women); PHIL 3510 Human Rights and Social Justice: Cultural Groups and Women in the U.S. (4), 3720 Feminist Philosophy (4); PSYC 3520 Interpersonal Processes (4); 3540 Groups and Organizations (4), 4420 Developmental Psychology (4), 4610 Psychology of Personality (4); SOC 3410 Sociology of the Family (4), 3415 Sociology of the African American Family (4), 3416 Sociology of the Mexican American Family (4), 3500 Social Psychology (4)

It is recommended that all students in the minor take at least one course that has a primary focus on minority women in America.

Other Elective Courses

Other elective courses (with appropriate content) may be approved by the Women's Studies Committee as they are

Women's Studies Option: Liberal Studies

G.E. Requirement

Undergraduate Courses

developed by departments.

Area VII, Credential Track or Area VI, General Track
(24 units)

WOST 1001 Perspectives on Women (4) or WOST 1002 Women
in Contemporary Society (4)

Five additional upper division courses chosen in consultation
with a Women's Studies advisor (20 units)

The courses satisfying the Cultural Groups/Women's Studies G.E.
requirement are listed in the Class Schedule. Not all courses
applicable to the Women's Studies Minor meet this G.E.
requirement. Please check the list. Also, where WOST is listed in
the G.E. program, it refers only to courses with that prefix, not to
other courses applicable to the minor.

The course prefix for the following courses is WOST.

- 1001** Perspectives on Women (4)
The observed similarities and differences in the behavior of
women and men as seen from the perspective of art,
history, literature, philosophy, biology, and psychology.
How these differences came about and what the future
may hold. (Tent. A)
- 1002** Women in Contemporary Society (4)
Women's work, family roles, political behavior, and legal
status today. Controversial issues raised by the women's
movement explored from the perspective of different
racial/ethnic groups and different political/economic/social
systems. (Tent. A)
- 2000** Internship in Women's Agencies (1-4)
Work in community agencies and businesses serving
women in fields of media, law, health, counseling, politics,
etc. Repeatable for up to 8 units, 4 of which may be
applied to minor. Prerequisites: 2.0 GPA; sophomore
standing; instructor's approval. CR/NC grading only. (F, W,
Sp)
- 3030** Immigrant and Refugee Women (4)
(See E S 3030 for course description.)
- 3050** Feminist Theory (4)
Feminist theories of American women's liberation
movement from mid-sixties to present. Gender identity;
"nature vs. nurture" theories of female subservience and
male domination; pornography; rape; class, race, and
gender.
- 3100** Seminar in Women's Studies (4)

An interdisciplinary consideration of topics relevant to women, involving extensive writing assignments. May be repeated twice for credit with prior consent of Women's Studies Director. (W)

- 3400** Women and Careers (4)
Women's experience in the workforce from a political, sociological and historical perspective. Comparison of structure and practices in the corporate structure to those in sports and the military. Obstacles women face, coping mechanisms and strategies for success. (Tent. F)
- 3420** Minority Women in America (4)
Persistence and change in the minority female experience in America. Focus on prominent stereotypes of minority women, patterns of courtship and marriage, employment and career trends, birth control and sexual freedom, and feminism and racial solidarity. Cross-listed with E S 3420. (Tent. W)
- 3500** Portrayal of Women in the Movies (4)
Changing portrayal of women in English-language movies from 1900 to the present. Special emphasis on the persistence/breakdown of racial, ethnic, and gender stereotypes associated with the presentation of women.
- 3510** Women in Myth and Prehistory (4)
The roles of mortal women and goddesses in prehistoric times and their contemporary relevance. A multidisciplinary course exploring anthropological, literary, mythological, and psychological themes. (Tent. F)
- 3520** Mothers, Daughters, and Sons (4)
The relationship between mothers and their daughters and sons from a literary, psychological, and sociological point of view. Discussion of literature, film and art. (Tent. W)
- 3530** Women and Their Bodies (4)
An interdisciplinary course focusing on women's experiences of their bodies, especially in the areas of health and sexuality. (Tent. F)
- 3540** Adultery and Literature (4)
From Helen of Troy to television dramas, women and adultery continue to be a dominant feature, particularly in some literary and social aspects of past and present times. Exploration of the main aspects of this phenomenon.
- 3545** Women's Health and Health Care (4)
Social, political, and economic perspective on current health status and health needs of women in the United States, especially in the areas of reproduction, genetic testing, and chronic illnesses such as heart disease and cancer.
- 3550** Women, Work, and Family Life (4)
The relationship of work and family, the dilemmas women face and strategies they use to negotiate work/family issue. The impact of economic/historical/sociological factors including gender, race, and class, all influencing work and

family life.

3938 Italian American Women through Literature (in English) (4)
(See MLL 3938 for course description.)

3999 Issues in Women's Studies (4)
Readings, discussion, and research on contemporary and/or significant issues in women's studies. May be repeated for credit when content varies.

4900 Independent Study (1-4)

4922 Women of the Classics (4)
The contrast between the reality and the image of woman as protagonist and actor of literary genres and as persona in Classic Medieval, and early Renaissance literature, religion, and society. Lecture and discussion based on works of literature.



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International Programs of the CSU

▶ [Courses](#)

Campus Faculty Representative, Academic Council on International Programs: Michael Lee (Geography and Environmental Studies)

Campus Coordinator: Wagaye Johannes, Exchange Programs Advisor, Center for International Education

Please consult the 2006-2007 online catalog for any changes that may occur.

Developing intercultural communication skills and international understanding among its students is a vital mission of The California State University (CSU). Since its inception in 1963, the CSU International Programs has contributed to this effort by providing qualified students an affordable opportunity to continue their studies abroad for a full academic year. More than 15,000 CSU students have taken advantage of this unique study option.

International Programs participants earn resident academic credit at their CSU campuses while they pursue full-time study at a host university or special study center abroad. The International Programs serves the needs of students in over 100 designated academic majors. Affiliated with more than 70 recognized universities and institutions of higher education in 18 countries, the International Programs also offers a wide selection of study locales and learning environments.

Australia

Griffith University; Macquarie University; Queensland University of Technology; University of Queensland; University of Western Sydney; Victoria University of Technology

Canada

The universities of the Province of Quebec including: Université de Montréal; Concordia University; Université Laval; McGill University; Université du Québec system; Université de Sherbrooke, Bishop's University

Chile

Pontificia Universidad Católica de Chile (Santiago)

China

Peking University (Beijing)

Denmark

Denmark's International Study Program (the international education affiliate of the University of Copenhagen)

France

Institut d'Études Françaises pour Étudiants Étrangers, l'Académie d'Aix-Marseille (Aix-en-Provence); Universités de Paris III, IV, V, VI, VII, VIII, IX, X, XI, XII, XIII, and the Institute of Oriental Languages and Civilizations, and Université Evry; École Normale Supérieure (Fontenay-St. Cloud)

Germany

Universität Tübingen and a number of institutions of higher education in the Federal State of Baden-Württemberg

Israel

Tel Aviv University; The Hebrew University of Jerusalem, University of Haifa

Italy

CSU Study Center (Florence); Università degli Studi di Firenze; La Accademia di Belle Arti Firenze

Japan

Waseda University (Tokyo)

Korea

Yonsei University (Seoul)

Mexico

Instituto Tecnológico y de Estudios Superiores de Monterrey, Campus Querétaro

New Zealand

Lincoln University (Christchurch); Massey University (Palmerston North)

Spain

Universidad Complutense de Madrid; Universidad de Granada

Sweden

Uppsala Universitet

Taiwan

National Taiwan University (Taipei); National Tsing Hua University

United Kingdom

Bradford University; Bristol University; Hull University; Kingston University; Sheffield University; University of Wales (Swansea)

Zimbabwe

University of Zimbabwe (Harare)

The International Programs pays all tuition and administrative costs for participating California resident students to the same extent that such funds would be expended to support similar costs in California. Participants are responsible for all personal costs, such as transportation, room and board, living expenses, and

home campus fees. Participants remain eligible to receive any form of financial aid (except work-study) for which they can individually qualify.

To qualify for admission to the International Programs, students must have upper division or graduate standing at a CSU campus by the time of departure. Students at the sophomore level may, however, participate in the intensive language acquisition programs in France, Germany, and Mexico. California Community Colleges transfer students are eligible to apply directly from their community colleges. Students must also possess a current cumulative grade point average of 2.75 or 3.0, depending on the program for which they apply. Some programs also have language study and/or other coursework prerequisites.

Additional information and application materials may be obtained from:

Michael Lee
Cal State Hayward Academic Council Representative
Meiklejohn Hall 3027
Phone: (510) 885-3155; E-mail: mlee@csuhayward.edu
or
Center for International Education
Student Services Hub 1325
Phone: (510) 885-2880
E-mail: cie@csuhayward.edu

You may also write to:

The California State University International Programs
401 Golden Shore, Sixth Floor
Long Beach, California 90802-4210
<http://www.gateway.calstate.edu/csuienet/>

Applications for the academic year overseas must be submitted by the preceding February 1.

Graduate Study

Please see "May I Receive Credit for Courses Taken Elsewhere?" in the Graduate and Post-baccalaureate Studies chapter.

Other Programs

Please see "Study Abroad," in the General Information chapter.

Courses

Courses taken by students enrolled in the International Programs are shown on the Cal State Hayward transcripts in terms of Cal State Hayward catalog designations. In the absence of equivalents, courses are shown on Cal State Hayward transcripts as follows:

(Dept.) 2000 IP (course title) Lower Division
(Dept.) 4000 IP (course title) Upper Division
(Dept.) 6000 IP (course title) Graduate



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Youth Services Administration

- ▶ [Department Information](#)
- ▶ [Program Information](#)
- ▶ [Minor Requirements](#)
- ▶ [Certificate Program](#)

Department Information

Department of Recreation and Community Services
College of Education
Office: Art and Education Bldg. 246
Phone: (510) 885-3043

Professor: Melany Spielman

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Information

The programs in Youth Services Administration are intended to prepare students for roles of professional leadership in voluntary youth and human services organizations. These organizations include, but are not limited to: American Red Cross, Big Brothers/Big Sisters, Boys Clubs, Boy Scouts, Camp Fire, 4-H, Girls Clubs, Girl Scouts, Junior Achievement, YMCA, and YWCA.

Students pursuing a baccalaureate degree may have the program recorded on their records as a minor; those who have no degree objective can receive a certificate for completion of the program. A person may not receive both the minor and the certificate.

Minor Requirements

The minor consists of 36-44 units and must be part of a baccalaureate degree.

- I. Core Requirement (16 units)
 - REC 2200 Programming for Recreation and Community Services (4)
 - REC 3205 Volunteer Administration (4) or REC 4100 Professional Issues in Recreation (4)
 - REC 3700 Community Organizations in the Urban Setting (4) or SOC 3700 Introduction to Social Services (4)

An appropriate internship course (4 units minimum):

- REC 2500 Program Fieldwork (4)
- SOC 4718 Field Practicum (4)

- II. Management Requirement (4 units)

One of the following:

MGMT 3600 Theories of Management (4)
PUAD 4830 Organization Theory and Human Behavior (4)
REC 4000 The Administration of Leisure Services (4)

III. Communication Requirement (4-12 units, including completion of the University Writing Skills Requirement, UWSR)

One of the following:

COMM 1000 Public Speaking (4), 1004 Interpersonal Communication (4), 3411 Argumentation and Debate (4), 3510 Small Group Communication (4), 4830 Intercultural Communication (4); ENGL 3005 Study of Language (4)

Completion of the University Writing Skills Requirement (UWSR) by passing the Writing Skills Test (WST) or, if you fail the WST, completion of the necessary coursework as specified by your essay score (0-8).

IV. Human Understanding Requirements (12 units)
One of the following (4 units):

E S 1001 Ethnic Experience in America I: Minorities (4), 1200 Introduction to Mexican American/Latino Studies (4), 1300 Introduction to Native American Studies (4), 2100 Blacks in the Americas (4), 3105 African American Identity (4), 3305 Contemporary Native American Life (4); SOC 3520 Sociology of Minority Groups (4)

One of the following (4 units):

E S 4290 Latino Politics and Public Policy (4); REC 1000 Nature and Scope of Recreation and Community Services (or 2400) (4); SOC 4450 Urban Sociology (4)

One of the following (4 units):

HDEV 4400 Adolescence (4); SOC 3410 Sociology of the Family (4)

Certificate Program

The certificate program in Youth Services Administration consists of the same 36 units as the Youth Services Administration minor, but may be earned without a degree.



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Graduate Studies

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- ▶ [Who is a graduate student?](#)
- ▶ [How do I apply for admission to graduate or post-baccalaureate studies?](#)
- ▶ [What are the graduate admission requirements for international students?](#)
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- ▶ [How can I pursue a second master's degree?](#)
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- ▶ [Who can answer my questions?](#)

1. What is the nature of graduate education?

The master's degree is awarded for completion of a planned and integrated program of advanced study. It recognizes that a student has mastered a particular field sufficiently to pursue creative or applied projects in that field.

When you complete your graduate degree, you will have acquired a mastery of a particular area of knowledge; an ability to relate that knowledge to knowledge in other disciplines; an ability to deal systematically with the concepts, theory, and principles in new situations; an ability to formulate and deal with problems on an advanced level; methodological, technical, and communication skills essential for advanced study; an ability to undertake independent investigation and research; abilities characteristic of professional performance; and attitudes conducive to continuous intellectual and professional development.

Every master's degree program includes what is termed a capstone experience. This may include a thesis or its equivalent, a comprehensive examination, a specialized internship, a project, or case study report, a musical recital, gallery showing, or other comparable achievement. Your completion of the capstone experience demonstrates that you have successfully integrated the various elements of the graduate learning experience and have gained an in-depth knowledge of your discipline.

2. Who is a graduate student?

You are considered a Graduate Student at Cal State Hayward if you have been admitted to a specific master's degree program as a "Conditionally Classified" or "Classified" student, or to an advanced credential program which can be earned in conjunction with a master's degree. Basic teacher credential programs constitute a separate area of post-baccalaureate work, and students in these programs are defined as "Classified Post-baccalaureate" students.

You will find information regarding master's degrees and credentials under the appropriate department's listing in the graduate section of this catalog.

Special orientation programs for new graduate students are offered each quarter by Student Life Programs. These programs are offered in the evening and cover master's degree requirements, campus resources, registration, and preliminary academic advisement. You will be sent orientation program information before your first quarter of enrollment.

3. How do I apply for admission to graduate or post-baccalaureate

studies?

Admission to the University

All graduate and post-baccalaureate applicants (e.g., joint Ph.D. and Ed.D applicants, master's degree applicants, those seeking a credential or a post-baccalaureate credential, and those interested in taking courses for personal or professional growth) must file a complete graduate application as described in the graduate and post-baccalaureate admission booklet. Applicants who completed undergraduate degree requirements and graduated the preceding term are also required to complete and submit an application and the \$55 nonrefundable application fee (payable by check or money order at the time the application is submitted). (*Note:* Applicants seeking a second bachelor's degree should submit an undergraduate application for admission, rather than a graduate application.) Since applicants for post-baccalaureate programs may be limited to the choice of a single campus on each application, redirection to alternate campuses or later changes of campus choice will be minimal. To be assured of initial consideration by more than one campus, it will be necessary to submit separate applications (including fees) to each. Applications are available in the 1st floor Lobby of Warren Hall, the Academic Programs and Graduate Studies Office (WA 859), or from the Graduate Studies Office of any California State University campus. You can apply online using CSU Mentor at: <http://www.csumentor.edu>, or you can send an e-mail request for an application to the Cal State Hayward Academic Programs and Graduate Studies Office at: gradprograms@csuhayward.edu. Beginning fall quarter 2005, only online CSU Mentor applications will be accepted.

Graduate and post-baccalaureate applicants may apply for a degree objective, a credential or certificate objective, or may have no program objective. Depending on the objective, Cal State Hayward will consider an application for admission as follows:

General Requirements

There are four requirements for admission to graduate and post-baccalaureate studies at Cal State Hayward and only in unusual circumstances does the university make exceptions to these criteria. (These requirements are in accordance with California State University regulations as well as Title 5, chapter 1, subchapter 3 of the *California Code of Regulations*.)

1. You must have completed a four-year college course of study and hold an acceptable baccalaureate degree from an institution accredited by a regional accrediting association, or have completed equivalent academic preparation as determined by appropriate campus authorities.
2. You must be in good academic standing at the last college or university you attended.
3. You must have earned a GPA of at least 2.5 (A=4.0) in the last 90 quarter (60 semester) units you attempted.
4. You must satisfactorily meet the professional, personal, scholastic, and other standards for graduate study (including qualifying examinations) established by your department. You may also be required to submit letters of recommendation.

Refer to the appropriate graduate department chapter in this catalog for information.

Application Filing Periods

The application filing periods for graduate and unclassified post-baccalaureate applicants are the same as for undergraduate applicants. See the "When should I apply?" section in the [Admissions/Undergraduate](#) chapter of this catalog. You should also contact Enrollment Services at 510-885-CSUH or check the university website (enter "Application and Document Timelines" in the Search box) for up-to-date information on application filing periods and deadlines for the term of entry you are considering.

Admission to a Graduate Program.

Many graduate degree programs at Cal State Hayward also require that you complete a separate departmental application. These programs may require that you meet additional admission requirements above and beyond those required for admission to the university. Contact the department offering the program to obtain a departmental application form and information on departmental application deadlines and admission requirements. Also see the chapter describing the graduate program in this catalog.

If you wish to pursue a graduate Special Major, contact the Office of Academic Programs and Graduate Studies (WA 859, 510-885-3718) as soon as possible, preferably before you submit your admission application. You cannot be admitted as a Special Major until your program of study has been approved.

For information on changing major, degree, or credential objectives after you have been admitted, see the section "How can I change my educational objective?" near the end of this chapter.

Admission Categories

If you meet the minimum requirements for graduate and post-baccalaureate studies, you will be considered for admission in one of the four following categories:

Unclassified Post-baccalaureate

If you are admitted as an "Unclassified Post-baccalaureate," you may be able to take courses applicable to a graduate degree (even if you have not yet been admitted to the degree program) up to a maximum of 13 units, or you may enroll in courses for personal or professional growth. Because of accreditation restrictions and/or heavy enrollment pressure, however, some departments may restrict registration in some courses for students in this category. Please contact the graduate department offering the courses you are interested in taking to see if you may register for graduate-level courses.

As an "Unclassified Post-baccalaureate," you are not assured of admission to any master's degree or credential program and no more than 13 quarter units earned in this status may be applied to a master's degree. In addition, because of heavy enrollment pressure, some departments may restrict registration in some courses for students in this category. For these reasons, if a master's degree is your goal, you should seek admission to your chosen program as soon as possible. Admission as an

"Unclassified Post-baccalaureate" student does not constitute admission to, or assurance of consideration for admission to, any graduate degree or credential program.

Classified Post-baccalaureate

When you are admitted to a credential or post-baccalaureate certificate program you are placed in the "Classified Post-baccalaureate" category. In addition to the general requirements outlined above, you are required to satisfy any additional criteria established by your department.

For information on admission to the credential programs in teacher education, administrative services, special education, and pupil personnel services, contact the College of Education and Allied Studies. For information on admission to certificate programs, contact the appropriate department.

Conditionally Classified Graduate

If you are admitted conditionally to your master's degree program for one or more of the following reasons, you are placed in the "Conditionally Classified Graduate" category:

1. You must complete specific courses (usually undergraduate).
2. Your program of study and thesis/project committee must be determined and approved.
3. You must pass certain qualifying examinations.
4. Your GPA does not quite meet expected standards, and you must demonstrate your ability to maintain a minimum 3.0 GPA.
5. You have not satisfied the University Writing Skills Requirement.

Departments have different policies regarding this status as well as differing lengths of time you may be allowed to remain conditionally classified. If you are admitted as a "Conditionally Classified Graduate" student, you should immediately check with your graduate advisor or department chair to determine what you must do to become fully classified.

Classified Graduate

If you are admitted to a specific master's degree program, you are placed in the "Classified Graduate" category. To be admitted as a "Classified Graduate," you must satisfy the general university admission requirements, all additional criteria established by your department, and the University Writing Skills Requirement.

4.

What are the graduate admission requirements for international students?

The CSU must assess the academic preparation of international students. For this purpose, "international students" include those who hold U.S. visas as students, exchange visitors, and those in other non-immigrant classifications.

There are separate requirements and application filing dates for the admission of international students. Verification of your English proficiency (see below), financial resources, and academic performance are all important considerations in your admission.

Application Filing Periods and Deadlines for International Students

The university has established deadlines to ensure that all application materials will be processed in time to allow you to make the necessary passport, visa, travel and other arrangements to reach the campus before the start of the quarter of admission. Contact Enrollment Services for current deadlines applicable to international student admission.

Each applicant must have a declared educational objective (major) when the application is filed. Applications received that do not indicate a major or that indicate a major that is not offered at this university, that is impacted, or that is closed, will be returned without action. International students on F-1 student visas may be admitted as "Conditionally Classified Graduate," "Classified Graduate," or "Classified Post-baccalaureate" students. They may not be admitted as "Unclassified Post-baccalaureate" students, unless they have an approved course of study acceptable to the Office of Academic Programs and Graduate Studies.

English Proficiency Requirement for Post-baccalaureate and Graduate Applicants

All graduate and post-baccalaureate applicants, regardless of citizenship, whose native language is not English and whose preparatory education was principally in a language other than English, must demonstrate competence in English. Proof of English proficiency can be met by submitting:

1. An official TOEFL score report of 550 (213 on the Computer-Based TOEFL) or above (required of applicants who do not possess a bachelor's degree from a post-secondary institution where English is the principal language of instruction), OR
2. An official transcript showing graduation with a bachelor's degree from a U.S. college or university, or an international college or university where English is the principal language of instruction, or an official letter from the college or university certifying that English was the language of instruction.

You must hold a degree obtained from a recognized university following completion of at least 16 years of scholastic work. You must also have the equivalent of a 2.50 grade point average, or higher, in your last two years of college-level courses.

Certification of International Students

If you are on a student visa, you are required by the Immigration Service to take a minimum 8 quarter units per quarter that will count towards your degree as a "Graduate" student, a "Classified Post-baccalaureate" student, or an "Unclassified Post-baccalaureate" student with an approved course of study. For additional information, see "What determines my post-baccalaureate classification at Cal State Hayward" later in this chapter. Enrollment in courses through Open University in the Division of Continuing and International Education will not count

for visa certification purposes.

5.

What are the enrollment requirements for transitory (visiting) students?

Graduate students are eligible for Intrasystem Concurrent Enrollment, Intrasystem Visitor Enrollment, and Cross-Registration with the University of California, Berkeley and selected other East Bay colleges.

Intrasystem Concurrent Enrollment

If you are enrolled at any campus of the California State University, you may apply to attend another campus while concurrently enrolled at your home campus.

Eligibility Requirements: (1) You have completed at least one term at the home campus as a matriculated student, or will be enrolled concurrently in such status, (2) you are, or have been, enrolled in an authorized graduate program at your home campus, and (3) you are in good standing at the last college attended.

Intrasystem Visitor Enrollment

If you are a student of any campus of The California State University, you may apply for admission as a visiting student at another campus for a period of one term.

Eligibility Requirements: (1) You have completed at least one term at the home campus as a matriculated student, (2) you are, or have been, enrolled in an authorized graduate program at the home campus, and (3) you are in good standing at the last college attended.

For additional information on Intrasystem Concurrent Enrollment and Intrasystem Visitor Enrollment, as well as information on the Cross-registration program with the University of California, Berkeley and selected other East Bay colleges, see "What Are the Enrollment Requirements for Transitory (Visiting) Students" in the Undergraduate Admission chapter.

6.

What fees do I pay when I register as a graduate or post-baccalaureate student?

The California State University is one of the most economical public universities in the nation and Cal State Hayward's fees are among the lowest in the California State University system. Resident students currently pay only 22% of the total cost of their education. All fees are subject to revision by the Board of Trustees without notice. If revisions occur, they will be published in the *Class Schedule*. Legal residents of California are not charged tuition, only fees.

Schedule of Graduate and Post-baccalaureate

Registration Fees, 2005-2006

Any student who holds a bachelor's degree, which includes students pursuing a second bachelor's degree, and all categories of graduate and post-baccalaureate students (except qualified students pursuing a teaching credential, see the next section) pay the following fees when registering at Cal State Hayward. (Legal residents of California are not charged tuition.)

Graduate/Post-baccalaureate Registration Fees¹

	<i>0.1 to 6.0 Units</i>	<i>6.1 or More Units</i>
State University Fee	*\$600	*\$1,034
Student Body Fee	15	15
Facilities Fee	2	2
University Union Fee	55	55
Instructionally Related Activities Fee	16	16
Health Services Fee	35	35
Photo I.D. (quarterly fee)	1	1
Total	\$724	\$1,158

*Note: The State University Fee for graduate and post-baccalaureate students for the academic year (three quarters) is \$1,800 for 0.1 to 6.0 units a quarter and \$3,102 for 6.1 or more units a quarter.

For information on how to pay fees, as well as information on other fees (e.g., library fees, individual course fees, test fees, etc.), see the [Fees and Expenses chapter](#) in this catalog. The Fees and Expenses chapter also has information on the policies governing debts owed to CSUH.

7.

What fees do I pay when I register if I am pursuing a teaching credential?

Students seeking an initial Multiple Subject, Single Subject, or Special Education teaching credential who have been admitted to a credential program with classified or conditionally classified status pay the following fees. This fee level will apply whether or not the student is simultaneously enrolled in a master's degree program

Qualified Teacher Credential Registration Fees, 2005-2006¹

	<i>0.1 to 6.0 Units</i>	<i>6.1 or More Units</i>
--	-----------------------------	------------------------------

State University Fee	*\$566	*\$974
Student Body Fee	15	15
Facilities Fee	2	2
University Union Fee	55	55
Instructionally Related Activities Fee	16	16
Health Services Fee	35	35
Photo I.D. (quarterly fee)	1	1
Total	\$690	\$1,098

*Note: The State University Fee for qualified teacher credential students for the academic year (three quarters) is \$1,698 for 0.1 to 6.0 units a quarter and \$2,922 for 6.1 or more units a quarter.

8.

Can I use university research facilities after I have taken all my required units?

If you have completed all the units required for your master's degree, but are still working on your thesis, project, or studying for a comprehensive exam, you can have continued access to university facilities by registering for GS X6990 Graduate Study Completion, through the Division of Continuing and International Education. This is a 1-unit course with a fee of \$36. The other alternative is to register for "0" units through the regular registration process at a cost of approximately \$560. Registering for GS X6990 will provide you with a valid Student ID card, the ability to check books out of the library, remote access to computerized databases in the library, use of computer labs on campus, the ability to continue to work on projects in science labs, eligibility to purchase a parking permit, and access to other benefits enjoyed by regularly registered students.

Note: GS X6990 cannot be used to satisfy any unit or course requirements for your degree.

You can register by picking up a "GS X6990 Graduate Study Completion Form" in your department or in the Continuing and International Education Office in WA 804.

9.

How is residence for tuition purposes determined?

Enrollment Services determines residence status of all new and returning students for nonresident tuition purposes. For information on the criteria used in making this determination, as

well as residence determination dates, see the [Admissions/Undergraduate](#) chapter in this catalog. (Legal residents of California are not charged tuition, only fees. See "What is Nonresident Tuition?" below.)

10.

What is Nonresident Tuition?

Nonresident Tuition (in addition to other fees charged to all students) per unit or fraction thereof is \$226.

Note: The total nonresident tuition paid per quarter will be determined by the number of units taken. The maximum nonresident tuition per academic year (as of 2005-2006) is \$10,170. Fees are subject to change without advance notice.

11.

What are the requirements for a master's degree?

You must complete the five requirements listed below:

1. Fulfill the University Writing Skills Requirement;
2. Be Advanced to Candidacy;
3. Complete at least 45 quarter units applicable to your degree (45-52 in the Special Major, 48 in Public Administration, 52-54 in Multimedia, 72 in Counseling).
 - All units must be earned within the five calendar years immediately preceding the receipt of your degree. (Outdated units may be accepted for one additional year with the approval of your department and the Associate Vice President, Academic Programs and Graduate Studies. If not completed in the sixth year, currency in the subject matter of the outdated courses must be demonstrated. Courses older than seven years cannot be applied to the degree.)
 - No more than 13 units can be completed when not in residence in your program (e.g., while at other schools, while an undergraduate with permission to take graduate courses, while pursuing an additional baccalaureate degree in "Unclassified Post-baccalaureate" status, while enrolled in another graduate degree program, or while enrolled in Extension courses-including Open University courses)
 - At least 1/2 of the units in your program must be 6000-level
 - No lower division units can be counted
 - No more than 9 units of university thesis or 5 units of departmental thesis or project work can be counted
 - No more than 15 units may be in CR/NC courses (16 in Public Administration, 24 in Counseling)

4. Complete a program of study approved by your department, which must include a thesis, project, or comprehensive examination; and
5. Earn a 3.0 grade point average in all units counted towards your degree.

12.

What is the University Writing Skills Requirement (UWSR)?

You must demonstrate writing skills competency by satisfying the University Writing Skills requirement (UWSR). This can be done in one of five ways:

1. By satisfying the UWSR as an undergraduate at Cal State Hayward. (See "What is the University Writing Skills Requirement?" in the B.A./B.S. Degree Requirements chapter).
2. By having previously satisfied the Graduation Writing Assessment Requirement at another CSU campus. (Cal State Hayward will accept certification of completion if the entire requirement, as specified by that CSU campus, was satisfied.)
3. By receiving an essay score of 4.5 or higher on the GMAT or GRE, or an essay score of 53 or higher on the CBEST.
4. By passing the Writing Skills Test (WST).
5. By passing approved first- and second-tier writing courses (see below).

If you have not satisfied the University Writing Skills Requirement before you begin your graduate work, you must take the Writing Skills Test (or begin the coursework by taking the first-tier course) by the end of your first quarter in "Conditionally Classified graduate" status. If you do not take the test or course when required, you will have a hold placed on your record and may be dropped from your courses. If you think your writing is competent, you should take the Writing Skills Test. The UWSR must be satisfied before you can be admitted as a "Classified Graduate" student and, consequently, before you can be Advanced to Candidacy and receive a degree.

As soon as you have been admitted to a graduate program, you will be required to take the Writing Skills Test or begin the coursework if you did not satisfy the UWSR as an undergraduate or by your essay score on the GMAT, GRE, or CBEST. For details about the test, contact the Testing Office (WA 438; Tel. 510-885-3662). When you pass the WST or the second-tier writing course, you have satisfied the UWSR for graduation.

The Writing Skills Test consists of an analytic essay that requires you to demonstrate that you can think critically and analyze a short text. You pass the WST and satisfy the University Writing Skills Requirement with an essay score of 8 or above. If you fail the WST, you have only one opportunity to take it again. If you fail

it again, your highest score of the two will determine your placement in courses. If your score is 6 or below, you will take both first- and second-tier courses (see description below). If your score is 7, you will take only a second-tier course to satisfy the UWSR. If you choose the option of the Writing Skills Test but do not show up for the exam, you will be blocked from registration in the following term until you re-register for the exam.

If you choose to enroll in courses rather than take the WST, you must complete two levels: (1) a first-tier course, ENGL 3000 or 3001 (designed to benefit ESL students), and (2) an approved second-tier writing course (normally in the college of your major) which addresses rhetorical approaches and strategies and is taken in the quarter after passing ENGL 3000 or 3001. (A list of approved second-tier writing courses appears in the online Class Schedule each quarter. The currently approved courses are: ENGL 3003 Discursive Writing, MKTG 3495 Business Communication, MLL 3119 French Literature in English Translation, SCI 3010 Writing in Sciences.)

If you choose the option of coursework, or are placed into a first-tier course after failing the exam, your writing will be judged by portfolio assessment at the end of the first-tier course. Portfolio evaluators (not your instructor) will give you a Credit ("CR") or No Credit ("NC") grade as defined below:

- "CR": need to take a second-tier course;
- "CR": satisfied the writing skills requirement
(a notation that reads "Graduation Writing Skills Req Completed" will be added to your transcript);
- "NC": need to take the first-tier course again.

To satisfy the UWSR with coursework, you must pass the second-tier writing course with a grade of "C-" or better or a first-tier course with a grade of "CR" and portfolio evaluator recommendation. (If you do not pass the second-tier course with a grade of "C-" or higher, you must repeat it or take a different second-tier course to satisfy the UWSR.)

You may be enrolled in a first-tier course and also take the WST offered that quarter. If you pass the WST, you will be permitted to petition to withdraw from the course.

If you have taken the first-tier course three times consecutively and have not passed, and have a letter of good faith effort from your most recent first-tier instructor, you may apply to the Associate Vice President, Academic Programs and Graduate Studies, for a waiver of the University Writing Skills Requirement. If a waiver is granted, your permanent record will note that you were allowed to graduate without having satisfied the UWSR. If you do not satisfy the requirement and do not have a waiver approved, you will not be allowed to graduate. Contact the Office of Academic Programs and Graduate Studies for information on waivers (WA 859; Tel. 510-885-3718).

If you fail the WST with an essay score of 6 or 7, and receive a grade of "D+" or "D" in a second-tier writing course (taken fall 2000 or later), you may appeal to the Associate Vice President, Academic Programs and Graduate Studies, for a waiver of the University Writing Skills Requirement. If a waiver is granted, your

permanent record will note that you were allowed to graduate without having satisfied the UWSR. If you do not satisfy the requirement and do not have a waiver approved, you will not be allowed to graduate. Contact the Office of Academic Programs and Graduate Studies for information on waivers (WA 859; Tel. 510-885-3718).

If you have a verified disability that affects your ability to satisfy this requirement, there is a special appeal process facilitated by the Student Disability Resource Center. Contact that office for details (ST 140; Tel. 510-885-3868).

13.

What is "Candidacy"?

"Candidacy" is a status which recognizes completion of substantial progress towards your degree. You are eligible for Advancement to Candidacy when you:

1. are a "Classified Graduate" student in good standing;
2. have completed at least 12 quarter units of 6000-level coursework with a minimum 3.0 GPA;
3. have designed a formal program of study approved by your graduate advisor;
4. have fulfilled the University Writing Skills Requirement;
5. have completed other department prerequisites for advancement; and
6. are recommended for Advancement to Candidacy by your advisor (subject to approval by your department's graduate coordinator).

14.

What are the characteristics of graduate courses?

You will find that graduate courses involve more complex ideas, materials, techniques, and problems than undergraduate courses, and they demand in-depth research, analysis, and creative thinking.

All graduate studies share the following characteristics:

1. Identification and investigation of theories and principles;
2. Application of theories to new ideas, problems, and materials;
3. Extensive use of bibliographic and other resource materials, with emphasis on primary data sources.

In addition, you can expect each of the following learning formats used in graduate studies to be organized in a similar manner.

Lecture-discussion courses combine lectures with group discussion, and are based on specialized studies and research. These courses consider relevant issues, examine different perspectives, include problem analysis and research, and require a high level of participation on your part. The variety of resources used provide a range and depth beyond that obtainable through a single text. You will be expected to demonstrate your ability to synthesize and analyze material in your written work and in examinations which will go beyond mere recall of factual information.

Seminars are organized around a series of significant, related issues and their focus may vary from quarter to quarter. Occasional lectures are limited to framing and clarifying issues, while the bulk of the course is devoted to the development, presentation, and critical examination of material, ideas, and conclusions by you and other students. Seminars are among the most exciting and stimulating learning formats in graduate studies.

Laboratory coursework focuses on data gathering, analysis, and interpretation. Specialized facilities and equipment are used. You are expected to pursue your research with relative independence.

Field work and clinical practice require that you possess a high level of theoretical competence and a mastery of the basic skills necessary to perform professional duties with minimal direction. You will have opportunities to apply your knowledge, exercise independent judgment, and assume responsibility for determining and implementing procedures. You are expected to report your experience in a way that indicates its significance, explains the rationale behind your major decisions, and evaluates its effectiveness.

An independent study is jointly designed by you and your professor with a specific objective related to your graduate program. It requires demonstration of competence through scholarly presentation of the results of your work during the course of the study and at its conclusion. Graduate Independent Study (6900) is restricted to students with at least a 3.00 GPA in the field or department in which the Independent Study is to be taken.

15.

What are the different kinds of capstone experiences?

The capstone experience of your graduate program will be the successful completion of a thesis, project, or comprehensive examination. The quality of your work, including quality of expression, is the major consideration in judging the success of this degree component.

Thesis

A thesis is the written product of a systematic study of a significant issue. In the thesis, you are expected to identify the issue, state your major assumptions, explain the significance of

your project, detail your sources for and methods of obtaining data, provide analysis of the data, and offer conclusions. Your thesis should demonstrate original critical and independent thinking, appropriate organization and format, and thorough documentation. If your research involves human subjects, your protocols must be approved by the Institutional Review Board (see "Research with Human Subjects" in the Appendix).

Cal State Hayward offers two kinds of master's degree theses, University Thesis (numbered 6910) and Departmental Thesis (numbered 6909). Most criteria are the same for both.

- You must be a graduate student (i.e., admitted to a master's degree program) to enroll in a thesis course; your department may add additional requirements.
- Your thesis work will be supervised by a departmental committee which must include at least one Cal State Hayward faculty member who is a member of your major department.
- You may not receive credit for more units of thesis work than allowed by your degree program.
- Each quarter you will receive a grade of "RP" (Report in Progress) for units earned in 6909 or 6910 until you complete your thesis; you will then be given a final grade for the entire course. No "RP" units will be counted towards your degree or in calculating your GPA. If your thesis is not approved within five years of your initial enrollment in a thesis course, the "RP" grade(s) will be changed to "F" or "NC" (depending on the grading pattern of the course).
- Normally you will be required to present an oral defense of your thesis.

There are also a few significant differences between the two kinds of theses.

- You may not earn more than 9 units for University Thesis, while the maximum for Departmental Thesis is 5 units. Several departments have lower unit requirements, so check the program description in this catalog.
- The format of a University Thesis is established by the Associate Vice President, Academic Programs and Graduate Studies. Since these works are expected to serve as resources for future research, the format is formal, and the theses are bound and placed in the Cal State Hayward Library. A Departmental Thesis, on the other hand, is usually not as formal. Its standards and format are determined by the department, and the thesis is retained by the department. For details regarding the approval process, format and timeline for a University Thesis, contact the Academic Programs and Graduate Studies Office (WA 859) at 510-885-3286, or visit their website at:
http://www.csuhayward.edu/csuh_students/thesis/thesis.html. For information about a Department Thesis, contact your department advisor or graduate coordinator.

Project

A project is a significant piece of non-written work in either a fine or applied art or a professional field. Your project should provide evidence of originality, independent thinking, and appropriate form and organization. You are required to describe your project in a written abstract that addresses the project's significance, objectives, methodology, and conclusions. In some cases, you may be required to present an oral defense.

Specific criteria for a Project (numbered 6899) are the same as those for a Departmental Thesis with a few exceptions.

- An "RP" grade in a project course will become an "F" (no "NC" option) after one year if your project is not completed.
- While your project need not be considered a research resource, it should be of a caliber to constitute a valid terminal activity in a master's degree program and will be permitted only when a thesis is not appropriate.

If you change from a program requiring a thesis to one requiring a project (or vice versa), you may count a combined maximum of 9 units for 6909, 6910, and 6899 towards your degree.

Comprehensive Examination

A comprehensive examination is intended to assess your mastery of relevant subject matter, your ability to analyze and integrate the knowledge of your field, your skill in critical and independent thinking, and your use of appropriate organization and accurate documentation. A record of your examination (questions and responses) will be retained by your department. Some departments grant unit credit for exam preparation while others do not.

16.

If I choose to write a University Thesis, what are the steps I must follow?

You should consult your graduate advisor for information on your department's guidelines, for thesis topics, and for the procedures to establish a thesis committee. Also, obtain a copy of the University Thesis Writing Guide from the Academic Programs and Graduate Studies Office (WA 859), or online at <http://imctwo.csuhayward.edu/grad/utwg.htm>. This is available at no cost, and contains detailed instructions regarding the structural elements of the thesis, its format, binding information, deadlines, numbers of copies, and other useful information. Once your committee is established and you have selected your topic, enroll in your department's University Thesis (6910) course.

Your next step is to obtain the necessary approvals of your topic and proposed research methodology, and, ultimately, of your thesis itself. These are obtained in the following sequence:

- Approval of your topic by the chair of your University Thesis Committee;
- Approval of your research protocol by the Institutional Review

Board (IRB) if your research will involve human subjects, to determine whether subjects will be at risk and to protect their rights and welfare;

- Approval of the preliminary draft of your thesis by the chair of your thesis committee;
- Approval of the draft by the department chair (if this is required by your department).

Once your draft is completed and approved, you will begin preparing your manuscript for binding according to the requirements in the University Thesis Writing Guide. All students must adhere to these standards, so read the guide before beginning this phase of your work. It literally may prevent your thesis from being rejected, at great cost of time and funds.

Your final draft must be submitted to the Academic Programs and Graduate Studies Office which will review your thesis format. Once the Academic Programs and Graduate Studies Office approves the format, give the original copy of your thesis to your committee chair for final review and signature, and then give copies to the other members of your committee for their signatures. An oral defense is normally required prior to committee approval; check with your department.

Your final step is to provide the appropriate number of copies of your thesis to the Academic Programs and Graduate Studies Office for binding and distribution. The cost is available from the Academic Programs and Graduate Studies Office.

The coordination of the preceding steps is quite important. The Academic Programs and Graduate Studies Office establishes deadlines for the last few steps (which are strictly enforced) to ensure that each is completed appropriately without delaying your graduation. Please contact the Academic Programs and Graduate Studies Office early in your thesis work to obtain the deadline information.

17.

What are the policies that affect my registration, grades and academic status?

Registration

As a graduate student, you must follow the same registration policies and procedures as undergraduate students. (See the Registration chapter for details.)

Registration procedures for Thesis or Project courses is slightly different. You must complete a "Special Registration Petition" for each quarter you wish to enroll in one of these courses. Submit it to your department office. This must be done no later than the last day of the Add period. You are responsible for checking on the progress of this procedure.

Prerequisites: See "What information do I need to register for and enroll in classes?" in the Registration chapter.

Grading

It is an integral part of the teaching responsibility of the faculty to provide careful evaluation and timely assignment of an appropriate grade to each enrolled student. There is a presumption that grades assigned are correct. It is the responsibility of anyone appealing an assigned grade to demonstrate otherwise. In the absence of compelling reasons, such as instructor or clerical error, prejudice, or capriciousness, the grade determined by the instructor of record will be considered final. Final course grades must be submitted by the faculty to Enrollment Services no later than noon of the second academic day after the end of the Final Examination Period.

For purposes of correcting an error, an instructor may change a grade with approval of his/her department chair and college dean. No grade may be changed once your graduation has been recorded. The administrative symbol for withdrawal cannot be assigned by a faculty member. See "What changes can I make in my enrollment status?" in the Registration chapter for a description of withdrawal policies and procedures.

The grading symbols used for graduate courses are as follows:

<i>Academic Grades</i>	<i>Standard of Work Represented</i>	<i>Grade (Quality) Points</i>
A	Superior	4.0
A-	Superior	3.7
B+	Adequate	3.3
B	Adequate	3.0
B-	Adequate ²	2.7
C+	Substandard	2.3
C	Substandard	2.0
C-	Substandard	1.7
D+	Unacceptable	1.3
D	Unacceptable	1.0
F	Failing	0
CR ²	Credit	0
NC ²	No Credit	0

<i>Administrative Grading Symbols²</i>	<i>Definitions</i>	<i>Grade (Quality) Points Earned</i>
RP	Report in Progress	0.0
I	Incomplete (Authorized)	0.0
IC	Incomplete Charged	0.0
RD	Report Delayed	0.0
W	Withdrawal	0.0
WU	Withdrawal Unauthorized	0.0
AU	Audit	0.0

Academic Grades: The typical grading pattern for courses you will take is "A-F"; the use of "+" and "-" is at the discretion of each instructor. Some departments do not allow "C" or "D" grades to be applied towards a master's degree; check with your department about its policy. You may use courses taken on a "CR/NC" basis to meet your degree requirements only if the courses are offered exclusively on that basis. Typically, these courses are restricted to fieldwork and internships and a "CR" grade indicates that your work is at least of "B-" quality. In no case, however, may more than 15 units of your master's degree work be earned with "CR" grades in the standard 45-unit master's degree program. In postbaccalaureate (5000-level) courses, a "CR" grade also indicates that your work is at least of "B-" quality.

Administrative Grades: You may also receive the administrative grades indicated above. It is important that you observe the differences among them. As noted earlier in the section "What are the different kinds of capstone experiences?," the Report in Progress grade ("RP") is used in courses when assigned work extends beyond one quarter. It indicates that work is in progress and has been evaluated and found satisfactory to date, but that assignment of a precise grade must await completion of additional work. You cannot enroll in more units of RP-graded courses than are applicable to your degree. An "RP" in a thesis course becomes an "F" or an "NC" if the work is not completed in five years; an "RP" grade in any other course becomes an "F" or an "NC" after one year.

The Incomplete (Authorized) grade ("I") is used to indicate that a portion of required coursework has not been completed and evaluated in the prescribed time period due to unforeseen but fully justified reasons, and your instructor believes it likely that you will earn credit for the course upon completion of that work. However, you may not receive an "I" when completion of the coursework requires that you retake a major portion of the course when it is next offered. An "I" must normally be made up within one calendar year immediately following the end of the term during which it was assigned. This limitation prevails whether or not you maintain continuous enrollment. If you receive an "I" and do not complete the work within the period specified by your instructor (in no case to exceed one year), the grade will be changed to an "IC" or "NC," depending on the grading pattern in which you enrolled. (An extension may be granted by the department if military service or serious health or personal problems prevent you from completing the work, or if the professor is away on leave during the quarter of expiration. Such extensions are for one quarter only, up to a maximum of two extensions, and must be approved by the instructor and the department chair. Written notification of the extension must be sent to Enrollment Services.)

An Incomplete Charged ("IC") is used when you receive an authorized incomplete ("I"), but do not complete the required coursework within the allowed time, and the original grading pattern of the course was "A-F." The "IC" replaces the "I" and is counted as a failing grade for computing your grade point average.

A Withdrawal Unauthorized ("WU") indicates that you enrolled in a course, but did not withdraw from the course and also failed to

complete course requirements. It is used when, in the opinion of the instructor, completed assignments or course activities, or both, were insufficient to make normal evaluation of academic performance possible. The "WU" is counted in your grade point average as an "F" grade.

The Report Delayed grade ("RD") is rarely used, and will be assigned by the Registrar only if grade reports are delayed by circumstances beyond your control, such as your instructor's illness.

You may drop a course at any time during the first two weeks of instruction. (For Drop procedures, see the Class Schedule.) No mention of a dropped course appears on your permanent record. After the first two weeks of the quarter, deletion of a course is considered a Withdrawal, and a "W" grade will be assigned if the reason for your request to withdraw from the course is due to circumstances beyond your control and you have obtained the appropriate approvals. This grade carries no connotation as to the quality of your work and is not included in GPA calculations. Under extreme circumstances you may decide that you must withdraw from all your courses. If you believe this may be necessary, contact your graduate advisor or department chair as soon as possible for advice on the appropriate procedures to follow. (See "What changes can I make in my enrollment status?" in the Registration chapter and "What are the administrative grading symbols, and what do they signify?" in the undergraduate Grading and Academic Standards chapter for additional information on withdrawal procedures.)

Grade Point Average (GPA): Your grade point average (GPA) is calculated by dividing the total number of quality hours (units you have attempted, excluding CR/NC courses) into the number of grade (quality) points earned. If you repeat a course, your department has the discretion not to include your earlier attempt in your GPA calculation. The approval not to include the earlier attempt in your degree program must be submitted by your department to Enrollment Services. This may be done at any time while you are in the degree program, but may not be done after you have been awarded your degree. You may also ask your department to exclude a course from your master's degree program. Follow the same procedure outlined above.

Final Examinations: You can expect your instructors to provide you with comprehensive course requirement information for each course at the beginning of the quarter. This will include the work that is expected of you and the basis on which you will be evaluated. Most courses have graded assignments throughout the quarter and a final examination or paper. The university's policy states that final examinations must be given only at the times published in the Class Schedule. The purpose of this policy is to ensure fairness for all students. Exceptions are, therefore, rare and must be approved in writing by the department chair. Contact your department chair or college dean if you believe this policy is not being followed. If you are in a course which has a separate laboratory, activity or discussion section, your instructor is permitted to give a separate final examination (but only for that section) during the last regularly scheduled meeting of the section.

Probation and Disqualification: There are two types of probation and disqualification: 1) academic, and 2) administrative. If you are an "Unclassified Post-baccalaureate" student, not in a master's degree or credential program, all of the following policies apply except that your minimum GPA requirement is 2.50 instead of 3.00.

Academic Probation

You must maintain a 3.00 GPA in your degree coursework to remain in good standing. If your GPA falls below 3.00, you will be placed on Academic Probation. Should this happen, you must consult with your graduate advisor prior to registering for the next quarter. You are also encouraged to take advantage of various university services (such as advising and tutoring) designed to assist you. You may, however, be academically disqualified by the Associate Vice President of Academic Programs and Graduate Studies if you do not earn a 3.00 GPA during any quarter while on probation, or if, at any time, you do not meet the academic criteria of your department.

Administrative Probation

You may be placed on Administrative Probation if you:

- withdraw from all courses for two consecutive quarters or any three quarters;
- do not progress towards your degree while enrolled (such as earning a number of "NC" grades);
- do not comply with appropriate academic requirements (such as taking the Writing Skills Test); or
- earn only "IC," "F," "WU," and/or "NC" grades for two consecutive, or any three quarters.

Administrative Disqualification

You will be administratively disqualified if you:

- do not meet the conditions for removal of your Administrative Probation;
- are placed on Administrative Probation twice for the same reason;
- are placed on Academic Probation while on Administrative Probation; or
- earn only "IC," "F," "WU," and/or "NC" grades for two consecutive, or any three quarters.

If you are disqualified, either academically or administratively, you may apply for reinstatement to your graduate program by completing a "Petition for Graduate Reinstatement." Your petition must be approved by your Graduate Coordinator or the department chair. Reinstatement will be approved only if you are able to provide compelling evidence of your ability to complete your degree. Then it will be forwarded for consideration to the Associate Vice President of Academic Programs and Graduate Studies who has final authority to approve reinstatement. If you are disqualified a second time, reinstatement will normally not be

considered.

Resolution of Disputes

If you believe you have received an inappropriate grade or have been treated in an unfair or discriminatory way and you cannot resolve the matter informally with the instructor and department chair, you should present your case to the Presidential appointee to the Fairness Committee, the Assistant Vice President, Instructional Services, no later than one quarter after the disputed grade was recorded. The Fairness Committee may authorize a change of grade under certain circumstances (see the undergraduate Grading and Academic Standards chapter). If the instructor of record does not assign a grade to an individual student, the appropriate failing grade for nonattendance ("WU" or "NC") is automatically recorded by Enrollment Services. You may petition the Fairness Committee if you believe the instructor should have assigned an academic grade. If the instructor of record is unable to assign course grades, the Fairness Committee is authorized to ensure that other qualified faculty do assign grades. For additional information, see "What recourse do I have if I believe I have received a grade that is inappropriate?" in the undergraduate Grading and Academic Standards chapter.

Honors

Because graduate students constitute a select group whose members do very well in their programs, there is no academic honors at graduation or dean's list recognition as is the case for undergraduates.

18.

What determines my post-baccalaureate classification at Cal State Hayward?

You will be classified a full- or part-time student according to the following criteria:

- Full-time enrollment for a "Graduate" or "Classified Post-baccalaureate" student is 8 or more units. You are considered to be a part-time student if you are enrolled for fewer than 8 units.
- Full-time enrollment for an "Unclassified Post-baccalaureate" student (i.e., not enrolled in a master's degree program), is 12 or more units.
- If you are receiving financial aid or benefits from other programs (e.g., Veterans Administration or State Department of Vocational Rehabilitation), you may be subject to specific enrollment requirements to maintain your eligibility. You should check directly with the source of your benefits.
- If you are an international student on a non-immigrant visa, the U.S. Immigration and Naturalization Service (INS) requires that you pursue a full-time course of study in a specific program. You are expected to complete 8 units per quarter and 24 per year.

Also see "Academic Load" in the Registration chapter.

19.

May I receive credit for courses taken elsewhere?

If you have earned credit at another institution which you wish to apply to your graduate program at Cal State Hayward, you may transfer up to 13 quarter units. (However, this number may be reduced if you have other non-residence credit you wish to apply to your degree.) To request transfer credit:

1. you must have taken the course after earning a bachelor's degree;
2. your department must accept the course(s) as relevant to your degree program;
3. the institution at which you took the course must customarily grant the level of credit for the course (graduate or upper division) that you wish to receive for it at Cal State Hayward;
4. you must have taken the course within five calendar years immediately preceding the receipt of your degree.

You also may apply units earned through the CSU International Programs that meet the criteria outlined above. No more than half of the 45 units required for your degree may be earned in this way. If you also apply transfer credits to your degree, the total of the transfer and International Program units may not exceed one-half of those required for your degree. If you complete your capstone experience (thesis, project, or comprehensive examination) while in the International Programs, this must be done under the supervision of at least one Cal State Hayward faculty member.

Also see "Credit for Non-Collegiate Instruction" in the Registration chapter.

In general, Cal State Hayward does not allow the use of credit-by-examination from challenged courses for master's degree requirements. Exceptions may be established by individual departments and must be noted in the degree description in the *University Catalog*. They are governed by the following policies:

- you must pass the exam challenging the course with a grade of "B-" or better;
- no more than 13 units of credit-by-examination may be applied to your degree; and
- challenged courses may not be credited to the residency requirement of your degree.

20.

How can I change my educational objective?

If you are a continuing post-baccalaureate student and wish to change your degree objective or credential program, or you wish to change from "Unclassified" status to a graduate degree or credential program, you must complete a "Change of Graduate Objective Application" form and a "Change of Graduate Objective Transmittal" form and submit both forms to Enrollment Services. The forms are available from, and shall be turned in to, either the Student Information Lobby of Warren Hall or the Academic Services Center at the Contra Costa campus.

Enrollment Services will complete the academic certification section of the "Transmittal" form and will forward all documents to your proposed new department which makes the admission decision. Your department will notify you and Enrollment Services of the decision. Changes made after the second week of the quarter will not take effect until the following quarter

21.

How can I pursue two master's degrees at the same time?

If you wish to pursue two master's degrees at the same time, you should:

1. decide which master's will be your first degree and which will be your second degree;
2. apply and be admitted to the university and your first master's degree;
3. obtain a "Dual Master's Degree Permission Form" from the Office of Academic Programs and Graduate Studies (Warren Hall 859) and complete Section 1 of the form. The Office of Academic Programs and Graduate Studies will complete Section 2 and obtain the signatures of the Graduate Coordinators for your first and second master's degrees in Section 3. Only the Associate Vice President, Academic Programs and Graduate Studies, can give final approval for a student to pursue two master's degrees simultaneously.

If your petition is approved, you will:

1. fulfill all prerequisites and requirements for your first degree;
2. fulfill all prerequisites and requirements for your second degree (up to 13 units from your first degree may be applied to your second degree if agreed to by your second degree program);
3. earn all units for each master's degree within the five calendar years immediately preceding the receipt of each degree.

If your second degree is in the same field as your first degree (e.g., business administration), the second degree must be in a different option and all 45 or more units must be different. The prerequisites and requirements for the first degree do not need to be completed before you begin work on the second degree, however, you may be Advanced to Candidacy for your second

degree only after you have been awarded your first degree. You may not receive both master's degrees in the same quarter.

22.

How can I pursue a second master's degree?

If you already have a master's degree and want to pursue a second master's degree, you must meet the following criteria:

1. apply and gain admission to the department offering the second master's degree program;
2. fulfill all prerequisites and requirements for the second degree;
3. complete at least 32 units (32-39 in the Special Major, 35 in Public Administration, 39-41 in Multimedia, 59 in Counseling) in your second degree. Up to 13 units from your first degree may be applied to your second degree if accepted by your second degree program;
4. earn all units for your second master's degree within the five calendar years immediately preceding the receipt of the degree.

If your second degree is in the same field as your first degree (e.g. business administration), the second degree must be in a different option and all 45 or more units must be different.

23.

How do I apply for graduation?

Obtain your "Degree Candidacy Form" with department approval from your major department (the Office of Academic Programs and Graduate Studies, WA 859, if you are a Special Major). Be sure to list all options you plan to complete as part of your degree. You must do this no later than the end of the Add/Drop Period the quarter preceding your final quarter. (The exact date is published in the quarterly *Class Schedule*.)

Submit the "Degree Candidacy Form" and the graduation filing fee to the Cashier's Office in the first floor Lobby of Warren Hall (or the Student Services Center at the Contra Costa Campus).

The fee is non-refundable, but if you don't graduate when you intended, the fee will be transferred to the subsequent quarter automatically. Your graduation quarter can be moved a maximum of three consecutive terms, after which you must re-file and pay a graduation filing fee again. Submit the "Change of Degree Candidacy Form" to the Student Information Lobby of Warren Hall. This should be done no later than twenty-four hours prior to the opening of your window to register for a given quarter, and no later than the end of the Add/Drop period of the quarter originally intended to be your final quarter. Changes in the information on the diploma (e.g., change of name) or the diploma mailing

address must be submitted no later than the end of the Add/Drop period of the intended quarter of graduation.

Check with your department by the end of the fifth week of classes of your next to last quarter to be certain your major check has been submitted to Enrollment Services. If it is not submitted by this time, your graduation will be delayed a quarter.

If you are completing an undergraduate Single Subject Matter Preparation Program for entry into a teaching credential program, or you are completing a graduate Single or Multiple Subject Credential Program, be certain that the appropriate check sheet is submitted by the department or program committee offering the program to the Credential Student Service Center in the College of Education and Allied Studies.

Enrollment Services will email your "Degree Progress Report" to your Horizon email account before the end of the Add/Drop Period of your final quarter. This check sheet is the official statement of your status. It shows all degree requirements that are completed, in progress, and to be completed.

Once you have completed all degree requirements and Enrollment Services has verified completion, your degree will be posted to your transcript and your diploma mailed to you within three months.

Once your degree is posted to your permanent record, your diploma and transcript cannot be altered by adding additional options, nor by grade changes or withdrawals unless a documentable clerical error has been made.

24.

Who can answer my questions?

If you have any questions about your graduate work at Cal State Hayward (information either addressed or not addressed in this section), do not hesitate to consult your advisor, your department's graduate coordinator or chair, or the Associate Vice President of Academic Programs and Graduate Studies.

Footnotes

¹Fee adjustments subject to the policies established in Executive Order 661.

²Note that a "B-" grade, though described as "adequate," generates fewer than 3.0 grade (quality) points and must be balanced by a grade of "B+" or higher.

³These grades cannot be selected by students. They are only available in graduate courses offered exclusively on a "Credit/No Credit" basis.

⁴For definitions of administrative grades, see "What are the administrative grading symbols, and what do they signify?"

in the undergraduate Grading and Academic Standards chapter.

- This is the only administrative grade used in calculating the GPA. It is equivalent to an "F."



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Graduate Programs

Graduate Programs

- ▶ [Graduate Programs](#)
- ▶ [Academic Organization](#)

Cal State Hayward offers master's degrees in 28 fields (in addition to the Special Major). The university also offers a joint doctoral program (Ed.D. in Educational Leadership) in cooperation with U.C. Berkeley, San Francisco State University, and San Jose State University. Other programs lead to teaching, specialist, pupil personnel services, and administrative services credentials; and to certificates.

Graduate Degrees and Options

Anthropology, M.A.
 Biological Science, M.S.
 Business Administration, M.B.A.
 Accounting Option
 Business Economics Option
 Computer Information Systems Option
 E-Business Option
 Entrepreneurship Option
 Executive Option
 Finance Option
 Human Resources Management Option
 International Business Option
 Management Option
 Marketing Management Option
 Operations and Materials Management Option
 Strategic Management Option
 Supply Chain Management Option
 Taxation Option
 Telecommunications Management Option
 Business Administration, M.S.
 Computer Information Systems/Quantitative Business Methods Option
 Chemistry, M.S. **1**
 Biochemistry Option
 Computer Science, M.S.
 Counseling, M.S. **1**
 Clinical Child/School Psychology Option
 Marriage and Family Therapy Option
 Economics, M.A. **1**
 Comparative Economic Systems Option
 Economics for Teachers Option
 General Economics Option
 International Economics Option
 Labor Economics Option
 Monetary Economics Option

Public Sector Economics Option
Education, M.S.
Curriculum Option
Educational Technology Leadership Option
Online Teaching and Learning Option²
Reading Instruction Option
Urban Teacher Leadership Option
Educational Leadership, M.S.
Urban Teacher Leadership Option
Educational Leadership, Ed.D.
English, M.A.¹
Teaching English as a Second Language Option
Geography, M.A.
Geology, M.S.¹
Environmental Geology Option
Health Care Administration, M.S.
Administration of Healthy Communities Option
Management and Change in Health Care Option
History, M.A.¹
Public History Option
Teaching Option
Kinesiology, M.S.
Exercise Physiology Option
Professional Perspectives Option
Skill Acquisition and Sport Psychology Option
Sports Humanities Option
Marine Science, M.S.
Mathematics, M.S.
Option I
Option II (Mathematics Teaching)
Option III (Applied Mathematics)
Multimedia, M.A.
Music, M.A.
Public Administration, M.P.A.
Administration of the Metropolitan Region Option
Health Care Administration Option
Organizational Change Option
Public Financial Administration Option
Public Human Resource Management Option
Public Management Option
Public Policy Development Option
Social Work, M.S.W.
Children, Youth and Families Option
Community Mental Health Option
Sociology, M.A.
Special Education, M.S.
Mild-Moderate Disabilities Option
Moderate-Severe Disabilities Option
Special Major, M.A.
Special Major, M.S.
Speech Communication, M.A.
Speech Pathology and Audiology, M.S.
Statistics, M.S.
Actuarial Statistics Option
Biostatistics Option
Computational Statistics Option
Mathematical Statistics Option
Theoretical and Applied Statistics
Taxation, M.S.
Telecommunication Systems, M.S.

Computer Technologies of Telecommunications Option
Telecommunications Management Option
Telecommunications Systems Engineering Option

Credential Programs

Bilingual, Cross-Cultural, Language, and Academic
Development Emphasis (BCLAD)
Blended Liberal Studies/Multiple Subject Teaching
Clinical Rehabilitative Services in Language,
Speech and Hearing/Audiology
Cross-Cultural, Language, and Academic
Development Emphasis (CLAD)
Education Specialist, Levels I and II
Mild-Moderate Disabilities
Moderate-Severe Disabilities
Education Specialist Internship, Level I
Mild-Moderate Disabilities
Moderate-Severe Disabilities
Internship in Administrative Services
Multiple Subject Teaching
Preliminary Administrative Services
Professional Administrative Services
Pupil Personnel
School Counseling
School Psychology
Reading Specialist
Single Subject Teaching

Certificate Programs

The criteria for regular certificate programs are described in the Certificate Programs chapter. Special Certificates are described in the Special Major chapter.

Biotechnology
Cross-Cultural, Language, and Academic Development (CLAD)
Children's Literature
Educational Technology Leadership
Engineering Management
Mathematical Statistics
Quality Management (Engineering)
Taxation

Academic Organization

California State University, Hayward is organized into four colleges: Arts, Letters and Social Sciences (ALSS); Business and Economics; Education and Allied Studies; and Science. Each college has significant responsibility for its own curricula, faculties, students, and budgets. The college dean, aided by an associate dean and an administrative assistant, is the chief administrative officer of each college. (The names of these officers appear in the University Administration section.) The Deans' offices are located as follows: ALSS, eighth floor of Warren Hall (885-3161); Business and Economics, second floor of the Music and Business Building (885-3311); Education and Allied Studies, first floor of the Art and Education Building (885-3072); and Science, first floor of the North Science Building (885-3441). The M.A. in Multimedia

and the M.A./M.S. Special Majors programs are administered by the Associate Vice President of Academic Programs and Graduate Studies, on the eighth floor of Warren Hall (885-3286).

Academic Organization Chart

The Academic Organization chart at the beginning of the "Undergraduate Programs" section of the printed Catalog is also available as a [GIF Image](#) (60 KB) or a [PDF Document](#) suitable for printing (53 KB) in the online University Catalog. The chart indicates the departments and programs of each college and the interdisciplinary programs. [You may need a viewer, Acrobat Reader 4.0 or higher, from [Adobe](#) (www.adobe.com) in order to display the PDF document in the online Catalog.]

College of Arts, Letters and Social Sciences

The College of Arts, Letters and Social Sciences is the largest in the university and includes 18 departments. It embraces the creative arts, the humanities, the social and behavioral sciences, and several applied disciplines.

Master's Degrees

Anthropology (M.A.)
English (M.A.)
Geography (M.A.)
Health Care Administration (M.S.)
History (M.A.)
Music (M.A.)
Public Administration (M.P.A.)
Social Work (M.S.W.)
Sociology (M.A.)
Speech Communication (M.A.)
Speech Pathology and Audiology (M.S.)

Credentials

Blended Liberal Studies/Multiple Subject Teaching
Clinical Rehabilitative Services in Language Speech and Hearing/Audiology

College of Business and Economics

Mission Statement:

The College of Business and Economics provides excellence and innovation in integrating quality teaching and learning, with applied research and relevant experience to a diverse clientele from the San Francisco Bay Area to the global community.

Core Values:

- Value diversity in students, faculty, staff and other stakeholders
- Commitment to and synergy between regional and global constituencies
- Commitment to excellence in teaching, curriculum delivery, and applied research
Latest technology and delivery systems
Flexibility in program delivery
- Innovation and cooperative approach to business problems

Business-ready curriculum
Economic development initiatives
Team-oriented approach
Capitalize on opportunities
Entrepreneurial orientation

- Commitment to ethics, honesty and integrity
- Creating a collegial and supportive work environment
- Commitment to outstanding service to our clientele

The graduate programs in business administration are accredited by the Association to Advance Collegiate Schools of Business.

Master's Degrees
Business Administration (M.B.A.)
Business Administration (M.S.)
Economics (M.A.)
Taxation (M.S.)
Telecommunication Systems (M.S.)

Certificate Program
Taxation Certificate

College of Education and Allied Studies

The mission of the College of Education and Allied Studies is to prepare collaborative leaders, committed to social justice and democracy, who will influence a highly technological and diverse world.

The college offers programs for the professional preparation of teachers and service personnel in schools, colleges, and community agencies. Advanced preparation and graduate degrees are designed to expand the knowledge base of students, upgrade professional skills, and/or prepare students for doctoral study.

The professional education programs of the college are accredited by the California Commission on Teacher Credentialing, the National Council for Accreditation of Teacher Education, and the National Association of School Psychologists.

The College also offers programs at the Contra Costa Campus in Concord through the Departments of Educational Leadership, Educational Psychology, and Teacher Education. Specific program information may be obtained by contacting these departments.

Joint Doctoral Program
Educational Leadership (Ed.D.)

Master's Degrees
Counseling (M.S.)
Education (M.S.)
Educational Leadership (M.S.)
Kinesiology (M.S.)
Special Education (M.S.)

Credentials
Programs to prepare teachers, counselors, school psychologists,

school counselors, special educators, supervisors and administrators have been approved by the State Commission on Teacher Credentialing. Information regarding specific requirements for each credential is available through the appropriate department.

1. Basic Teaching Credential Programs

- Multiple Subject

The regular multiple subject program enables credential holders to teach all subjects in elementary or middle school. In addition, a Blended Liberal Studies/credential program is offered.

- Single Subject, which enables the credential holder to teach one or more of the approved single subjects

- TED/SPED

Joint Multiple Subject and Education Specialist Credential in the areas of Mild-Moderate or Moderate-Severe Disabilities

2. Specialist Credential Programs. These credentials are to be obtained concurrent with, or subsequent to obtaining a basic credential.

- Reading

- Education Specialist Credentials, Levels I and II
Mild-Moderate Disabilities
Moderate-Severe Disabilities

- Education Specialist Internship Credential, Level I
Mild-Moderate Disabilities
Moderate-Severe Disabilities

3. Emphasis Credential Programs

- Bilingual, Cross-Cultural, Language, and Academic Development (BCLAD)

- Cross-Cultural, Language, and Academic Development (CLAD)

4. Service Credential Programs

- Preliminary Administrative Services

- Internship Credential in Administrative Services

- Professional Administrative Services

- Pupil Personnel

a. School Counseling Credential

b. School Psychology Internship Credential

c. School Psychology Credential

Certificate Programs

Children's Literature

Cross-Cultural, Language, and Academic Development (CLAD)

Educational Technology Leadership

College of Science

The College of Science offers programs that provide a broad education in the physical, life, and health sciences; and in mathematics, statistics, and computer science. The career flexibility available to science students is one of the main advantages of a degree in the science area. The Master of Science programs are designed to allow students who possess appropriate qualifications to deepen their level of knowledge, upgrade their professional skills, and prepare for doctoral study.

Master's Degrees

Biological Science (M.S.)
Chemistry (M.S.)
Computer Science (M.S.)
Geology (M.S.)
Mathematics (M.S.)
Marine Science (M.S.)
Statistics (M.S.)
Telecommunication Systems (M.S.)

Certificate Programs

Biotechnology
Engineering Management
Mathematical Statistics
Quality Management (Engineering)

Interdisciplinary Programs

The interschool graduate interdisciplinary programs are administered by the Associate Vice President of Academic Programs and Graduate Studies.

Master's Degrees

Multimedia (M.A.)
Special Major (M.A., M.S.)
Option in Online Teaching and Learning
(M.S. in Education)

Certificate Program

Special Certificate

Footnotes

¹It is not necessary to select an option for these degrees.

²See quarterly bulletin of Extended and Continuing Education for classes offered each quarter.



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Course Numbering Key

Course Number and Description Key

- ▶ [Course Numbering Key](#)
- ▶ [Course Units](#)
- ▶ [Class Hours per Week](#)
- ▶ [Course Offering Key](#)
- ▶ [Footnote](#)

The numbering of courses is intended to describe the level at which they are offered. Any student, however, may enroll for any course if he or she has completed the listed prerequisites, except for certain graduate courses. See "California Articulation Number (CAN) System" in the Registration chapter for an explanation of CAN numbers.

0800-0999	Remedial courses (not for baccalaureate degree credit)
1000-1999	Freshman level
2000-2999	Sophomore level
3000-3999	Junior level
4000-4999	Senior level
5000-5999	Post baccalaureate and professional level
6000-6999	Graduate level
7000-7699	Upper division level continuing education ¹
7700-7999	Graduate level continuing education ¹

Course Units

() - Unit credits appear in parentheses following title of course

Class Hours per Week

The number of class hours a course meets per week equals the number of units listed for the course, unless otherwise indicated in the course description. (A "class hour" is 50 minutes.) Supervision courses (e.g., independent study, project, thesis) have no prescribed correspondence between class hours per week and units.

Course Offering Key

Quarter of offering may be subject to change without prior notice.

- F - Fall quarter
- W - Winter quarter
- Sp - Spring quarter
- Su - Summer quarter
- A - All quarters
- Y - At least once a year
- Tent. - Tentatively (used with one of the basic symbols above)
- Alt. - Alternate (used with one of the basic symbols above)

The lack of a symbol indicates uncertainty about offering the course in 2004-2006.

Footnote

- ¹ See quarterly bulletin of Continuing and International Education for classes offered each quarter.



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Department Information

M.A. in Anthropology

Anthropology

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- ▶ [Graduate Courses](#)

Department of Anthropology
College of Arts, Letters, and Social Sciences
Office: Meiklejohn Hall 4064
Phone: (510) 885-3168

Professors Emeriti: Peter J. Claus, H. Glynn Custred

Professors: Alan J. Almquist, George R. Miller, Laurie J. Price
(Chair)

Assistant Professor: Laura C. Nelson

Lecturers: David J. Matsuda, Rita Ross

Graduate Coordinator: Laura C. Nelson

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

The university offers the Master of Arts degree in Anthropology. Anthropology, the study of humans, provides a cross-cultural and time-depth perspective of humanity as the product of both evolutionary and cultural conditions. Students in this field will learn more about the self in relation to biological and cultural forces and in relation to persons of other ethnic backgrounds. In addition, the Department of Anthropology offers regional courses on the major populations of the world, with particular emphasis placed on North and South America and Asia. Although there are no separate options in the program, students are expected to focus their interests in any two sub-fields of the disciplines: socio-cultural, archaeological, biological, or linguistic anthropology.

Career Opportunities

Community College Teacher • Anthropologist • Archaeologist • Artifacts Conservator • Curator • Ethnologist • Foreign Service Officer • Immigration Service Officer • International Business • Multicultural Education Instructor • Museum Curator • Park Ranger • Park Service Official • Professor/Teacher • Researcher • Social Science Teacher • Travel Consultant • Urban Planner

Research Facilities

The Clarence E. Smith Museum of Anthropology houses a sizable collection of archaeological artifacts recovered in Alameda and Contra Costa Counties, as well as collections of culture groups throughout the world. The public museum is administered by the department and is also used as an instructional facility. Students have an opportunity for "hands-on" experience in museum work and gallery exhibits, and through related courses in museology and cross-cultural art. The museum, housed in Meiklejohn Hall, is open to the public. For information, call (510) 885-3168 or (510) 885-3104.

Research Support and Teaching Opportunities

There are a number of teaching and teaching-related opportunities, in both classroom and online instruction, available within the department for qualified students, including positions as Teaching Assistants, Readers, and Graduate Writing Instructors. Cal State Hayward offers opportunities for practical training and paid internships through its Cooperative Education Program. In the past, anthropology graduate students have obtained internships at places as nearby as local community colleges and as far away as the Smithsonian Institution.

Admission to the Program

To be admitted to the program with "Conditionally Classified Graduate" status, the student must: (1) meet all Cal State Hayward requirements for admission to the university as a post-baccalaureate student; (2) have a grade point average of at least 2.50 in his or her last 90 quarter (60 semester) units; (3) file a written application with the department (in addition to the official application filed with the Admissions Office); and (4) submit two letters of recommendation for admission to the program from former professors.

Classification in the Program

"Classified Graduate" status implies that the student has demonstrated adequate preparation to pursue graduate work leading to the M.A. degree in Anthropology. Credit can be granted for necessary courses taken with graduate standing at other institutions; deficiencies, if any, can be corrected while registered as a "Conditionally Classified Graduate" student in the program. It should be noted that not more than 15 units of graduate level course work (6000 series) in Anthropology taken as a "Conditionally Classified Graduate" student will be applicable to M.A. degree requirements. To attain "Classified Graduate" status, either at the time of admission or thereafter, a student must: (1) have completed a baccalaureate degree with a major in Anthropology which includes the following anthropology courses or their equivalents: ANTH 3100 or 3101, 3200, 3400, 3800 or 3810, 4250 or 4310, 4910; (2) satisfy the University Writing Skills requirement.

Advancement to Candidacy

Advancement to Candidacy implies that the student has demonstrated the capacity to complete satisfactorily the program leading to an M.A. degree in Anthropology. To be Advanced to Candidacy, a student must file with the department (normally upon completion of 23 course units) an approved program of study to include relevant courses satisfactorily completed, those in progress, and those yet to be taken; and then be recommended

for Advancement to Candidacy by the department.

Maintenance of "Classified Graduate" Standing

To maintain "Classified Graduate" standing a grade point average of 3.0 or higher must be achieved in all courses taken in the approved program of study, whether at Cal State Hayward or at any other college or university. If a "Classified Graduate" student's GPA falls below 3.0, s(he) shall be dropped from candidacy, if previously attained, and placed in "Conditionally Classified Graduate" status until all deficiencies have been remedied and the student is recommended by the department for reinstatement to "Classified Graduate" status (and candidacy when applicable). Failure by a student to return to "Classified Graduate" status following completion of 16 additional quarter units shall result in his or her dismissal from the program.

Requirements for the M.A. in Anthropology (45 units)

I. Requirements for Advancement to Candidacy

- A. Acquire a research skill by successfully completing one year of coursework or equivalency (or demonstrating competence) in one of the following: (1) foreign language, (2) computer and/or multimedia skills, (3) statistics.
- B. Complete a minimum of 23 units of anthropological coursework applicable to M. A. requirements, including at least 15 units of graduate-level (6000 series) coursework.

II. Course Requirements

- A. Complete 45-46 quarter units of graduate work including the 23 units needed for Advancement to Candidacy.
 - 1. All must be earned within the five years just preceding the completion of the requirements for the degree.
 - 2. Not fewer than 32 must be completed in residence.
 - 3. Not fewer than 26 must be in anthropology courses in the 6000 series.
 - 4. Not more than 13 may be taken in "Unclassified Post-baccalaureate" status and/or for extension and/or transfer course credit, as approved by the department.

B. Required Courses (25-28 units)

- 1. All students are required to take either:
 - ANTH 6350 Advanced Ethnographic Methods (5) or 6251 Advanced Archaeological Field Methods (5)
- 2. Students following the Comprehensive Exam or Thesis Tracks must complete ANTH 6700 Applied Anthropology (5) and any three of the following:
 - ANTH 6100 Seminar in Biological Anthropology (5), 6200

Seminar in Archaeology/Prehistory (5), 6400 Seminar in Socio-Cultural Anthropology (5), 6800 Seminar in Linguistic Anthropology (5)

3. Students following the Applied Anthropology Track must complete ANTH 6700 Seminar in Applied Anthropology (5), 6750 Pre-Internship Seminar (5), 6760 Internship Experience (3), 6790 Post-Internship Seminar (5) and any one of the following:

ANTH 6100 Seminar in Biological Anthropology (5), 6200 Seminar in Archaeology/Prehistory (5), 6400 Seminar in Socio-Cultural Anthropology (5), or 6800 Seminar in Linguistic Anthropology (5)

- C. Elective courses (graduate or upper division) in Anthropology (or outside of Anthropology in one or more closely related fields) taken as a graduate student. Choice of appropriate coursework will be made with consent of Graduate Advisor. Students in the Comprehensive Exam Track must have completed at least two upper division courses (or their equivalent) in each of the fields in which they take their exams. All units used to fulfill comps requirements must be included as elective units. Students in the Applied Anthropology Track are strongly advised to complete at least one course in statistics. (16 units)

- D. Capstone Experience (1-5 units)
Complete one of the following:

1. Comprehensive Exam Track: ANTH 6905 (5) and pass a comprehensive examination in two sub-fields of anthropology. Before enrolling in ANTH 6905 students must (a) declare the two sub-fields from socio-cultural, biological, archaeological, and linguistic anthropology in which they intend to take their examination, (b) have taken at least 8 units of upper division coursework within each of the chosen fields, and (c) have the approval of the Department Graduate Coordinator. The examination may be taken only after Advancement to Candidacy and the completion of the appropriate core seminars (ANTH 6100, 6200, 6400, and 6800).

2. Applied Anthropology Track: ANTH 6909 Departmental Thesis (1) (in conjunction with ANTH 6790 Post-Internship Seminar).

3. Thesis Track: ANTH 6910 University Thesis (4)

- E. Have a 3.00 or higher GPA in all courses applied to the M.A. degree. See also the "University Requirements for Graduation" which are described in the Graduate and Post-baccalaureate Studies chapter at the beginning of the graduate section of this catalog.

Comprehensive Exam, Thesis Track, and Applied Anthropology Track

Students may choose to complete ANTH 6905 and pass a comprehensive examination on any two fields from socio-cultural, biological, archaeological, and linguistic anthropology. Normally

Graduate Courses

the exam will be given twice a year, in the Fall and Spring quarters. With the consent of the department faculty and the approval of the Graduate Coordinator, students may elect to enroll in ANTH 6910, and undertake and satisfactorily complete a University Thesis under the supervision of a committee of at least two faculty members from the department. Students in the Applied Anthropology Track must enroll in ANTH 6790 Post-Internship Seminar and ANTH 6909 Departmental Thesis.

Courses Acceptable for the Master's Degree

In addition to graduate level (6000 series) courses, all Anthropology courses in the 3000-4000 series (except ANTH 3000) are acceptable in the master's degree program. Only courses with grades of "A," "B," and "C" are considered applicable to degree requirements. To apply a course to the degree in which a "D" or "F" is received, the student must repeat the course and earn a grade of "C" or higher. However, both the original grade and the repeat grade are utilized in calculating the student's graduate grade point average.

The course prefix for the following courses is ANTH.

- 6100** Seminar in Biological Anthropology (5)
Critical examination of theoretical developments in paleoanthropology and primatology, with emphasis on evolutionary mechanisms. Prerequisites: graduate standing and permission of instructor.
- 6200** Seminar in Archaeology/Prehistory (5)
Advanced study of methods and theories used in archaeological research, combining discussion of current archaeological literature and individual analysis of available archaeological data. Prerequisites: graduate standing and permission of instructor. (W)
- 6251** Advanced Archaeological Field Methods (5)
Advanced techniques in surface survey and archaeological excavation, laboratory artifact analysis, and principles of data recording and management. Aspects emphasized will depend on opportunities available. May be repeated once for credit. Two hrs. lect., 6 hrs. act.
- 6350** Advanced Ethnographic Methods (5)
Ethnographic research design; wide range of observation and interview methods, introduction to quantitative description, field notes, research ethics, methods of analysis and representation, relevant software programs, oral and written presentation of original field research. May be repeated once for credit. Two hrs. lect., 6 hrs. act.
- 6400** Seminar in Socio-Cultural Anthropology (5)
A critical examination of traditional and contemporary theories and methods in socio-cultural anthropology, including trends in the various subfields of the discipline. Emphasis on student participation in criticism and synthesis of significant theoretical positions. Prerequisites: graduate standing and permission of instructor.

- 6700** Applied Anthropology (5)
Anthropological principles and methods applied to problems of sociocultural change and cross-cultural communication; community based participatory methods and planning; policy analysis; organizational culture, needs assessment, program evaluation, proposal development.
- 6750** Pre-Internship Seminar (5)
Includes training in developing, presenting, and evaluating position papers, proposals, work plans; literature and website searches; ethics and professional development for work outside academia, active involvement in securing appropriate internship, and negotiating plan for internship.
- 6760** Internship Experience (3)
Applied M.A. track internship in an agency or nongovernmental organization, including personal activity log, mid-internship report, internship completion statement, and oral presentation on internship. May be repeated once for credit. Prerequisites: ANTH 6350 or 6251, and 6750. Six hrs. act.
- 6790** Post-Internship Seminar (5)
Emphasizes preparing and writing of internship report. Course includes developing skills in organizational analysis, oral presentation, and audiovisual formats. Prerequisites: ANTH 6350 or 6251, 6750 and 6760.
- 6800** Seminar in Linguistic Anthropology (5)
Seminal work within the subdisciplines of anthropological linguistics, including examples of its application. Prerequisites: graduate standing and permission of instructor. (W)
- 6898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 8 units. A maximum of 4 units will be accepted toward the M.A. in Anthropology. CR/NC grading only. Prerequisites: at least a 3.0 GPA; departmental approval of activity. (A)
- 6900** Independent Study (1-4)
Independent study in anthropology with concentration on a specific problem under guidance by a faculty sponsor. Prerequisites: Completion of seminar relevant to the specified problem and consent of instructor. (A)
- 6905** Directed Readings in Anthropology (5)
Selected readings in consultation with two or more appropriate faculty members in preparation for the Master's Comprehensive Written Examination in two sub-fields of anthropology. The reading list and the exams must be consistent with the student's areas of concentration and approved by the Graduate Advisor.
- 6909** Departmental Thesis (1-4)
Development and writing of a research paper for submission to the department which specifies its format. Supervision by a departmental committee, at least one of

whom must be a Cal State Hayward faculty member. Oral defense normally required. Prerequisite: "Classified Graduate" standing. Maximum of 4 units per student.

- 6910** University Thesis (1-5)
Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least two of whom must be members of the Department. Oral defense normally required. Prerequisite: "Advancement to Candidacy." Maximum of 5 units per student. (See also, "University Thesis Writing Guide," available in WA 859.) (A)
- 6999** Issues in Anthropology (4)
Readings, discussion, and research on contemporary and/or significant issues in anthropology. May be repeated for credit when content varies.



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Department Information

M.S. in Kinesiology

Kinesiology

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Department of Kinesiology and Physical Education
 College of Education and Allied Studies
 Office: Physical Education Bldg. 130
 Phone: (510) 885-3061

Professors Emeriti: John Z. Ostarello, Timothy Tierney

Professors: Calvin S. Caplan, Stanley J. Clark, Penny McCullagh (Chair), Donald T. Sawyer, Robert W. Zambetti

Assistant Professors: Catherine Inouye, Rita Liberti, Spiros G. Prassas, Jeffery P. Simons, Jin H. Yan

Lecturers: Will Biggs, Glen E. Borgeson, Lisa De Rossi, Amy Foreman, Jair Z. Fory, Anthony G. Garcia, Cara L. Hoyt, Sara L. Judd, Dirk L. Morrison, Greg Ryan, James Spagle

Graduate Coordinator: Calvin Caplan

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

The Department of Kinesiology and Physical Education offers programs in sport and exercise phenomena. The purpose of the Master of Science degree program is to give students a broad knowledge of Kinesiology and the profession of Physical Education and to develop their scholarly skills. The program serves as a terminal degree for professionals as well as preparation for those intending to complete a doctorate. To meet the needs and interests of students, the course of study leading to the Master of Science degree has four options. The high standards and academic rigor required of students pursuing these options is characteristic of an excellent graduate-level education. Because most students are working professionals, graduate courses are offered primarily during the evening hours.

Career Opportunities

Athletic Director • Athletic Trainer • Cardiopulmonary Rehabilitation Specialist • Community College Teacher • Corporate Fitness Director • Intercollegiate and Interscholastic Coach • Exercise

Physiologist • Personal Trainer • Physical Education Administrator
• Physical Education Teacher • Physical Therapist • University
Instructor • Wellness Counselor

Faculty: Areas of Specialization

Calvin S. Caplan, Ed.D., University of California, Berkeley:
Exercise physiology, sports medicine

Stanley J. Clark, Ed.D., Stanford University: Sport history

Catherine Inouye, Ed.D., University of Northern Colorado:
Exercise physiology, exercise nutrition

Rita Liberti, Ph.D., University of Iowa: Sport sociology, sport
history, sport psychology

Penny McCullagh, Ph.D., University of Wisconsin, Madison: Sport
and exercise psychology

John Z. Ostarello, Ed.D., University of California, Berkeley:
Biomechanics

Spiros G. Prassas, Ph.D., University of Maryland: Biomechanics,
kinesiology measurement

Donald T. Sawyer, Ed.D., University of San Francisco: Skill
acquisition, motor control, sport psychology

Jeffery P. Simons, Ph.D., University of Illinois: Sport and exercise
psychology, lifetime physical activity participation

Jin H. Yan, Ph.D, Arizona State University: Motor development,
motor learning, statistics

Option Areas

The M.S. degree has four options:

1. **Sports Humanities:** Study of the historical, social, cultural and philosophic aspects of sport and exercise.
2. **Exercise Physiology:** Study of the response of physiological systems to exercise and the limitations of these systems to perform work.
3. **Skill Acquisition/Sport Psychology:** Study of the nature of sensorimotor skill acquisition and performance and the influence of psychological variables.
4. **Professional Perspectives:** Study of kinesiological phenomena related to the development of curriculum, programs and facilities for physical education and athletics.

Features

The department offers a complete range of laboratory facilities and technologies for graduate students. These resources enable comprehensive research opportunities in all option areas. Biomechanical digitizing, gas analysis, biofeedback, coincidence timing, nutritional analysis, and computer statistical packages are examples of available tools.

Other features include the potential for individualized programs of study to meet specific interests and needs, extensive library resources, and a seminar instructional format which stimulates high interaction among students and promotes independent scholarship.

Admission to the Program in "Classified Graduate" Status

Eligibility for admission to the M.S. degree program in "Classified Graduate" status requires a student to have a baccalaureate degree with a major approximately equivalent to the Hayward B.S. degree major in Kinesiology. The graduate coordinator or department chair will determine degree equivalencies. Students must also have attained at least a 3.00 grade point average in the major and have satisfied the University Writing Skills requirement.

The department encourages students to meet university prescribed deadlines for admission into the program beginning in the Fall quarter, although the department is willing to accept graduate students into the program during the Winter and Spring quarters.

"Conditionally Classified Graduate" Status

Students who are judged to be admissible, but who do not meet all of the admission requirements specified above for "Classified Graduate" status, receive "Conditionally Classified Graduate" standing. Such students may need to complete certain undergraduate prerequisites in preparation for graduate study and/or may have other deficiencies, such as the University Writing Skills requirement, that must be removed within a reasonable period of time. Each student will be judged on an individual basis. The department may require the Graduate Level Examination (GRE), Aptitude Test Score, three letters of recommendation from former professors, and/or the repeat of undergraduate coursework in the case of below-standard grade point averages.

Generally, courses taken to remove deficiencies will not count for credit in the M.S. program. In no case will more than 13 quarter units taken in "Unclassified Post-baccalaureate" standing or at another university, be counted toward the M.S. degree.

"Unclassified Post-baccalaureate" Status

A student who does not meet the admission criteria for the program may seek admission to the university in "Unclassified Post-baccalaureate" status. No more than 13 units earned in this status may be applied to degree requirements.

Advancement to Candidacy

"Classified Graduate" students are eligible for Advancement to Candidacy based on the criteria given below.

1. Maintain a 3.0 grade point average in all graduate work completed.
2. Complete KPE 6000 in the first two quarters in the program.
3. Declare in writing to the graduate coordinator the choice of Sport Humanities, Exercise Physiology, Skill Acquisition/Sport Psychology, or Professional Perspectives as an option. This declaration must be made before more than 18 units of

graduate study have been completed.

4. Submit to the graduate coordinator an approved program of study developed in conjunction with the appropriate faculty committee.

Prerequisite Courses (36-38 units)

In the absence of an appropriate undergraduate degree, prerequisite coursework must be completed. Generally, courses taken to remove deficiencies will not count for credit in the M.S. program. Preparatory work for students with undergraduate degrees in other fields is described below.

- A. KPE 3300 Kinesiological Measurement (5)
(Applied statistics background is acceptable equivalent.)
- B. KPE 3305 Structural Kinesiology (5)
(Functional anatomy background is acceptable equivalent.)
- C. Three courses (14-15 units) completed from:
KPE 3310 Biomechanics (5)
KPE 3320 Exercise Physiology (5)
KPE 3330 Motor Learning and Control (5)
KPE 4340 Motor Development (4)
- D. Three courses (12-13 units) completed from:
KPE 3700 History of Sport and Physical Education (4)
KPE 3740 Philosophic Foundations of Sport and Physical Education (4)
KPE 3750 Sport in Contemporary Society (4)
KPE 4410 Sport and Exercise Psychology (5)

Waiver of one or more of these area requirements will be considered if comparable coursework has been completed, or if the student has strong compensating academic strengths in areas related to the graduate program (a degree in Physical Therapy, for example). All requests for such waivers and their justification must be submitted in writing to the graduate coordinator.

Degree Requirements

The Master of Science degree will be awarded when the general requirements listed below have been successfully completed.

1. Completion of a minimum of 45 quarter units of approved upper division and graduate courses
2. A minimum grade point average of 3.0
3. Completion of breadth-requirements listed below
4. Completion of an option
5. Completion of one Capstone Experience:
 - a. University Thesis
 - b. Department Thesis
 - c. Comprehensive Examination
6. In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate and Post-baccalaureate

Studies chapter at the beginning of the graduate section in this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills requirement.

Curriculum Requirements (45 units)

- I. Required Course (4 units)
KPE 6000 Foundations of Graduate Research (4)
- II. Breadth Requirements (12 units)
A minimum of one seminar (four units) from each of the three option areas outside the selected option. See the next section for a description of the options.
- III. Options (Minimum 16 units)
(If a student wishes to have an additional option recorded, that option must contain three unique seminar courses not used for any other option and totaling a minimum of 12 units.)

A. Sports Humanities Option

KPE 6430 Seminar in the History of Sport (4)
KPE 6440 Seminar in Sport in Contemporary Society (4)
KPE 6460 Seminar in Philosophy of Sport (4)

Repeat one option Seminar (4)

Additional courses may be selected in consultation with an option area advisor.

B. Exercise Physiology

KPE 6420 Seminar in Exercise Physiology (4)
KPE 6470 Seminar in Exercise Nutrition (4)
KPE 6650 Seminar in Sports Medicine (4)

Repeat one option Seminar (4)

Additional courses may be selected in consultation with an option area advisor.

C. Skill Acquisition/Sport Psychology

KPE 6400 Seminar in Biomechanics (4)
KPE 6410 Seminar in Sport Psychology (4)
KPE 6415 Seminar in Motor Learning and Control (4)

Repeat one option Seminar (4)

Additional courses may be selected in consultation with an option area advisor.

D. Professional Perspectives

KPE 6450 Seminar in Motor Development (4)
KPE 6610 Seminar in Physical Education Programs and Facilities (4)
KPE 6620 Seminar in Athletic and Sport Management (4)

Repeat one option Seminar (4)

Post- Baccalaureate Courses

Additional courses may be selected in consultation with an option area advisor.

IV. Electives (4-13 units)

Selection of appropriate courses in consultation with option advisor.

V. Capstone Experience (0-9 units)

1. KPE 6909 Departmental Thesis (2-5)
 2. KPE 6910 University Thesis (6-9)
 3. Comprehensive Examination (no unit credit) in the student's option.
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The course prefix for the following courses is KPE.

Consult an advisor to determine if these courses can be applied to the M.S. degree.

5000 Sports Officiating (3)
Theory and practical experience in officiating men's and women's sports and games. Coeducational. Sports to be covered rotate quarterly. May be taken three times for credit with different context. Two hrs. lect., 2 hrs. act. (F, W, Sp)

5900 Independent Study (1-4)

Graduate Courses

The course prefix for the following courses is KPE.

6000 Foundations of Graduate Study and Research (4)
Analysis of physical education and kinesiological variables. Scientific thought and inquiry. Application of research methods to specific problems. Statistics/technology module included. CR/NC grading only. Prerequisite: KPE 3300 or equivalent. (A)

6331 Collaborative Leadership I (4)
(See EDUI 6331 in the graduate Teacher Education chapter for course description.)

6400 Seminar in Biomechanics (4)
Critical review of research related to the biological and mechanical analysis of human movement. May be repeated once for credit with consent of instructor. Prerequisite: KPE 3310 or equivalent. (A)

6410 Seminar in Sport Psychology (4)
Kinesiological analysis of sensory-motor control and integration in skill acquisition and performance. Emphasis on theory and empirical evidence related to sport and exercise. May be repeated once for credit with consent of instructor. Prerequisite: KPE 3330 or equivalent. (A)

- 6415** Seminar in Motor Learning and Control (4)
Kinesiological analysis of sensory-motor control and integration in skill acquisition and performance. Emphasis on empirical evidence and underlying theories related to sport and exercise. May be repeated once for credit with consent of instructor. Prerequisite: KPE 3330 or equivalent. (A)
- 6420** Seminar in Exercise Physiology (4)
Analysis of immediate and long-range adaptations of human biological systems to exercise and related environmental stresses. Seminar may be repeated once for credit with consent of instructor. Prerequisite: KPE 3320 or equivalent. (A)
- 6430** Seminar in the History of Sport (4)
Critical analysis of the interrelationships of sport, agonistic practices and culture. Seminar may be repeated once for credit with consent of instructor. Prerequisite: Graduate status, KPE 3700 or equivalent recommended. (A)
- 6440** Seminar in Sport in Contemporary Society (4)
Discussion and analysis of literature, research and issues pertaining to the role of play, games, and sport in contemporary society. May be repeated once for credit with consent of instructor. Prerequisite: KPE 3750 or equivalent. (A)
- 6450** Seminar in Motor Development (4)
Advanced study and review of the research literature pertaining to neuromotor and physical development from birth through adulthood. May be repeated once for credit with consent of instructor. Prerequisite: KPE 4340 or equivalent. (A)
- 6460** Seminar in Philosophy of Sport (4)
Analysis of philosophic issues in competitive and aesthetic movement forms. May be repeated once for credit with consent of instructor. (A)
- 6470** Seminar in Exercise and Nutrition (4)
Biochemical and physiological responses related to nutrition and performance. Course may be repeated once for credit. Prerequisites: graduate standing, KPE 3320, KPE 4000 or equivalencies or consent of instructor. (A)
- 6610** Seminar in Physical Education Programs and Facilities (4)
Analysis of factors related to effective physical education curricula in elementary and secondary schools. Effect of national, state and local needs, legislation, staffing and facility requirements on curriculum development. May be repeated once with consent of instructor.(A)
- 6620** Seminar in Athletic and Sport Management (4)
Background and trends in administration and supervision of physical education and athletics, including secondary school and college programs for men and women. May be repeated once for credit with consent of instructor. (A)

- 6650** Seminar in Sports Medicine (4)
The role of sports medicine in contemporary sports and athletics. Philosophical, physiological, and legal aspects of the field. May be repeated once for credit with consent of instructor. Prerequisite: KPE 3320 or consent of instructor. (A)
- 6700** Seminar: Contemporary Issues in Kinesiology (4)
Selected advanced topics of importance to the discipline of kinesiology. (A)
- 6850** Supervised Research (2-4)
Independent research under direction of faculty. May be repeated for credit with consent of advisor. Prerequisite: KPE 6000. (A)
- 6899** Project (2-5)
Development of an original product which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their format. Supervision by a department committee, at least one of whom must be a Cal State Hayward, faculty member. Oral defense may be required. Prerequisite: graduate standing. Maximum of five units per student. (A)
- 6900** Independent Study (1-4)
Independent study under direction of faculty. May be repeated for credit with consent of advisor. (A)
- 6909** Departmental Thesis (2-5)
Development and writing of a research paper for submission to the department, which specifies its format. Supervision by a department committee, at least one of whom must be a member of the graduate faculty. Oral defense is required. Maximum of five units per student. Prerequisites: Graduate standing, consent of graduate coordinator, KPE 6000 or equivalent. (A)
- 6910** University Thesis (2-6)
Development and writing of a formal research paper for submission to the University in the specified bound format. Supervision by a departmental committee, at least one of whom must be a graduate faculty member. Oral defense required. Prerequisite: graduate standing. Maximum of 6 units per student. (See also "University Thesis Writing Guide" available in WA 859.) (A)
- 6999** Issues in Kinesiology and Physical Education (4)
Readings, discussion, and research on contemporary and/or significant issues in kinesiology and physical education. May be repeated for credit when content varies.



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Department Information

Department of Biological Sciences
College of Science
Office: North Science 429
Phone: (510) 885-3471

Professor Emeritus: Richard E. Tullis

Professors: Christoph W. Baysdorfer, Stephen C. Benson, Beverly A. Dixon, Lynne O. Elkin, Donald A. Gailey, Christopher L. Kitting, Maria C. Nieto, Susan B. Opp, Richard A. Symmons (Chair)

Associate Professors: Michael S. Hedrick, Carol R. Lauzon

Assistant Professors: Caron Inouye, Laura Marschall, Erica L. Wildy

Lecturers: D. Gail DeLalla, Michele A. Graham, David C. Rosen

Graduate Coordinator: Susan B. Opp

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M.S. in Biological Science

The Master of Science degree in Biological Science offers students the opportunity to obtain advanced academic and research experience in specialized areas of biological science.

Career Opportunities

Biological Science is a fast-changing, exciting field offering students numerous options for rewarding careers and future advancement. Examples of M.S. study areas in the department are environmental biology, general ecology, population biology, marine ecology, insect ecology, plant and animal ecology, physiological biology, cell and molecular biology, plant and animal physiology, microbiology, genetics, and immunology.

Faculty

The Biological Science faculty is comprised of 16 full-time professors at Cal State Hayward. The faculty are committed to excellence in teaching and research, and many of the faculty have federal, state, and private research grant support.

Related Programs

The Biotechnology Certificate Program within the department is a post-baccalaureate program emphasizing cellular, molecular, and immunological techniques. With careful planning, this certificate may be combined with the M.S. in Biological Science degree. Contact the Biological Sciences Department for application forms and deadlines for this program.

The M.S. degree in Marine Science is offered at Moss Landing Marine Laboratories, located on Monterey Bay, for students from Cal State Hayward and seven other California State University consortium schools. Graduate students from Cal State Hayward may also take such courses at Moss Landing as are appropriate for their degree objectives. Contact the Biological Sciences Department for application forms and deadlines for this program. See Marine Sciences in the graduate section of this catalog.

Research Facilities

Department facilities for student research and study include invertebrate, vertebrate, and entomology museums; herbarium; greenhouse; insectary; histology, transmission and scanning electron microscope labs; radiation hot lab; microbiology facilities including those for anaerobic culture; cell culture facilities; animal rooms; molecular biology labs; and DNA sequencing facilities. Local field opportunities may be found at a wetlands field station at the San Francisco Bay National Wildlife Refuge, the brackish and salt water marshes of the Hayward Regional Shoreline of San Francisco Bay, and a 35-acre oak-grassland preserve located immediately adjacent to the Hayward campus and contiguous with Garin Regional Park (one of the East Bay Regional Parks).

Research Support

Research space is available to all "Classified Graduate" students, usually in the major advisor's research lab. Limited funds for graduate research supplies are available each year from the department budget. Graduate research grants are available annually on a competitive basis through Academic Programs and Graduate Studies and can be used to purchase supplies or pay travel expenses for graduate research. In addition, research assistantships are available for some students through faculty research grants and the Minority Biomedical Research Support Program. Teaching assistantships may become available for a given quarter. Financial aid within the department is limited. Contact the Financial Aids Office regarding other assistance from the University Work-Study Program, loans, scholarships, etc.

Admission Requirements

1. The M.S. degree program in the Department of Biological Sciences is open to graduates of accredited institutions who have a four-year baccalaureate degree in any field of the biological sciences and who have achieved a GPA of at least 2.75 in all undergraduate work and an average of 3.00 in all biological science courses taken as an upper division student. Normally, all applicants should have completed undergraduate courses equivalent to those required of all biological science majors at Cal State Hayward.
2. In addition to filing the university application and fee, students

must make application to the Department of Biological Sciences for admission to graduate standing in the M.S. degree program. Application forms are available through the department office or by accessing the Biology Department website. Students are encouraged to obtain information about research interests of the faculty and to contact faculty members who could potentially serve as thesis advisors. In addition to the GPA requirements for admission mentioned in #1, the department requires that the following be sent directly to the Department of Biological Sciences:

- departmental application
- GRE scores of the General Test
- three letters of reference

Applicants must have taken basic courses in biological and physical sciences and mathematics/statistics; areas omitted, if any, will be treated as course deficiencies and must be completed by the time of classification (see below). No action will be taken by the department until the application file is complete; this is the applicant's responsibility. Students with less than the minimum GPA (see above), with other undergraduate majors, or with course deficiencies may request special consideration from the departmental Graduate Committee.

3. All students admitted to the program will be admitted as "Conditionally Classified Graduate" students.
4. At the time of admission the student will be assigned an interim advisor who will aid the student during the first portion of his or her residence in the program.
5. Those students applying for admission to the program with the intent of obtaining a M.S. degree in Marine Sciences from work done at Moss Landing Marine Laboratories must gain admission into "Conditionally Classified Graduate" status as stated above. However, the classification procedures as stated below WILL NOT apply for these students; instead, once admitted to the program as "Conditionally Classified Graduate" students, they will follow MLML's classification procedures (see Marine Science chapter in the graduate section of this catalog).
6. Any student not admitted to the program because of incomplete applications, deficiencies, or failure to meet time deadlines is urged to enroll in the university as an "Unclassified Post-baccalaureate" student pending completion and consideration of the application for classification.
7. No more than 13 quarter units of courses applicable toward the master's degree completed before admission to the program may be counted toward the degree.

Note: Although not an admission requirement, the Writing Skills Test (WST) must be taken during the first quarter of admission to the program and must be passed to become a fully "Classified Graduate" student.

Degree Requirements

A "Conditionally Classified Graduate" student must become a fully

"Classified Graduate" student in the program as set forth in 1, 2, 3, and 4 below and within the specified time limits or the "Conditional Classification" will expire and the student will be placed in "Unclassified Post-baccalaureate" status.

1. *Establish a graduate advisory committee by the end of the second quarter after admission to the program.* Two faculty members from the Department of Biological Sciences will serve as members of the committee. One faculty member from the department will normally be the major advisor in guiding the student in graduate training. One to two other members of the committee will be chosen in consultation with the major advisor. The committee will advise on and approve the student's final program including any work and research units counted toward the degree. This advisory committee will also administer the oral examination at the completion of the thesis.
2. *Complete basic course deficiencies.* If the student lacks basic courses in biological or physical sciences, or mathematics/statistics, these courses must be completed by the end of the fourth quarter following admission to the program. In addition, the student's advisory committee may also determine that there are other course deficiencies to be completed.
3. *Research proposal.* Students wishing to be a fully "Classified Graduate" must submit a formal research proposal to the departmental Graduate Committee for either Plan A or Plan B. It must be approved by the student's advisory committee (item 1 above) and submitted to the Graduate Coordinator by the first day of the quarter in which the student wants to begin taking thesis units. If the work is to be done in an off-campus location, a letter of agreement must be included that indicates a mutual understanding and responsibility between the off-campus supervisor, Cal State Hayward, and the student. The department office or Graduate Coordinator has examples of these proposals and their format.
4. *University Writing Skills Requirement.* The Writing Skills Graduation Test must be passed. (See Graduate and Post-baccalaureate Studies chapter at the beginning of the graduate section of this catalog.)

It is the responsibility of the student to establish a graduate advisory committee, take the qualifying examination, and complete course deficiencies within the time limits stated above.

Advanced to Candidacy

The student must have:

1. attained "Classified Graduate" standing
2. completed at least 12 quarter units of satisfactory work beyond the baccalaureate degree suitable for inclusion in an M.S. program in Biological Science as approved by the student's graduate advisory committee. At least 3 quarter units of graduate level coursework in residence at Cal State Hayward must be included. (Satisfactory work in a graduate program is that showing a GPA of 3.00 in all courses; no grade below "C" may be counted in this program.)

3. received from his or her advisory committee approval of either a Plan A or Plan B individual research program.

Curricular Requirements

The M.S. programs in biological science provide for the degree to be obtained under either Plan A (University Thesis) or Plan B (Departmental Thesis).

Plan A, University Thesis (45 units)

A total of 45 quarter units is required beyond the baccalaureate with a GPA of 3.0 or above and no grade lower than "C" in courses included in the program, and with specific requirements as follows:

1. University Thesis (9 units)
Complete copies of the University Thesis must be submitted, in accordance with the rules set forth by the Office of the Associate Vice President, Curriculum and Academic Programs and the Dean of Graduate Programs, to the chair of the candidate's advisory committee by the sixth week of the quarter at the end of which the degree is desired.
2. Graduate courses (14-36 units) in area of special concentration option or in areas related to it as approved by the student's advisory committee; included must be at least one graduate seminar in the area of special concentration. (May include a maximum of 4 units of Independent Study (BIOL 6900); in certain circumstances exceptions may be granted by the departmental Graduate Committee.)
3. Upper division courses (0-22 units) taken as a graduate student and approved by the advisory committee as appropriate to the student's objective.
4. An oral examination administered by the advisory committee covering the candidate's area of specialization and thesis research. This examination will be publicized and open to all faculty.

Plan B, Departmental Thesis (45 units)

A total of 45 units is required beyond the baccalaureate with a GPA of 3.0 or above and no grade lower than "C" in courses included in the program, and with specific requirements as follows:

1. A review paper satisfactory to the advisory committee based on intensive study and analysis of the scientific literature on a topic approved by the major professor, with or without supplementary field or laboratory work. Not more than 4 units of Departmental Thesis (BIOL 6909) for preparation of the paper may be included in the program approved by the advisory committee for the degree. (The final copy of the paper must be circulated among the members of the advisory committee at least two weeks prior to the oral examination.)
2. Graduate courses (19-41 units) in area of special concentration or in areas related to it as approved by the student's advisory committee; included must be at least one graduate seminar in the area of the concentration.

3. Upper division courses (0-22 units) taken as a graduate student and approved by the advisory committee as appropriate to the student's objective.
4. An oral examination administered by the advisory committee covering the candidate's area of the option and review paper. This examination will be publicized and open to all faculty.

Note: The following standards will apply to BIOL 6909 for use as a Plan B requirement:

Format: Typewritten and referenced in appropriate scientific fashion; a title page with the student's advisory committee's signatures must be included; specific format used is up to the discretion of the major advisor.

Binding: Bound in fiberboard or other satisfactory binders for permanent storage.

Records: The department will retain a copy of the Departmental Thesis in its files.

Technical: Typed on 16-pound white paper and with general "thesis" quality, i.e., no strike-overs, etc. Sufficient left-hand margins (1 1/2") should be left for binding.

Approval: Form and style--department; content--advisory committee.

Granting the Degree

Upon successful completion of the above requirements for the degree under Plan A (including completion of the University Thesis) or under Plan B (including completion of the Departmental Thesis), the department will recommend that the candidate be granted the degree.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate and Post-baccalaureate Studies chapter at the beginning of the graduate section of this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills requirement.

Certificate in Biotechnology

This certificate program consists of 26 units and is designed to give recognition to students who complete a curriculum emphasizing cellular, molecular, and immunological techniques. This is an appropriate capstone for biology or chemistry students and is preparatory for careers in industrial and academic biological research, development, and production. The Biotechnology Certificate Program requires 26 units of advanced work. The laboratory courses, important to this program, emphasize a "hands-on" approach with close faculty supervision. In addition to experimental techniques, safety standards and quality control are also stressed. Courses are scheduled in a non-

conflicting pattern so that a full-time student entering this program can complete the requirements in one academic year. There are over 300 biotechnology companies in the Bay Area with a growing demand for employees skilled in the technical subjects herein outlined. Seven faculty members from the Departments of Biological Sciences and Chemistry share the responsibility for this program and play an active role in arranging employment interviews for students who successfully complete this certificate program.

Admission to the Program

The Certificate Program in Biotechnology is open to undergraduates and graduates of accredited institutions who have a degree major in any field of biological sciences or chemistry and who have achieved a GPA of at least 2.75 in the major and at least 3.0 in the prerequisite courses. Applicants failing to meet these criteria may petition the Biotechnology Committee for a waiver of these requirements.

Prerequisites

Applicants must have major in biology or chemistry, and have completed the courses listed below or their equivalents. Participants in this program will be selected by the Biotechnology Committee of the Department of Biological Sciences.

BIOL 1401 Molecular and Cellular Biology, or equivalent (taken within last 3 years)

BIOL 3121 Principles of Genetics or equivalent (taken within last 3 years) (*Note: BIOL 3120 has been discontinued.*)

BIOL 3122 Principles of Developmental Genetic Analysis or equivalent (taken within last 3 years)

BIOL 3405 Microbiology or equivalent
CHEM 4411 General Biochemistry or equivalent

Continued Participation in the Program

Students must maintain a 3.0 GPA in the program for continued participation and pass a comprehensive examination upon completion of the program.

Students who have a baccalaureate degree and wish to combine the Biotechnology Certificate with an M.S. in Biological Science should be aware that only 13 units earned prior to admission to the Master's Program may be applied to a graduate degree. Students wishing to pursue the M.S. degree in Biological Science must also complete the application process to be considered for the M.S. degree.

Curricular Requirements

Required Courses (26 units)
BIOL 4450 Cell Culture Techniques (4)
BIOL 4485 PCR, DNA Sequencing and Fragment Analysis (4)
BIOL 6140 Recombinant DNA Techniques (4)
BIOL 6151, 6152 Cell and Molecular Biology I, II (5, 5)
CHEM 6430 Protein Chemistry Techniques (4)

Graduate Courses

Biology Courses

The course prefix for the following courses is BIOL.

- 6120** Environmental Experimental Analysis (4)
Advanced applications of graphic modeling, experimental design, direct and remote monitoring, and modern statistical analyses of ecological/physiological experiments. Prerequisites: graduate standing in biology or consent of instructor. Two hrs. lect., 1 hr. disc., 3 hrs. lab/field.
- 6140** Recombinant DNA Techniques (4)
Recombinant DNA methodology and its analytical and industrial applications. Laboratory studies include nucleic acid isolation, vector characterization, restriction endonuclease reactions, recombinant DNA construction, transformation, and "blotting" procedures. Prerequisites: BIOL 3405 or equivalent, biochemistry, and permission of instructor. Two hrs. lect., 6 hrs. lab.
- 6151, 6152** Cell and Molecular Biology I, II (5, 5)
The cellular and molecular biology of eucaryote cells emphasizing membrane structure and function, structure of genetic material, control of gene expression, and protein synthesis, cell division and differentiation. Prerequisites: BIOL 4455 or equivalent, and at least one quarter of biochemistry.
- 6160** Community and Ecosystem Ecology (4)
Structure, dynamics and distributional aspects of ecological communities and energy flow relations in whole ecosystems. Lectures and intensive field work in selected communities, with emphasis on those of central California. Prerequisite: BIOL 3110 or equivalent. Recommended: advanced taxonomic courses in zoology. Two hrs. lect., 6 hrs. field (or lab).
- 6175** Population Biology (4)
Study of the sizes and distributions of plant and animal populations. Processes affecting reproduction, age structure, density and population fluctuations. Recommended for students interested in ecology, conservation, or environmental biology. Required project, designed, implemented and analyzed by student. Not open to those with credit for BIOL 4175. Prerequisites: BIOL 3110 or equivalent and statistics or consent of instructor. Three hrs. lect., 3 hrs. lab.
- 6340** Environmental Microbiology (4)
Key positions that microorganisms occupy in nature and their effects on global ecosystems; includes bioremediation, disease transmission/public health, biogeochemical cycling, plant-animal-insect-microbe interactions. Required project, designed, implemented and analyzed by student. Prerequisite: BIOL 3405. Not open to those with credit for BIOL 4340.
- 6350** Conservation Biology (4)
Principles and theories of conservation biology, including

biodiversity, extinction, habitat fragmentation, captive-breeding programs, restoration ecology, role of humans in western U.S. Graduate project required. Not open to those with credit for BIOL 4350. Prerequisites: BIOL 1401, 1402, 1403; BIOL 3110 or equivalents. Two hrs. lect., 6 hrs. lab.

- 6500** Quantitative Methods in Physiology (2)
Quantitative treatment and analysis of physiological data using modern methods including applied statistics, spread sheets, graphical methods and data presentation. Not open to those with credit for BIOL 4500. Prerequisites: BIOL 3150, STAT 3031, or consent of instructor.
- 6504** Comparative Physiology (4)
Physiology of metabolic, respiratory, circulatory, excretory, muscle, and nervous systems of vertebrate and invertebrate animals with an emphasis on physiological diversity and adaptation. Required project, designed, implemented and analyzed by student. Not open to those with credit for BIOL 4504. Prerequisite: BIOL 3150 or consent of instructor.
- 6506** Animal Physiology Laboratory (3)
Examination of regulatory mechanisms of animal organ systems using controlled laboratory experiments, with an emphasis on experimental design and data analysis. An independent research project and oral presentation of these results will be required. May be taken concurrently or following BIOL 6504 or BIOL 6516. Not open to those with credit for BIOL 4506. Prerequisite: BIOL 3150 or equivalent, or consent of instructor. One hr. lect., 6 hrs. lab.
- 6512** Applied Neurobiology (4)
Basic principles of neurobiology demonstrated using laboratory experiments that include intracellular and extracellular nerve recording, membrane potentials, action potentials, sensory and motor neural processing, nerve tracing, and histology. Required scientific paper based upon an independent research project. Prerequisite: BIOL 4510 or consent of instructor. Two hrs. lect., 6 hrs. lab.
- 6516** Environmental Animal Physiology (4)
An examination of the physiological adaptations that animals use to cope with their environments, emphasizing the physiological responses of species to extreme environments. Students to present (in oral and written format) and lead discussion on recent research on certain topics in environmental physiology. Not open to those with credit for BIOL 4516. Prerequisite: BIOL 3150 or equivalent, or consent of instructor.
- 6520** Mammalian Physiology Laboratory (3)
Advanced treatment of regulatory mechanisms in mammalian organ systems. Laboratory techniques of anesthesia, surgery, instrumentation and data analysis. Emphasis on cardiovascular, respiratory, renal and gastrointestinal physiology. Terminal project required. Not open to those with credit for BIOL 4520. Prerequisites:

BIOL 3150 or equivalent. One hr. lect., 6 hrs. lab.

- 6530** Ecological Methods (4)
Methods of design and analysis of ecological studies, including sampling techniques, field and laboratory measurements, and computer-aided data analysis including introductory modeling. Required ecological field project, designed, implemented and analyzed by student. Prerequisites: BIOL 1401, 1402, 1403 or equivalents; BIOL 3110, and graduate standing. Recommended: statistics course. Three hrs. lect., 3 hrs. lab/field.
- 6610** Transmission Electron Microscopy (2)
Theoretical principles of tissue preparation and function of electron lenses. Special techniques such as negative staining, freeze fracture, cryomicrotomy, autoradiography and immunochemistry will be discussed. Techniques of quantitative data analysis and experimental design. Prerequisite: graduate standing or permission of instructor.
- 6611** Transmission Electron Microscopy Laboratory (2)
Applied techniques of transmission electron microscopy. Students will learn to operate the electron microscope and perform research on biological structures. Prerequisites: BIOL 6610 and permission of instructor. A miscellaneous course fee will be charged for materials. Please consult the quarterly *Class Schedule* for the current fee. Six hrs lab.
- 6613** Scanning Electron Microscopy (3)
Theoretical and practical applications of scanning electron microscopy emphasizing techniques used in biology and geology. Use of energy-loss spectroscopy, back scattering, secondary electrons, and aujer electrons. Prerequisite: permission of instructor. A miscellaneous course fee will be charged for materials. Consult the quarterly *Class Schedule* for the current fee. Two hrs. lect./demonstration, 3 hrs. lab.
- 6801** Graduate Seminar-Ecology (3)
A seminar in ecology, with a different theme or subject area to be chosen each year. Course based on papers presented by students enrolled. May be repeated once for credit. Prerequisite: graduate standing in biology or consent of instructor.
- 6811** Graduate Seminar-Physiology (3)
A seminar course dependent upon papers presented by students enrolled. The specific subject area of physiology will be chosen each year. Prerequisite: graduate standing in biology or consent of instructor. May be repeated once for additional credit.
- 6821** Graduate Seminar in Cell and Molecular Biology (3)
A seminar course involving presentation and discussion of current research literature in cell and molecular biology. The specific subject matter will be at the discretion of the

instructor. Prerequisite: graduate standing in biology or consent of instructor. May be repeated once for additional credit.

- 6831** Graduate Seminar in Microbiology (3)
A seminar course based on papers presented by students enrolled. A different subject area in microbiology will be chosen each quarter of offering. May be repeated once for credit. Prerequisite: graduate standing or consent of instructor.
- 6898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 8 units, 4 units of which are applicable to a biology graduate degree. Prerequisites: at least 3.0 GPA; departmental approval of activity. (A)
- 6900** Independent Study (1-4)
- 6909** Departmental Thesis (1-4)
Development and writing of a research paper for submission to the department which specifies its format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense normally required. CR/NC grading only. Prerequisite: graduate standing.
- 6910** University Thesis (1-9)
Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense normally required. CR/NC grading only. Prerequisite: graduate standing. Maximum of 9 units per student. (See also "University Thesis Writing Guide," available in WA 859.)
- 6999** Issues in Biological Science (2-4)
Readings, discussion, and research on contemporary and/or significant issues in biological science. May be repeated for credit when content varies.

Marine Science Courses

See the [Marine Science chapter](#) for descriptions of the following courses. (The course prefix for the following courses is MSC.)

*Offered at the Moss Landing Marine Laboratories*¹

- 6202** Oceanographic Instrumentation (6)
- 6204** Sampling and Experimental Design (6)
- 6206** Molecular Biological Techniques (6)
- 6208** Scientific Methods (6)
- 6211** Ecology of Marine Birds and Mammals (6)

- 6212 Advanced Topics in Marine Vertebrates (6)
- 6221 Advanced Topics in Marine Invertebrates (6)
- 6231 Biology of Seaweeds (6)
- 6233 Advanced Topics in Marine Ecology (1.5-6)
- 6234 Advanced Biological Oceanography (6)
- 6271 Population Biology (4.5)
- 6272 Subtidal Ecology (6)
- 6273 Marine Environmental Studies of the Gulf of California (6)
- 6274 Advanced Topics in Oceanography (1.5-6)
- 6280 Scientific Writing (3)
- 6285 Graduate Seminar in Marine Science (3)
- 6900 Independent Study (1.5-6)
- 6910 University Thesis (1.5-6)

Footnote

¶ Courses listed under Marine Science at Moss Landing Marine Laboratories are offered on a semester basis in the fall and spring. Semester units have been converted to quarter units.



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Department Information

Moss Landing Marine Laboratories

Marine Science

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- ▶ [Graduate Courses](#)

Moss Landing Marine Laboratories

Professors Emeriti: William W. Broenkow, Michael S. Foster

Professors: Gregor M. Caillet, Kenneth Coale (Acting Director), Gary Greene, Nicholas A. Welschmeyer

Associate Professors: Jonathan Geller, James T. Harvey

Please consult the 2006-2007 online catalog for any changes that may occur.

The California State University operates the Moss Landing Marine Laboratories (MLML) at Moss Landing on Monterey Bay, California. This facility functions as a seaside extension of the campuses of seven cooperating California State Universities (Hayward, Monterey Bay, San Jose, San Francisco, Sacramento, Stanislaus, and Fresno) and offers course work in marine biology, geology, oceanography, and other marine sciences.

Facilities

Since January 2000, the Laboratories have occupied new facilities in Moss Landing overlooking Monterey Bay, replacing the original laboratory demolished in the 1989 Loma Prieta earthquake. The stunning new building provides modern, up-to-date classrooms, laboratories, research facilities, library and conference room for faculty, staff and students of the consortium campuses.

MLML's Marine Operations Center, located also in Moss Landing, facilitates oceanographic and near-shore classes and research by providing shore support. The Center houses equipment used for in-port maintenance of scientific equipment, SCUBA air compressor, shore-based radio operations, and other support needs.

The MLML maintains a collection of nautical charts and topographical maps with an emphasis on the West Coast and there is a growing collection of reprints. It also subscribes to abstracting services such as "Oceanic Abstracts" and "Aquatic Sciences and Fisheries Abstracts." A terminal is available for computer literature searches. Close ties are maintained with libraries at Stanford's Hopkins Marine Station, U.C. Santa Cruz,

Naval Postgraduate School, San Jose State University, and the Monterey Bay Aquarium Research Institute. Materials are borrowed from these agencies or further afield as the need arises. A special effort has been made to collect materials relating to Monterey Bay and Elkhorn Slough.

As a member of the Central California Oceanographic Cooperative (CENCAL), MLML operates the 135-foot Research Vessel Point Sur. The R/V Point Sur, built in 1981, is well-equipped for instructional use and research, with a trawl winch, two hydrographic winches and three laboratories, scientific equipment for sampling and oceanographic profiling, Smith-McIntyre grabs, rock dredges, and various types of coring devices. Also available is a variety of nets for bottom and midwater trawls.

The Laboratories also own and operate the 56-foot R/V John Martin and the 35-foot R/V Ed Ricketts. These boats are used for trawling, water sampling and other work near shore, and serve as diving platforms.

In addition, faculty and students at MLML utilize other University National Oceanographic Laboratory System (UNOLS) vessels when they have research requirements for larger vessels or for vessels in a different area of the world. MLML personnel have participated in cruises to Baja California, Hawaii, the Bahamas, Mexico, South America, the Arctic, and the Antarctic.

Graduate Program

A Master of Science in Marine Science degree program is offered at MLML for students from Cal State Hayward and the other consortium schools. Details of this program follow. In addition, graduate students from Cal State Hayward may take such courses at Moss Landing as are appropriate to their degree objectives, including that of an M.S. in Biological Science or an M.S. in Geological Sciences. (See the Biological Science and Geology chapters in the graduate section of this catalog.) A major part of the work leading to the M.S. degree in Biological Science, particularly in the environmental biology option, or to the M.S. degree in Geological Sciences may be completed at the Marine Laboratories. Normally, a minimum of one or two quarters enrollment for other necessary courses on the Hayward campus may also be required.

Courses Offered

Full-time coursework and research in marine sciences are offered the year around. Emphasis in instruction and research is at the upper-division undergraduate and graduate levels. The Laboratories operate on a semester system during the academic year.

A total of thirty to forty units are offered each term in marine biological and physical sciences. Contact the Cal State Hayward Department of Biological Sciences for a current list of courses for the term you wish to attend, or you can write to Moss Landing Marine Labs, 8272 Moss Landing Road, Moss Landing, CA 95039. Basic courses offered every term include marine ecology, marine science diving, graduate seminar, and selected topics in marine sciences. See graduate course offerings listed at the end of this section. Also see the Marine Science chapter in the Undergraduate section of this catalog for undergraduate course

listings.

Nature of Instructional Program

Classes usually are small, with major emphasis upon field and laboratory instruction, and with a strong independent study or directed research component. Coursework usually is organized into large blocks of time (all day on a given day). Since field and laboratory activities are more demanding of time and energy than is usual for on-campus courses, the staff recommends that the student limit his or her academic load to twelve units. While it is possible to commute to Moss Landing for part-time work, this is not recommended because of the time and energy drain. In addition to standard course offerings, independent study (undergraduate) and graduate research and thesis work may be undertaken under supervision of staff members currently in residence.

Research Areas and Emphases at Moss Landing

Stress is upon field-oriented studies of marine and estuarine ecosystems, with physical science researches concerned particularly with geological, chemical, and physical limiting factors, and biological investigations dealing with relationships of organisms to these factors. Where possible, physical and biological studies are paired to provide reciprocal benefits from a team approach and from interdisciplinary faculty sponsorship. The near-shore shallow waters of Monterey Bay, Elkhorn Slough, and the deep waters of the Monterey Submarine Canyon provide a wide diversity of habitats.

Housing in Moss Landing Area

Commercial housing (apartments, small furnished houses, rooms with or without board, etc.) is available at communities near Moss Landing (Castroville, Salinas, Watsonville, Aptos, Monterey). Short-distance commuting from these areas is necessary; thus, availability of a car or participation in a car pool usually is required.

Registration Procedures

Since MLML courses are offered on the semester system (fall and spring semesters), there are special registration procedures.

Students must complete and submit a "Space Reservation" form to MLML (available through the Cal State Hayward Department of Biological Sciences and through MLML). Permission must be given by the Cal State Hayward Biological Sciences Secretary for Hayward MLML students to register by phone via SAILOR (the on-line registration system). Students must also attend the first day of classes at MLML.

Fall and spring SAILOR registration for MLML courses is at the same time as Cal State Hayward's regular fall and spring registration. Fall registration fees are paid at the same time as regular fall registration fees. Spring registration fees must be paid at the beginning of spring semester MLML classes (end of January).

Program Description

This degree program, offered through the Department of Biological Sciences and the Department of Geological Sciences, provides the opportunity for students to acquire a practical and theoretical education in the marine sciences to prepare them for careers as marine specialists, scientists and teachers. The program at Moss Landing provides interdepartmental work and a field facility for advanced study in the marine sciences which cannot be duplicated on the Cal State Hayward campus.

Admission to the Program

The master's degree program is administered through either the Department of Biological Sciences or Department of Geological Sciences, depending on the choice of the student. The prospective student must meet the admission requirements of either of these departments. Refer to descriptions of these department graduate programs for complete information. Students will be accepted as "Conditionally Classified Graduate" students in the department of their choice upon completion of the admission requirements. The student will become a "Classified Graduate" student upon completion of MLML's requirements (below).

MLML Classification in the Program

A "Conditionally Classified Graduate" student may become a fully "Classified Graduate" student in the marine science program as set forth in the following steps.

1. Obtain an adviser at MLML and one from the science department at the home campus. Each new student in the master's program at MLML will be assigned an advisor who may or may not be the final thesis advisor.
2. Make up any coursework deficiencies in either the home campus department (see their regulations) and/or at MLML. M SC 4104 Quantitative Marine Science, and three of the following five courses are prerequisites for "Classified Graduate" standing: M SC 4103 Marine Ecology, 4141 Geological Oceanography, 4142 Physical Oceanography, 4143 Chemical Oceanography, and 4144 Biological Oceanography. These courses may be waived by the graduate committee upon certification that equivalent courses have been satisfactorily completed. M SC 4104 Quantitative Marine Science cannot be counted toward the 45 unit degree requirement.
3. Students who do not receive a grade of "B" or better in the courses described in (2) above taken at MLML, or who wish to substitute equivalent courses taken elsewhere regardless of the grade(s) received, must petition to have the courses accepted, or must pass a written qualifying examination given by the faculty at MLML. The examination will substitute for any equivalent examination given by home campus departments. There is no official time limit, but the exam should be taken as soon as possible; only a limited number of units taken while in "Conditionally Classified" status can be counted toward the degree. The exam may be repeated once, and must be passed before the student can be "Classified." The examination will consist of a choice of five out of six questions designed to test knowledge of the concepts and principles of oceanography, marine ecology, and statistics as covered in the courses listed under (2) above. It will be used to evaluate the student's

background in these subject areas and the ability to write well and formulate answers logically. Each answer will be graded "pass" or "fail" by two faculty members (a third faculty member will resolve disagreements) on accuracy, content, and ability to clearly communicate. For a reading list covering the required material and further details concerning the exam, see MLML's Assistant to the Director.

4. Students must have satisfied the University Writing Skills requirement according to Cal State Hayward standards.

Advancement to Candidacy

In order to be Advanced to Candidacy, the student must have:

1. attained "Classified Graduate" standing;
2. selected a thesis problem and a thesis advisor committee. The thesis committee will be composed of at least three members, including one faculty member from MLML (who is ordinarily the thesis advisor) and, at the discretion of the home campus, a representative from that campus. The other member or members of the thesis committee may be from MLML, the home campus, or elsewhere, with the approval of the thesis advisor.

Curricular Requirements

A student becomes eligible for the master's degree in Marine Science after the following requirements have been satisfied:

1. The student has been Advanced to Candidacy
2. The student has satisfied MLML's requirements for the degree
3. The student has completed the following curriculum requirements:
 - a. A minimum total of 22.5 quarter units of 6000-level courses (a minimum of 45 units), including 3 units of M SC 6285, 6286, or 6287, and 6 units of M SC 6910.
 - b. A total of not more than 22.5 units of 3000-, 4000-, and/or 6000-level courses as approved by the thesis committee. Elective courses that may be used to satisfy requirements for the major are listed below by catalog number, title, and quarter units of credit.

M SC 4112 Marine Birds and Mammals (6), 4113 Marine Ichthyology (6), 4124 Marine Invertebrate Zoology I (6), 4125 Intertidal Invertebrates of California (4.5), 4131 Marine Botany (6), 4135 Physiological Ecology of Marine Algae (6)

M SC 6204 Sampling and Experimental Design (6), 6208 Scientific Methods (6), 6211 Ecology of Marine Birds and Mammals (6), 6233 Advanced Topics in Marine Ecology (1.5-6), 6234 Advanced Biological Oceanography (6), 6242 Plate Tectonics (4.5), 6261 Ocean Circulation and Mixing (6), 6262 Satellite Oceanography (6), 6263 Application of Computers in Oceanography (6), 6271 Population Biology (4.5), 6274 Advanced Topics in Oceanography (1.5-6), 6280 Scientific Writing (3), 6900 Independent Study (1.5-6)

Graduate Courses

Other electives, including courses from the home campus departments, may be included after consultation with the advisory committee. The combination of required units (seminar and thesis) and elective units must total at least 45 quarter units.

4. The student must have submitted a University Thesis approved by the thesis advisory committee. The thesis must conform to the rules set forth in the Cal State Hayward "University Writing Guide" available in WA 859.
5. The student must successfully give an oral thesis defense in the form of a seminar open to the general public. The thesis advisory committee must be present, may require further oral questioning after the seminar, and will evaluate the success of the presentation.

The course prefix for the following courses is M SC. Units are quarter units, class hours are weekly on semester calendar.

Biological Science

- 6204** Sampling and Experimental Design (6)
Basic design of experiments and field sampling; random sampling, systematic sampling, subsampling, survey techniques, and design of single and multifactorial experiments using randomized and block experiment designs. Prerequisites: M SC 4103 and 4104. Four hrs. lect.
- 6206** Molecular Biological Techniques (6)
Laboratory-based overview of concepts and techniques for the isolation, characterization, and analysis of DNA and RNA; standard methods (amplification, cloning, sequencing) and selected specialized techniques (analysis of gene expression), emphasizing marine science applications. Prerequisites: graduate standing; college-level courses in genetics and molecular biology, or consent of instructor. Three hrs. lect., 9 hrs. lab.
- 6208** Scientific Methods (6)
Research information and skills for graduate students covering scientific writing, design of experiments and sampling programs, and the use of the library and other resources. Prerequisites: graduate standing and consent of instructor. Four hours lect., 6 hrs. lab.
- 6211** Ecology of Marine Birds and Mammals (6)
Community approach to ecology of marine birds and mammals using experimental and sampling methodology, examining the distribution, abundance, trophic ecology, and behaviors of birds and mammals in Elkhorn Slough and Monterey Bay. Prerequisites: M SC 4103, 4104 and 4112. Two hrs. lect., 6 hrs. lab/field.
- 6233** Advanced Topics in Marine Ecology (1.5-6)
Selected topics and current issues in marine ecology. The

subjects vary depending on student demand and availability of instructors. May be repeated for credit with consent of instructor. Prerequisites: M SC 4103 and consent of instructor. (On demand)

- 6234** Advanced Biological Oceanography (6)
A continuation of biological oceanographic studies. Lectures and discussion of special topics such as human impact on the marine environment. Critical analyses of current literature. An individual research project involving the use of one or more available analytical tools is required. Prerequisites: M SC 4144 or consent of instructor. Two hrs. lect., 6 hrs lab.
- 6271** Population Biology (4.5)
Principles involved in interaction among marine organisms which result in the alteration of population structures. Techniques for assessment and management of animal populations. Not open to students with credit for BIOL 6170. Prerequisites: M SC 4103, 4104 or STAT 3031 and consent of instructor. Two hrs. lect., 3 hrs. lab/field.
- 6273** Marine Environmental Studies of the Gulf of California (6)
Analysis of Gulf of California marine environments; intensive field work; required scientific paper based on original research; topics vary. Taught with faculty and students from LaPaz, Mexico. Required two-week field trip in June. May be repeated twice for credit when content varies. Prerequisites: graduate standing and consent of instructor. Three hrs. lect., 9 hrs. lab.
- 6274** Advanced Topics in Oceanography (1.5-6)
The study of a selected area in oceanography. The subjects vary depending on student demand and availability of instructors. Prerequisite: consent of instructor. May be repeated for credit with consent of instructor.
- 6280** Scientific Writing (3)
The techniques and strategies of scientific writing used for proposals, journal submissions, and abstracts of meetings. Students will develop their writing skills by preparing, editing, and rewriting manuscripts. Prerequisites: graduate standing and consent of instructor. Two hrs. lect/disc.
- 6285** Graduate Seminar in Marine Science (3)
A seminar in marine science for presentation and discussion of advanced studies in special fields. May be repeated once for credit. Prerequisites: graduate standing and consent of instructor. Two hrs. seminar, discussion.
- 6900** Independent Study (1.5-6)
- 6910** University Thesis (1.5-6)
Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense normally required. Prerequisite: graduate standing. Maximum of 6 units per student. (See also, "University

Geological Sciences

- 6202** Oceanographic Instrumentation (6)
Principles of instruments used in oceanographic research, introduction to electronics, and applications of instrument measurements. Prerequisites: M SC 4141, 4142, and consent of instructor.
- 6204** Sampling and Experimental Design (6)
Basic design of experiments and field sampling; random sampling, systematic sampling, subsampling, survey techniques, and design of single and multifactorial experiments using randomized and block experimental designs. Prerequisites: M SC 4103 and 4104. Four hrs. lect.
- 6242** Plate Tectonics (4.5)
Historical background, modern theory and geophysical evidence of continental drift, sea floor spreading and plate tectonics. Examinations of the impact of the recent revolution in historical geology. Prerequisites: M SC 4141 or consent of instructor. Three hrs. lect.
- 6246** Geology of the Monterey Bay Region (6)
Geology, tectonic, and active, naturally occurring processes in the Monterey Bay region; geologic and tectonic history of central California, plate tectonic processes and representative stratigraphy and geomorphology of Monterey Bay region. Prerequisites: graduate standing and consent of instructor. Three hrs. lect., 9 hrs. lab.
- 6248** Marine Benthic Habitat Techniques (6)
Collection and interpretation of geophysical data used to characterize marine benthic habitats. Basic geophysical principles will be reviewed. Application of techniques to identify and characterize marine benthic habitats, including echosounders, multibeam bathymetry and backscatter, sidescan sonar, seismic profiling, and GIS. Prerequisites: graduate standing and consent of instructor. Three hrs. lect., 9 hrs. lab.
- 6261** Ocean Circulation and Mixing (6)
The mathematical description of the distribution of properties (density, dissolved oxygen, etc.) in the oceans relating to physical and biochemical processes. Theory of distribution of variables, geostrophic method. Prerequisites: M SC 4142 and college physics strongly recommended; one year of calculus, or consent of instructor. Three hrs. lect., 3 hrs. lab.
- 6262** Satellite Oceanography (6)
Physical principles of remote sensing with application to the oceans, including satellite image processing methods. Labs involve use of PC and Unix workstation. Prerequisites: M SC 4142 and 4144, or consent of

instructor. M SC 6263 strongly recommended. Two hrs. lect., 6 hrs. lab.

6263 Application of Computers in Oceanography (6)
Discussion and technical programming with MATLAB for computation and visualization with applications in marine sciences; use of existing program libraries for data I/O and analysis. Semester project required. Prerequisites: college math and consent of instructor. Two hrs. lect., 6 hrs. lab.

6274 Advanced Topics in Oceanography (1.5-6)
The study of a selected area in oceanography. The subjects vary depending on student demand and availability of instructors. May be repeated for credit with consent of instructor. Prerequisite: consent of instructor.

6900 Independent Study (1.5-6)

6910 University Thesis (1.5-6)
Development and writing of a formal research paper for submission to the University in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense normally required. Prerequisite: graduate standing. Maximum of 6 quarter units per student. (See also "University Thesis Writing Guide," available in WA 859 at Cal State Hayward.)

General

6201 Graduate Studies in Marine Science: Library Research (1.5)
Fundamental library skills to conduct library research and evaluate sources; extensive introduction to internet search tools; strong emphasis on ability to critically evaluate bibliographic tools and sources; copyright, intellectual property, and scholarly publishing. Prerequisites: graduate standing in MLML's program, consent of instructor.



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Department Information

Departments of Accounting and Computer Information Systems, Economics, Management and Finance, Marketing and Entrepreneurship
College of Business and Economics

Dean: _____

Dean's Office: Music and Business Bldg., Room 2571

Phone: (510) 885-3291

Please consult the 2006-2007 online catalog for any changes that may occur.

- College of Business and Economics Student Service Center (MB 2525, 510-885-3311)

- Department of Accounting and Computer Information Systems (MB 2525, 510-885-3311)

Professor Emeritus: Vernon T. S. Kam

Professors: Doris G. Duncan, Micah Frankel, Ching-Lih Jan, Franklin Lowenthal, Christopher W. K. Lubwama, Nancy R. Mangold, Bijan Mashaw, Gary R. McBride, Kenneth Pefkaros, Ray Roberts, Diane Satin, Philip P. Storrer (Chair), Kathleen K. Wright

Associate Professors: Y. Robert Lin, Xinjian Lu

Assistant Professor: Hongwei Du

Lecturers: Charlene Abendroth, Suzanne M. Busch, Stuart G. Gould, James Potter, Bruce L. Raine, Lily T. Sieux, F. Victor Stanton

- Department of Economics (MB 2525, 510-885-3311)

See the undergraduate Economics chapter for a listing of Economics faculty and a description of the Economics major and minor.

- Department of Management and Finance (MB 2525, 510-885-3311)

Professors Emeriti: Spyros Economides, John G. Kilgour, Susan D. Schaefer, Paul D. Staudohar, Richard Zock

Professors: S. David Aviel, Sam N. Basu, Joyendu Bhadury (Chair), Loretta Breuning, Samuel I. Doctors, Craig G. Johnson, Guido Krickx, Duane R. Lambert, John B. Major, Stephen H. Miller, William L. Moore, Surendra Pradhan, Zinovy Radovilsky, Harry Waters, Jr., John J. Villarreal, Donna L. Wiley, Donald H. Wort

Associate Professors: Hadi Behzad, Alan P. Goldberg, Sharon Green, Fung-Shine Pan, Asha Rao

Assistant Professors: Vishwanath Hegde, H. Steven Peng, Tammie X. Simmons-Mosley, Gregory Theyel

Adjunct Professor: Peter A. Wilson

Lecturers: Kurt S. Martsof, Carol F. Moore, John L. Primus, James E. Riley, Anne Roth, Joseph Tombari, Gary Wishniewsky

- Department of Marketing and Entrepreneurship (MB 2525, 510-885-3311)

Professor Emeritus: Ricardo L. Singson

Professors: Jagdish Agrawal, Chong S.K. Lee (Chair), Norman Smothers, Eric Soares, Steve Ugbah

Associate Professors: Stevina Evuleocha, Cesar Maloles

Assistant Professors: Brian McKenzie, Jean Ann West

Lecturers: Kenneth Hanley, Valerie Smith

- Institutes and Centers

Center for Business and Environmental Studies.

Director: Samuel I. Doctors

Center for Economic Education

Director: Jane E. Lopus

Center for New Ventures and Alliance

Director: Ricardo L. Singson

Human Investment Research and Education (HIRE) Center

Director: Nan Maxwell

Smith Center for Private Enterprise Studies

Director: Charles W. Baird; *Associate Director:* Micah Frankel

Graduate Programs (MB 2583, 885-3964)

Director of Graduate Programs: Donna L. Wiley

Graduate Faculty Advisors for M.B.A. Options

M.B.A./Accounting: Diane Satin

M.B.A./Business Economics: Nan Maxwell

M.B.A./Computer Information Systems: Franklin Lowenthal

MBA/E-Business: Doris Duncan, Guido Krickx

M.B.A./Entrepreneurship: Brian McKenzie, Ricardo L. Singson,
Norman Smothers

M.B.A./Executive: Shyam J. Kamath

M.B.A./Finance: Sam N. Basu, Fung-Shine Pan, Surendra
Pradhan

M.B.A./Human Resources Management: Donna L. Wiley

M.B.A./International Business: Loretta Breuning

M.B.A./Management: John Villarreal

M.B.A./Marketing Management: Jagdish Agrawal, Cesar Maloles

M.B.A./Operations and Materials Management: Joyendu Bhadury,
Zinovy Radovilsky

M.B.A./Strategic Management: Guido Krickx

MBA/Supply Chain Management: Joyendu Bhadury, Zinovy
Radovilsky

M.B.A./Taxation: Kathleen K. Wright

M.B.A./Telecommunications Management: Hongwei Du

Graduate Coordinators

M.S./Taxation: Gary McBride, Kathleen K. Wright

*M.S.B.A./Computer Information Systems/Quantitative Business
Methods:* Alan Goldberg, Frank Lowenthal

Program Description

The mission of the master's programs in the College of Business and Economics (CBE) at Cal State Hayward is to provide an excellent graduate education that will allow you to succeed in a business environment that is characterized by rapid technological advancements; a work force of ethnic, cultural, and gender diversity; demands for continuous improvements in quality and service; the necessity for continuous individual and organizational learning; and need for the understanding and skills to practice in global markets. All CBE programs are accredited by The Association to Advance Collegiate Schools of Business International (AACSB).

The Master of Business Administration (M.B.A.) program is designed to provide you with a balance of functional expertise and general managerial competencies. You may select from seventeen areas of concentration called options, each of which includes electives both within and outside of your area of concentration. This allows you to tailor the program to meet your individual career goals. In addition, four specialized master's programs, the M.S. in Business Administration with an Option in Computer Information Systems/Quantitative Methods, M.S. in Taxation, M.A. in Economics (see Economics chapter in graduate section of this catalog), and M.S. in Telecommunication Systems (see

Telecommunication Systems chapter in graduate section of this catalog), prepare students who seek specialized careers in these areas.

In pursuit of this mission, graduate programs in the College of Business and Economics will provide you with:

- a balance of theoretical concepts and practical approaches to business problems;
- a balance of quantitative, analytical, and interpersonal skills;
- an understanding of the ethical, political, social, legal, environmental, and technological issues that influence business;
- opportunities to experience and gain expertise in leading edge instructional and business technologies;
- an understanding of global issues facing business and opportunities for international educational experiences; and
- a broad, multidisciplinary, strategic vision that allows you to manage innovation and change.

The College of Business and Economics offers the following master's degrees in the area of business administration:

1. Master of Business Administration (M.B.A.) with the following options:
 - a. Accounting
 - b. Business Economics
 - c. Computer Information Systems (C.I.S.)
 - d. E-Business
 - e. Entrepreneurship
 - f. Executive
 - g. Finance
 - h. Human Resources Management
 - i. International Business
 - j. Management
 - k. Marketing Management
 - l. Operations and Materials Management
 - m. Strategic Management
 - n. Supply Chain Management
 - o. Taxation
 - p. Telecommunications Management
2. Master of Science (M.S. in Business Administration) with an Option in Computer Information Systems/Quantitative Business Methods (Q.B.M.)
3. Master of Science (M.S.) in Taxation

Course Offerings

Business Administration major on this campus and then enroll in the fifth year credential program elsewhere, the university does not offer all of the coursework prerequisites to some credential programs.

Hayward Campus

All requirements for all graduate programs of the College of Business and Economics are offered on the Hayward campus except for the Executive Option. Lower and upper division courses satisfying the graduate program foundation requirements are scheduled both during the day and in the evening. Graduate courses (6000-level) are offered primarily in the evening.

Contra Costa Campus

The upper division undergraduate courses for the M.B.A. foundation coursework and the 6100-6999 level courses needed for the M.B.A. core and for the Finance and Management options of the M.B.A. program are also offered at the Cal State Hayward, Contra Costa Campus, 4700 Ygnacio Valley Road, Concord, 94521, phone (925) 602-6700. If you are enrolled in other M.B.A. options, you can complete all of your remaining upper division M.B.A. foundation requirements, the M.B.A. core, and one to three of your option requirements at Contra Costa, leaving you with a maximum of six graduate courses to be completed on the Hayward campus. No lower division courses are offered at Contra Costa; thus, any lower division M.B.A. prerequisites that you have not completed will need to be taken at a community college, the Hayward campus, or another accredited institution.

Upper division courses at Contra Costa are scheduled both during the day and in the evening; graduate 6000-6999 level courses are offered only in the evening. See the General Information chapter and the map at the back of this catalog for additional information on the Cal State Hayward Contra Costa Campus.

Common Requirements

For M.B.A., M.S. Business Administration, and M.S. Taxation Degrees

Admission

These programs are open to students who hold a baccalaureate degree from an accredited college or university.

Applications for admission to the M.B.A. Program are accepted for fall, winter, and spring quarters. Each applicant is evaluated on the basis of: (1) past academic records as reflected in undergraduate grade point average and subsequent coursework; (2) results of the Graduate Management Admissions Test (GMAT).

Admission is automatic for applicants with (1) a minimum 1050 "Index Score" and (2) minimum 20th percentile GMAT verbal and quantitative scores. [Index Score = (Upper Division GPA x 200) + Total GMAT].

Applicants who do not meet the above criteria are referred to the

Graduate Admissions Committee for consideration for admission to the program. The applicant should provide the committee with complete background information including: (1) post-baccalaureate academic performance; (2) recent work experience; (3) community activities and service; (4) letters of recommendation; and (5) a statement of purpose that details the candidate's qualifications and objectives and his/her reasons for pursuing an M.B.A.

Classification in the Programs

If you have a baccalaureate degree from a regionally accredited institution but have not been admitted to any graduate degree program, you can apply for admission to the university as an "Unclassified Post-baccalaureate" student (formerly called a "non-objective" student). If you are enrolled as an "Unclassified Post-baccalaureate" student and wish to be admitted into the M.B.A. program, you should complete a "Change of Graduate Objective" form, which may be obtained at the Student Services Center (CBE) or Enrollment Services Office. Admission to the university as an "Unclassified Post-baccalaureate" student in no way implies acceptance to a graduate degree program. Undergraduate and "Unclassified Post-baccalaureate" students may not take 6000-level courses with ACCT, CIS, ENTR, FIN, MGMT, MKTG or TC prefixes. In addition, certain 6000-level courses in the Department of Economics are also closed to undergraduates and "Unclassified Post-baccalaureate" students (see Economics chapter in graduate section of this catalog).

There are three levels of advancement for you within the M.B.A., M.S. Business Administration, and M.S. Taxation programs: "Conditionally Classified Graduate" standing, "Classified Graduate" standing, and Advancement to Candidacy.

1. "Conditionally Classified Graduate" standing

If you have been admitted to a graduate degree program but have not satisfied all of the foundation coursework, other program requirements, and/or the University Writing Skills requirement, you are a "Conditionally Classified Graduate" student. You may be admitted to a graduate degree program as a "Conditionally Classified Graduate" student upon:

- a. submission of an application with required supporting documents and fee payment to the Admissions Office of the university;
- b. acceptance by the program based on past academic performance, GMAT score, and other relevant criteria;
- c. completion of other appropriate requirements as specified in the Graduate and Post-baccalaureate chapter of this catalog.

2. "Classified Graduate" standing

If you have been admitted to a graduate degree program by meeting the requirements established in item (1) above, and have fulfilled all foundation coursework proficiencies, and other requirements including the University Writing Skills requirement, you can become a "Classified Graduate" student. As a practical matter, if you enter the program with a strong background in your new field of study and have satisfied the University Writing Skills requirement, you can begin as a "Classified Graduate" student. If you enter the program from a different discipline, you

can become a "Classified Graduate" student after completing foundation coursework and have been recommended for such standing by the department. You must have satisfied the University Writing Skills requirement as explained in the Graduate and Post-baccalaureate Studies chapter in this catalog and all other proficiency evaluations (e.g., the College of Business Proficiency Test) specified for your degree program.

3. *Advancement to Candidacy.*

To be Advanced to Candidacy you must:

- a. be a "Classified Graduate" student in good standing;
- b. have completed 32 quarter units of 6100-6999 level courses beyond the 6000 through 6099 foundation courses;
- c. have completed such other requirements as prescribed by the program faculty;
- d. have been recommended for Advancement to Candidacy by the program faculty.

The academic performance of all CBE graduate students will be monitored by the CBE Director of Graduate Programs. Those found to have an unsatisfactory performance at any point in time will be recommended for disqualification from their degree program.

Proficiency Evaluations

Proficiency evaluations in writing skills must be satisfied in each of the Business Administration graduate programs. All students must satisfy the University Writing Skills Requirement (UWSR) before they can attain "Classified Graduate" status. If you are enrolling in any Business Administration graduate program you must take the Writing Skills Test (WST) during your first quarter after receiving "Conditionally Classified Graduate" standing unless you have met the Writing Skills requirement as an undergraduate or graduate student at one of the CSU system campuses or scored 4.5 or better on the GMAT essay.

Passing the WST satisfies the UWSR. If you fail the WST with an essay score of 6 or below, you must immediately enroll in a first-tier writing course (ENGL 3000 or 3001). After passing this course, you must immediately enroll in a second-tier writing course such as MKTG 3495. Passing the second-tier course and the Writing Skills Essay (WSE) given at the end of the course satisfies the UWSR. If you fail the WST with a score of 7 or 8 you may satisfy the UWSR either by retaking and passing the WST or by passing a second-tier writing course and the WSE.

The Writing Skills Test and Writing Skills Essay are administered by the Office of Assessment and Testing located in Warren Hall (WA 438), phone 885-3661. You should contact this office directly for information on test dates, registration procedures, and fees. The College of Business Proficiency Tests (SBPT) in mathematics and statistics are described in a subsequent section.

Requirements for Graduation

To be eligible for the M.B.A., M.S. in Business Administration

(except C.I.S./Q.B.M. Option), or M.S. in Taxation degree, you must:

1. have been a "Classified Graduate" student and Advanced to Candidacy (see items (2) and (3) under the section on Classification in the Programs)
2. have satisfied the international requirement
3. have completed 45 quarter units of which:
 - a. all are beyond the foundation coursework;
 - b. all have a course grade of "C" or better and a 3.00 GPA;
 - c. all are applicable to the degree;
 - d. at least 32 are in residence as a "Classified and/or Conditionally Classified Graduate" student;
 - e. not more than 13 are for extension and/or transfer credit (any extension and/or transfer credit must be approved by the CBE Director of Graduate Programs) and/or coursework taken in "Unclassified Postbaccalaureate" status;
 - f. all are earned within the five years immediately preceding the completion of the requirements for the degree;
 - g. the distribution of the 45 units offered for a specific graduate degree must meet the general guidelines specified by the Association to Advance Collegiate Schools of Business International (AACSB), the professional accrediting body for Business Administration academic programs;
 - h. not more than 5 units are for thesis, independent study and/or a project, except in the case of the M.S. Business Administration/C.I.S./Q.B.M. Option, where up to 9 units may be taken with the approval of the CBE Director of Graduate Programs.
4. have a 3.0 grade point average for all units taken to satisfy the requirements of the student's degree program.
5. have completed a satisfactory program of study as determined by the College of Business and Economics and the university.

Capstone Requirement

The university requires all masters degree students to complete a capstone requirement prior to graduating. The capstone experience for students in the M.B.A. program is a project that is incorporated within either the Entrepreneurship Practicum course (ENTR 6490) or the Seminar in Strategic Management course (MGMT 6490). M.B.A. students may select either the Entrepreneurship Practicum course (ENTR 6490) or the Seminar in Strategic Management course (MGMT 6490) to satisfy the capstone experience requirement. For most of the M.S. degree programs, the capstone requirement is a departmental thesis (6909) or project (6899). Consult the catalog description for the specific requirements of your degree program or option.

Master of Business Administration

In addition to the set of common requirements for the M.B.A., M.S. in Business Administration, and M.S. in Taxation degrees presented in the preceding section, there are requirements specific to the Master of Business Administration (M.B.A.) degree. These requirements are discussed in this section

General Curricular Requirements for M.B.A. Degree Programs Accredited by AACSB

The American Assembly of Collegiate Schools of Business is the professional accrediting body for Business Administration degree programs. All College of Business and Economics degree programs are accredited by AACSB and the graduate programs in the College of Business and Economics are designed to comply with the listed AACSB curriculum guidelines.

Proficiency Evaluations

The M.B.A. degree program requires the writing skills proficiency evaluation described previously under the Common Requirements for the M.B.A., M.S. in Business Administration, and M.S. in Taxation degrees. In addition, if you are enrolled in the M.B.A. degree program, you are required to satisfy proficiency requirements in introductory mathematics and statistics. To satisfy the mathematics proficiency, you must have completed equivalent coursework in introductory differential calculus, college algebra, matrix algebra, and finite math. If you have not completed such coursework, you must take MATH 1130, 1810, and 1820. The statistics requirement may be met by a course in statistics that is equivalent to STAT 2010 or STAT 6011.

Foundation Coursework for the M.B.A.

The M.B.A. program is built upon a foundation of fundamental disciplines which, in the aggregate, underlie the graduate business curriculum. The nature and composition of this foundation is discussed below. It is not necessary to complete all, or even any, of the foundation coursework before applying for admission to the M.B.A. degree program. In fact, it is strongly recommended that application to the M.B.A. program be made as early as practicable. If you are admissible and have not satisfied the foundation coursework, you will be admitted as a "Conditionally Classified Graduate" student.

Having "Conditionally Classified Graduate" status allows you to enroll in the 6000 to 6099 series of graduate-level foundation courses. These are accelerated courses designed for graduate-level students. Using these courses, where available, substantially reduces the number of undergraduate units that would otherwise be required to achieve "Classified Graduate" standing.

Equivalent previous coursework will satisfy listed foundation courses. Students who have received an undergraduate degree in Business Administration from an AACSB-accredited institution are exempt from the foundation coursework requirements. Contact the CBE Student Services Center for a list of AACSB-accredited institutions. A grade of "C-" or better is necessary for a transfer of a Cal State Hayward course (whether completed currently or in the past) to be accepted for foundation requirements. Note also that all 6000 to 6099 numbered Business Administration courses (i.e., ACCT, CIS, FIN, MGMT, MKTG, and ECON) with titles

beginning with "Graduate Introduction to . . ." are graduate program foundation courses and cannot be calculated as part of the 45 units required for a CBE graduate degree.

Foundation Coursework Common to All M.B.A. Options Except Executive Option (36 units)

ACCT 6011 Graduate Introduction to Financial Accounting (4)
(Not required if ACCT 2251 and 2252 previously completed, 4-4 units)

ACCT 6022 Graduate Introduction to Managerial Accounting (2)
(Not required if ACCT 3200 previously completed, 4 units)

CIS 6070 Graduate Introduction to Computer Information Systems (2) (Not required in CIS Option or if CIS 3060 previously completed, 4 units)

ECON 6051 Graduate Introduction to Economics for Managers (4) (Not required if ECON 3005 and ECON 3551 previously completed, 4-4 units)

FIN 6033 Graduate Introduction to Financial Decisions (4) (Not required if FIN 3300 previously completed, 4 units)

MGMT 6000 Graduate Introduction to Quantitative Methods in Business (4) (Not required if MGMT 3100 previously completed, 4 units)

MGMT 6020 Graduate Introduction to Production and Operations Management (4) (Not required if MGMT 3620 previously completed, 4 units)

MGMT 6050 Business and Society (4) (Not required if MGMT 2701 and 4500 previously completed, 4-4 units)

MGMT 6060 Graduate Introduction to Organization and Management (4) (Not required if two of MGMT 3600, 3614, or 3680 previously completed, 4-4 units)

MKTG 6005 Managing Marketing: Theory and Practice (4) (Not required if MKTG 3401 previously completed, 4 units)

Proficiencies to be satisfied: Mathematics, Statistics, and Writing Skills (WST) See "Proficiency Evaluations" in this section, Master of Business Administration)

Additional Prerequisites Required for Some Options

Accounting Option (8 units)

- ACCT 3211, 3212 Intermediate Financial Accounting I, II (4, 4)

Computer Information Systems Option (8 units)

- CIS 3275 (4) or CS 3340 (4) or any advisor-approved object-oriented programming language taken during the last three years. (Students who have no programming background should take CIS 3270 or CS 2360 prior to enrolling in any of the above classes.)
- CIS 3281 Systems Analysis and Design (4)

Taxation Option (4 units)

- ACCT 3220 Tax Accounting: Fundamentals and Individuals (4)

Telecommunications Management Option (8 units)

- CIS 3270 Algorithm Development and Programming (4) or any advisor-approved third-generation programming language taken during the last three years.
- TC 3250 Networks and Telecommunication Systems (4)

M.B.A. Curricular Requirements

A. Policy on the use of 3000-, 4000-, and unrestricted 6000-level courses in the M.B.A.

Most M.B.A. options restrict the use of 3000-, 4000-, and unrestricted 6000-level courses. You should clear any planned use of upper division undergraduate coursework in the 45 units for your M.B.A. degree with either the graduate option advisor or the CBE Director of Graduate Studies.

B. International Requirement (4 units)

To receive an M.B.A., you must have completed a 4-unit course in international business/international economics as part of the 45 units of the M.B.A. degree (ACCT 6470; ECON 6700, 6705, 6710; FIN 6375; MGMT 6140, 6150, 6440, 6570, 6675; MKTG 6470). In order for a course to both satisfy the International Requirement and count as part of your 45 degree units beyond core courses, the course must be selected from the above list of 6100-6999 level courses or must be approved by your graduate advisor or the CBE Director of Graduate Programs.

C. Core Requirements Except Executive Option (12 units)

FIN 6300 Seminar in Corporate Financial Management (4)
MGMT 6100 Quantitative Business Methods (4)

One "Interpersonal Skills" course selected from the following (4 units): MGMT 6560, 6612, 6617, 6630, 6635; MKTG 6403 or 6460.

D. Capstone Experience (5 units)

ENTR 6490 Entrepreneurship Practicum (5) or MGMT 6490 Seminar in Strategic Management (5)

M.B.A. students may select either the Entrepreneurship Practicum course (ENTR 6490) or the Seminar in Strategic Management course (MGMT 6490) to satisfy the capstone experience requirement. Either ENTR 6490 or MGMT 6490 is taken as one of the final courses in an M.B.A. student's program. In these comprehensive courses, students will integrate knowledge gained in their core requirement and option courses. A project is required in these courses and serves in place of either a comprehensive examination or a thesis as the required capstone experience.

E. Option Requirements

In addition to these required courses, students must satisfy the

requirements of one of the options as outlined below. If you wish to have more than one option recorded on your permanent record, the pattern of courses you take to fulfill each additional option must differ by at least 3 courses and 12 units from any other option or combination of options you have taken. The Executive option is a 45-47 unit package of courses in which there is no separation of core and option requirements.

1. *Accounting Option (28 units)*

a. *Prerequisites*

See previous section on additional prerequisites required for some options.

b. *Required Courses (16 units)*

ACCT 6211-12 Seminar in Accounting and Auditing Theory I, II (4, 4)

ACCT 6230 Strategic Cost and Performance Management (4)

ACCT 6260 Accounting Research Methods Seminar (4)

c. *Electives within Accounting (4 units)*

Select one course from the following:

Any 6100-6900 level Accounting course beyond those listed as required or any 6100-6999 level Taxation course.

d. *Electives outside Accounting (8 units)*

Select 8 units of 6100-6999 level College of Business and Economics courses outside the ACCT prefix. MGMT 6110 Business and Economic Forecasting is recommended as one of these elective courses.

2. *Business Economics Option (28 units)*

a. *Required Courses (16 units)*

ECON 6101 Seminar: Micro-Economic Theory I (4)

ECON 6105 Seminar: Macro-Economic Theory (4)

ECON 6400 Seminar: Econometrics (4)

MGMT 6550 Research Methods and Communications (4)

b. *Electives within Business Economics (4 units)*

Select at least one of the following:

ECON 6102 Seminar: Micro-Economic Theory II, 6250 Seminar: Project Analysis, 6315 Seminar: Monetary Theory, 6370 Seminar: Public Sector Economics, 6520 Seminar: Industrial Organization and Public Policy, 6680 Seminar: Labor Economics, 6700 Seminar: International Trade, 6710 Seminar: International Economic Development

c. *Electives outside of Business Economics (8 units)*

Select 8 units of 6100-6999 level College of Business and Economics courses outside of Economics. MGMT 6110 Business and Economic Forecasting is strongly recommended as one of these elective courses.

3. *Computer Information Systems Option (28 units)*

a. *Prerequisites*

See section on additional prerequisites required for some options.

b. *Required Courses (16 units)*

CIS 6270 Advanced Study of Computer Information Systems (4)

CIS 6274 Data Base Theory and Administration (4)

CIS 6275 Decision Support and Expert Systems (4)

CIS 6276 Data and Voice Communications (4)

c. *Electives within Computer Information Systems (4 units)*

Select any 6100-6999 level CIS or TC course (4 units) that is not listed as required.

d. *Electives outside Computer Information Systems (8 units)*

Select 8 units of 6100-6999 level College of Business and Economics courses outside of Computer Information Systems, or any other department-approved graduate-level course (including Mathematics and Computer Science) outside Computer Information Systems. MGMT 6110 Business and Economic Forecasting is strongly recommended as one of these elective courses.

4. *E-Business Option (28 units)*

a. *Required Courses (12 units)*

CIS 6278 E-Commerce Technology (4)

MGMT 6475 E-Strategy (4)

MKTG 6585 E-Commerce Marketing (4)

b. *E-Business Electives (16 units)*

Select 16 units from the following:

CIS 6270 Advanced Study of Computer Information Systems, 6274 Database Theory and Administration, 6300 Web Site Development; ENTR 6485 New Venture and E-Business Plans; FIN 6305 New Venture Financing; MGMT 6115 E-Commerce Enterprise Management, 6145 Logistics Management, 6150 Global Supply Chain Management, 6420 Competitive Strategy, 6470 Management of Technology and Innovation; MKTG 6570 Business to Business Marketing; TC 6101 Analysis and Design of Telecommunications Systems, 6210 Collaborative Multimedia Networking and Telepresence; Other CBE-approved coursework outside CBE, including courses in Multimedia or Computer Science

5. *Entrepreneurship Option (28 units)*

a. *Required Courses (12 units)*

ENTR 6480 Introduction to Entrepreneurship (4)

ENTR 6485 New Venture and E-Business Plans (4)

FIN 6305 New Venture Financing (4)

b. *Entrepreneurship Electives (16 units)*

Students are encouraged to meet with their faculty advisor to discuss selection of electives. Select a total of 16 units from the following lists; at least 12 units must be courses offered in the College of Business and Economics:

ACCT 6230 Strategic Cost and Performance Management (4), 6420 Fundamentals of Federal Income Taxation (4), 6705 Mergers and Acquisitions (4), 6713 Financial Statement Analysis and Business Valuation (4), 6900 Independent Study (1-4); CIS 6278 E-Commerce Technology (4), 6300 Web Site Development (4); ECON 6190 Market Processes: Theory and Applications (4), 6250 Seminar: Project Analysis (4), 6710 Seminar: International Economic Development (4); ENTR 6487 Managing Growing Ventures (4); FIN 6720 Strategic Corporate Financial Management (4); HCA 6210 Leadership and Change in Health Care Organizations (4), 6240 Health Care Financing and Budgeting (4)

MGMT 6115 E-Commerce Enterprise Management (4), 6465 Legal Aspects of Corporate Management (4), 6470 Management of Technology and Innovation (4), 6475 E-Strategy (4), 6550 Research Methods and Communications (4), 6560 High Performance Management (4), 6612 Seminar in Strategic Human Resources Management (4), 6615 Compensation Administration (4), 6617 Conflict Resolution (4), 6635 Managerial Psychology (4), 6745 Executive Leadership, Creativity and Team Building (2-4), 6900 Independent Study (1-4)

MKTG 6401 Marketing Research (4), 6411 Product Management (4), 6413 Integrated Marketing Communications (4), 6420 Seminar in Marketing Strategy (4), 6450 Seminar in Selected Marketing Topics (4), 6460 Seminar in Negotiation (4), 6470 International Marketing (4), 6570 Business to Business Marketing (4), 6585 E-Commerce Marketing (4), 6900 Independent Study (1-4), 6910 University Thesis (1-5), 6999 Issues in Marketing (4); MM 6103 Business Basics in Multimedia (4); PUAD 6806 Policy Design for Sustainable Futures (4), 6878 Transforming Health Care (4); TC 6207 Telecommunications Management Systems (4), 6210 Collaborative Multimedia Networking and Telepresence (4)

6. *Executive Option (45-47 units)*

a. *China Program (45 units)*

Required Courses for Corporate Financial Management Specialization:

ACCT 6230 Strategic Cost and Performance Management (4)
ACCT 6701 Advanced Financial Reporting and Analysis I (4)
ACCT 6704 Advanced Financial Reporting Systems: Design and Implementation (4)

ACCT 6705 Mergers and Acquisitions (4)
ACCT 6713 Financial Statement Analysis and
Business Valuation (4)
FIN 6300 Seminar in Corporate Financial Management
(4)
FIN 6310 Seminar in Security Analysis and Portfolio
Management (4)
FIN 6375 International Financial Management (4)
MGMT 6490 Seminar in Strategic Management (5)

One elective course from the following:

FIN 6305 New Venture Financing (4)
FIN 6315 Seminar in Options and Futures (4)
FIN 6320 Studies in Financial Markets (4)
FIN 6325 Financial Management of Banking Institutions
(4)
FIN 6360 Management of Risk and Insurance (4)

One elective course from the following:

MGMT 6560 High Performance Management (4)
MGMT 6612 Seminar in Strategic Human Resources
Management (4)
MKTG 6720 Management of Marketing Functions (4)

Required Courses for Finance Specialization:

ACCT 6713 Financial Statement Analysis and
Business Valuation (4)
FIN 6300 Seminar in Corporate Financial Management
(4)
MGMT 6100 Quantitative Business Methods (4)
MGMT 6110 Business and Economic Forecasting (4)
MGMT 6490 Seminar in Strategic Management (5)

Five elective courses from the following:

FIN 6305 New Venture Financing (4)
FIN 6310 Seminar in Security Analysis and Portfolio
Management (4)
FIN 6315 Seminar in Options and Futures (4)
FIN 6320 Studies in Financial Markets (4)
FIN 6325 Financial Management of Banking Institutions
(4)
FIN 6360 Management of Risk and Insurance (4)
FIN 6375 International Financial Management (4)

One elective course from the following:

MGMT 6560 High Performance Management (4)
MGMT 6612 Seminar in Strategic Human Resources
Management (4)
MKTG 6720 Management of Marketing Functions (4)

Required Courses for Management Specialization:

ACCT 6230 Strategic Cost and Performance
Management (4)
ACCT 6713 Financial Statement Analysis and
Business Valuation (4)
FIN 6300 Seminar in Corporate Financial Management
(4)
FIN 6310 Seminar in Security Analysis and Portfolio
Management (4)
MGMT 6130 Enterprise Planning and Control (4)

MGMT 6150 Global Supply Chain Management (4)
MGMT 6440 Global Strategic Management and Strategic Alliances (4)
MGMT 6490 Seminar in Strategic Management (5)
MGMT 6560 High Performance Management (4)
MGMT 6612 Seminar in Strategic Human Resources Management (4)
MKTG 6720 Management of Marketing Functions (4)

Required Courses for Marketing Specialization:

ACCT 6230 Strategic Cost and Performance Management (4)
ACCT 6713 Financial Statement Analysis and Business Valuation (4)
FIN 6300 Seminar in Corporate Financial Management (4)
MGMT 6140 Seminar in Advanced Operations Management (4)
MGMT 6490 Seminar in Strategic Management (5)
MGMT 6612 Seminar in Strategic Human Resources Management (4)
MKTG 6401 Marketing Research (4)
MKTG 6420 Seminar in Marketing Strategy (4)
MKTG 6450 Seminar in Selected Marketing Topics (4)
MKTG 6730 Pricing and Product Management (4)
MKTG 6740 Promotion and Distribution (4)

b. Europe Program (47 units)

Required Courses

ACCT 6700 Accounting for Executives (4)
ECON 6720 The European Union, Its Institutions and International Trade (4)
ECON 6725 Money, Banking and International Finance (4)
ECON 6751 Managerial Economics (4)
FIN 6720 Strategic Corporate Financial Management (4)
MGMT 6440 Global Strategic Management and Strategic Alliances (4)
MGMT 6612 Seminar in Strategic Human Resources Management (4)
MGMT 6715 Doing Business in Regional Markets (4)
MGMT 6747 Executive Development Seminar (3)
MGMT 6750 Research Methods (4)
MGMT 6760 Global Strategic Supply Chain Management (4)
MKTG 6720 Management of Marketing Functions (4)

c. Hong Kong Program (45 units)

Required Courses

ACCT 6700 Accounting for Executives (4)
ECON 6751 Managerial Economics (4)
FIN 6375 International Financial Management (4)
FIN 6720 Strategic Corporate Financial Management (4)
MGMT 6100 Quantitative Business Methods (4)
MGMT 6150 Global Supply Chain Management (4)
MGMT 6475 E-Strategy (4)

MGMT 6490 Seminar in Strategic Management (5)
MGMT 6560 High Performance Management (4)
MGMT 6612 Seminar in Strategic Human Resources
Management (4)
MKTG 6705 Strategic Marketing Management (4)

d. Singapore Program (45 units)

Required Courses

ACCT 6230 Strategic Cost and Performance
Management (4) or MKTG 6585 E-Commerce
Marketing (4) if not used as a substitute for MGMT
6115

ACCT 6700 Accounting for Executives (4)
ECON 6725 Money, Banking, and International
Finance (4)
ECON 6751 Managerial Economics (4)
FIN 6720 Strategic Corporate Financial Management
(4)

MGMT 6115 E-Commerce Enterprise Management (4)
or MKTG 6585 E-Commerce Marketing (4) if not used
as a substitute for ACCT 6230

MGMT 6150 Global Supply Chain Management (4)
MGMT 6440 Global Strategic Management and
Strategic Alliances (4) or MGMT 6612 Seminar in
Strategic Human Resources Management (4)

MGMT 6490 Seminar in Strategic Management (5)
MGMT 6735 Asian Institutions and Organization
Behavior (4)

MKTG 6705 Strategic Marketing Management (4) or
MKTG 6725 Marketing Management (4)

e. South America Program (47 units)

Required Courses

ACCT 6700 Accounting for Executives (4)
ECON 6725 Money, Banking and International Finance
(4)

ECON 6751 Managerial Economics (4)
FIN 6720 Strategic Corporate Financial Management
(4)

MGMT 6440 Global Strategic Management and
Strategic Alliances (4)

MGMT 6612 Seminar in Strategic Human Resources
Management (4)

MGMT 6715 Doing Business in Regional Markets (4)

MGMT 6747 Executive Development Seminar (3)

MGMT 6750 Research Methods (4)

MGMT 6760 Global Strategic Supply Chain
Management (4)

MKTG 6720 Management of Marketing Functions (4)
One elective from any 6100-level and above course in
CBE (4)

f. Transnational Program (47-50 units)

Required Courses (39-42 units)

ACCT 6700 Accounting for Executives (4)
ECON 6715 An Executive Introduction to Social
Philosophy, Ethics, and the History of Economic
Thought (4)
ECON 6725 Money, Banking, and International
Finance (4)
ECON 6751 Managerial Economics (4)
FIN 6720 Strategic Corporate Financial Management
(4)

MGMT 6115 E-Commerce Enterprise Management (4)
or MKTG 6585 E-Commerce Marketing (4)

MGMT 6150 Global Supply Chain Management (4)
MGMT 6440 Global Strategic Management and
Strategic Alliances (4)
MGMT 6745 Executive Leadership, Creativity and
Team Building (2-4)
MGMT 6747 Executive Development Seminar (1-2)
MKTG 6420 Seminar in Marketing Strategy (4)

Elective Courses (8 units)

ECON 6720 The European Union, Its Institutions, and
International Trade (4)
MGMT 6612 Seminar in Strategic Human Resources
Management (4)
MGMT 6715 Doing Business in Regional Markets (4)
MGMT 6730 Strategic Human Resources Management
(4)
MGMT 6735 Asian Institutions and Organization
Behavior (4)
MGMT 6740 Regional Institutions and Organization
Behavior (4)

7. *Finance Option (28 units)*

a. *Required Course (4 units)*

MGMT 6550 Research Methods and Communications
(4)

b. *Electives within Finance (16 units)*

Select 16 units of graduate-level Finance courses
beyond FIN 6300.

c. *Electives outside Finance (8 units)*

Select 8 units of 6100-6999 level College of Business
and Economics courses outside Finance or any other
department-approved coursework outside Finance.

8. *Human Resources Management Option (28 Units)*

a. *Required Courses (8 units)*

MGMT 6550 Research Methods and Communications
(4)
MGMT 6612 Seminar in Strategic Human Resources
Management (4)

b. *Electives within Human Resources Management (12*

units)

Select 12 units from the following:

MGMT 6613 Topics in Human Resources Management and/or Industrial Relations, 6614 Seminar in Labor and Employee Relations, 6615 Compensation Administration, 6616 Human Resources Evaluation, 6617 Conflict Resolution, 6618 Human Resources Training and Development, 6622 Human Resources Information Systems, 6630 Organization Theory, 6635 Managerial Psychology, 6675 Seminar in International Human Resources Management, 6680 Seminar in Labor-Management Relations Administration, 6900 Independent Study (1-4)

One of these elective courses may also be selected from the following:

CIS 6270 Analysis of Information Systems; COMM 4830 Intercultural Communication; MGMT 4680 Collective Bargaining and Labor Law; PUAD 6764 Intervention Strategies for Changing Organizations, 6812 Changing Human Organizations, 6850 Human Resource Management in the Public Sector, 6854 Seminar in Public Labor Relations

c. Electives outside Human Resources Management (8 units)

Select 8 units of 6100-6999-level College of Business and Economics courses outside HRM or any other department-approved coursework outside HRM.

9. International Business Option (28 units)

a. Required Course (4 units)

MGMT 6570 Management of the Multinational Firm (4)

b. Electives within International Business (16 units)

Select four courses from the following:

ACCT 6470 International Taxation; ECON 6700 Seminar: International Economics or 6705 International Finance, or 6710 Seminar: Economic Development; FIN 6375 International Financial Management; MGMT 6140 Global Operations Management, 6150 Global Supply Chain Management, 6440 Global Strategic Management and Strategic Alliances, 6550 Research Methods and Communications, 6675 Seminar in International Human Resources Management; MKTG 6470 International Marketing; One department approved upper division or graduate-level liberal arts course with an international or regional orientation. The selected course must deal primarily with cultural or social factors, and its principal content should reach beyond the student's native culture and/or geographical region.

c. Electives outside International Business (8 units)

Select 8 units of 6100-6999 level College of Business and Economics courses outside International Business

or any other department-approved coursework outside International Business.

10. *Management Option (28 units)*

a. *Required Course (4 units)*

MGMT 6550 Research Methods and Communications
(4)

b. *Electives within Management (16 units)*

Select 16 units from the following:

Any 6100-6999 level courses with a MGMT prefix.

c. *Electives outside Management (8 units)*

Select 8 units of 6100-6999 level College of Business and Economics courses (or any other department-approved coursework) outside any field of specialization resulting from selections made under "Electives within Management." A "field of specialization" is defined as 12 or more units of graduate coursework taken in an identifiable professional area within the Department of Management and Finance.

11. *Marketing Management Option (28 units)*

a. *Select 20 units from the following (20 units):*

MKTG 6401 Marketing Research (4)
MKTG 6410 Buyer Behavior (4)
MKTG 6411 Product Management (4)
MKTG 6412 Pricing Management (4)
MKTG 6413 Integrated Marketing Communications (4)
MKTG 6414 Distribution Management (4)
MKTG 6420 Seminar in Marketing Strategy (4)
MKTG 6450 Seminar in Selected Marketing Topics (4)
MKTG 6460 Seminar in Negotiation (4)
MKTG 6470 International Marketing (4)
MKTG 6570 Business to Business Marketing (4)
MKTG 6585 E-Commerce Marketing (4)
MKTG 6900 Independent Study (1-4)

b. *Electives outside Marketing Management (8 units)*

Select 8 units of 6100-6999 level College of Business and Economics courses outside Marketing Management.

12. *Operations and Materials Management Option (28 units)*

a. *Required Courses (8 units)*

Select two courses from the following:

MGMT 6130 Enterprise Planning and Control (4), 6140 Global Operations Management (4), 6141 Service Operations Management (4), 6526 Quality Management (4)

b. *Electives within Operations and Materials Management (12 units)*

Select three courses from the following:

Any course from the preceding list (MGMT 6130, 6140,

6141, and 6526) if not taken as a required course in Operations and Materials Management; ENGR 6200 Project Management (4); MGMT 6110 Business and Economic Forecasting (4), 6115 E-Commerce Enterprise Management (4), 6121 Seminar in the Design and Use of Computer Simulation Models (4), 6125 Purchasing and Materials Management (4), 6145 Logistics Management (4), 6150 Global Supply Chain Management (4)

c. Electives outside Operations and Materials Management (8 units)

Select 8 units of 6100-6999 level College of Business and Economics courses outside Operations and Materials Management or any other department-approved graduate-level coursework outside Operations and Materials Management

13. Strategic Management Option (28 units)

a. Required Research Methods Course (4 units)

Select one of the following research methods courses:

ACCT 6260 (4), MGMT 6550 (4), MKTG 6401 (4)

b. Elective Strategic Management Courses (12 units)

Select three courses from the following:

MGMT 6420 Competitive Strategy (4), 6430 Corporate Strategic Management (4), 6440 Global Strategic Management and Strategic Alliances (4), 6460 Strategic Management for a Sustainable Society (4), 6465 Legal Aspects of Corporate Management (4), 6470 Management of Technology and Innovation (4), 6475 E-Strategy (4)

c. Electives within Strategic Management and Related Disciplines (4 units)

Select one course from the following:

Any course from the preceding list in (b) not taken as an elective strategic management course; MGMT 6570 Management of the Multinational Firm (4), 6612 Seminar in Strategic Human Resources Management (4); MKTG 6420 Seminar in Marketing Strategy (4)

d. Electives outside Strategic Management (8 units)

Select 8 units from any 6100-6999 level College of Business and Economics courses except those listed in (b) above.

14. Supply Chain Management Option (28 units)

a. Required Courses (8 units)

Select two courses from the following:

MGMT 6115 E-Commerce Enterprise Management (4), 6125 Purchasing and Materials Management (4), 6145 Logistics Management (4), 6150 Global Supply Chain Management (4)

b. Electives within Supply Chain Management (12 units)

Select three courses from the following:

Any course from the preceding list (MGMT 6115, 6125, 6145, and 6150) not taken as a required course in Supply Chain Management; ENGR 6200 Project Management (4); MGMT 6110 Business and Economic Forecasting (4), 6121 Seminar in the Design and Use of Computer Simulation Models (4), 6130 Enterprise Planning and Control (4), 6140 Global Operations Management (4), 6141 Service Operations Management (4), 6526 Quality Management (4)

c. Electives outside Supply Chain Management (8 units)

Select 8 units in 6100-6999 level College of Business and Economics courses outside Supply Chain Management, or any other department approved graduate-level coursework outside Supply Chain Management.

15. Taxation Option (28 units)

a. Prerequisites

See section on additional prerequisites required for some options.

b. Required Courses (20 units)

ACCT 4220 Tax Accounting: Corporate Tax (4)

ACCT 6222 Income Taxation of Partners and Partnerships (4)

ACCT 6223 Federal Tax Research, Procedures, and Penalties (4)

ACCT 6224 Advanced Corporate Taxation (4) or ACCT 6227 S Corporations and Other Flow-Through Entities (4)

ACCT 6410 Tax Accounting Periods and Methods (4)

c. Electives outside Taxation (8 units)

Select 8 units of 6100-6999 level College of Business and Economics courses outside Taxation or any other department-approved courses outside Taxation.

16. Telecommunications Management Option (28 units)

a. Prerequisites

See section on additional prerequisites required for some options.

b. Required Courses (12 units)

TC 6101 Analysis and Design of Telecommunications Systems (4)

TC 6205 Routing and Data Networking Models in Telecommunications (4)

TC 6207 Telecommunications Management Systems (4)

c. Electives within Telecommunications Management (4 units)

M.S. in
Business
Administration

One course selected from the following:

TC 6210 Collaborative Multimedia Networking and Telepresence (4), 6284 Management of Satellite/Wireless Communications (4)

d. Electives outside Telecommunications Management (12 units)

Select 12 units of 6100-6999 level College of Business and Economics courses outside Telecommunications Management.

Computer Information Systems/Quantitative Business Methods Option (C.I.S./Q.B.M.)

I. Foundation Coursework (16 units)

Students with foundation courses yet to be completed are encouraged to secure "Conditionally Classified Graduate" standing as early as possible. Having "Conditionally Classified Graduate" status qualifies a student for enrollment in the 6000 to 6099 series of graduate-level foundation courses given below. These are faster-moving courses designed for graduate-level students.

In order to be considered for "Classified Graduate" standing in the M.S./Business Administration C.I.S./Q.B.M. option program, a student must satisfy the following foundation courses (16 units):

CIS 3275 (4) or CS 3340 (4) or any advisor-approved object-oriented programming language (4) taken during the last three years. (Students who have no programming background should take CIS 3270 or CS 2360 prior to enrolling in any of the above classes.

CIS 3281 Systems Analysis and Design (4)

MGMT 6000 Graduate Introduction to Quantitative Methods in Business (4) (Not required if MGMT 3100 previously completed, 4 units)

MGMT 6020 Graduate Introduction to Production and Operations Management (4) (Not required if ECON 3552, or MGMT 3620 previously completed, 4 units)

Proficiency Evaluations to be satisfied: Mathematics, Statistics, and Writing Skills Test (WST) (See the Proficiency Evaluations section under the Master of Business Administration and under the Common Requirements for the M.B.A., M.S. Business Administration, and M.S. Taxation Degrees. The former deals with statistics and mathematics proficiency and the latter with writing skills evaluations.)

II. Curricular Requirements (45 units)

A. *Required Courses (36 units)*

CIS 6270 Advanced Study of Computer Information

M.S. in Taxation

Systems (4)
CIS 6274 Data Base Theory and Administration (4)
CIS 6275 Decision Support and Expert Systems (4)
CIS 6276 Data and Voice Communications (4)
ECON 6400 Seminar: Econometrics (4)
MGMT 6100 Quantitative Business Methods (4)
MGMT 6110 Business and Economic Forecasting (4)
MGMT 6121 Seminar in the Design and Use of Computer Simulation Models (4)

Select one from the following: CIS 6271; MGMT 6119, 6130, 6140; TC 6101, 6205

B. Electives (8 units)

Select 8 units in 6100-6999 level College of Business and Economics courses.

C. Capstone Experience (1 unit)

CIS 6899 Project (1)

In addition to the set of Common Requirements for the M.B.A., M.S. Business Administration, and M.S. Taxation degrees described earlier, the following specific requirements must be met for the Master of Science in Taxation degree.

Foundation Coursework (24 units)

If you have foundation courses yet to be completed, you are encouraged to secure "Conditionally Classified Graduate" standing as early as possible. Having "Conditionally Classified Graduate" status qualifies you for enrollment in the 6000 to 6099 series of graduate-level foundation courses given below. These are accelerated courses designed for graduate-level students. Using the 6000 to 6099 courses, where they are available, enables you to complete the M.S./Taxation foundation coursework in 24 units compared to the 32 units needed if all foundation coursework is met through your equivalent undergraduate coursework.

In order to be considered for "Classified Graduate" standing in the Master of Science in Taxation program, you must satisfy the following foundation courses or your undergraduate equivalents given in parentheses:

ACCT 3220 Tax Accounting: Fundamentals and Individuals (4)

ACCT 6011 Graduate Introduction to Financial Accounting (4)
(Not required if ACCT 2251 and 2252 previously completed, 4-4 units)

ACCT 6022 Graduate Introduction to Managerial Accounting (2) (Not required if ACCT 3200 previously completed, 4 units)

CIS 6070 Graduate Introduction to Computer Information Systems (2) (Not required if CIS 3060 previously completed, 4 units)

ECON 6051 Graduate Introduction to Economics for Managers (4) (Not required if ECON 3005 and ECON 3551 previously

completed, 4-4 units)

FIN 6033 Graduate Introduction to Financial Decisions (4) (Not required if FIN 3300 previously completed, 4 units)

Proficiency Evaluation

Proficiency Evaluation to be satisfied: Writing Skills Test (WST). (See the "Proficiency Evaluations" section under Common Requirements for the M.B.A., M.S. Business Administration, and M.S. Taxation Degrees.)

International Requirement

To receive an M.S. Taxation degree, you must have completed a 4-unit course in international business/international economics as part of the 45 units of the M.S. Taxation degree (ACCT 6470; ECON 6700, 6710; FIN 6375; MGMT 6440, 6570, 6675; MKTG 6470). In order for a course to both satisfy the International Requirement and count as part of your 45 degree units beyond core courses, the course must be selected from the above list of 6100-6999 level courses or must be approved by your graduate advisor or the CBE Director of Graduate Programs.

Curricular Requirements (45 units)

Also see the section on Common Requirements for the M.B.A., M.S. Business Administration, and M.S. in Taxation degrees.

A. Required Courses (24 units)

ACCT 4220 Tax Accounting: Corporate Tax (4)

ACCT 6222 Income Taxation of Partners and Partnerships (4)

ACCT 6223 Federal Tax Research, Procedures, and Penalties (4)

ACCT 6224¹ Advanced Corporate Taxation (4) or ACCT 6227¹ S Corporations and Other Flow-Through Entities (4)

ACCT 6258 Tax Planning for Individuals (4)

ACCT 6410 Tax Accounting Periods and Methods (4)

B. Elective Courses (20 units)

Select 20 units from the following:

ACCT 6224¹ Advanced Corporate Taxation or 6227¹ S Corporations and Other Flow-Through Entities, 6226² Issues in State Taxation: California Income and Sales Taxes, 6229 Estate/Gift Tax and Income Taxation of Estates and Trusts, 6259 Tax Clinic (1-4), 6470 International Taxation; ECON 6370 Seminar: Public Sector Economics; one advisor-approved 6100-6999-level course in the College of Business and Economics.

C. Capstone Experience (1 unit)

ACCT 6909 Departmental Thesis (1)

Taxation Certificate

The graduate Taxation certificate program is designed to meet the needs of those who wish to focus on taxation courses.

Admission

The program is open to students who hold a baccalaureate degree from an accredited college or university. Admission into the graduate Taxation certificate program requires that at least two of the following standards be met:

1. Satisfactory performance on the Graduate Management Admissions Test (GMAT)
2. Acceptable grade point average on all course work prior to admission into the certificate program;
3. A record of appropriate employment.

Prerequisite Courses (12 units)

(These prerequisite courses may be satisfied through equivalencies.)

- ACCT 2251 Financial Reporting and Analysis I (4)
- ACCT 2252 Financial Reporting and Analysis II (4)
- ACCT 3220 Tax Accounting: Fundamentals and Individuals (4)

Curricular Requirements

A. Required Courses (20 units)

- ACCT 4220 Tax Accounting: Corporate Tax (4)
- ACCT 6222 Income Taxation of Partners and Partnerships (4)
- ACCT 6223 Federal Tax Research, Procedures, and Penalties (4)
- ACCT 6258 Tax Planning for Individuals (4)
- ACCT 6410 Tax Accounting Periods and Methods (4)

B. Elective Courses (8 units)

Two of the following, one of which must be ACCT 6224 or ACCT 6227:

- ACCT 6224 Advanced Corporate Taxation (4), 6226 Issues in State Taxation: California Income and Sales Taxes (4), 6227 S Corporations and Other Flow-Through Entities (4), 6229 Estate/Gift Tax and Income Taxation of Estates and Trusts (4), 6470 International Taxation (4)

Participants in the program will be required to have a minimum 3.0 grade point average in order to receive the certificate. No grade below a "B" in graduate courses and no grade below a "C" in undergraduate courses can be used in the program. All of the coursework must be completed within five years.

Graduate Courses

Restricted to "Classified" and "Conditionally Classified" Graduate Students.

Accounting

The course prefix for the following courses is ACCT.

- 6011** Graduate Introduction to Financial Accounting (4)
Accounting concepts, principles and procedures focused on the preparation of financial statements. Emphasis on

the interpretation and use of financial statements for decision-making.

- 6022** Graduate Introduction to Managerial Accounting (2)
Use of accounting information for managerial decision-making. Topics include costing systems, cost-volume-profit relationships, cost estimation, profit planning, and capital budgeting. Prerequisite: ACCT 6011.
- 6211, 6212** Seminar in Accounting and Auditing Theory I, II (4 units each)
Critical study of the concepts and principles characteristic of accounting and auditing; an examination of alternative theories in the formulation of accounting principles and auditing standards. Courses are sequential. Prerequisites: ACCT 3212, 6022.
- 6222** Income Taxation of Partners and Partnerships (4)
Concepts and principles governing the taxation of partners and partnerships; including the tax effect of formation, partnership agreements, distributions, and dissolutions. Prerequisite: ACCT 3220 or 6420.
- 6223** Federal Tax Research, Procedures, and Penalties (4)
Methods of researching federal tax issues using LEXIS and other research materials with a focus on case studies. Emphasis on administrative procedures, introduction to the judicial process, and taxpayer and preparer penalties. M.B.A./Taxation and M.S./Taxation students selecting the departmental thesis as their terminal exercise should enroll concurrently in ACCT 6909. Prerequisite: ACCT 3220 or 6420.
- 6224** Advanced Corporate Taxation (4)
Corporate liquidations, redemptions, reorganizations, carryovers of tax attributes, personal holding companies, accumulated earnings tax, collapsible corporations, consolidated returns, and employee compensation plans. Prerequisite: ACCT 4220 or 6420 or consent of instructor.
- 6226** Issues in State Taxation: California Income and Sales Taxes (4)
Comprehensive study of California income and sales tax issues. Nonconforming items, issues relating to residency, computation of taxable income of nonresident, apportionment of business income, taxation of flow through entities. Overview of sales tax. Prerequisite: ACCT 3220 or 6420 or consent of instructor.
- 6227** S Corporations and Other Flow-Through Entities (4)
Concepts and principles governing the taxation of S corporations and S shareholders; including the tax effect of formation, operations, distributions, and liquidations. Selected advanced partnership issues.
- 6229** Estate/Gift Tax and Income Taxation of Estates

and Trusts (4)

Taxation of beneficiary, estate, gift, and related tax treatment of fiduciary entity. Focus on estate tax planning. Prerequisite: ACCT 3220 or 6420.

6230 Strategic Cost and Performance Management (4)

Design of cost and performance management systems for strategic managerial decision-making and for implementing strategy. Topics include activity-based costing systems, activity-based management, profit planning, evaluating profit performance, transfer pricing, balanced scorecard, and incentive and compensation systems. Prerequisite: ACCT 6022.

6250 Seminar in Auditing (4)

Standards and procedures in auditing. Analysis of the interrelationship of audit standards, ethics, and procedures. Not open to students who have credit for an undergraduate or graduate course in auditing. Prerequisite: ACCT 3212 or equivalent.

6258 Tax Planning for Individuals (4)

Individual tax planning, minimizing taxes. Comprehensive personal financial planning-retirement income planning, estate planning, short-term investment planning. Tax consequences of property transactions and different arrangements, such as family trusts, wills, private annuities. Prerequisite: ACCT 3220 or 6420.

6259 Tax Clinic (1-4)

Students will represent taxpayers before the IRS and FTB in audits, various collection matters and appeals. Instructor will provide individual supervision. May be repeated for a maximum of 4 combined units. Prerequisites: consent of instructor and successful completion of one graduate-level tax course.

6260 Accounting Research Methods Seminar (4)

Accounting research methods including role and nature of research, data sources, problem formulation, research design, data collection, writing of accounting research paper. Prerequisites: ACCT 6211, CIS 6070.

6410 Tax Accounting Periods and Methods (4)

Cash and accrual methods, startup and organization costs, installment sales, accounting periods and the appropriate tax year-end, inventory methods including the uniform capitalization rules, original issue discount, bad debt reserves, and FASB 109. Prerequisite: ACCT 3220 or 6420.

6420 Fundamentals of Federal Income Taxation (4)

Federal income taxation concepts applicable to individuals, corporations, partnerships. Gross income, deductions, credits, property transactions, tax accounting methods. Rules governing formation, operation, disposition of partnerships/corporations. Not open to students in M.B.A. option in Taxation or M.S. Taxation. Prerequisite: ACCT 6011 or equivalent.

- 6470** International Taxation (4)
U.S. taxation of foreign source income, controlled foreign corporations/subpart F, foreign sales corporations, foreign tax credits, and provisions used to reduce offshore tax deferral. Limited discussion of U.S. taxation of non-residents/foreign corporations. Prerequisites: ACCT 6420, or ACCT 3220 and 4220.
- 6700** Accounting for Executives (4)
The managerial use of cost data for decision-making including the latest development in activity based cost accounting and its implications for financial planning and budgeting. Prerequisite: graduate standing.
- 6701** Advanced Financial Reporting and Analysis I (4)
Critical study of U.S. financial reporting standards for reporting corporate financial position and operating results. Topics include study of financial statements and analysis of financial reporting standards for assets, liabilities, stockholders' equity, revenues, expenses and other reporting issues. Prerequisite: ACCT 6011.
- 6702** Advanced Financial Reporting and Analysis II (4)
Critical study of concepts and practices of U.S. accounting standards for reporting corporate financial position and operating results. Liabilities and stockholders' equity. Prerequisite: ACCT 6701.
- 6703** Advanced Financial Reporting and Analysis III (4)
Critical study of concepts and practices of U.S. accounting standards. Analysis and use of cash flows and financial statements for company performance evaluation, forecast and business valuation. Comparison with competitors and industry over time. Prerequisite: ACCT 6702
- 6704** Advanced Financial Reporting Systems: Design and Implementation (4)
Advanced design, implementation and analysis of financial reporting systems for manufacturing and service organizations. Topics include financial reporting and analysis, design and implementation of financial applications for general ledger, assets, procurement and payables, order fulfillment and receivables, budgeting and cash management. Prerequisites: ACCT 6011 and 6022.
- 6705** Mergers and Acquisitions (4)
The mergers and acquisition process from conception to completion: motives behind deals, pricing, valuation of target, accounting treatment, alternative legal structures, negotiation tactics, strategies to minimize market risk, issues relating to post-deal integration and corporate governance. International deals will be analyzed. Prerequisite: ACCT 6011.
- 6713** Financial Statement Analysis and Business

Valuation (4)

Analysis and forecast of financial statements for business valuation and financial strategies. Topics include financial statement analysis and forecast, business valuation using accounting and cash flow-based models, valuation analysis for equity security, credit decisions, distress prediction, and mergers and acquisitions. Prerequisite: ACCT 6011.

- 6898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities within the quarter enrolled. May be repeated for up to 4 units. No units may be counted toward any CBE graduate degree. Prerequisites: at least 3.0 GPA, departmental approval of activity. CR/NC grading only.
- 6900** Independent Study (1-4)
- 6909** Departmental Thesis (1)
Development and writing of a research paper for submission to the department which specifies its format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense normally required. Maximum of one unit per student. Should be taken concurrently with ACCT 6223 or 6260 by students using ACCT 6909 for their terminal exercise. Prerequisite: "Conditionally Classified Graduate" standing.
- 6915** Graduate Internship in Accounting (1-4)
Supervised work/educational experience with a company, CPA firm, non-profit organization, or governmental agency in a department-approved program for graduate students. May be repeated once for credit. Prerequisites: vary according to agency or firm.
- 6999** Issues in Accounting (4)
Readings, discussion, and research on contemporary and/or significant issues in accounting. May be repeated for credit when content varies.

Computer Information Systems

The course prefix for the following courses is CIS.

- 6070** Graduate Introduction to Computer Information Systems (2)
Oriented toward computer user. Planning, developing, implementing computer information systems including problem definition, feasibility study, alternative solutions, cost-benefit analysis, hardware/software selection. Computer-based solutions to business problems. Closed to students with credit for CIS 3060, or 3281 or 3282.
- 6160** Computer Technology in Business (4)
Principles, practice, and opportunities of information technology in business. Understanding of computer components and subsystems; the process of developing

automated solutions for business systems utilizing hardware, database management systems, user software, telecommunications, and the Internet. Includes mini-projects for applications. Prerequisite: CIS 6070 or consent of the instructor.

- 6270** Advanced Study of Computer Information Systems (4)
Introduction to the theory and practice of information systems in the areas of database, decision support and expert systems and telecommunications. Prerequisites: CIS 6070 (except students in MSBA CIS/QM option) and CIS 3281.
- 6271** Seminar in Current Topics in Information Systems (4)
Selected topics dealing with design, installation, control, and communication problems relevant to the total management information systems environment. May be repeated for credit with consent of department. Prerequisite: CIS 6270 or consent of instructor.
- 6274** Data Base Theory and Administration (4)
Role of data base administrator in managing data resources. Conceptual frameworks for selecting, implementing, maintaining commercial data base management packages. Data structures, data dictionaries, security, distributed data bases. Current technologies, future directions. Prerequisite: CIS 6270 or consent of instructor.
- 6275** Decision Support and Expert Systems (4)
Theory and practice of decision support and expert systems. Topics include the formulation, development, application, analysis and design of decision-oriented and knowledge-based systems, with appropriate hands-on projects. Prerequisite: CIS 6270.
- 6276** Data and Voice Communications (4)
Voice and computer communication facilities used in business. Network design and operation including common carriers, transmission technologies, protocols, and standards. Integration of voice and data communication and computing technologies. Prerequisite: CIS 6270.
- 6278** E-Commerce Technology (4)
The environment in which electronic commerce operates. Fundamentals of the enabling technologies which include the Internet, World Wide Web, databases, programming languages, web authoring tools. Security standards. Student projects. Prerequisite: CIS 3060 or 6070.
- 6300** Web Site Development (4)
The development and design of Internet web sites for business use. Web browsers, programming, data integration, navigation, usability, dynamic images, audio and video files, Java applets, and Java script. Basic HTML used in conjunction with visual web authoring tool such as Frontpage or Dreamweaver. Prerequisite: CIS

6278.

- 6898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities within the quarter enrolled. May be repeated for up to 4 units. No units may be counted toward any CBE graduate degree. Prerequisites: at least 3.0 GPA, departmental approval of activity. CR/NC grading only.
- 6899** Project (1)
Development of an original product which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their formats. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense may be required. CR/NC grading only.
Prerequisites: all foundation coursework; completion of at least 32 units of MSBA CIS/QBM program; prior or current registration in MGMT 6121.
- 6900** Independent Study (1-4)
- 6909** Departmental Thesis (1)
Development and writing of a research paper for submission to the department which specifies its format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense normally required. Maximum of one unit per student. Prerequisite: "Conditionally Classified Graduate" standing.
- 6999** Issues in Computer Information Systems (4)
Readings, discussion, and research on contemporary and/or significant issues in computer information systems. May be repeated for credit when content varies.

Economics

See graduate Economics chapter for list of Economics courses.

Entrepreneurship

The course prefix for the following courses is ENTR.

- 6480** Introduction to Entrepreneurship (4)
Provides a survey of entrepreneurship and business ownership--including foundation concepts, the new venture creation process, financial estimation, and entrepreneurial decision-making. A highly participatory, integrative class, with lectures, case studies, extensive discussions, and student presentations. Prerequisites: all foundation coursework completed; all CBE proficiencies satisfied.
- 6485** New Venture and E-Business Plans (4)
Students select, research, design, structure, document, and persuasively present a business plan for a new or growing entrepreneurial venture. Students learn and apply

systematic approaches to business planning. A highly participatory, team-oriented, term project class.
Prerequisites: all foundation coursework completed; all CBE proficiencies satisfied; ENTR 6480.

- 6487** Managing Growing Ventures (4)
An interdisciplinary course that focuses on building and managing a high growth venture from conception to maturity. Students critically examine problems, issues, and uncertainties faced in the creation of, and management of high growth ventures.
- 6490** Entrepreneurship Practicum (5)
An integrative "Capstone Experience" term project course that bridges student's knowledge of functional areas of business to the practice of entrepreneurship. Formatted as an experiential, hands-on, consulting project.
Prerequisites: all foundation coursework and CBE and university proficiencies, including the UWSR; completion of at least 32 units of the graduate program, and application for graduation on file.

Finance

The course prefix for the following courses is FIN.

- 6033** Graduate Introduction to Financial Decisions (4)
Application of financial and analytical techniques to concepts of asset valuation, risk assessment, capital budgeting, financial markets and financial decision making. Emphasis on market values. Prerequisites: ACCT 6022 or equivalent, and math proficiency.
- 6300** Seminar in Corporate Financial Management (4)
Theory and practice of financial decision-making. Financial indicators of corporate performance, market valuation of stocks and bonds, capital project evaluation, risk-return analysis, asset valuation theories, cost of capital and capital structure decisions, dividend policy decisions. Prerequisite: FIN 6033.
- 6305** New Venture Financing (4)
Concepts and practices of financing and financial management of a new venture or expansion of an existing growth business. Valuation, financial planning, corporate structuring, exit strategies, private placement, initial public offerings venture capital, and other current issues. Prerequisite: FIN 6300.
- 6310** Seminar in Security Analysis and Portfolio Management (4)
Theory and practice of security investment. Investment environment and instruments, capital asset pricing theory, technical and fundamental analysis of common stock portfolio analysis, bond analysis and management, mutual funds and investment companies, and financial derivatives. Prerequisites: FIN 6300.
- 6315** Seminar in Options and Futures (4)

Financial derivative markets. Option markets, valuation, and strategies; futures markets and strategies; risk management and hedging; swaps and financial engineering. Prerequisite: FIN 6300.

- 6320** Studies in Financial Markets (4)
Evolution and structure of financial markets, instruments, and institutions. The process of intermediation including the development of risk reduction devices and the growth of securitization. Focus is on debt instruments and the role of global regulation. Prerequisite: FIN 6033 (or FIN 3300).
- 6325** Financial Management of Banking Institutions (4)
Comprehensive treatment of commercial bank management in today's financial services industry. Modern approach to understanding and managing the risks faced by banks. Methods of optimizing shareholder value, risk-return tradeoffs, regulatory and strategic issues.
- 6360** Management of Risk and Insurance (4)
Identification, measurement, analysis, treatment, and administration of risk in the business firm. Insurance for commercial, professional, family and personal risk exposures and contract provisions for property, liability, health, and life insurance. Regulation and operation of insurance companies and related public policy issues.
- 6375** International Financial Management (4)
Financial decision-making for multinational corporations, management of foreign exchange risk, foreign direct investment, multinational project evaluation, international diversification and risk-return analysis, international capital markets and capital structure. Prerequisite: FIN 6300.
- 6720** Strategic Corporate Financial Management (4-5)
Analysis and evaluation of managerial issues and problems affecting financial decision-making in a corporation; corporate goals and linkages with financial strategy and corporate policy formulation; strategic financial planning and control; case studies. Prerequisite: graduate standing.
- 6898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities within the quarter enrolled. May be repeated for up to 8 units. No units may be counted toward any CBE graduate degree. Prerequisites: at least 3.0 GPA, departmental approval of activity. CR/NC grading only.
- 6900** Independent Study (1-4)
- 6910** University Thesis (1-5)
Development and writing of a formal research paper for submission to the University in the specified bound

format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense normally required. Prerequisite: classified graduate standing and advisor approval. Maximum of 5 units per student. (See also, "University Thesis Writing Guide," available in WA 859.)

- 6999** Issues in Finance (4)
Readings, discussion, and research on contemporary and/or significant issues in finance. May be repeated for credit when content varies. Prerequisite: consent of instructor.

Management

The course prefix for the following courses is MGMT.

- 6000** Graduate Introduction to Quantitative Methods in Business (4)
Graduate level survey of linear programming, transportation models, CPM/PERT, deterministic inventory models, and decision analysis. Emphasis on problem formulation and applications. Use of appropriate computer software. Prerequisites: CIS 6070, MATH and STAT proficiencies.
- 6020** Graduate Introduction to Production and Operations Management (4)
Up-to-date concepts, strategic and tactical decisions in managing operations in both manufacturing and service organizations. Topics include global operations, management of total quality, new product development, process development, capacity planning, inventory decisions, just-in-time systems, and supply-chain management. Prerequisite: MGMT 3100 or 6000.
- 6050** Business and Society (4)
The relationship of business to society and government; the American legal system and legal reasoning; business law issues, antitrust policy, ethics, social responsibility; regulatory agencies, deregulation, self-regulation. Closed to students with credit for MGMT 4500. Prerequisites: ECON 3005, 6051; MGMT 6060.
- 6060** Graduate Introduction to Organization and Management (4)
The process of management as it applies to the various functional areas including research and development, finance, production, human resources management, marketing, and controllership. Consideration of current theory and applications, individual and group behavior in the organization. Strong emphasis on verbal and written communication skills to be demonstrated through graded exercises, papers, and presentations.
- 6100** Quantitative Business Methods (4)
Optimization of management decisions by applying quantitative methods of linear and dynamic programming, inventory modeling, queuing analysis, and simulation. Emphasis on developing skills of quantitative analysis and

computerized solutions. Prerequisite: MGMT 6000 or 6194, and MATH and STAT proficiencies satisfied.

- 6103** Seminar in Management Decision-Making under Uncertainty (4)
Topics in management decision making under uncertainty including utility, risk, and decision trees. Emphasis on problem formulation and use of computer programs. Selected case studies from business and government. Prerequisites: MGMT 6195, 6550; or MGMT 6100 and consent of instructor.
- 6110** Business and Economic Forecasting (4)
Survey of major methods of short- and long-range forecasting for national economy, industry, or firm; emphasis on applications and evaluation. Prerequisites: ECON 3005, 6051; MGMT 6000 or 6194; MGMT 6060, 6550, equivalents, or consent of instructor.
- 6115** E-Commerce Enterprise Management (4)
Methods and applications of managing material, labor, and finance resources in service and manufacturing organizations utilizing computer-mediated network and World Wide Web. Emphasis on developing practical skills and using modern computer software in enterprise resource planning and e-commerce. Prerequisite: MGMT 6020.
- 6119** Seminar in Advanced Techniques of Quantitative Business Methods (4)
Seminar topics in mathematical programming and network models. Prerequisites: MGMT 6194, 6550; STAT 3401.
- 6121** Seminar in the Design and Use of Computer Simulation Models (4)
The design and use of computer simulation models, including topics in randomization, comparison of simulation languages, and the design and analysis of simulation experiments. Prerequisites: MGMT 6195, 6550; or MGMT 6100 and consent of instructor.
- 6125** Purchasing and Materials Management (4)
Modern techniques in sourcing and negotiation, contract management, supply chain management, and computer-based purchasing systems. Seminar format with case studies and projects.
- 6126** Seminar in Management Sciences/Operations Research (4)
The seminar will examine recent developments in operations research and management science. Topics will be chosen by the instructor and course participants. May be repeated for credit with approval of instructor. Prerequisites: MGMT 6195, 6550; or MGMT 6100 and consent of instructor.
- 6130** Enterprise Planning and Control (4)
Modern methods of planning and managing resources in an organization including aggregate planning, enterprise resource planning and control, short-term scheduling, and

maintenance. Emphasis on developing practical skills and utilizing modern computer applications in enterprise resource planning and control.

- 6140** Global Operations Management (4)
Management of product design and manufacturing operations in the global environment. The topics include global product design and process analysis, strategic capacity management, global outsourcing of design/manufacturing and global manufacturing chains. Prerequisite: MGMT 3620 or 6020.
- 6141** Service Operations Management (4)
Contemporary methods and applications of service operations management, including those in service processes, planning, and scheduling. Seminar format with case studies, problem solving, and use of computer software. Prerequisite: MGMT 3620 or 6020.
- 6145** Logistics Management (4)
The physical distribution of goods. Methods of logistics analysis, planning, and scheduling. Use of information technology in logistics and logistics information systems. Logistical support to e-business operations. Emphasis on problem solving and use of computer software. Prerequisite: MGMT 3600 or 6060.
- 6150** Global Supply Chain Management (4)
Topics in global supply chain management, including synthesis of global logistics, operations, purchasing, and distribution into a cohesive strategy. Use of information technology, global strategic supply management planning, relationships, and quality. Prerequisite: MGMT 3620 or 6020.
- 6194** Seminar in Deterministic Techniques of Quantitative Business Methods (4)
Seminar in the techniques of linear programming, network models, deterministic inventory and production models, and deterministic dynamic programming. Prerequisites: MATH 1820 or 2304, CS 1020, 1031 or CIS 3270; or consent of instructor.
- 6420** Competitive Strategy (4)
Integrative treatment of competitive strategy, using research findings and cases. Emphasis is on industry analysis, competitive rivalry, and competitive advantage. Objective is to develop an analytical understanding of the factors that contribute to sustainable competitive advantage.
- 6430** Corporate Strategic Management (4)
A critical examination of the theory of corporate strategic management and, through case studies, how the internal dynamics of an organization, as well as external forces, determine or constrain particular strategic choices.
- 6440** Global Strategic Management and Strategic Alliances (4)
Integrative treatment of global strategic management and

strategic alliances. Emphasis is on the firm in the global competitive context, decisions to enter markets, how to compete in global markets, and how to develop and implement a global strategy.

- 6460** Strategic Management for a Sustainable Society (4)
Examines the strategic management of environmental issues and the functional and strategic responses of firms to deal with environmental issues. The domain of strategy and industry is expanded to incorporate environmental issues.
- 6465** Legal Aspects of Corporate Management (4)
Examines the law governing business corporations, duties and ethical responsibilities of managers and directors in such situations as mergers, acquisitions, securities offerings, and litigation, negotiation techniques, arbitration, and mediation.
- 6470** Management of Technology and Innovation (4)
Examines the management of technology and innovation, the strategic problems of firms in high technology industries, with special attention to market structure, standards issues, and strategic responses by firms in highly turbulent environments.
- 6475** E-Strategy (4)
The role of strategy in the new competitive landscape that has been created by e-commerce. The strategic implications of new business models in both B2B and B2C markets will be explored. Case analyses and/or a project with an e-commerce initiative. Prerequisite: MGMT 6060.
- 6490** Seminar in Strategic Management (5)
A "Capstone Experience" course that integrates and bridges the student's knowledge from the functional areas of business to the practice of management. Prerequisites: all foundation coursework and CBE and university proficiencies, including the UWSR; completion of at least 32 units of the graduate program, and a current application for graduation on file.
- 6526** Quality Management (4)
Topics in modern quality management, including planning, organizing, and controlling quality, implementing, and improving quality. Seminar format with case studies and projects. Prerequisite: MGMT 3620 or 6020.
- 6550** Research Methods and Communications (4)
Methods of business research including the role and nature of research, sources of data, problem formulation, research design, data collection, and report writing. To be taken at beginning of M.B.A./Finance, Management, or Business Economics program. Prerequisites: all foundation coursework.
- 6560** High Performance Management (4)
Development of skills essential for managerial success.

Use of a combination of self-assessment instruments, readings, experiential exercises, cases, and application in real-life settings, to develop skills in areas such as team effectiveness, leadership, communication, goal-setting, empowering people, persuasion, and conflict resolution.

- 6570** Management of the Multinational Firm (4)
A study of the operation of multinational firms in terms of marketing, finance, accounting, production, and personnel policies using case studies and current readings.
Prerequisites: MGMT 6550 and consent of instructor.
- 6612** Seminar in Strategic Human Resources Management (4)
Seminar in strategic human resources management from the perspective of human resources professionals and general managers. Focus on how firms use human resource functions, such as recruitment and selection, training and development, performance management, compensation and benefits, to gain a competitive advantage. Prerequisites: MGMT 6550, 6060 or consent of instructor.
- 6613** Topics in Human Resources Management and/or Industrial Relations (4)
Current topics in human resources management and/or industrial relations selected by the instructor. May be repeated for credit with the approval of the department.
Prerequisite: MGMT 6060.
- 6614** Seminar in Labor and Employee Relations (4)
Seminar in labor and employee relations in both unionized and non-unionized workplaces. Topics include contract negotiations, grievance procedures, disciplinary processes, employee assistance programs, and employee complaint investigations. Prerequisite: MGMT 6060 or equivalent.
- 6615** Compensation Administration (4)
Current theory, law, and practice in wage, salary, and benefits administration. Not open to students having credit for MGMT 4615 or equivalent. Prerequisites: ECON 6051, MGMT 6060, and 6550.
- 6616** Human Resources Evaluation (4)
Procedures in selecting, placing and evaluating employees. Topics include job analysis, interviews, ability and psychological tests, innovative assessment methods, and performance management. Not open to those with credit for MGMT 3616. Prerequisites: STAT 2010 or equivalent and MGMT 6060 or equivalent.
- 6617** Conflict Resolution (4)
Focuses on different strategies and tactics in competitive and cooperative negotiations to resolve conflict. Topics include characteristics of effective and ineffective negotiators, distributive and integrative bargaining, cross-cultural styles and strategies, and alternative methods of dispute resolution. Prerequisite: MGMT 6060.

- 6618** Human Resources Training and Development (4)
Focus on the systems approach to human resources training and development. Topics include needs assessment, learning theories, instructional design, training methodologies, presentation techniques, and program evaluation. Students will design and present sample training and development programs. Not open to students having credit for MGMT 4618 or equivalent. Prerequisites: MGMT 6050 and 6060.
- 6622** Human Resources Information Systems (4)
Administration of human resources information systems. Topics include the uses and content of HRIS, effective organization and implementation of information systems, legal and ethical considerations of HRIS, effective reporting for management and employee users, and review of widely utilized systems. Prerequisites: CIS 6070 or equivalent, and MGMT 6060 or equivalent.
- 6630** Organization Theory (4)
The study of how organizations function and how they affect and are affected by the people and the society in which they operate. The focus of the course will be on the process by which managers select and manage aspects of structure and culture so that an organization can control those activities necessary to achieve its goals.
- 6635** Managerial Psychology (4)
A seminar on using psychological techniques to enhance managerial creativity and effectiveness. Participants are required to fully participate in all exercises and weekly assignments.
- 6675** Seminar in International Human Resources Management (4)
Seminar on how multinational firms use human resource functions, such as recruitment and selection, training and development, performance appraisal, compensation and benefits, to compete internationally. Focus on international and comparative labor-management relations and management of multicultural teams. Prerequisite: MGMT 6050, 6060 and 6550.
- 6680** Seminar in Labor-Management Relations Administration (4)
Research, analysis, reporting and discussion of selected topics in labor-management relations, such as contract negotiations, grievance procedures, and governmental involvement and regulations. Prerequisite: MGMT 6060 or equivalent and MGMT 6550.
- 6700** Global Business and Economic Forecasting; the Economics of Information Technology (4)
A comprehensive review of major state-of-the-art methods and techniques of international business forecasting. Computer simulations and strategic decision analysis for corporate planning. The evaluation and analysis of international economic and political long-and-short-range trends in information technology. The

economics of information superhighways. Prerequisite: graduate standing.

- 6710** Management of the Multinational Firm in a Changing World (4)
An in-depth global competitive analysis of the economic and legal environment of international business. Host country interests and corporate strategies for international growth in rapidly shifting structures. Single-nation cases versus multi-nation case. The role of parent-subsidizing relationships. Prerequisite: graduate standing.
- 6715** Doing Business in Regional Markets (4)
What firms need to learn and do in order to enter regional (e.g., Asian, European, South American) markets and succeed. Examines regulations, business conditions, resource endowments, and law-and-order issues to devise appropriate business strategies.
- 6730** Strategic Human Resource Management (4)
Current practices and law in strategic human resource management. Human resource management's role in strategy formulation and implementation and its contribution to competitiveness. International human resource management employment laws emphasizing functional areas such as planning, recruiting, selection, training, evaluation, and salary and benefits administration. Prerequisite: graduate standing.
- 6735** Asian Institutions and Organization Behavior (4)
The major economic, financial, legal, and regulatory institutions of Asian economies and their relevance for an integrated approach to management. In-depth study of Asian organizational issues including Asian management models, management of human resources, and cultural issues.
- 6740** Regional Institutions and Organization Behavior (4)
Major economic, financial, legal and regulatory institutions of the region (e.g., Europe, South America) and their relevance for an integrated management approach. In-depth study of regional organizational issues including organization behavior, human resources management, and cultural issues.
- 6745** Executive Leadership, Creativity and Team Building (2-4)
Managerial exercises in executive leadership, creativity, empowering people, communication, and team building. Development of skills essential for managerial success. Activities include "hands-on" team-based games, managerial leadership exercises, self-assessment instruments, experiential exercises, personality inventories, and high-performance team building.
- 6747** Executive Development Seminar (1-4)
Team-based capstone terminal exercise. Activities include preparation of a detailed report and findings, preparation

of formal presentation, formal defense of research findings, and recommendations before university faculty or real-world client.

- 6750** Research Methods (4)
Research methods and analytical tools for business managers. Description of the research process, including research design, sources of data, data collection procedure and communication of results. Special attention is given to statistical tools for effective managerial decision-making. Prerequisite: graduate standing.
- 6760** Global Strategic Supply Chain Management (4)
Overview of the major strategic concepts in managing a complete supply chain and their relative interactions. Theory and practice of the important models and relevant technology in supply chain management. Prerequisite: graduate standing.
- 6898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities within the quarter enrolled. May be repeated for up to 8 units. No units may be counted toward any CBE graduate degree. Prerequisites: at least 3.0 GPA, departmental approval of activity. CR/NC grading only.
- 6900** Independent Study (1-4)
- 6909** Departmental Thesis (2)
Development and writing of a research paper for submission to the department which specifies its format. Supervision by a faculty committee at least one of whom must be a Cal State Hayward faculty member. Oral defense normally required. Prerequisite: graduate standing.
- 6910** University Thesis (1-5)
Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense normally required. Prerequisite: "Classified Graduate" standing and advisor approval. Maximum of 5 units per student. (See also, "University Thesis Writing Guide," available in WA 859.)
- 6999** Issues in Management Sciences (4)
Readings, discussion, and research on contemporary and/or significant issues in management sciences. May be repeated for credit when content varies.

Marketing

The course prefix for the following courses is MKTG.

- 6005** Managing Marketing: Theory and Practice (4)
Theories, principles, concepts, practices, and tools of marketing analysis. Emphasis on theoretical concepts and

their practical applications through marketing decision-making in a simulated business environment and/or through case analysis. Prerequisite: post-baccalaureate status.

- 6401** Marketing Research (4)
Knowledge and training in process and techniques of acquiring, analyzing, interpreting and reporting information for decision-making. Topics include data collection instruments, sampling plan, statistical analysis and reporting of results. Hands-on learning is emphasized through assignments and/or project. Prerequisites: MKTG 3401 or 6005 and successful completion of STAT proficiency requirement.
- 6403** Managerial Communication (4)
Students will learn and apply the following advanced business communication concepts: performance appraisal, persuasion and motivation, negotiation and bargaining, leadership, conflict management, and written and oral communications. Lectures, case discussions, and a term project will be used to integrate concepts.
- 6410** Buyer Behavior (4)
Theories, concepts, methods, and empirical findings regarding buyers' decision-making processes and choice behavior from buyers, marketers, and public policy makers' perspectives. Lectures, discussion of research articles, case analysis, and research project emphasized. Prerequisite: MKTG 3401 or MKTG 6005; recommended: MKTG 6401.
- 6411** Product Management (4)
Knowledge and skills in the process of designing and marketing of new and existing products. Topics include product design, product positioning, market definition, segmentation, test marketing, and demand forecasting. Lectures, cases, and hands-on experience emphasized. Prerequisites: MKTG 3401 or 6005; MKTG 6401.
- 6412** Pricing Management (4)
Pricing strategies, tactics, methods, laws, treatment of costs, effect of sales promotion, consideration of competition and customers for pricing. Lectures, discussion of relevant articles, and analyses of cases and pricing problems emphasized. Prerequisite: MKTG 3401 or MKTG 6005.
- 6413** Integrated Marketing Communications (4)
Students learn marketing communications and promotion and apply knowledge and skills to develop an integrated marketing communication plan. Students learn decision techniques for positioning a brand using appropriate mix of advertising, sales promotion, sales force, and public relations. Prerequisite: MKTG 3401 or MKTG 6005.
- 6414** Distribution Management (4)
Students learn about marketing channels and design and manage appropriate channels and logistics for a variety of products. Lecture, project, case studies, and/or a

simulation may be used to assist students in understanding distribution models. Prerequisites: MKTG 3401 or 6005; MKTG 6401.

- 6420** Seminar in Marketing Strategy (4)
Development of marketing strategy and plan based on the analysis of the environment, organization, competition, and customers. Topics include product portfolio analysis, demand estimates, market boundary, segmentation, competitive analysis, and planning. Emphasis on development of skills using analytical tools, cases, and/or simulation. Prerequisites: MKTG 3401 or 6005; MKTG 6401 or an equivalent graduate-level research methodology course.
- 6450** Seminar in Selected Marketing Topics (4)
Concepts, tools and techniques associated with a special topic in marketing such as consumer behavior, or application of marketing to a specific situation such as business-to-business marketing, international marketing, marketing through the Internet. Prerequisite: MKTG 3401 or 6005.
- 6460** Seminar in Negotiation (4)
Students learn to become successful negotiators across marketing and professional contexts. Topics include bargaining models and strategies, communication skills, leverage, cultural influences, and intervention. Lecture, films, simulations, and case studies assist students in demonstrating negotiation knowledge and skill. Prerequisite: MKTG 3401 or 6005.
- 6470** International Marketing (4)
Using cases and a project, students learn how to respond to differences in the cultural, political, legal and economic environments in other countries in designing effective market-entry, segmentation, positioning, and marketing-mix strategies. Ethical issues confronting global marketers are also discussed. Prerequisite: MKTG 3401 or 6005.
- 6570** Business to Business Marketing (4)
Training in the marketing of products and services to organizations as opposed to final consumers. Integration of marketing concepts, models and analytical tools necessary for B2B marketing, both in Internet and non-Internet environments. Prerequisite: MKTG 3401.
- 6585** E-Commerce Marketing (4)
The process and marketing issues of e-commerce. The current state of marketing in e-commerce, understanding of e-customer characteristics, key characteristics of electronic marketplace, various types of e-commerce, the impact of emerging m-commerce, marketing implications of enabling technologies and necessary infrastructure, and e-marketing strategies and tactics. Cases and/or projects. Prerequisite: MKTG 3401 or 6005, or consent of instructor.
- 6705** Strategic Marketing Management (4)
Core marketing issues in a changing global environment

including e-commerce. Concepts and tools to analyze markets, customers, competitors, and complementers. Cases and development of a strategic marketing plan comprising the marketing mix of product, price, place, promotion, and service. Prerequisite: graduate standing.

- 6710** Executive Development Seminar (1)
One-week course on the Cal State Hayward campus including presentation of final reports on marketing simulation, concluding seminar, and corporate visitations. Prerequisite: graduate standing.
- 6720** Management of Marketing Functions (4)
Management of marketing mix. Training managers/consultants in making decisions regarding product, pricing, promotion and distribution of existing and new brands. Emphasis on developing operations skills in solving marketing problems using analytical techniques and cases. Prerequisite: MKTG 6005 or consent of instructor.
- 6725** Marketing Management (4)
Conceptual knowledge of marketing and analytical skills applicable to marketing. Focus on understanding of buyer behavior and marketing research process. Application of knowledge and skills in making marketing mix decisions in both online and offline environments.
- 6730** Pricing and Product Management (4)
Designing and developing products and making pricing decisions. Topics include product design and development, brand equity, product line, pricing methods, and pricing strategies. Emphasis on developing concepts and skills to make product and pricing decisions using analytical tools and cases. Prerequisite: MKTG 6005.
- 6740** Promotion and Distribution (4)
Management of integrated promotion system and distribution channels. Topics include advertising, sales promotion, sales force, public relations, store location, wholesaling, and retailing. Emphasis on developing concepts and skills to make promotion and distribution decisions using analytical tools and cases. Prerequisite: MKTG 6005.
- 6898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities within the quarter enrolled. May be repeated for up to 8 units. No units may be counted toward any CBE graduate degree. Prerequisites: at least 3.0 GPA, departmental approval of activity. CR/NC grading only.
- 6900** Independent Study (1-4)
- 6910** University Thesis (1-5)
Development and writing of a formal research paper for submission to the University in the specified bound format. Supervision by a departmental committee, at least

one of whom must be a Cal State Hayward faculty member. Oral defense normally required. Prerequisites: "Classified Graduate" standing and advisor approval. Maximum of 5 units per student. (See also "University Thesis Writing Guide," available in WA 859.)

- 6999** Issues in Marketing (4)
Readings, discussion, and research on contemporary and/or significant issues in marketing. May be repeated for credit when content varies.

Telecommunications

The course prefix for the following courses is TC.

- 6101** Analysis and Design of Telecommunications Systems (4)
Four-step telecommunications decision framework. Analytical and knowledge-based models for network management. Architectures of Internet, ISDN, ATM, SONET and advanced satellite communications. Telecommunications business problem solving. Prerequisites: CS 3590 or TC 3250.
- 6205** Routing and Data Networking Models in Telecommunications (4)
Communication models for physical and link layers, error detection and framing. Packet switching and flow control in TCP/IP. Asynchronous Transfer Mode algorithms. Splitting algorithms, carrier sensing, reservations. Routing in data networks. Network algorithms and shortest path routing. Prerequisites: CS 3590 or TC 3250.
- 6207** Telecommunications Management Systems (4)
Planning, configuration and performance management, fault maintenance approaches to telecommunications systems. TMN and SNMP standards. Knowledge-based management of ATM/SONET and wireless communications. Management concepts of satellite communications. Existing management systems. Prerequisites: CS 3590 or TC 3250.
- 6210** Collaborative Multimedia Networking and Telepresence (4)
Fundamentals of multimedia communications in business. Concepts of virtual organization. Audio-video and desktop conferencing. Cooperative work and groupwork. Multipoint teleconferencing. Mbone, ISDN, and ATM IP multicasting solutions. Prerequisites: CS 3590 or TC 3250.
- 6284** Management of Satellite/Wireless Communications (4)
Hands-on practice with PCS technology, control centers for wireless communications. Implementation of COMNET system for visual modeling. Artificial intelligence and expert system technology applied to wireless/satellite communication management. Internet, Web, teleconferencing technologies in management of wireless communications. Prerequisite: TC 6207.

- 6458** Optical Fiber Technologies (4)
Theory of light propagation in optical fibers, bandwidth and attenuation of fiber optic systems, principles of semiconductor lasers and photodiodes, noise in optical receivers, modulation techniques, coherent optical communication systems. Prerequisites: CS 3590 or TC 3250. Cross-listed with CS 6458.
- 6815** Artificial Intelligence in Telecommunications (4)
Overview of TMN requirements to knowledge based models in telecommunications. Knowledge representation models. Distributed AI. Intelligent agents. Implications to network management: fault maintenance, configuration planning, intelligent routing, and filtering traffic patterns. Hands-on practice with ART* Enterprise knowledge-based systems development tool. Prerequisites: CS 6585, TC 6101. Cross-listed with CS 6815.
- 6844** Digital Image Processing (4)
(See CS 6844 for course description.)
- 6899** Project (5)
Development of an original telecommunications project which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their formats. Supervision by a department committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense required. Prerequisite: advancement to candidacy. Cross-listed with CS 6899.
- 6909** Departmental Thesis (1-4)
Development and writing of a research paper for submission to the department, which specifies its format. Supervision by a departmental committee, at least one of which must be a CSU Hayward faculty member. May be repeated for a maximum of 4 units. Prerequisites: advancement to candidacy and approval of thesis proposal by advisor and departmental committee.
- 6999** Issues in Telecommunications (4)
Readings, discussion, and research on contemporary and/or significant issues in telecommunications. May be repeated for credit when content varies.

Footnotes

1 If ACCT 6224 is selected, then ACCT 6227 may be chosen as a taxation elective, and vice versa.

2 ACCT 6226 may be repeated for credit with consent of the department.



HOME



HELP



HOME



HELP

Department Information

Program Description

Mathematics

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Professor Emeritus: Charles M. Marut

Professors: James S. Daley, Kathleen Hann, Edward L. Keller (Associate Chair), Gary E. Lippman, Massoud Malek, Russell L. Merris, Christopher L. Morgan, William R. Nico (Computer Science Coordinator), Edna E. Reiter (Chair), Istvan Simon, Stuart Smith, William Thibault, Bruce E. Trumbo, Donald L. Wolitzer, Ytha Y. Yu

Associate Professors: Jagdish Bansiya, Edward A. Billard, Kevin A. Brown, Kevin E. Callahan, Julie S. Glass, Dan Jurca, Thomas W. Roby, Farzan Roohparvar, Assim Sagahyroon

Assistant Professors: Leann Christianson, Roger W. Doering, Levent Ertaul, Madhavi Gandhi, Lynne L. Grewe, Hilary J. Holz, C. Matthew Johnson, Chung-Hsing OuYang, David Yang

Lecturers: Paula Albert, Jack A. Carter, Francis Conlan, Michael A. Contino, Dorothy E. Fujimura, Phil Gonsalves, Ching-Cheng Lee, David L. Pugno, Denise Sargent-Natour, Jean Simutis

Graduate Coordinator: Donald L. Wolitzer

Please consult the 2006-2007 online catalog for any changes that may occur.

The Mathematics and Computer Science Department offers graduate study leading to the degree of Master of Science in Mathematics. The goal of the faculty is to provide excellent instruction in advanced mathematics and to maintain a supportive environment for graduate students. Students who complete the program should be equipped for careers in community college teaching or positions in industry that require knowledge of mathematics beyond the undergraduate level. The M.S. degree in

Mathematics can also serve as preparation for advanced study toward a Ph.D. degree in mathematics or a related field.

Our program features small classes that allow for close contact between students and faculty. Most graduate classes are offered in the late afternoon or early evening, making it possible for working students to attend. Courses toward the M.S. degree may also be taken during the summer quarter. Students may begin their studies in any one of the four quarters.

Students interested in the M.S. degree program in Mathematics should speak with the Mathematics Graduate Coordinator.

Career Opportunities

A number of former Cal State Hayward students currently hold positions as community college mathematics teachers. Others have found the M.S. degree in mathematics to be an ideal preparation for further studies at doctorate-granting institutions and have continued by working towards a Ph.D. degree in mathematics or a related field such as operations research, physics, or economics. A number of these alumni are now professors at four-year institutions. Still others are in mathematics-related careers in industry.

Faculty

The faculty of the Mathematics and Computer Science Department hold doctorates in a wide variety of areas of specialization and offer courses encompassing a broad range of pure and applied mathematics, including standard graduate mathematics courses as well as courses in new areas. Areas of emphasis include numerical analysis, pure and applied algebra, differential equations, real and complex analysis, topology, geometry, mathematical optimization, computer simulation, probability, statistics, and selected topics in applied mathematics.

Special Features

Each quarter, a limited number of teaching positions is available to qualified graduate students. These positions, which generally involve teaching one lower division mathematics course per quarter, provide valuable experience, especially for those who intend to become community college teachers. The department also employs qualified students as paper graders.

Mathematics students have access to modern computer equipment, including various mathematical software packages.

The CSUH Mathematics Club is open to all interested students. This club features lectures by students and faculty and offers a variety of social activities.

Scholarships

Each year the department awards a number of scholarships covering a large portion of the fees for the subsequent year. Scholarship applications may be obtained from the department office during the winter quarter.

coursework drawn from fundamental branches of mathematics: algebra, topology, and real and complex analysis. Option II, Mathematics Teaching, is intended for those who hold secondary teaching credentials and who intend to pursue a career in secondary education. Option III, Applied Mathematics, is designed to expose students to various aspects of applied mathematics, while allowing some coursework in "pure" mathematics as well. Students who intend to become community college teachers or go on to further graduate study should select Option I or Option III.

Option I

Admission

To enter the program with "Classified Graduate" status, a student must have completed at least 36 quarter units of acceptable upper division mathematics with a grade point average of "B" or higher. Included among these units must be courses in:

- Analysis
- Abstract algebra
- Linear algebra
- Differential equations

A student may be admitted to the program with "Conditionally Classified Graduate" status while making up course or grade point deficiencies. Units taken to meet any course deficiencies may not be applied toward the master's degree, and no more than 20 quarter units taken while in "Conditionally Classified Graduate" status may be applied to the degree.

A "Conditionally Classified Graduate" student who has no course deficiencies, a "B" or higher average in at least 12 quarter units of postbaccalaureate study, and has satisfied the University Writing Skills requirement, should petition the graduate coordinator for admission to the master's degree program with "Classified Graduate" status.

Advancement to Candidacy

A student with "Classified Graduate" status may apply for Advancement to Candidacy after completing at least 16 quarter units toward the master's degree with a "B" or higher average, including at least two 6000-level mathematics courses with a "B" or higher average. Before being Advanced to Candidacy, a student's complete course of graduate study must be approved by the Mathematics Graduate Studies Committee.

Degree Requirements

The following departmental requirements must be satisfied:

- A. The following four courses (or their equivalents) must be completed, either as an undergraduate or as a graduate student:

MATH 4121 Advanced Algebra (4)
MATH 4340 Introduction to Complex Variables (4)
MATH 4350 Theory of Functions of a Real Variable (4)
MATH 4360 Introduction to Topology (4)

- B. The 45 quarter units applied to the degree must include:

1. At least 24 quarter units of 6000-level courses, of which at least 20 quarter units are mathematics courses. Credit will be given for the seven M.A.T.H. courses (MATH 6015-6065, and 6899), only with the permission of the Mathematics Graduate Committee.
2. At least two of the following four courses:
 - MATH 6121 Topics in Advanced Algebra I (4)
 - MATH 6201 Topology (4)
 - MATH 6340 Complex Analysis (4)
 - MATH 6350 Real Analysis (4)

C. A comprehensive examination must be passed. Details are available in the department office.

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate and Post-baccalaureate Studies chapter at the beginning of the graduate section of this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills requirement.

Option II (Mathematics Teaching)

Admission

The M.A.T.H. (Mathematics and Teaching at Hayward) option is available only to holders of teaching credentials, unless special permission is obtained. In order to be admitted to the master's degree program with "Classified Graduate" status, a student must have completed 24 or more quarter units of acceptable upper division mathematics with an average of "B" or higher. A student may be admitted to the program with "Conditionally Classified Graduate" status while making up course or grade point deficiencies. Units taken to meet any course deficiencies may not be applied toward the master's degree, and no more than 20 quarter units taken while in "Conditionally Classified Graduate" status may be applied to the degree. A "Conditionally Classified Graduate" student who has no course deficiencies, a "B" or higher average in at least 12 quarter units of post-baccalaureate study, and has satisfied the University Writing Skills requirement, should petition the graduate coordinator for admission to the master's degree program with "Classified Graduate" status.

Advancement to Candidacy

A student with "Classified Graduate" status may apply for Advancement to Candidacy after completing at least 16 quarter units of work toward the master's degree with a "B" or higher average.

Before being Advanced to Candidacy, a student's complete course of study must be approved by the Mathematics Graduate Studies Committee.

Degree Requirements

The following departmental requirements for the M.S. degree are in addition to the general University requirements:

A. Six M.A.T.H core courses (24 units)

MATH 6015 Algebra for Teachers (4)
MATH 6025 Geometry for Teachers (4)
MATH 6035 Analysis for Teachers (4)
MATH 6045 Mathematics in the Sciences (4)
MATH 6055 Discrete Mathematics (4)
MATH 6065 Connections in Mathematics (4)

B. Two Teacher Education courses selected from the following (8 units):

T ED 6010 Seminar in Teaching and Learning Mathematics (4)
T ED 6021 Seminar in Diagnosis and Treatment of Learning Difficulties in Mathematics (4)
T ED 6030 Seminar on Problem Solving and Critical Thinking in Mathematics (4)
T ED 6040 Advanced Curriculum and Instruction in Mathematics (4)

C. An upper division or graduate-level course offered by the Statistics Department and approved by the Math Graduate Coordinator (4 units)

D. One or two upper division or graduate electives approved by the Math Graduate Coordinator (4-8 units)

E. MATH 6899 Project (1-5 units)

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate and Post-baccalaureate Studies chapter at the beginning of the graduate section of this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills Requirement.

Option III (Applied Mathematics)

Admission

To enter the program with "Classified Graduate" status, a student must have completed a course in computer science and at least 36 quarter units of acceptable upper division mathematics, statistics, or computer science courses with a grade point average of "B" or higher. Included among these units must be courses in:

- Analysis
- Abstract algebra
- Linear algebra
- Differential equations

A student may enter the program with "Conditionally Classified Graduate" status while making up course or grade point deficiencies. Units taken to meet course deficiencies may not be applied toward the master's degree, and no more than 20 quarter units taken while in "Conditionally Classified Graduate" status may

be applied to the degree.

A "Conditionally Classified Graduate" student who has no course deficiencies, a "B" or higher average in at least 12 quarter units of post baccalaureate study, and has satisfied the University Writing Skills Requirement, should petition the department graduate coordinator for a change to "Classified Graduate" status.

Advancement to Candidacy

A student with "Classified Graduate" status may apply for Advancement to Candidacy after completing at least 16 quarter units towards the master's degree with a "B" or higher average, including at least two 6000-level mathematics courses with a "B" or higher average.

Before being Advanced to Candidacy, a student's complete course of study must be approved by the Mathematics Graduate Studies Committee. In particular, approval must be obtained for any course(s) taken outside the Mathematics and Computer Science Department.

Degree Requirements

The following departmental requirements must be satisfied:

- A. The following four courses (or their equivalents) must be completed, either as an undergraduate or as a graduate student:

MATH 3301 Analysis II (4)

MATH 3401 Introduction to Probability Theory I (4)

MATH 3750 Numerical Analysis I (4)

MATH 3841 Linear Programming (4)

- B. The 45 quarter units applied to the degree must include:

1. At least 22 1/2 quarter units of 6000 level courses of which at least 18 are mathematics courses. Credit will be given for the seven M.A.T.H. courses (MATH 6015-6065, and 6899), only with the permission of the Mathematics Graduate Committee.

2. At least two of the following five courses:

MATH 6100 Applied Algebra (4)

MATH 6331 Topics in Differential Equations (4)

MATH 6401 Advanced Probability I (4)

MATH 6750 Topics in Advanced Numerical Analysis (4)

MATH 6870 Computer Simulation (4)

- C. A comprehensive examination must be passed. Details are available in the department office.

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate and Post-baccalaureate Studies chapter at the beginning of the graduate section of this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills requirement.

Graduate Courses

Upper Division Mathematics, Computer Science, and Statistics Courses Acceptable for M.S. in Mathematics

Upper division and graduate computer science courses may be used with the approval of the Mathematics Graduate Studies Committee.

Other upper division mathematics courses may be used with the approval of the Mathematics Graduate Studies Committee. MATH 4012, 4013, 4014 will not be approved.

STAT 3401, 3402 Introduction to Probability Theory I, II (4 each), 3502, 3503 Statistical Inference I, II (4 each), 4401 Introduction to Stochastic Processes (4)

The course prefix for the following courses is MATH.

- 6005** Teaching Mathematics at the University Level (1)
Theory, methodology, and practical experience in the teaching of mathematics at the university level. Includes discussion of lecturing techniques, analysis of tests and supporting material, preparation and grading of examinations, and related topics. Required of departmental teaching associates. May be repeated for credit, but only two units can be used toward the M.S. degree. Prerequisites: graduate standing and permission of department.
- 6100** Applied Algebra (4)
A survey course covering significant areas of applied algebra. Topics might include applied matrix theory, game theory, convexity and inequalities, and/or algebraic coding theory. Prerequisite: MATH 3100 or equivalent. May be repeated once for credit with consent of Mathematics Graduate Studies Committee.
- 6121** Topics in Advanced Algebra I (4)
Continuation of MATH 4121. Topics include ideals, commutative rings, modules; field extensions and Galois theory. Prerequisite: MATH 4121.
- 6201** Topology (4)
Continuation of MATH 4360. Topics may include countability and separation axioms, Tychonoff theorem, metrization theorems, homotopy theory. Prerequisite: MATH 4360.
- 6235** Introduction to Knot Theory (4)
Introduction to the theory of knots and links. Reidemeister moves, knot invariants, including 3-colorings, linking number, Alexander polynomial, Kauffman bracket and Jones polynomial. Applications in biology and/or chemistry will be discussed, time permitting. Additional work required for graduate level credit. Prerequisite: MATH 3121.

- 6250** Topics in Differential Geometry and Topology (4)
Topics in differential geometry and topology such as manifolds, bundles, differential forms, curvature, theorems of Sard-Smale, Poincaré-Hopf, Gauss-Bonnet, de Rham, and Hodge. Prerequisites: MATH 3100, 3301, or consent of instructor.
- 6251** Symplectic Geometry (4)
Introduction to Symplectic geometry. Symplectic linear algebra, groups, Lie algebras, and manifolds. Darboux-Weinstein theorem, relation to optics and Hamiltonian dynamics, moment maps, and geometric quantization. Prerequisites: MATH 3100 and 3300, or consent of instructor.
- 6260** Computational Complexity (4)
(See CS 6260 for course description.)
- 6331** Topics in Differential Equations (4)
Topics selected from the theory of ordinary and partial differential equations. May be repeated for credit with consent of Mathematics Graduate Studies Committee. Prerequisites: MATH 3100, 3331, 3301 or instructor's permission.
- 6340** Complex Analysis (4)
Cauchy integral formula, Mittag-Leffler's theorem, Weierstrass' factorization theorem, normal families, Riemann mapping theorem, and selected topics. Prerequisite: MATH 4340.
- 6341** Elliptic Curves (4)
Introduction to the geometry and arithmetic of elliptic curves. Elliptic integrals and functions, theta functions, automorphic functions, and modular forms. Algebraic curves over finite fields. Elliptic curve factorization algorithms and cryptosystems. Prerequisites: MATH 4340 or consent of the instructor.
- 6350** Real Analysis (4)
Theory of Lebesgue measure and integration on the real line. Selected topics and applications. Prerequisite: MATH 4350.
- 6401,** Advanced Probability I, II (4, 4)
6402 (See STAT 6401, 6402 for course description.)
- 6501,** Mathematical Statistics I, II (4, 4)
6502 (See STAT 6501, 6502 for course description.)
- 6510** Analysis of Variance (4)
(See STAT 6510 for course description.)
- 6600** Advanced Number Theory (4)
Topics in number theory such as algebraic number fields, continued fractions, geometry of numbers, theory of partitions, distribution of primes, factoring algorithms and quadratic forms. May be repeated once for credit with

consent of the Mathematics/Computer Science department chair. Prerequisites: MATH 3121 and 3600, or consent of instructor.

- 6750** Topics in Advanced Numerical Analysis (4)
Topics selected from approximation theory; spline theory; numerical linear algebra; the algebraic eigenvalue problem; numerical solutions to non-linear systems of equations, partial differential equations, and boundary value problems. May be repeated for credit with consent of Mathematics Graduate Studies Committee. Cross-listed with CS 6750. Prerequisites: MATH 4750 and 3301 or instructor's permission.
- 6841** Nonlinear Optimization (4)
Optimality conditions and solution procedures for unconstrained and constrained optimization problems. Prerequisite: MATH 3841.
- 6865** Mathematical Modeling (4)
Discrete and continuous mathematical models. General introduction to the use of difference and differential equations, probability and statistics, and matrices for solving realistic problems. Computer simulation. Emphasis on effective written reports. Additional graduate applications module. Prerequisites: MATH 2101 and MATH 2304. Not open to students with credit for MATH 3865. Cross-listed with STAT 6865.
- 6870** Computer Simulation (4)
(See CS 6870 for course description.)
- 6900** Independent Study (1-4)
- 6910** University Thesis (1-6)
Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense normally required. Prerequisite: graduate standing. Maximum of 6 units per student. (See also, "University Thesis Writing Guide" available in WA 859.)

Mathematics Education (M.A.T.H. Option Courses)

- 6015** Algebra for Teachers (4)
Polynomials, groups, fields, and rings from an advanced standpoint as they relate to the high school algebra curriculum. Discussion of strategies to help secondary students develop their algebraic thinking skills. Prerequisite: permission of instructor.
- 6025** Geometry for Teachers (4)
Rigorous development of a non-Euclidean geometry, such as spherical, projective, or hyperbolic geometry. Models and technology used where appropriate. Discussion of implementation strategies for teaching geometry and

proof techniques for high school students. Prerequisite: permission of instructor.

- 6035** Analysis for Teachers (4)
A rigorous development of calculus. The real line, functions, limits, continuity, differential and integral calculus. Technology used to develop an intuitive understanding of calculus which can be implemented in the high school classroom. Prerequisite: permission of instructor.
- 6045** Mathematics in the Sciences (4)
Mathematics as found throughout the sciences. The mathematics used to model phenomena in biology, chemistry and/or physics. Students discover some of this mathematics through scientific experiments. Prerequisite: permission of instructor.
- 6055** Discrete Mathematics (4)
Topics in discrete mathematics relating to the high school curriculum such as combinatorics, number theory, and graph theory. Prerequisite: permission of instructor.
- 6065** Connections in Mathematics (4)
Topics which illustrate connections between different fields and applications of mathematics such as neural networks, tomography, coding theory, symmetry groups, optimization theory, and applications found in differential equations or complex analysis. Prerequisite: permission of instructor.
- 6899** Project (1-5)
Development of an original product which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their formats. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense may be required. Prerequisite: graduate status. Maximum of 5 units per student.
- 6900** Independent Study (1-4)



HOME



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Department Information

M.S. in Chemistry

Chemistry

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Department of Chemistry and Biochemistry
College of Science
Office: North Science 431
Phone: (510) 885-3452

Professors Emeriti: Kevin D. Cadogan, Richard S. Monson,
Charles T. Perrino

Professors: Michael K. Leung, Richard T. Luibrand (Chair), Larry
G. Scheve

Associate Professors: Joy C. Andrews, Ann A. McPartland

Assistant Professors: Michael Groziak, Chul-Hyun Kim, Anne T.
Kotchevar

Lecturers: Ronald J. Hicks, Mark A. Karplus

Graduate Coordinator: Larry G. Scheve

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Program Description

The Master of Science degree in Chemistry mainly serves students in four categories: those seeking opportunities in the chemical industry requiring training beyond the baccalaureate level, fully employed chemists who wish to enhance their career potential, future teachers of high school or community college chemistry, and graduates contemplating subsequent study at the Ph.D. level.

Because the program is relatively small at the present time, all qualified applicants are currently accepted. Applicants may select either a general option permitting emphasis in any area of chemistry, or an option in biochemistry. At present, enrollment is about the same in both options. To make the program more accessible to employed students, most required courses are offered in the evening.

Program Options

Within the Chemistry option, candidates may pursue either Plan A, which requires a university thesis, or Plan B, which entails passing a comprehensive examination over all coursework applied to the degree. The Biochemistry option requires a university thesis; candidates may also elect to concentrate in biochemistry under Plan B of the Chemistry option.

Faculty

The Department of Chemistry and Biochemistry has seven full-time faculty members; each has a Ph.D. degree. Most came to Cal State Hayward with postdoctoral experience either in academia or industry, or both. Added breadth of experience is provided by occasional visiting lecturers in graduate lecture courses.

Facilities

The laboratories are modern and well-equipped. Major instrumentation includes a nuclear magnetic resonance spectrometer (NMR), capillary gas chromatographs with both flame-ionization and mass-spectral detection (GC/MS), a fourier-transform infrared spectrophotometer (FT-IR), an atomic absorption spectrophotometer (AA) with graphite furnace and cold vapor attachments, high performance liquid chromatograph (HPLC), ion chromatograph (IC), x-ray fluorescence spectrometer, and a diode-array visible-ultraviolet spectrophotometer that can be adapted for stopped-flow kinetics studies. A molecular modeling facility is available for instruction and research. Electron microscopy, including scanning electron microscopy, is available through the Department of Biological Sciences.

The department is served by an office staff of a department secretary and a part-time clerical assistant, and by a staff of four full-time technicians and one part-time person.

Additional Information

The masters' degree program is under the nominal direction of the graduate coordinator, with the participation of the department's Graduate Studies Committee. All inquiries should be directed to the graduate coordinator or to the department chair.

Admission Requirements

The basic requirements for entry into the program are possession of a baccalaureate degree major equivalent to that at Cal State Hayward and an upper division GPA of at least 2.6 in upper division chemistry and biochemistry courses. Equivalent degree programs for the three tracks (Plan A, Plan B, and the Biochemistry option) are the B.S. degree major in Chemistry, B.A. degree major in Chemistry, and B.A. degree option in Biochemistry, respectively. Applicants not meeting the GPA requirement may still be accepted subject to receipt of acceptable letters of recommendation. The G.R.E. is not required. Applicants not having an undergraduate major in chemistry may be accepted into the program depending on the amount of undergraduate coursework required to remove deficiencies.

Qualified applicants are accepted in "Conditionally Classified Graduate" status. To become fully "Classified Graduate" students they and must pass placement tests in organic, physical, and one of analytical, inorganic, or biochemistry; remove any deficiencies in the undergraduate major, complete 12 units applicable to the

degree, and pass the university Writing Skills Test (WST).

Plan A, Thesis

A university thesis is required both in Plan A and in the Biochemistry option. A thesis topic is decided by mutual agreement between a graduate student and an appropriate faculty member.

Off-Campus Research

Candidates whose employers permit the use of appropriate facilities and approve the release of the applicable findings may arrange to conduct research on their employers' premises in support of their M.S. theses, subject to prior approval by the department.

Plan B, Comprehensive Examination

Plan B entails the completion of additional specified coursework in lieu of a thesis and completion of a significant literature search and report on a selected topic. Applicants must pass a comprehensive examination which consists of an oral portion covering the report of the literature search and a written portion covering all other coursework applied to the degree.

Required Coursework

Units are specifically required in courses covering thermodynamics, the chemical bond, and advanced topics in other areas. Plan B additionally requires courses in instrumental analysis and the chemical literature. The total 45 units are rounded out by approved upper division courses in chemistry, biochemistry, biology, and occasionally other subjects in science or mathematics.

Advancement to Candidacy

In order to progress in the program, a student must pass or obtain a waiver for the placement exams. A waiver is usually obtained by enrolling in an undergraduate course covering appropriate material. The exams must be completed within one year of entry into the Department of Chemistry and Biochemistry. Additionally, students must pass the Writing Skills Test and qualify for "Classified Graduate" status within two years of admission.

Advancement to Candidacy requires that the student complete 12 units in 6000-level courses applicable towards the degree with an average grade of 3.0 or better and select a research advisor for the thesis or a supervisor for the Plan B literature search and comprehensive examination.

Chemistry Option Requirements

(Plan A or Plan B must be selected)

Plan A, Thesis

In order to be eligible for the degree, the student must satisfy the following departmental requirements:

1. Complete a total of 22 units in required courses in Chemistry comprising the following:

CHEM 4521 Elements of Chemical Thermodynamics (4)

CHEM 6521 The Chemical Bond (3)

CHEM 6820 Seminar (1,1,1)
CHEM 6830 Research (6)
CHEM 6850 Methods of Graduate Research (3)
CHEM 6910 University Thesis (3)

2. Complete a minimum of nine units from the Advanced Topics courses 6310 and 6510
3. Complete additional units to total the minimum 45 units required--to be selected, with the approval of the student's advisor, from additional graduate courses in chemistry. These units must be selected from the list of upper division courses in chemistry acceptable for the master's degree and must not include more than four units of 6900 and three units of 6830. A maximum of six units from applicable courses in related fields may be included (e.g., in physics, geological sciences, or mathematics), and additional units must be taken to replace any courses in (1) or (2) above that were taken as an undergraduate

Upper Division Chemistry Courses Acceptable for the Master's Degree (A maximum of 15 units may be chosen from this category; all choices must be approved by the candidate's advisor.)

CHEM 4162 Advanced Inorganic Chemistry, 4311 Advanced Organic Chemistry, 4411, 4412, 4413 General Biochemistry, 4430 General Biochemistry Laboratory, 4700 Survey of Chemical Literature

4. Submit to the department an acceptable master's degree thesis (University Thesis, CHEM 6910)

Plan B, Comprehensive Examination

In order to be eligible for the degree, the student must satisfy the following departmental requirements:

1. Complete a total of 21 units in the following required Chemistry courses:

CHEM 4240 Instrumental Methods of Analysis (4)
CHEM 4521 Elements of Chemical Thermodynamics (4)
CHEM 4700 Survey of Chemical Literature (2)
CHEM 6521 The Chemical Bond (3)
CHEM 6820 Seminar (1, 1, 1)
CHEM 6850 Methods of Graduate Research (3)
CHEM 6901 Comprehensive Review (2)

2. Complete a minimum of 12 units from the Advanced Topics courses 6310, 6410 and 6510
3. Complete additional units to total the minimum required 45 to be selected, with the approval of the student's advisor, from additional graduate courses in chemistry (to include no more than two units of 6900 and none of 6830 or 6910), from the lists of upper division courses in chemistry acceptable for the master's degree (including those acceptable for the biochemistry option, see below), up to a maximum of 12 units in applicable courses in related fields, and additional units to replace any courses in (1) or (2) above taken as an

Option in Biochemistry

undergraduate

4. Pass a comprehensive examination consisting of a written portion covering the courses taken and an oral portion covering the content of CHEM 6901.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate and Post-baccalaureate Studies chapter at the beginning of the graduate section of this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills requirement.

To be eligible for the Option in Biochemistry, M.S. in Chemistry, the student must satisfy the following departmental requirements:

1. Complete the following required courses in biochemistry and chemistry (22 units):

CHEM 6410 Advanced Topics in Biochemistry (3)
CHEM 6430 Protein Chemistry Techniques (4)
CHEM 6820 Seminar (1, 1, 1)
CHEM 6830 Research (Biochemistry Specialization) (6)
CHEM 6850 Methods of Graduate Research (3)
CHEM 6910 Thesis (Biochemistry Specialization) (3)

2. Complete a minimum of six units from the following courses:

CHEM 4521, 6310, 6410, 6521 including at least one of CHEM 4521 and 6521

3. Complete additional units to total the minimum 45 units required-to be selected, with the approval of the student's advisor, from additional graduate courses in chemistry and biochemistry. These units must be selected from the list of upper division courses in chemistry acceptable for the master's degree, Option in Biochemistry, and must not include more than four units of 6900 and three units of 6830. A maximum of ten units from applicable courses in Biological Sciences may be selected from the following:

BIOL 4450 Cell Culture Techniques (4)
BIOL 6140 Recombinant DNA Techniques (4)
BIOL 6151, 6152 Cell and Molecular Biology I, II (5, 5)

Additional units must be selected to replace any courses in (1) and (2) above taken as an undergraduate

Upper Division Chemistry Courses Acceptable for the Biochemistry Option, Master's Degree in Chemistry
CHEM 3531, 3532 Physical Chemistry Laboratory, 4161, 4162 Advanced Inorganic Chemistry, 4180 Inorganic Chemistry Laboratory, 4240 Instrumental Methods of Analysis, 4311 Advanced Organic Chemistry, 4700 Survey of Chemical Literature

Graduate Courses

4. Submit to the department an acceptable master's degree thesis (University Thesis, CHEM 6910).

The course prefix for the following courses is CHEM.

- 6310** Advanced Topics in Organic Chemistry (3)
Selected topics in special advanced fields of organic chemistry. Topics vary each quarter. May be repeated for maximum of 9 units credit. Prerequisite: CHEM 4311 or consent of instructor. (Y)
- 6410** Advanced Topics in Biochemistry (3)
Selected topics in biochemistry, e.g., advanced discussion of proteins, enzyme kinetics, physical biochemical techniques, nucleic acid chemistry. May be repeated for a maximum of six units. Prerequisite: CHEM 4413 or consent of instructor. (Y)
- 6430** Protein Chemistry Techniques (4)
Techniques in protein chemistry. Methods for protein quantitation, separation, identification, purification and sequence analysis. Emphasis on modern procedures employing techniques such as chromatography, electrophoresis, isoelectric focusing, gene splicing and immunological probing. Prerequisites: CHEM 4412 (or equivalent) and permission of instructor. Two hrs. lect., 6 hrs. lab. (Alt. Y)
- 6510** Advanced Topics in Physical Chemistry (3)
Selected topics in physical chemistry, e.g., molecular structure, spectroscopy, quantum mechanics, and crystallography. May be repeated for maximum of 9 units. Prerequisite: 1 year physical chemistry. (Y)
- 6521** The Chemical Bond (3)
The quantum mechanical description of the structure and spectroscopic properties of atoms and molecules, of the chemical bonding in molecules, and of bonding in solids and liquids. Prerequisite: CHEM 3513. (Sp)
- 6820** Seminar (1)
Written and oral review of topics in the current chemical literature; reports of research in progress. May be taken three times for credit. CR/NC grading only. Prerequisite: upper division or graduate standing in chemistry. (A)
- 6830** Research (1-5)
Original research in chemistry, under the supervision of a member of the graduate faculty. May be repeated for a total of nine units. Prerequisites: Advancement to Candidacy and departmental approval. (A)
- 6850** Methods of Graduate Research (3)
An introduction to advanced research methods including bibliographical, instrumental, and laboratory applications. Prerequisites: "Classified Graduate" standing in chemistry and departmental approval. (Y)

- 6898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 4 units. No units may be counted toward the Chemistry major. CR/NC grading only. Prerequisites: at least a 3.0 GPA and departmental approval of activity. (A)
- 6900** Independent Study (1-3)
A maximum of four units may be applied toward the degree. (A)
- 6901** Comprehensive Review (2)
Preparation for Comprehensive Examination including review of relevant areas and preparation of a substantial written report on a selected topic under the direction of a faculty advisor. The final examination covers the selected topic and is the oral portion of the Comprehensive Examination. CR/NC only. Prerequisite: completion of or concurrent enrollment in all courses required in categories (1), (2) and (3) of M.S. program excluding one unit of CHEM 6820. (A)
- 6910** University Thesis (1-3)
Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense is normally required. Prerequisites: Advancement to Candidacy and departmental approval. Maximum of 3 units per student. (See also, "University Thesis Writing Guide," available in WA 859.) (A)
- 6999** Issues in Chemistry (4)
Readings, discussion, and research on contemporary and/or significant issues in chemistry. May be repeated for credit when content varies.



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Department Information

M.A. in Multimedia

Multimedia

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Multimedia Program Committee
College of Arts, Letters, and Social Sciences; College of Business and Economics; College of Education and Allied Studies; College of Science

Office: Multimedia Graduate Program, Art and Education 1231
Phone (510) 885-3204

Professor: James Petrillo (Art)

Assistant Professors: Li-Ling Chen (Teacher Education), Phillip Hofstetter (Art), Scott Hopkins (Art), Gwyan Rhabyt (Art), Suzy Wear (Art)

Graduate Coordinator: James Petrillo (Art)

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

The Multimedia master's degree is a unique interdisciplinary program that focuses on the creative and technical aspects of new technology to create, control, deliver, and present meaningful content in a variety of interactive forms. This degree draws upon elements from a number of fields, including art, computer science, education, business, and telecommunications.

The Multimedia graduate program mirrors real world conditions by emphasizing teamwork and project oriented goals. Students learn the skills needed to adapt quickly to new environments, a valuable asset for any profession. Because multimedia is a rapidly developing and rapidly changing field, the program focuses as much on the enduring creative processes as on the transient technology.

The Multimedia master's is a two-year degree program. Most coursework is offered in the evening. During the first year, students develop a theoretical foundation in multimedia technology, enhance their creative skills and learn to work effectively in teams. During the second year, small teams of students with various backgrounds and talents create innovative,

professional-quality, interactive multimedia projects. Ideas for group projects can originate from students, faculty, or external sources. Many of our student projects have won national and international awards.

Students in the Multimedia graduate program enjoy a number of benefits including small student-teacher ratios and a dedicated interdisciplinary faculty. Thesis project students have 24-hour access to their own professional quality multimedia production studio. These facilities are well-equipped and maintained with the latest technology.

Career Opportunities

The Multimedia graduate program prepares students for successful careers in the new and thriving multimedia industry. As the only multimedia master's program in the state, it leads the way in training future multimedia producers and artists. Graduates can seek employment in positions where they work in teams or individually to produce artistic and commercial multimedia materials. Potential places of employment include film and video studios, production and post-production houses, publishers, corporate training and communication groups, support groups for scientific visualization, support groups for business presentation, and support groups for educational institutions.

Added career-oriented features of the Multimedia graduate program are its location in the San Francisco Bay Area, home to the hottest interactive digital media industry in the world.

Faculty

This is an interdisciplinary program involving all four colleges in the university. The program is administered by a Multimedia Program Committee comprised of one faculty member from each college. Committee members typically include faculty from the departments of: Art, Management and Finance, Mathematics and Computer Science, and Interdisciplinary Studies in Education. The Graduate Dean serves as a member of the Committee.

Admission

Applicants are individually evaluated for admission to the Multimedia graduate program using the following criteria:

- A minimum GPA of 3.0 in the last 90 units of undergraduate work
- A work sample reflecting the applicant's talents and abilities
- Evidence of professional experience in related fields

In addition to submitting a university application and application fee to the Admissions Office, applicants must complete a departmental application and submit it along with a statement of purpose, resume, work sample, two reference letters, and copies of academic transcripts. Applicants are selected by an admissions panel of the Multimedia Program Committee.

Students are admitted for the Fall quarter only. The application deadline is March 1. No entrance exam is required for admission; however, international students must take the TOEFL exam and pass with a score of 213 or better.

Applicants who have not completed all prerequisite requirements may be placed in "Conditionally Classified Graduate" status if they can demonstrate the ability to complete these requirements.

Requirements for Continuation

Once admitted to the program, students must satisfy further requirements, e.g., they must satisfy the University Writing Skills requirement. Students who have completed all the prerequisite requirements and the University Writing Skills requirement are given "Classified Graduate" status. Advancement to Candidacy is a university requirement for graduation. A student with "Classified Graduate" status may apply for Advancement to Candidacy after completing at least 16 quarter units towards the master's degree with a "B" average. Before being Advanced to Candidacy, a student's complete course of study and progress must be approved by the Multimedia Program Committee.

Curricular Requirements (52 units)

I. Required Courses (44 units)

- MM 6100 Tech I: Principles of Digital Multimedia (4)
- MM 6101 Multimedia Seminar (4)
- MM 6102 Application of Learning Theories to Multimedia Design (4)
- MM 6103 Business Basics in Multimedia (4)
- MM 6110 Tech II: Multimedia Network and Hardware Development (4)
- MM 6120 Tech III: Multimedia Software Development (4)
- MM 6805 Forum (1) (Must be repeated for a total of 4 units)
- MM 6860 Introduction to Multimedia Project Development (4)
- MM 6870 Multimedia Development I (4)
- MM 6880 Multimedia Development II (4)
- MM 6899 Project (4)

II. Electives (8 units)

Select eight units of electives under advisement of graduate coordinator.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate and Post-baccalaureate Studies chapter at the beginning of this catalog. These requirements include the 39-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills requirement.

Graduate Courses

The course prefix for the following courses is MM.

- 6100** Tech I: Principles of Digital Multimedia (4)
Creation, capture, conversion, storage, transport and display of digital multimedia information. Physical basis of perception and digital representations. Multimedia input/output devices and processing architectures. Historical and conceptual basis of multimedia. Course is limited to graduate multimedia majors.

- 6101** Multimedia Seminar (4)
Seminar on the conceptual strategies for multimedia development. Also examines key historical events in the emergence of multimedia forms and the role of multimedia in the creation of culture. Particular emphasis placed on small group working dynamics. Course is limited to graduate multimedia majors.
- 6102** Application of Learning Theories to Multimedia Design (4)
Learning theories in creating effective educational multimedia for CD and World Wide Web. Trends in cognitive, social, psychological, developmental, and humanistic theories for multimedia content development. Prerequisite: MM 6101 and familiarity with at least one development methodology (e.g., computer software development, theater or video scripting, educational materials development).
- 6103** Business Basics in Multimedia (4)
Basic business skills for the new economy. Includes options for employment, various uses of multimedia in industry and how to create a multimedia business. Business plan creation, marketing, cash flow analysis and presentation skills are emphasized.
- 6110** Tech II: Multimedia Network and Hardware Development (4)
Theory and practice of data networking. Analysis, design and construction of electronic multimedia components including the use of sensors, effectors and controllers. Prerequisite: MM 6100.
- 6120** Tech III: Multimedia Software Development (4)
Introduction to scripting and programming for multimedia production. Prerequisite: MM 6110. Two hrs. lect., 4 hrs. act.
- 6350** Audio Production for Multimedia (4)
Developing effective audio for multimedia programs using a variety of digital production tools. Students will develop multimedia audio presentations. Prerequisite: MM 4850. Two hrs. lect., 4 hrs. act.
- 6805** Forum (1)
Lectures and presentations by professionals and students working in a wide variety of multimedia related disciplines. May be repeated up to a maximum of 4 units. Forums are open to the general public.
- 6860** Introduction to Multimedia Project Development (4)
Small development projects to evaluate the potential of individual students to succeed as members of a thesis team. Establishment of research project teams and the development of thesis proposals. Prerequisites MM 6100, 6101, 6120 and classified or conditionally classified standing in the Multimedia M.A. program. A miscellaneous course fee will be charged. Consult the quarterly *Class*

Schedule for the current fee.

- 6870** Multimedia Development I (4)
Collaborative interdisciplinary teams begin to develop multimedia projects. Design and creation of interactive audio, video, graphic and narrative content. Prerequisite: MM 6860 and advancement to candidacy. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee.
- 6880** Multimedia Development II (4)
Continuation of multimedia projects begun by the teams established in Multimedia Development I. Project prepared for completion in MM 6899. Prerequisite: MM 6870. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee.
- 6898** Cooperative Education (1-8)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 8 units. A maximum of 8 units will be accepted toward the major. CR/NC grading only. Prerequisites: at least a 3.0 GPA; departmental approval of activity.
- 6899** Project (4)
Completion of an original professional quality digital interactive multimedia project and comprehensive written documentation. The project and documentation are submitted to the program committee which specifies the format. Weekly supervision by a faculty advisor and quarterly reviews by a faculty committee. Oral presentation of multimedia project is required. Prerequisite: MM 6880. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee.
- 6999** Issues in Multimedia (4)
Readings, discussion, and research on contemporary and/or significant issues in multimedia. May be repeated for credit when content varies.



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Department Information

M.S. in Computer Science

Computer Science

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Associate Professors: Jagdish Bansiya, Edward A. Billard, Kevin A. Brown, Kevin E. Callahan, Julie S. Glass, Dan Jurca, Thomas W. Roby, Farzan Roohparvar, Assim Sagahyroon

Assistant Professors: Leann Christianson, Roger W. Doering, Levent Ertaul, Madhavi Gandhi, Lynne L. Grewe, Hilary J. Holz, C. Matthew Johnson, Chung-Hsing OuYang, David Yang

Lecturers: Paula Albert, Jack A. Carter, Francis Conlan, Michael A. Contino, Dorothy E. Fujimura, Phil Gonsalves, Ching-Cheng Lee, David L. Pugno, Denise Sargent-Natour, Jean Simutis

Graduate Coordinator: Donald L. Wolitzer

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

The Mathematics and Computer Science Department offers graduate study leading to the degree of Master of Science in Computer Science. This program is designed to extend the student's knowledge in a broad manner beyond the baccalaureate degree major in Computer Science. It will both (1) deepen general understanding of theoretical principles and (2) provide specific

professional background. This approach is especially important in Computer Science, where training in specific languages and systems and on specific machines is transitory, as these languages, systems, and machines evolve. In contrast, many of the principles will last and generally apply to a wide variety of specializations within the field. This breadth is important to individual students because many of them will have a number of different job classifications in their working lives.

Our program features small classes that allow for close contact between students and faculty. Most graduate classes are offered in the late afternoon or early evening, making it possible for working students to attend. Courses toward the M.S. degree may also be taken during the summer quarter. Students may begin their studies in any one of the four quarters.

Students interested in the M.S. degree program in Computer Science should speak with the Computer Science Graduate Coordinator. The Math/Computer Science and Accounting/Computer Information Systems Departments offer an interdisciplinary Master of Science degree program in Telecommunication Systems.

Career Opportunities

Systems Analyst • Program Analyst or Designer • Systems Manager or Programmer • Scientific Applications Programmer • Computer Operations Manager • Graphics Specialist • Software Engineer • Programming Team Member, possibly specializing in Design, Testing, or Documentation • Computer Network Support • Database Applications Programmer or Administrator • Computer Sales Representative • Customer Support • Technical Writer • Teacher/Professor

Faculty

The faculty of the Mathematics and Computer Science Department hold doctorates in a wide variety of areas. They have a strong commitment to high quality teaching, and have interests in fields such as computer graphics, networks, numerical analysis, compiler design, computer simulation, parallel programming, computer architecture, automata, multimedia, cryptography, computational complexity, language design and implementation, graph theory, microcomputer architecture, and database systems.

Features

Computer Science students at Cal State Hayward have access to some of the most modern and powerful computer equipment available. The campus provides a network backbone, including connection to the Internet, and hundreds of personal computers. The department also has equipment of its own, including a network of Unix workstations and classrooms equipped for computerized demonstrations. Several computer labs on campus offer terminal access and assistance with problems.

Cal State has an active Computing Club, which hosts industry tours as well as academic and social events and is involved with a number of ongoing projects.

Scholarships

Each year the department awards a number of scholarships covering a large portion of the fees for the subsequent year.

Scholarship applications may be obtained from the department office during the Winter quarter.

Admission

To apply for admission to the Master of Science program in Computer Science, a student must submit the proper forms, fees and transcripts to the university's Office of Admissions, which reviews each application initially. The department then reviews the application, making the decision whether to accept or reject the applicant. Each applicant must have the score on the general portion of Graduate Record Examination (GRE) submitted directly to the department. Submission of scores on the Computer Science portion is optional.

A student wishing to enter this program must normally have an undergraduate degree in Computer Science or in a related field, with courses in Computer Science as indicated below, and must have a grade point average of 2.75 in all undergraduate work and a 3.00 grade point average in the Computer Science Core and Mathematics courses listed below.

Computer Science Admission Requirements

Twenty-eight (28) quarter units (7 courses) of upper division Computer Science coursework that covers a broad range of Computer Science and includes the following four courses or their equivalents.

- CS 3120 Programming Language Concepts
- CS 3240 Data Structures and Algorithms
- CS 3430 Computer Architecture
- CS 4560 Operating Systems

Successful completion of equivalents to all the following mathematics requirements is also required.

Mathematics Requirements for Admission

- A year of Calculus (MATH 1304, 1305, 2304)
- Linear Algebra (MATH 2101)
- Discrete Structures (MATH 2150)

- An upper division course in Probability or Statistics (STAT 3401, 3502, or 3601)

A student who has not met all of the above requirements may be admitted to the program at the discretion of the department as a "Conditionally Classified Graduate" student, provided the student's record clearly demonstrates the capability of meeting all these requirements.

No more than 20 quarter units taken while in "Conditionally Classified Graduate" status may be applied to the degree. Note that courses used to make up deficiencies for admission may not be applied toward the master's degree. A "Conditionally Classified Graduate" student who has no course deficiencies, a "B" or better average in at least 12 quarter units of post-baccalaureate study, and has satisfied the University Writing Skills requirement should petition the graduate coordinator for admission to the master's degree program with "Classified Graduate" status. A maximum of 13 units taken as an "Unclassified Post-baccalaureate" student

may be applied to a master's degree.

Advancement to Candidacy

Advancement to Candidacy is a university requirement for graduation for a master's degree program. A student with "Classified Graduate" status may apply for Advancement to Candidacy after completing at least 16 quarter units towards the master's degree with a "B" average, including at least two 6000 level Computer Science courses with a "B" or better average.

Before being Advanced to Candidacy, a student's complete course of study must be approved by the Computer Science Graduate Committee.

Degree Requirements

The following departmental requirements are in addition to the university requirements.

A. Research Methodologies Requirement (2 units)
CS 6000 Research Methodologies (2)

B. Breadth Requirement (20 units)
CS 6260 Computational Complexity (4)
CS 6560 Operating Systems Design (4)

At least one course from each of the following three groups:

1. Theory

CS 6140 Language Design (4), 6170 Automata and Formal Languages (4), 6245 Combinatorial Algorithms (4), 6360 Formal Specification and Verification (4), 6520 Cryptography and Data Security (4); MATH 6750 Topics in Advanced Numerical Analysis (4)

2. Architecture

CS 6430 Computer System Architecture (4), 6580 Distributed Systems (4), 6585 Distributed and Client/Server Systems (4), 6825 Computer Vision (4)

3. Systems

CS 6110 Theory and Design of Compilers (4), 6320 Software Engineering of Web-Based Systems (4), 6570 Distributed Computation (4), 6660 Database Systems (4), 6715 Data Compression (4), 6810 Topics in Artificial Intelligence (4), 6840 Principles of Computer Graphics (4)

C. Capstone Experience (0-5 units). Select (1) or (2)

1. A comprehensive written examination. Details are available in Mathematics/Computer Science Department,
2. A Departmental Thesis (CS 6909). Students who write a thesis must have an advisor who agrees to oversee the work, and must have the proposed topic approved by the Computer Science Graduate Studies Committee.

D. Electives (18-23 units)

Graduate Courses

The following Cal State Hayward courses (or their equivalents) may be counted toward the master's degree:

MATH 3151 Combinatorics
MATH 4151 Graph Theory

All 3000-level (except for CS 3898), 4000-level and 6000-level Computer Science courses not used in categories (A), (B), and (C) above or as an admission requirement may be used as electives toward the master's degree.

E. Unit and Grade Requirements

At least 45 quarter units of approved upper division and graduate work. Of these, at least 26 units must be approved graduate (6000-level) courses. All work toward the 45 units must be at an average grade of "B" (3.0) or higher. Grades below "C-" will not be counted as prerequisites or toward the degree.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate and Post-baccalaureate Studies chapter at the beginning of the graduate section of this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills requirement.

The course prefix for the following courses is CS.

6000 Research Methodologies (2)

Seminar in recent research in Computer Science. Use of periodical and non-periodical literature for research in computer science. Students read, analyze, present, and discuss papers of current interest in Computer Science. Prerequisite: "Classified Graduate" standing in Computer Science M.S. degree program and permission of instructor. (Y)

6005 Teaching Computer Science at the University Level (1)

Theory, methodology, and practical experience in the teaching of computer science at the university level. Includes discussion of lecturing techniques, analysis of tests and supporting material, preparation and grading of examinations, and related topics. Required of departmental teaching associates. May be repeated for credit, but only two units can be used toward the M.S. degree. Prerequisites: graduate standing and permission of department.

6110 Theory and Design of Compilers (4)

Grammars and parsing techniques, advanced theory and methods of code generation, code optimization, error recovery, use of compiler-generator tools. Prerequisite: CS 4110.

- 6140** Language Design (4)
Topics in design and use of programming languages: object-oriented languages, functional and applicative languages. Exception handling, parallel processing and concurrency control. Fourth generation languages.
Prerequisites: CS 3120 and 4110.
- 6170** Automata and Formal Languages (4)
Deterministic and nondeterministic finite automata. Regular grammars, languages, and expressions. Kleene's Theorem, algebraic characterizations. Chomsky hierarchy. Languages: regular, context free, context sensitive, recursive, type 0. Normal forms, pushdown automata, pumping lemmas, closure. Time and tape bounded Turing machines. Decision problems. Prerequisite: CS 4170.
- 6245** Combinatorial Algorithms (4)
Design and analysis of efficient combinatorial algorithms. Graph theory and algorithms: flows in networks, max flow/min cut theorem. Theorems of Menger, Hall, Tutte, Dilworth. Examples of algorithms drawn from matching, maxflow, mincost flow, Hitchcock Problem, weighted matching, linear programming. NP-complete problems, approximation algorithms. Prerequisites: CS 4245; MATH 4151 recommended.
- 6260** Computational Complexity (4)
Models of computation, particularly deterministic and nondeterministic Turing machines. Decision problems, measures of complexity (e.g. P, NP, PSPACE). Approximation algorithms, randomized algorithms.
Prerequisites: CS/MATH 4170 or CS/MATH 4245 or permission of instructor. Cross-listed with MATH 6260.
- 6310** Software Engineering (4)
Theory and practice of large software development projects, including methods of requirement specifications, programming approaches, program management, testing strategies, and performance evaluation. Team organization and management. Software life cycles. Prerequisites: CS 2360, CS 3240, and a senior level Computer Science course in which programs are written.
- 6315** Object-oriented Software Development for Telecommunications (4)
Networking and telecommunications APIs. Class libraries for networking and distributed services. Object-oriented software development tools, languages, and techniques. Programming exercises. Prerequisites: CS 3240, CS 3590.
- 6320** Software Engineering of Web-Based Systems (4)
Current practices and trends in software design, development, and deployment of web-based systems, with particular emphasis on e-commerce. Projects include the latest technologies and techniques used by the Internet community. Prerequisites: CS 3520, CS 3340; or permission of instructor.
- 6340** Advanced Topics in Object-Oriented

Programming and Design (4)

Advanced topics in object-oriented programming and design using the Java platform. Threads, platform-independent network programming, distributed objects, remote method invocation, CORBA, data-base connectivity, persistence and serialization, Java beans, enterprise Java beans, advanced GUI design. Prerequisite: CS 3340.

6360 Formal Specification and Verification (4)

Fundamental techniques of program specification and verification. Inductive methods for proving program correctness, including invariant, inductive and intermittent assertion methods and subgoal, structural and computational induction. Prerequisites: CS 3240 and MATH 2150 (or upper division mathematics course in which theorems are proved).

6430 Computer System Architecture (4)

Processor design: register transfer, processor control, microprogramming. Design of instruction sets. Pipelining. Microprocessor-based architectures. RISC architectures. Memory hierarchies and organization: cache, RAM, mass storage. Addressing mechanisms, I/O organization: polling, interrupts, DMA. Highly parallel architectures. Prerequisites: CS 3430; CS 3432 and/or CS 3434 recommended.

6432 VLSI Systems Design (4)

The use of a highly integrated suite of CAD (Computer Aided Design) tools to design and test a bit-sliced microprocessor that implements concepts from CS 6430. Prerequisites: CS 4432 and 6430 or consent of instructor. Three hrs. lect., 3 hrs. lab.

6458 Optical Fiber Technologies (4)

(See TC 6458 for course description.)

6520 Cryptography and Data Security (4)

Cryptographic theory with applications to data and file access security. Substitution ciphers, stream and block cyphers, algebraic codes, error correcting codes, Shannon's theorem. Cryptosystems, including public key. The Data Encryption Standard. Issues of privacy, authenticity, integrity. Implementation issues, including key management and chaining. Prerequisites: CS 4560, CS 4170 or 4245, and a course in probability; or permission of instructor.

6522 Advanced WWW Software Development (4)

Advanced WWW system architecture and software development. Database access, 2- and 3-tier systems, objects and components, ORB, CORBA, COM, ActiveX, Java Beans. Programming exercises. Prerequisites: CS 3340 and either CS 3520 or TC 3320; or permission of instructor.

6525 Network Security (4)

Principles of secure network communications. Techniques of authentication and identification, cryptographic key

distribution and management, assurances of data integrity. Access control. Security policy; conformance of implementation to policy. Discussion of particular systems, protocols, and utilities, e.g., Kerberos, firewalls, various commercial standards. Prerequisites: CS 6585, TC 6205.

- 6560** **Operating Systems Design (4)**
Theory of operating systems. Process synchronization, concurrency, resource management, security, performance evaluation, analytic models, human interfaces. Implementation issues. Prerequisite: CS 4560
- 6570** **Distributed Computation (4)**
Classical problems which abstract real-world network problems. Process synchronization and communication using message-passing systems. Topics may include mutual exclusion, leader election, global snapshots, Byzantine generals, consensus, shared registers, common knowledge and distributed spanning trees. Prerequisite: CS 4560.
- 6580** **Distributed Systems (4)**
Issues in the design and implementation of distributed systems. Network layers, architectures, and topologies. Distributed process management, concurrency control, deadlock, and recovery. Prerequisites: CS 4560 and 4590.
- 6585** **Distributed and Client/Server Systems (4)**
Distributed services, goals, and issues. Computer network architectures and communications models. Remote procedure calls, event ordering, naming, concurrency control, transactions, voting algorithms. Case studies: ONC, DCOM. Development and management tools. Programming exercises. Prerequisites: CS 3240 and CS 3590, or TC 3265.
- 6660** **Database Systems (4)**
Design issues in current database systems: data models, storage management and access, distributed systems, query languages and query optimization, database integrity and security, encryption and decryption, concurrency control. Prerequisites: CS 3660, 4560, and 4660.
- 6715** **Data Compression (4)**
Algorithms for data compression, Huffman coding, arithmetic coding, Lev-Zimpel coding. Adaptive variations of compression algorithms. Lossless and lossy compression. Transform methods and image compression. Coding theory and information-theoretic bounds. Applications to data transmission. Prerequisite: CS 3240, STAT 3401 or STAT 3502.
- 6750** **Topics in Numerical Analysis (4)**
(See MATH 6750 for course description.)
- 6752** **Digital Signal Processing (4)**
Linear systems and complex numbers, Fourier and Z transforms, A/D and D/A conversion techniques, Discrete Fourier Transform, Fast Fourier Transform, linear prediction, digital filters, speech processing. Prerequisites:

MATH 1304, MATH 2101, CS 3240.

- 6800** Topics Seminar (4)
Presentation of selected topics beyond regular courses. Subjects will vary. Prerequisites: "Classified Graduate" standing in Computer Science M.S. degree program and consent of instructor.
- 6810** Topics in Artificial Intelligence (4)
Knowledge representation and reasoning. Theory and advanced programming techniques. Topics selected from areas of expert systems, natural language processing, image understanding, machine learning, games, and robotics.
- 6815** Artificial Intelligence in Telecommunications (4)
(See TC 6815 for course description.)
- 6820** Machine Learning (4)
Advanced topics in Artificial Intelligence, including induction, decision trees, ensemble learning; current-best-hypothesis search, knowledge representation, explanation-based learning, relevance information, inductive logic programming; Bayesian networks, instance-based learning; neural networks and genetic algorithms; reinforcement learning, and adaptive dynamic programming. Prerequisite: CS 4810 or 6810.
- 6825** **P**Computer Vision (4)
Mathematical and algorithmic approaches to the problem of computing properties of the 3-D world from one or more digital images. Imaging, image processing, feature detection, calibration, stereopsis, motion, object recognition, tracking. Prerequisites: MATH 2101, 2034; CS 3240.
- 6830** Genetic Algorithms and Evolutionary Programming (4)
Theoretical and practical foundations of the design, complexity and correctness of genetic programs and classifier systems; the formal properties of various evolutionary approaches; the design of new genetic operators, representations and fitness functions for specific practical and scientific applications. Prerequisite: CS 4810.
- 6835** Statistical Pattern Recognition (4)
Fundamentals of characterizing and recognizing patterns in numerical data. Signal recognition problems in user modeling; affect recognition, speech recognition and understanding, and more. Topics include: decision theory, statistical classification, maximum likelihood/Bayesian estimation, non-parametric methods, unsupervised learning, and clustering. Prerequisites: ability to program and STAT 3601 or equivalent. Cross-listed with STAT 6835.
- 6840** **P**Principles of Computer Graphics (4)
Advanced graphics algorithms including viewing, scan conversion, hidden line, hidden surface, ray tracing, shading and lighting, fractals. Solid modeling. Software

packages, development, and standards. Software development on advanced graphics workstations. Prerequisite: CS 4840.

6844  Digital Image Processing (4)

Digital image acquisition, display, analysis, manipulation, and transmission. Color space conversion, convolution, geometric transformations, and compression. Programming exercises. Prerequisites: CS 6585, TC 6101. Cross-listed with TC 6844.

6870  Computer Simulation (4)

Introduction to construction and analysis of models by computer simulation. Study of one discrete and one continuous simulation language. Application to modeling biological, industrial, and physical processes. Prerequisites: MATH 3100, 3331, and a course in computer programming. Cross-listed with MATH 6870.

6899 Project (5)

Development of an original telecommunications project which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their formats. Supervision by a department committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense required. Prerequisite: advancement to candidacy. Cross-listed with TC 6899.

6900 Independent Study (1-4)

6909 Departmental Thesis (1-5)

Development and writing of a research paper for submission to the department, which specifies its format. Supervision by a departmental committee, at least one of which must be a Cal State Hayward faculty member. May be repeated for a maximum of 5 units. Prerequisites: CS 6000, advancement to candidacy, and approval of thesis proposal by advisor and departmental committee.

Footnote

 Enrollment in these courses is restricted to "Classified" and "Conditionally Classified Graduate" students. Others may enroll with the permission of the department.



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Department Information

M.A. in Music

Music

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Professors Emeriti: David B. Stein, William Wohlmacher

Professors: Thomas W. Acord, Roberta Brokaw, David H. Eshelman, Frank J. La Rocca, Timothy M. Smith (Chair), Ellen Wassermann

Lecturers: Priscilla Granger, Eric E. Hansen, Ronald McKean, Jeffrey L. Miller, Jennifer S. Navarrete, Janice D. Ortega, David P. Ridge, Jay Rizzetto, Kathryn Smith, Arthur L. Storch, Marc S. Teicholz, Daniel L. Zinn

Graduate Coordinator: David B. Stein

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

The Master of Arts degree in Music is designed for those individuals pursuing careers as public or private school teachers; for professional performers and composers; for school and college music teachers who wish to increase their professional effectiveness; and for those who plan further music study at the doctoral level. Courses emphasize scholarly performance and include in-depth work and research in the student's major field of interest. The ultimate goal of the Department of Music is to develop well-informed performers, independent scholars, and inspired teachers.

Faculty

The Department of Music faculty have achieved an enviable reputation for their high degree of academic, professional, and classroom expertise. Faculty, students and alumni are proud of the program and its success in graduating well-prepared students who have continued to work in the music field locally, nationally, and internationally. The programs of the Department of Music are fully accredited by the National Association of Schools of Music.

Areas of Emphasis

Within the M.A. degree program, students will concentrate their study in one of four areas of emphasis: (1) Performance, (2) Composition-Theory, (3) Music Education, and (4) Music History and Literature.

Performance

The performance emphasis is designed to prepare the student as a professional performer or teacher through the advancement of instrumental or vocal skills and the study of selected historical, stylistic, and theoretical courses. An audition is required before a student is accepted into this area of emphasis. Performance of a Graduate Recital is a major goal of this program. Graduate performance students will receive a sixty-minute lesson each week of the regular quarter.

Composition-Theory

This area of emphasis is designed for the student who wishes to continue developing toward a professional level as a composer, and who wishes to continue further study of music theory. Most students in this program aim toward careers as professional composers and teachers. Some continue into doctoral programs at other universities. Composition students are given a sixty-minute lesson each week. The successful completion of a substantial original composition, accompanied by a written analysis, is required for students in this area.

Music Education

Courses in Music Education are designed to deal with the practical aspects of teaching music in the public and private schools. Emphasis is placed on conducting skills, conceptual teaching, rehearsal techniques, organizational procedures, and appropriate pedagogical approaches for all levels of teaching development. Students who adopt this emphasis usually will have had previous teaching experience, but this program is open to all qualified applicants. A standard thesis or project is a requirement in this area.

Music History and Literature

This area of emphasis is designed to give sufficient academic work and background to those students who wish to continue graduate study at the doctoral level or for students wishing to teach in the areas of history, literature and music appreciation. Classes offered by the Department of Music cover all the major historical periods and specific historical studies are offered as seminars. A student who pursues this option is expected to be able to do independent research and will complete a standard thesis.

Scholarships

Scholarships, including the Graduate Equity Fellowships, are available for new and continuing graduate students. Contact the Department of Music office at (510) 885-3135 for more information.

Admission Requirements

Upon making application to the program, a candidate may be admitted for graduate study in the Department of Music as a "Conditionally Classified Graduate" student if: (1) the general requirements for graduate standing have been met, and (2) the

student holds a baccalaureate degree with a major in music and an upper division grade point average of at least 3.0 ("B") in music.

Students wishing to enroll in the graduate program who do not have a major in music must first complete an equivalency of the Cal State Hayward B. A. degree major in Music. When the equivalency has been completed, the student will then be eligible for entrance into the graduate program, subject to the entrance requirements stated above.

Graduate Music Advisory Examinations

The Graduate Music Advisory Examinations, given by the Department of Music, must be taken prior to the beginning of the student's first quarter in residence. These examinations include dictation, theory, history and literature, and piano proficiency. Contact the department for the date of these examinations.

Graduate Entrance Audition-Performance, Composition

All graduate applicants seeking admission into the Performance or Composition-Theory areas of emphasis must perform an audition or submit original scores prior to being accepted for graduate level applied lessons. These evaluations are held prior to the registration period for the fall, winter and spring quarters. Performance auditions are twenty minutes in length. Composition students should submit tapes and scores of their works for evaluation. Contact the department for the date of these auditions.

Classification in the Program

A student may be a "Classified Graduate" student if (s)he:

1. Has completed all undergraduate deficiencies;
2. Has completed at least 12 quarter units in residence at the 6000-level applicable toward the master's degree, including Music 6000, with a minimum grade point average of 3.0;
3. Has passed the Graduate Advisory Examinations in basic piano proficiency, ear training, music history and literature, and music theory. The Graduate Advisory Examinations must be passed by the time the student has completed 20 units applicable to the degree or the student will be dropped from the program;
4. As a graduate student pursuing the history-literature area of emphasis, has demonstrated reading ability in French, German, or Italian; other languages may be substituted by approval of the department;
5. Has fulfilled the University Writing Skills requirement.

Advancement to Candidacy

A student who holds "Classified Graduate" standing may be considered for Advancement to Candidacy when (s)he:

1. Has filed a study program for the completion of the degree which has been approved by the departmental Graduate Studies Committee;

2. If electing the performance emphasis, has successfully demonstrated a graduate standard of excellence before an auditions committee.

Degree Requirements

To be eligible for the Master of Arts degree a student must:

- A. Be Advanced to Candidacy;
- B. Complete 45 units of approved courses of which:
 1. 32 must be completed in residence;
 2. 24 must be at the 6000 level;
 3. A minimum of 9 units must be in one of the four possible areas of emphasis: composition-theory, history-literature, music education or performance;
 4. Not more than 12 units of applied music will be counted in the performance area of emphasis;
 5. Up to, but no more than 3 units of applied music, when approved by an advisor, may be applied toward degree requirements by candidates outside the performance area of emphasis;
 6. At least 3 units in addition to those in the area of emphasis must be completed in each of the following areas: composition-theory, history-literature, music education;
 7. Up to, but no more than 9 units of study outside of music may be counted toward the degree (these units must be approved by a graduate advisor and must be at the 3000 level or above);
- C. Present a thesis or project in one of the following forms:
 1. In the history-literature area, a standard research thesis (University Thesis, MUS 6910);
 2. In the composition-theory area, an original composition;
 3. In the music education area, either a standard research thesis (University Thesis, MUS 6910) or a project (Project, MUS 6899);
 4. In the performance area, a final graduate recital;
- D. Pass both written and oral examinations upon completion of all coursework. (Students who do not complete a thesis or project are required to pass a comprehensive examination.)

The candidate must observe the specific departmental requirements stated here and in the Handbook for Graduate Music Majors. In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate and Postbaccalaureate Studies chapter in this catalog. These include the 32-unit residence requirement, the five-year rule on currency

of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills requirement. The candidate is responsible for seeing an advisor and planning a tentative program, for completing the prerequisites to program approval, and for taking the Graduate Advisory Examinations.

Curricular Requirements (45 units)

- I. Core Classes (12-15 units)
 - MUS 6000 Seminar in Bibliography and Research Methods (3)
 - One course in Theory (3)
 - One course in History/Literature (3)
 - One course in Music Education (3)
 - Applied Music (0-3)
- II. Other Required Studies in Music (9-18 units)
 - Emphasis area classes (9-12)
 - University Thesis or Project (0-6)
- III. Electives (12-21 units)
 - In Music (6-12)
 - In Music, or, with approval, outside of Music (9)
 - Pass written and oral examinations (0)

Performance Activities

While it is not required that graduate music students enroll in performance activities and/or chamber ensembles, it is recommended, and the additional experience earned will be beneficial. Credit earned in these activities is not included in the 45 quarter units required for the M. A. degree in Music.

Upper Division Music Courses Acceptable for Master's Degree

Before enrolling in any undergraduate course the graduate student should be aware of the minimum requirement of 6000-level units and should consult his or her advisor in the department.

- 4054 Instrumentation
- 4435 Seminar in Public School Instrumental Teaching Techniques
- 4440 Seminar in Public School Choral Teaching Techniques
- 4445 Seminar in Elementary Classroom Music Teaching Techniques
- 4502 Seminar in the Art and Science of Vocal Pedagogy II

3000-level courses may be acceptable for the master's degree with approval of the graduate advisor.

Graduate Courses

The course prefix for the following courses is MUS.

General

- 6000** Seminar in Bibliography and Research Methods (3)
 - Analysis of specialized bibliography and methodology

employed in the four main areas of music history/literature, theory and composition, music education, and performance. Individual research on selected topics. Required for Advancement to Candidacy. Prerequisite: graduate standing in music or consent of the instructor. (F)

- 6899** Project (1-3)
Development of an original product which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their formats. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense may be required. Prerequisite: graduate standing. Maximum of 3 units per student. (A)
- 6910** University Thesis (1-6)
Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense normally required. Prerequisite: graduate standing. Maximum of 6 units per student. (See also, "University Thesis Writing Guide," available in WA 859.) (A)
- 6999** Issues in Music (4)
Readings, discussion, and research on contemporary and/or significant issues in music. May be repeated for credit when content varies.

Music Education

- 6380, 6390** Advanced Conducting (Choral I, Instrumental II) (3, 3)
Analysis, interpretation, score reading, and actual experience in conducting in an advanced rehearsal situation. May be repeated for credit, with permission of the instructor. Prerequisites: MUS 3380, 3390 or equivalents.
- 6415** Seminar in Developing Music Concepts Through the Rehearsal (3)
Analysis of selected instrumental and choral music to discover theory, structural, and stylistic concepts which may be developed during the rehearsal. Prerequisite: graduate standing in music or consent of instructor.
- 6420** Seminar in Advanced Instrumental Techniques (3)
Development of techniques and skills applicable to junior and senior high school instrumental music teaching. Discussions and presentations, with focus on practical application. Prerequisite: graduate standing in music or consent of instructor.

Music History and Literature

- 6100** Seminar in History of Western Music (4)
Advanced review of the history of Western music from the Medieval period to the present. Emphasis on stylistic, formal and theoretical development. Not applicable toward the M.A. degree in music. Prerequisite: graduate standing or consent of instructor.
- 6105** History of Music, Medieval to Renaissance (3)
A comprehensive study of musical forms and styles from 1100 to 1600 with detailed analyses of representative works and theoretical writings. Prerequisites: graduate standing in music or consent of instructor, MUS 3155-57 or equivalents. (Alt. Y)
- 6115** Music in the Baroque Period (3)
A detailed study of musical styles, forms, and performance practice from 1600 to 1750, with analyses of representative works. Prerequisites: graduate standing in music or consent of instructor, MUS 3155-57 or equivalents. (Alt. Y)
- 6125** Music of the Classical Period (3)
A detailed study of the development of musical forms and performance media, from the Rococo to the end of the 18th Century. Prerequisites: graduate standing in music or consent of instructor, MUS 3155-57 or equivalents. (Alt. Y)
- 6135** Music of the Romantic Period (3)
An intensive study of the structure and development of music from Beethoven through the end of the 19th Century. Prerequisites: graduate standing in music or consent of instructor, MUS 3155-57 or equivalents. (Alt. Y)
- 6160** Music of the Orient (3)
A study of the tuning systems, instruments, and performance practices in Oriental music, with emphasis on the classical traditions in Indian, Chinese, and Japanese music. Prerequisite: MUS 3034 or consent of instructor.
- 6180** Contemporary Music (3)
Research of developments in music since 1950, including recent 12-tone theory, aleatoric techniques and electronic music. Prerequisites: MUS 3157 and 3034 or consent of instructor. (Alt. Y)

Music Theory

- 6010** Seminar in Theory and Analytic Techniques of Western Music (4)
Advanced review of the vocabulary and analytic techniques of Western music from modal through set theory. Emphasis on application of techniques to analysis of representative styles. Not applicable toward the M.A. degree in music. Prerequisite: graduate standing or consent of instructor.

- 6015, Analysis of Musical Styles I, II (3,3)
6016 Analysis of compositional styles from chant to present day music. Compositional principles are derived from the music with results then generalized according to composer and period. Prerequisite: MUS 3034 or consent of instructor. (Alt. Y)

Applied Music

- 6210- Graduate Applied Music (1-5)
6270 Individual advanced instruction for graduate music majors. Open to graduate students who have been accepted by audition. May be repeated for credit up to a maximum of 12 units. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. (F, W, Sp)

6210 Advanced Piano
6211 Advanced Organ
6212 Advanced Harpsichord
6220 Advanced Voice
6230 Advanced Violin
6231 Advanced Viola
6232 Advanced Cello
6233 Advanced String Bass
6234 Advanced Harp
6235 Advanced Guitar
6240 Advanced Flute
6241 Advanced Oboe
6242 Advanced Clarinet
6243 Advanced Bassoon
6244 Advanced Saxophone
6250 Advanced Trumpet
6251 Advanced French Horn
6252 Advanced Trombone
6253 Advanced Baritone
6254 Advanced Tuba
6260 Advanced Percussion
6270 Advanced Composition

Miscellaneous

- 6900 Independent Study (1-4)



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Department of Economics
College of Business and Economics
Office: Music and Business Bldg. 2583
Phone: (510) 885-3339

Professor Emeritus: Jay L. Tontz

Professors: James C. W. Ahiakpor, Charles W. Baird (Co-Chair), Alexander E. Cassuto, Gregory B. Christensen, Leo Kahane, Shyam J. Kamath, Anthony K. Lima, Jane E. Lopus, Nan L. Maxwell (Co-Chair), Lynn C. Paringer, Stephen Shmanske, David J. St. Clair,

Lecturer: M. David Yaar

Graduate Advisor: Nan L. Maxwell

Please consult the 2006-2007 online catalog for any changes that may occur.

Admission Requirements

To be considered for admission, students must hold a baccalaureate degree from an accredited college or university and have a grade point average of 2.75 or better over the last 90 quarter units of their undergraduate program. A student who does not meet the grade point requirements may be admitted at the discretion of the department pending receipt of other evidence of the student's academic achievement.

International students must show English proficiency by posting an official TOEFL score of 580 or above (237 on the Computer-Based TOEFL), or by posting an official transcript showing graduation with a bachelor's degree from a U.S. college or university, or an international college or university where English is the principal language of instruction, or by an official letter from the college or university certifying that English was the language of instruction.

Students enrolling in the program are expected to have completed MATH 1810-20 or a two-course sequence in calculus; STAT 2010 or equivalent [a CAN STAT 2 course and STAT 2011 (1) will substitute for STAT 2010]; and at least one course in intermediate micro-economics and one course in intermediate macro-economics. Students who have not completed the Economics prerequisites may enroll in the undergraduate courses to fulfill the prerequisites.

Graduate Student Participation in Upper Division Undergraduate Courses

The department allows graduate students to enroll in selected upper division undergraduate courses under a graduate number for graduate course credit provided undergraduate credit had not already been earned for the courses. The graduate student is responsible for attending the lecture and discussion meetings of the undergraduate course and for participation in any undergraduate assignments and testing specified by the instructor as being required of the graduate students. In addition, the graduate student must complete an added tutorial-type module involving independent reading assignments, reports, and research papers coupled with periodic, individual and/or small group meetings with the instructor. This approach to graduate student participation in undergraduate courses makes part of the greater breadth of the department's undergraduate course offerings available to the graduate students while still maintaining (1) the heavier workload, (2) the greater responsibility on the part of the student for independent learning, and (3) the higher performance expectations appropriate to graduate level instruction.

The following courses are available under the special graduate credit program described in the preceding paragraph. Graduate students may use units from these courses to satisfy the required elective units for their M.A. degree (i.e., they may have from a minimum of zero to a maximum of 7-12 such units in their degree program). All of the listed courses have the same course descriptions as their parallel upper division courses; have a common set of prerequisites of ECON 3005 and ECON 3000 or 3551, or consent of the instructor; and have a graduate tutorial module required. The specific content of each tutorial module is specified by the individual instructor. In order to have the units that are earned through any of the graduate/upper division courses count toward the 45 units of the M.A. degree, the graduate student must be enrolled in the course under the graduate number.

- ECON 6150 Economic History of the United States (4)
- ECON 6170 History of Economic Thought (4)
- ECON 6190 Market Processes: Theory and Applications (4)
- ECON 6306 Environmental Economics (4)
- ECON 6310 Money, Banking, and Financial Intermediaries (4)
- ECON 6375 Public Choice (4)
- ECON 6500 Regional and Urban Economics (4)
- ECON 6590 Selected Topics in Economic Analysis (4)
- ECON 6685 Labor Institutions (4)
- ECON 6705 International Finance (4)

Classification in the Program

There are three levels of advancement for students within the M.A. program: "Conditionally Classified Graduate" standing,

"Classified Graduate" standing, and Advancement to Candidacy. Note: If a student is in post-baccalaureate status but has not been accepted into a graduate degree program s(he) is an "Unclassified Post-baccalaureate" student. Admission to the university as an "Unclassified Post-baccalaureate" student in no way implies acceptance to a graduate degree program.

A. Conditionally Classified Graduate Standing

A student who has been admitted to a graduate degree program but who has not satisfied all prerequisite coursework or other requirements such as the University Writing Skills Requirement is a "Conditionally Classified Graduate" student. A student may be admitted to a graduate degree program as a "Conditionally Classified" graduate student upon:

1. submission of a written application, with required supporting documents, to the Admissions Office declaring an intent to pursue the M.A. degree in Economics;
2. acceptance by the department; and
3. completion of other appropriate requirements as specified in the Graduate and Post-baccalaureate Studies chapter at the beginning of the graduate section of this catalog.

B. Classified Graduate Standing

A student who has been admitted to the M.A. program by meeting the requirements established in item 1 above; has fulfilled all prerequisite coursework and other requirements such as the University Writing Skills requirement; and has a strong background in economics may begin as a "Classified Graduate" student. Students admitted into the program but lacking such background will be designated as "Conditionally Classified Graduate" students until deficiencies are made up and they are recommended for "Classified Graduate" standing by the department. The student must have fulfilled the University Writing Skills requirement to become a "Classified Graduate" student.

C. Advancement to Candidacy

To be Advanced to Candidacy in the M.A. program a student must:

1. be a "Classified Graduate" student in good standing;
2. have filed an approved program of study with the department;
3. have completed at least 12 quarter units in Economics considered applicable by the department toward the M.A. degree requirements, including at least 8 quarter units of graduate level (6100-6999 series) work in residence at Cal State Hayward; and
4. have been recommended for Advancement to Candidacy by the department.

Requirements for Graduation

To be eligible for the M.A. degree in economics a student must:

- A. have been Advanced to Candidacy;
- B. have completed 45 quarter units of graduate work as indicated in (C) below, of which:
 1. all must have been earned within the five years just preceding the completion of the requirements for the degree;
 2. not fewer than 32 must have been completed in residence;
 3. not fewer than 28 must have been in Economics courses in the 6100-6999 series;
 4. not more than 5 may have been for a thesis (ECON 6910);
 5. not more than 13 have been taken in "Unclassified Post-baccalaureate" status and/or for extension and/or transfer course credit, as approved by the department; and
- C. have completed a satisfactory program of study (45 units) as approved by the department and the graduate coordinator, to include:
 1. *Required Courses (20 units):*
ECON 6101, 6102 Seminar: Micro-Economic Theory I, II (8)
ECON 6105 Seminar: Macro-Economic Theory (4)
ECON 6400 Seminar: Econometrics (4)
MGMT 6110 Business and Economic Forecasting (4)
 2. *Choice of one of the following groups (20-24 units):*
 - a. Complete the General Economics Option listed below (20-24 units)
 - b. Complete one of the following approved options: Comparative Economic Systems, International Economics, Labor Economics, Monetary Economics, or Public Sector Economics (8 units), and one or two additional graduate seminars (4-8 units) from the following list: ECON 6200, 6250, 6315, 6370, 6520, 6680, 6700, 6710. Complete one to three additional electives (4-12 units) chosen from graduate Economics courses or approved upper division or graduate electives in Mathematics, Statistics, Finance
 3. *Choice of the following (1-5 units):*
 - a. ECON 6896 Research Methods (5)
 - b. ECON 6910 University Thesis (1-5)
 4. *Pass a two-part comprehensive exam:* one in micro-economic theory and one in macro-economic theory
 5. *Satisfy the other university requirements* for graduation described in the Graduate and Postbaccalaureate Studies chapter at the beginning of the graduate section in this catalog. These include a 3.00 GPA and the University Writing Skills requirement.

Options

Comparative Economic Systems Option (8 units)

Required courses (8 units)

ECON 6200 Seminar: Comparative Economic Systems (4),
ECON 6710 Seminar: International Economic Development (4)

Suggested electives (not required)

ECON 6370 Seminar: Public Sector Economics (4), 6375 Public Choice (4), 6700 Seminar: International Trade (4), 6705 International Finance (4)

General Economics Option (20-24 units)

Electives (20-24 units)

Three graduate seminars (12 units) in Economics chosen from the following list: ECON 6200, 6250, 6315, 6370, 6520, 6680, 6700, 6710 and two or three electives (8-12 units) chosen from graduate Economics courses or approved upper division electives in Mathematics, Statistics, or Finance.

International Economics Option (8 units)

Required courses (8 units)

ECON 6700 Seminar: International Trade (4)
ECON 6705 International Finance (4)

Suggested electives (not required)

ECON 6710 Seminar: International Economic Development (4),
6200 Seminar: Comparative Economic Systems (4)

Labor Economics Option (8 units)

Required courses (8 units)

ECON 6680 Seminar: Labor Economics (4)
ECON 6685 Labor Institutions (4)

Suggested electives (not required)

ECON 6500 Regional and Urban Economics (4), 6520 Seminar: Industrial Organization and Public Policy (4); MGMT 6612 Seminar in Strategic Human Resources Management (4), 6615 Compensation Administration (4)

Monetary Economics Option (8 units)

Required courses (8 units)

ECON 6310 Money, Banking, and Financial Intermediaries (4)
ECON 6315 Seminar: Monetary Theory (4)

Suggested electives (not required)

ECON 6705 International Finance (4); FIN 6325 Financial Management of Banking Institutions (4)

Public Sector Economics Option (8 units)

Required courses (8 units)

ECON 6370 Seminar: Public Sector Economics (4)
ECON 6375 Public Choice (4)

M.A. in
Economics,
Option in
Economics for
Teachers

Graduate
Courses

Suggested electives (not required)

ECON 6250 Seminar: Project Analysis (4), 6520 Seminar:
Industrial Organization and Public Policy (4), 6680 Seminar:
Labor Economics (4)

Business Economics Option, (M.B.A.)

An option in Business Economics is provided in the Master in Business Administration programs for students with an interest in Economics. (See the Business Administration chapter in the graduate section of this catalog.)

Prerequisites

ECON 2301 Principles of Microeconomics or equivalent (4)
ECON 2302 Principles of Macroeconomics or equivalent (4)
MATH 1130 College Algebra (4)
STAT 1000 Elements of Probability and Statistics (5)
Teaching Credential

Required courses (45 units)

ECON 3000 Micro-Economic Theory (4)
ECON 3005 Macro-Economic Theory (4)
ECON 6899 Project (1-5)

Thirty-two (32) units of Economics electives selected from courses 6100-level and above.

The course prefix for the following courses is ECON.

Students who are not graduate students in the College of Business and Economics must consult with the instructor before registering for a graduate course in Economics. (See last page of this chapter for all footnotes.)

6051  Graduate Introduction to Economics for Managers (4)
Macro and micro-economic theories as applied to business situations to facilitate managerial decision-making relevant to the domestic and international marketplaces.
Prerequisites: MATH and STAT proficiencies for the M.B.A. program.

6101  Seminar: Micro-Economic Theory I (4)
First of two-quarter sequence: Selected topics in periodical literature in consumer behavior; price determination; and resource allocation patterns in a decentralized economy.
Prerequisites: ECON 3005; ECON 3000 or 3551; and the math admission requirements for the M.A. in Economics.
(W)

6102  Seminar: Micro-Economic Theory II (4)
Second of two-quarter sequence: Selected topics in periodical literature in general equilibrium; welfare theory and economic efficiency; capital theory. Prerequisite:
ECON 6101. (Sp)

- 6105** Seminar: Macro-Economic Theory (4)
Review of periodical literature on inflation, employment and economic growth. Prerequisites: ECON 3005; ECON 3000 or 3551; and the math admission requirements for the M.A. in Economics. (F)
- 6150** Economic History of the United States (4)
The development of the American economy and economic institutions; emphasis on factors affecting economic growth, problems, and policies. Not open to those with credit for ECON 3150. Prerequisites: ECON 3005 and one of the following: ECON 3000, 3551, or consent of instructor.
- 6170** History of Economic Thought (4)
The key theories and individuals in the history of economic thought including Adam Smith, David Ricardo, and Karl Marx. Prerequisites: ECON 3005; ECON 3000 or 3551; and the math admission requirements for the M.A. in Economics.
- 6190** Market Processes: Theory and Applications (4)
Austrian School analysis of socioeconomic phenomena including: methodology of the social sciences, theory of subjective value, entrepreneurship, competition as a discovery procedure, spontaneous orders, the division of knowledge, the capital structure, and trade cycles. Historical applications used throughout. Prerequisites: ECON 3005; ECON 3000 or 3551; and the math admission requirements for the M.A. in Economics.
- 6200** Seminar: Comparative Economic Systems (4)
Selected problems and approaches to resource allocation, income distribution, economic development, and planning in alternative economic systems. Prerequisites: ECON 3005; ECON 3000 or 3551; and the math admission requirements for the M.A. in Economics.
- 6250** Seminar: Project Analysis (4)
Benefit-cost analysis applied to resource allocation and planning. Applications to such areas as education, manpower programs, medical care, transportation, and non-profit enterprises. Prerequisites: ECON 3005; ECON 3000 or 3551; and the math admission requirements for the M.A. in Economics.
- 6306** Environmental Economics (4)
Readings, reports, and discussion on economic aspects of environmental problems and alternative proposed solutions: pollution, congestion, and population. Prerequisites: ECON 3005; ECON 3000 or 3551; and the math admission requirements for the M.A. in Economics.
- 6310** Money, Banking, and Financial Intermediaries (4)
Essentials of commercial and central banking; financial intermediaries; monetary policy. Prerequisites: ECON 3005; ECON 3000 or 3551; and the math admission requirements for the M.A. in Economics.

- 6315** Seminar: Monetary Theory (4)
Review of periodical literature on static and dynamic issues of the supply and demand for money. Prerequisites: ECON 3005; ECON 3000 or 3551; and the math admission requirements for the M.A. in Economics.
- 6370** Seminar: Public Sector Economics (4)
Economic analysis as applied to the public sector including public finance, welfare economics, public expenditure evaluation, theories of taxation, analysis of the U.S. tax structure, public choice, and policy issues. Prerequisites: ECON 3005; ECON 3000 or 3551; and the math admission requirements for the M.A. in Economics. (Sp)
- 6375** Public Choice (4)
Economic theory applied to political institutions and decision-making within governments. Allocations under various property right systems; coalitions and voting behavior; theory of constitutions; theory of bureaucracy; political economy of income redistribution, crime, violence, discrimination, federalism, nationalism, anarchy. Prerequisites: ECON 3005; ECON 3000 or 3551; and the math admission requirements for the M.A. in Economics.
- 6400** Seminar: Econometrics (4)
Statistical analysis of economic relationships. Regression analysis, multi-equation models and time series analysis. Prerequisites: ECON 3005; ECON 3000 or 3551; STAT 2010.
- 6500** Regional and Urban Economics (4)
Economic analysis as applied to urban and regional economic problems and policies. Prerequisites: ECON 3005; ECON 3000 or 3551; and the math admission requirements for the M.A. in Economics.
- 6520** Seminar: Industrial Organization and Public Policy (4)
Selected topics in industrial organization and public policy including antitrust policy. Prerequisites: ECON 3005; ECON 3000 or 3551; and the math admission requirements for the M.A. in Economics.
- 6590** Selected Topics in Economic Analysis (4)
Application of economic analysis to past/contemporary economic issues. With department permission, may be repeated once for credit with a different instructor or different topics. Prerequisites: ECON 3005; ECON 3000 or 3551; and the math admission requirements for the M.A. in Economics.
- 6680** Seminar: Labor Economics (4)
Selected topics on theoretical models of labor markets with applications to current micro and macro-economics manpower problems. Prerequisites: ECON 3005; ECON 3000 or 3551; and the math admission requirements for the M.A. in Economics.
- 6685** Labor Institutions (4)
Development of the labor sector in the American economy

with emphasis on labor institutions, labor legislation, and public policy toward labor organizations. Prerequisites: ECON 3005; ECON 3000 or 3551; and the math admission requirements for the M.A. in Economics.

6700 Seminar: International Trade (4)

Selected topics in the modern theory of international trade and investment, multinational enterprise, commercial policy and international trading systems and methods.

Prerequisites: ECON 3005; ECON 3000 or 3551; and the math admission requirements for the M.A. in Economics.

6705 International Finance (4)

Comprehensive coverage of the organization, operation and theory of foreign exchange markets, Eurocurrency and offshore financial markets, balance of payments and international adjustment, international capital flows and different types of international monetary systems.

Prerequisites: ECON 3005; ECON 3000 or 3551; and the math admission requirements for the M.A. in Economics.

6710 Seminar: International Economic Development (4)

Selected topics in the theory and practice of international economic development with a focus on the nature and causes of development in specific areas and nations of the world. Prerequisites: ECON 3005; ECON 3000 or 3551; and the math admission requirements for the M.A. in Economics.

6715 An Executive Introduction to Social Philosophy, Ethics, and the History of Economic Thought (4-5)

An in-depth review of major controversial socio-philosophical concepts: the State, the society, individual freedom, the environment, justice, and free markets; conflicting trains of economic thought; the key figures and their main social theories; methodological problems of implementation and realization of political ideals.

Prerequisite: graduate standing.

6720 The European Union, Its Institutions, and International Trade (4-5)

An economic analysis of the institutional evolution of European legal, cultural, and political integration, and competition from eastern Europe. The leading institutions of the European Union: their tasks, procedures, and effects on business regulations, industrial policy, and international trading systems. Prerequisite: graduate standing.

6725 Money, Banking, and International Finance (4-5)

A theoretical and applied analysis of international monetary policies, commercial and central banking, international capital markets, capital flows, and exchange rates determination. A comprehensive coverage of the most important international financial institutions, their structures, network operations, and socioeconomic tasks. Prerequisite: graduate standing.

6751 Managerial Economics (4)

Selected topics in the socioeconomic application of intermediate micro-economic theory with an emphasis on the needs of the international business community.
Prerequisite: graduate standing.

6896 Research Methods (5)
Research methodologies, data analysis, and report writing. Provides students with analytic and research tools to increase their capacity to pose, answer, and critically evaluate research questions. Culminates in research project that synthesizes research methods, statistical analysis, and reporting of empirical results. Prerequisites: ECON 6101, 6102 or 6105, 6400, and at least one graduate seminar in Economics. Four hrs. lect., 2 hrs. lab.

6898¹ Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities within the quarter enrolled. May be repeated for up to 8 units. No units may be counted toward any SBE graduate degree. Prerequisites: at least 3.0 GPA; departmental approval of activity. CR/NC grading only. (A)

6899 Project (1-5)
Developing and writing of formal research projects relevant to the teaching of economics. Supervision by a member of the Economics Department faculty. May be repeated for credit up to a maximum of 5 units. Prerequisites: ECON 3000, ECON 3005, MATH 1103, STAT 1000, and acceptance into the M.A. Economics, Option in Economics for Teachers.

6900 Independent Study (1-4)

6910² University Thesis (1-6)
Development and writing of a formal research paper for submission to the University in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense normally required. Prerequisites: Advancement to Candidacy and an officially appointed thesis director or committee. Maximum of 6 units per student. (See also "University Thesis Writing Guide," available in WA 859). (A)

6999 Issues in Economics (4)
Readings, discussion, and research on contemporary and/or significant issues in economics. May be repeated for credit when content varies.

Footnotes

¹ Enrollment in this course is restricted to "Classified" and "Conditionally Classified Graduate" students. The course is a graduate program prerequisite, and its units cannot be applied to the 45 units required for any SBE graduate degree.

❑ Enrollment in these courses is restricted to "Classified" and "Conditionally Classified Graduate" students.

❑ Undergraduate, upper division course plus a graduate tutorial module. Not open to students who have completed the parallel-numbered undergraduate course at Cal State Hayward for credit.



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Department Information

Public Administration

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Department of Public Affairs and Administration
College of Arts, Letters, and Social Sciences
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Professor Emeritus: Jong S. Jun

Professors: Carl J. Bellone, Jombo ("Jay") Umeh (Chair), Dvora Yanow

Associate Professor: George F. Goerl

Assistant Professors: Ann L. Cunliffe, Jennifer Eagan, Toni Fogarty, Frank E. Scott

Lecturer: Carol Edlund

Graduate Coordinator: George Goerl

Internship Coordinator: George Goerl

- Institute for Governmental Research and Training: Jay Umeh (Director)

Please consult the 2006-2007 online catalog for any changes that may occur.

Master of Public Administration

Program Description

The Department of Public Affairs and Administration at Cal State Hayward offers a program of coursework leading to a Master of Public Administration (M.P.A.) degree accredited by the National Association of Schools of Public Affairs and Administration (NASPAA). The department also offers the management courses for the B.A. in Arts Administration (see "Arts Administration" in the "Undergraduate Programs" section of this catalog) and an M.S. in Health Care Administration (see "Health Care Administration" in the "Graduate Programs" section of this catalog). The following pages describe only the M.P.A. degree program.

Public Administration is a rich and challenging multi-disciplinary field drawing from sociology, anthropology, philosophy, psychology, economics, and urban and organizational studies. The

master's degree program provides students with a grounding in major philosophical and social science thinking about the nature of organizations; it helps students to build the intellectual and practical tools they will need to become effective organizational leaders in the public and non-profit sectors. The M.P.A. program is designed to increase the personal and professional effectiveness of people working in public, voluntary, and private organizations. The purpose of the program is to prepare individuals for leadership positions in various kinds of organizations with a sense of commitment to social purpose, the public interest, and effective public problem-solving.

The program proceeds on several assumptions: (1) many pressing problems of society must be dealt with through public agencies, and these agencies must be staffed by well-prepared public administrators; (2) public agencies should be more oriented toward the public interest and be more client-centered than is generally the case at present; (3) public agencies should be humanistically oriented, encouraging personal contribution, growth, and improvements in the quality of working life; (4) public agencies should nurture and support a critical awareness on the part of public administrators, leading to an ability to challenge and change administrative practice; and (5) public administrators need to find creative and innovative solutions to the problems of providing quality public services in times of resource scarcity.

The department strives to expand the meaning of public administration to include the theory and practice of administration in non-profit and community organizations. Overall, emphasis is placed upon developing student sensitivities to a wide variety of human, social, and organizational realities in order to assist public organizations in formulating and obtaining their goals and striving toward responsible social change. In sum, the faculty believes the challenge of the changing post-industrial era is best met by humanizing governments, by strengthening their capacities for intelligent policy analysis and effective action on behalf of the public interest, and by encouraging in public administrators a welcoming attitude toward learning, creativity and innovation.

Career Opportunities

The M.P.A. program prepares students for careers in government organizations at the federal, state, and local levels as well as in community organizations and the non-profit sector. The program also offers an excellent preparation for doctoral level study for those seeking careers in university teaching and research. The curriculum offers students opportunities to specialize in public management (including finance and human resources management), public policy development and implementation, health care administration, and organizational change. Cal State Hayward M.P.A. alumni are well represented in positions of leadership throughout the Bay Area as well as in local, state, and federal agencies in the western states.

Features

Instructional Locations: The department offers evening courses that meet from 6:30 p.m. to 10:00 p.m. at Cal State Hayward and the university's Contra Costa Campus in Concord. The degree with the Public Management Option may be taken at the Contra Costa Campus and, when available, at other off-campus sites, such as the Oakland Center. All courses are taught by regular

faculty and carry regular academic credit. Students may take courses at either of the two locations in whatever combinations desired in pursuit of the M.P.A. degree.

Internships. The Department of Public Affairs and Administration sponsors a graduate internship program as an integral part of the master's program. The internship program provides students with an opportunity to complement their academic studies with practical administrative experience in a city, county, state, federal, or non-profit agency. The internships vary from three to nine months and average 10 to 30 hours per week. Some pay a stipend, others are on a volunteer basis. An internship is not a job placement, but an opportunity for gaining experience.

Scholarships

Graduate Equity Fellowship

Herman J. McKenzie Memorial Scholarship Fund

Robert Odell Scholarship

Admission

The M.P.A. degree program is open to students planning a career in public organizations who have a baccalaureate degree from an accredited institution and who have earned an overall grade point average of 3.0 (4.0 basis) in the last two years or 90 quarter/60 semester units of undergraduate work. Students with a GPA below 3.0 may be admitted based upon an evaluation of their student profile, including extensive experience in positions of administration and management beyond the baccalaureate. In evaluating applications from such individuals, the department's Admissions Committee may ask an applicant to take the three foundation courses and reapply, so that a decision can be based on grades in those courses. The Graduate Record Exam (GRE) is not required.

All applicants should submit: (1) a statement of purpose (2-3 pages) with their application stating their reasons for wanting to pursue the M.P.A. degree, describing their relevant work experience, and explaining their past academic performance; (2) two letters of recommendation (letters from prior instructors are preferred); and (3) a resume. Successful experience in positions of administrative leadership will be considered in evaluating these applications.

Admission to the university and admission to the M.P.A. degree program are separate steps. It is suggested that application for admission to the university (Part A) be filed together with the form for entry into the degree program (Part B).

Student Standing and Progress Toward the Degree

There are three categories of student status which reflect student progress toward the degree: "Conditionally Classified Graduate" student, "Classified Graduate" student, and Advancement to Candidacy.

1. Students achieve "Conditionally Classified Graduate" status when they have been admitted to the M.P.A. degree program, but have not yet completed the requirements for "Classified Graduate" status in the M.P.A. degree program.

These requirements are: PUAD 4800 Public Administration and Society (with a grade of "B" or better), PUAD 4830 Organization Theory and Human Behavior (with a grade of "B" or better), PUAD 5000 Philosophy of Public Administration (with a grade of "B" or better), and STAT 1000 or its equivalent (with a grade of "C" or better). A student may request to have one or more of them waived based upon coursework taken outside of our Departments of Public Affairs and Administration or Statistics. These foundation courses should be taken before enrolling in the core graduate courses. Since no specific undergraduate major is required for admission to the program, when additional deficiencies are apparent, a student may be required to complete preparatory work in the deficient areas before attempting graduate level study.

2. Students achieve "Classified Graduate" status when they have satisfactorily completed the four foundation courses for the M.P.A. degree program or their equivalents, and satisfied the University Writing Skills requirement.
3. Students are Advanced to Candidacy when they have completed the core courses with a 3.0 or better GPA.

Degree Requirements

The Master of Public Administration program requires completion of 48 quarter units, distributed among core courses; required and elective courses in an option area; and the graduate synthesis or the departmental or university thesis. Of these, at least 35 units must be completed in residence (transfer units are limited to 13 quarter units); at least 24 units must be in courses in the 6000 series. No course numbered 1000 to 2999 (or equivalent if taken elsewhere) may be used as part of the 48 unit graduate degree program.

No more than 8 units of Independent Study (PUAD 6900) may be counted toward the 48 units required for the degree. Thesis or Graduate Synthesis credit may not exceed 4 units.

A grade point average of 3.0 must be maintained in all 48 quarter units taken to satisfy the degree requirements. Students who fail to maintain progress by falling below a 3.0 GPA in their graduate courses for two consecutive quarters will be academically disqualified from the university. All graduate degree requirements must be completed within 5 years.

Students accumulating more than 8 units of work graded "I" (Incomplete) may not register for further courses applicable to the degree until the "I" grades are removed.

Curricular Requirements

- A. Required Core Courses (20 units)
 - PUAD 6801 Public Policy Formulation (4)
 - PUAD 6811 Human Organizations and Social Realities (4)
 - PUAD 6812 Changing Human Organizations (4)
 - PUAD 6831 Research Methods in Public Administration I (4)
 - PUAD 6832 Research Methods in Public Administration II (4)

Note: Foundation courses (STAT 1000; PUAD 4800, 4830, 5000)

must be completed before taking the required core courses. Core courses should be completed prior to enrolling in option courses.

B. Option Area: 24 units in one of the following seven option areas:

1. *Administration of the Metropolitan Region (24 units)*

Four of the following:

- PUAD 6864 Managing Public Organizations (4)
- PUAD 6865 Administration of the Metropolitan Region (4)
- PUAD 6866 Approaches to Urban and Regional Problem-Solving (4)
- PUAD 6868 Land-Use Planning for Administrators (4)
- PUAD 6869 Topics in Public Management (4)

Electives: 8 units, selected with the consent of advisor.
These units may be taken outside of the department.

2. *Health Care Administration (24 units)*

Four of the following:

- HCA 4200 Social Construction of Health Care (4)
- HCA 6240 Health Care Financing and Budgeting (4)
- HCA 6280 Legal and Ethical Issues in Health Care (4)
- PUAD 6878 Transforming Health Care (4)
- PUAD 6879 Administration of Integrated Health Care (4)

Electives: 8 units, selected with the consent of advisor.
These units may be taken outside of the department.

3. *Organizational Change (24-28 units)*

- PUAD 6762 Self and Organizational Change (4)
- PUAD 6763 Advanced Group Processes and Team Learning (4)
- PUAD 6764 Organizational Learning and Change (4)
- PUAD 6765 Organizational Change Interventions (4)

Electives: Choose alternative A or alternative B

Alternative A: Management Focus

Two of the following (8 units), selected with consent of advisor:

- PUAD 6830 Information Management in Public Organizations (4)
- PUAD 6840 Seminar in Public Finance Administration (4)
- PUAD 6842 Governmental Budgeting (4)
- PUAD 6850 Human Resource Management in the Public Sector (4)
- PUAD 6851 Work and Organizations of the Future (4)
- PUAD 6854 Seminar in Public Labor Relations (4)

Alternative B: Counseling Focus in Educational Psychology

(This alternative provides more concentrated work in the clinical and counseling areas). Three of the following (12 units), selected with consent of advisor:

- EPSY 6400 Family Psychotherapy (4)
- EPSY 6750 Foundations of Counseling (4)

EPSY 6751 Counseling and Psychotherapy Theory (4)
Four units of 6000-level EPSY coursework covering the application of psychological health and human effectiveness theories/research to counseling practices, with consent of advisor (4)

4. *Public Financial Administration (24 units)*

Four of the following:

PUAD 6840 Seminar in Public Finance Administration (4)
PUAD 6842 Governmental Budgeting (4)
PUAD 6847 Strategic Approaches in Public Finance and Budgeting (4)
PUAD 6869 Topics in Public Management (4)
Four units of 6000-level PUAD coursework covering governmental accounting and fiscal management, with consent of advisor (4)

Electives: 8 units, selected with the consent of advisor.
These units may be taken outside of the department.

5. *Public Human Resource Management (24 units)*

Four of the following:

PUAD 6762 Self and Organizational Change (4)
PUAD 6850 Human Resource Management in the Public Sector (4)
PUAD 6851 Work and Organizations of the Future (4)
PUAD 6854 Seminar in Public Labor Relations (4)
PUAD 6869 Topics in Public Management (4)

Electives: 8 units, selected with the consent of advisor.
These units may be taken outside of the department.

6. *Public Policy Development (24 units)*

Four of the following:

PUAD 6802 Seminar in Public Policy Implementation (4)
PUAD 6803 Seminar in Interpretive Policy Analysis (4)
PUAD 6806 Policy Design for Sustainable Futures (4)
PUAD 6808 Topics in Public Policy (4)
PUAD 6809 Seminar in Public Program Evaluation (4)
PUAD 6842 Governmental Budgeting (4)
PUAD 6866 Approaches to Urban and Regional Problem-Solving (4)

Electives: 8 units, selected with the consent of advisor.
These units may be taken outside of the department.

7. *Public Management (24 units)*

Four of the following:

PUAD 6815 Ethics and Administrative Responsibility (4)
PUAD 6830 Information Management in Public Organizations (4)
PUAD 6840 Seminar in Public Finance Administration (4)
PUAD 6842 Governmental Budgeting (4)
PUAD 6850 Human Resource Management in the Public Sector (4)
PUAD 6851 Work and Organizations of the Future (4)

PUAD 6864 Managing Public Organizations (4)
PUAD 6869 Topics in Public Management (4)

Electives: 8 units, selected with the consent of advisor.
These units may be taken outside of the department.

C. Capstone Experience (0-4 units)
Choose 1 or 2

1. The Graduate Synthesis (PUAD 6901) (4 units) and Comprehensive Examination, *or*
2. The Departmental Thesis (PUAD 6909) or University Thesis (PUAD 6910) (4 units).

Note: Students in the Counseling Focus (Alternative B) of option 4 (Organizational Change) are not required to take the Graduate Synthesis (PUAD 6901) but instead take an additional elective. Their comprehensive exam will be specially designed to cover the Educational Psychology electives.

Capstone Experience

Comprehensive Exam, Departmental or University Thesis

Students have a choice of completing the program with a Departmental or University Thesis, or Comprehensive Examination. Students who wish to take the Comprehensive Examination must enroll in PUAD 6901, Graduate Synthesis (4 units) (except for those completing the "Counseling Focus" of Option 4). Students completing PUAD 6901 are eligible to take the Comprehensive Exam, which is a proctored essay exam. Students who fail the Comprehensive Exam may retake PUAD 6901 and the Exam one time, or they may choose to enroll in PUAD 6909, Departmental Thesis or PUAD 6910, University Thesis; they may not do both.

Students who wish to take PUAD 6909, Departmental Thesis or PUAD 6910, University Thesis (each carries 4 units of graduate credit) should be aware of the procedural differences between a departmental and university thesis. The university thesis requires a two-faculty member committee and submission of the thesis to the university for final approval and binding. Two bound copies are required (one for the department and one for the university library). The university thesis deadline dates are listed in the catalog each year. The University Thesis Committee meets as called by the student or the faculty. Students completing the departmental thesis may either sign up individually with a faculty advisor or meet in a scheduled graduate course. A departmental thesis is directed by one faculty member. Two copies of the departmental thesis are required for the department.

Grades of "SP" (Satisfactory Progress) may be given for a thesis that is not completed at the end of the quarter. The "SP" grade must be removed within five years or it will become an "F."

Granting the Degree

Upon satisfaction of all requirements for the degree, the department will recommend that the candidate be granted the Degree of Master of Public Administration. Students must file for

Post- baccalaureate Courses

graduation by the second week of the quarter prior to the quarter in which they expect to graduate.

The course prefix for the following courses is PUAD.

- 5000** Philosophy of Public Administration (4)
Critical analysis of emerging domestic and global ideas and issues shaping and being shaped by the public sector. Theoretical perspectives on understanding values, ethics, citizenship, public good, and search for democratic administration. Prerequisites: PUAD 4800, 4830. (A)
- 5900** Independent Study (1-4)
-

Graduate Courses

The course prefix for the following courses is PUAD. They are restricted to "Conditionally Classified" and "Classified Graduate" students.

- 6762** Self and Organizational Change (4)
Focus on becoming a lifelong learner and change-manager by developing self-awareness and critical reflection skills. Explore learning styles, paradox, managing oneself, interpersonal skills, individual differences, influence styles, motivation, and identity work. Prerequisite: PUAD 6811.
- 6763** Advanced Group Processes and Team Learning (4)
Focus on team learning strategies, paradox, systems and integrative thinking, group processes, distributive leadership, problem solving, resolving conflict, and managing change. Includes discussion, group activities, and case problems. Prerequisite: PUAD 6762
- 6764** Organizational Learning and Change (4)
Organizational diagnosis and development. The interrelationship between organizations as structural networks, learning communities, and relational networks, the role of the change agent, organizational learning. Classes are a mix of input, discussion, case analysis, and seminars. Prerequisite: PUAD 6763.
- 6765** Organizational Change Interventions (4)
Intervention strategies (e.g., systems-based, appreciative inquiry, dialogue conferences, action learning), O. D. methods, interview techniques, observation, surveys, and discussion. Course participants carry out an organizational diagnosis and assessment. Prerequisite: PUAD 6764.
- 6801** Public Policy Formulation (4)
Critical analysis of public policy-making processes; interrelationships among policy formulation, implementation, evaluation, and revision; alternative models of the policy process. Prerequisite: PUAD 4800. (A)

- 6802** Seminar in Public Policy Implementation (4)
Developing strategies and tactics for identifying and solving implementation problems. Implementation as a design, evaluative, and learning process. Analysis of implementation case studies. Prerequisite: PUAD 6801. (A)
- 6803** Seminar in Interpretive Policy Analysis (4)
Analytic approaches developed in response to hermeneutical, phenomenological, and other developments in the philosophy of science and social science; narrative policy analysis, policy design and framing, analysis of local knowledge. Prerequisite: PUAD 6801. (Y)
- 6806** Policy Design for Sustainable Futures (4)
Foundations for futures studies. The future as paradox, learning, democratic process, and interpretation of reality. Forecasting, making policy recommendations, and exploring alternative actions for sustainable futures. Interpreting global transformations and creating the future. Prerequisite: PUAD 6801. (Y)
- 6808** Topics in Public Policy (4)
Different substantive areas of public policy, e.g., immigration policy; race-ethnic policies; science and technology policy, environmental policy; welfare, housing, family, and other social policies; comparative public policy. May be repeated once for credit, when content changes, and with consent of instructor. Prerequisite: PUAD 6801. (Y)
- 6809** Seminar in Public Program Evaluation (4)
Assessment of policy impact and effectiveness; analysis of program objectives; methods of evaluation; developing action-oriented evaluation processes; administration of evaluation systems. Prerequisite: PUAD 6801. (Y)
- 6811** Human Organizations and Social Realities (4)
Post-modernist approaches to the understanding of organizational realities, including phenomenological, critical, feminist, and other interpretive approaches; subjective, intersubjective, contextual, historical influences; organizational socialization and personality growth, personal and organizational value development and human effectiveness. Prerequisites: PUAD 4800, 4830 and STAT 1000 or its equivalent. (A)
- 6812** Changing Human Organizations (4)
Application of interpretive, critical, and postmodern theories to changing organizations; use of meaning-centered, experientially grounded theories for understanding organizational cultures; personal praxis in changing organizations. Prerequisite: PUAD 6811. (A)
- 6815** Ethics and Administrative Responsibility (4)
Ethical dimensions of the public service; value dilemmas, administrative ethics and accountability, responsibility in making public choices, whistle-blowing, the public interest; equality and equity in democracy. Prerequisites: PUAD 6801 and 6811. (Y)

- 6830** Information Management in Public Organizations (4)
Critical examination of the significance of information management concepts, tools, and technologies for public organizations; their implications for policy formulation, analysis, evaluation, organizational change, budgeting, decision making, knowledge management, and client services. Prerequisites: PUAD 4800, 4830, and STAT 1000 or its equivalent. (Y)
- 6831** Research Methods in Public Administration I (4)
Theory and methods of interpretive research in the public sector. Emphasis on meaning-centered and inductive modes of data-gathering and analysis, including interviews, participant observation, ethnographic methods and the development of grounded theory. Issues in case study presentation and field research narratives. Prerequisites: PUAD 4800, 4830, 5000. (A)
- 6832** Research Methods in Public Administration II (4)
Positivist research methods; uses of quantitative and computer analysis; application of quantitative approaches to organizational improvement, policy research, and decision making; implementation of research design; examination of the logic underlying application of quantitative methods and statistical techniques. Prerequisites: PUAD 4800, 4830, 5000, and STAT 1000 or its equivalent. (A)
- 6840** Seminar in Public Finance Administration (4)
Budgetary processes in public policy formation and administrative control; strategic principles of fiscal policy in attaining public goals; public revenues, sources, incident, and effect of principal taxes; intergovernmental aspects of revenue problems; grants in aid. Prerequisite: PUAD 6801. (Y)
- 6842** Governmental Budgeting (4)
Governmental budgeting as political and social process; administrative control at federal, state, local levels; central budget agencies and budget offices in operating agencies, budgets as planning, policymaking and management instruments; executive-legislative relationships. Prerequisite: PUAD 6801. (Y)
- 6847** Strategic Approaches in Public Finance and Budgeting (4)
Strategies and tactics for developing innovative approaches for financing public goods and service. Critical evaluation of public sector efforts to acquire financial and budgetary resources. Public sector managers as entrepreneurs. Prerequisites: PUAD 6801 and 6842. (Y)
- 6850** Human Resource Management in the Public Sector (4)
Development of public service concepts and institutions; assessment of public personnel methods and organizations; interaction with other management functions, and with the executive and legislative processes; influence

of social and political values upon public service concepts.
Prerequisite: PUAD 6811. (Y)

- 6851** Work and Organizations of the Future (4)
Critical assessment of the nature of work and traditional human resource practices in public organizations. Empowering and involving employees. Diversity, trust, and mutualism. Relationships among information technologies, the organization, employees, and citizens. Creating the organization of the future. Prerequisite: PUAD 6811. (Y)
- 6854** Seminar in Public Labor Relations (4)
History and present legal status of public labor relations; changing concepts and their implications for existing institutions; processes and values in public personnel systems; dispute resolution; cooperative labor/management committees and other current issues. Prerequisite: PUAD 6801. (Y)
- 6864** Managing Public Organizations (4)
The responsibilities of the public sector manager; differences between private and public sector management; short versus long-term management in the public sector. Critical examination of public managers as strategic leaders. Prerequisite: PUAD 6801. (Y)
- 6865** Administration of the Metropolitan Region (4)
Description and evaluation of urban, suburban and regional institutional arrangements for providing and delivering public goods and services. Origins and description of institutional arrangements and critical evaluation of prospects for improving the effectiveness of metropolitan government and governance. Prerequisite: PUAD 6801. (Y)
- 6866** Approaches to Urban and Regional Problem-Solving (4)
Urban and regional environments as a source of public problems, including such issues as employment, education, transportation, and citizen participation. Comparative study of efforts to improve the quality of urban and regional life. Prerequisite: PUAD 6801. (Y)
- 6868** Land-Use Planning for Administrators (4)
Historical overview of land-use planning in the U.S.; general and specific plans; infrastructure development and cost projections; land-use planning models; California planning law; planning processes: preliminary, tentative and final maps; zoning; political pluralism and the politics of planning. Prerequisite: PUAD 6801. (Y)
- 6869** Topics in Public Management (4)
Specialized investigations of public management issues and problems selected by instructor. Repeatable once if the course content is different. Prerequisite: PUAD 6801. (Y)
- 6878** Transforming Health Care (4)
Emerging career plans in health care administration. The implications of decentralized health care and integrated

health systems for health care workers. The future of health care delivery systems and the wider impact of these changes on the social order. Prerequisites: PUAD 6801 and 6811. (Y)

- 6879** Administration of Integrated Health Care (4)
Health care administration issues and practices associated with coordinating care among complementary and conventional health care providers in a changing market. Emphasis on understanding and facilitating dynamics among different health paradigms as they converge to provide integrated care for the individual patient. Prerequisites: PUAD 6801 and 6811. (Y)
- 6880** Selected Problems in Public Administration (4)
An investigation of a specific problem area defined by the instructor that is of current interest to the field of public administration. Repeatable if the content is different. Prerequisite: PUAD 6801. (Y)
- 6893** Internship in Public Administration (1-4)
Academically challenging field placements in half-time or full-time positions with governmental agencies under the supervision of university faculty member. Examination of the relationship of theory to practice in the provisions of public service. CR/NC grading only. Prerequisites: "Classified Graduate" status and the consent of the Internship Coordinator. (A)
- 6897** Community Health Administration Practicum (4)
Practical experiences through field work with community agencies, emphasis on improving a student's ability to activate community resources and support sustainable wellness communities. Prerequisites: HCA 4200, and either PUAD 4830 or MGMT 3614. (A)
- 6898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 4 units. A maximum of 4 units will be accepted toward the Master of Public Administration degree. CR/NC grading only. Prerequisites: at least a 3.0 GPA; the approval of the Internship Coordinator. (A)
- 6900** Independent Study (1-4)
- 6901** Graduate Synthesis (4)
A synthesis of public administration theories and concepts through a critique of major readings in the field. Prerequisite for Comprehensive Examination (except for Counseling Focus students in the Organizational Change Option). Prerequisites: Advancement to Candidacy (completion of all core courses, option area requirements and electives) and consent of instructor. (A)
- 6909** Departmental Thesis (1-4)
Development and writing of a research paper for submission to the department, which specifies its format. Supervision by a departmental faculty member. Oral

defense normally required. Prerequisites: Advancement to Candidacy and consent of thesis advisor. Maximum of 4 units per student. (See also "Departmental Thesis Guidelines," available in department office.) (A)

6910 University Thesis (1-4)

Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense normally required. Prerequisites: Advancement to Candidacy and consent of Thesis Committee. Maximum of 4 units per student. (See also "University Thesis Writing Guide" available in WA 859.) (A)

6999 Issues in Public Administration (4)

Readings, discussion, and research on contemporary and/or significant issues in public administration. May be repeated for credit when content varies.



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Department Information

General Information

M.S. in Education

Education: Interdisciplinary

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Interdisciplinary Studies Cluster
College of Education and Allied Studies
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Professor Emerita: Jodi Servatius (Educational Leadership and Interdisciplinary Studies)

Professor: Emily Lowe Brizendine (ISC Coordinator)

Associate Professor: Nan P. Chico (Coordinator of Online Teaching and Learning Option)

Please consult the 2006-2007 online catalog for any changes that may occur.

The Interdisciplinary Studies Cluster (College of Education and Allied Studies) program is built on the recognition that there are some issues that cross disciplines or professional areas within the College of Education and Allied Studies. It develops cross-disciplinary courses and experiences for students at the same time it provides a base for those subjects, programs, and faculty not currently embraced by any one department. It promotes interdisciplinary collaboration among students and faculty in the college, builds partnerships, and broadens program offerings for current and new students. By involving faculty from three or more departments in common endeavors, the Interdisciplinary Studies Cluster actively encourages cross-departmental renewal and innovation. The Cluster offers the M.S. in Education, Option in Online Teaching described below.

The Cluster also offers the M.S. in Education, Option in Educational Technology Leadership, and the Certificate Program in Educational Technology Leadership. See "Teacher Education" in the graduate section of this catalog for a description of both these programs.

Option in Online Teaching and Learning

I. Prerequisites

To be admitted to the Online Teaching and Learning Option in the M.S. in Education, students meet normal Cal State Hayward requirements for admission to a graduate program in Education. The program, however, is offered through the Extended and Continuing Education Division. Since students are admitted as special session students, they will receive residence credit. Students from schools where English is not the primary language of instruction are required to achieve a TOEFL score of at least 213 (550 on the former grading scale) for admission to the program.

II. Curricular Requirements (45 units)

Students work with designated program advisors. Communication with advisors is by e-mail, telephone, and videoconference as necessary. Student orientation to the program is by means of the program website.

Students complete 45 units of approved coursework. All 45 units must be completed within a five-year period with a 3.0 GPA or better. Students who are qualified for admission to the program will be placed in the "Conditionally Classified Graduate" category. Upon completion of the University Writing Skills Requirement (which is satisfied with a "B" or better in EDUI 6706), they will be placed in the "Classified Graduate" category. If students do not pass EDUI 6706 with a "B" or better, they must take the Writing Skills Test (WST) to satisfy the University Writing Skills Requirement. If students do not pass the WST, they must take a course or courses (depending on the score they received on the WST), to improve their skills and satisfy the University Writing Skills Requirement. Students complete either EDUI 6899 Project (4.5) or EDUI 6910 University Thesis (4.5) as the capstone experience.

A. Required Courses (36 units)

Students must complete EDUI 6701, 6702, 6703, and 6704 before they may take any other courses.

EDUI 6701 Introduction to Online Teaching and Learning (4.5)

EDUI 6702 Teaching Models for Online Instruction (4.5)

EDUI 6703 Technology Tools for Online Instruction (4.5)

EDUI 6704 Designing Curriculum for Online Instruction (4.5)

EDUI 6705 Educational Planning and Development for Online Programs (4.5)

EDUI 6706 Research in Online Teaching and Learning (4.5)

EDUI 6707 History and Culture of Online Learning Communities (4.5)

EDUI 6899 Project (4.5) or EDUI 6910 University Thesis (4.5)

B. Electives (9 units)

1. Theoretical: Choose one of the following (4.5 units):

EDUI 6772 Content Development for Online Learning (4.5)

EDUI 6773 Supervising and Evaluating Online Teaching (4.5)

EDUI 6774 Current Issues in Online Learning (4.5)

2. Methodological: Choose one of the following (4.5 units):

Courses

EDUI 6780 Building the Online Environment (4.5)
EDUI 6781 Creating Digital Media for Online Instruction (4.5)
EDUI 6782 Designing and Implementing User Interfaces for Online Instruction (4.5)
EDUI 6783 Providing Interactivity in the Online Environment (4.5)

The course prefix for the following courses is EDUI.

For additional EDUI courses, see "Teacher Education" in the graduate section of this catalog.

Post-baccalaureate Courses

5090 Computer Applications for Educational Settings (4)
Understanding of computers beyond word processing. Using computers as an adaptive, interactive, and exploratory tool and as an introduction to understanding different applications in educational settings. Word processing, database, spread sheet, multimedia, and internet applications.

5900 Independent Study (1-4)

Graduate Courses

6002 Animation for the Web (2)
Introduction to Flash, an animation tool for the Web; covers the basic functions that permit the educator to include multimedia features in lessons and student productions. A Flash movie may use text, graphics, sounds, animation, buttons and fields. May be repeated for credit up to a maximum of 10 units when content varies. Prerequisite: graduate standing or consent of instructor. Six hrs. lab.

6005 Digital Graphics (4)
Introduction to several graphics programs such as Adobe Photoshop and Illustrator used in educational settings. Students learn to use the drawing tools in these applications to edit, create, and manipulate graphics and millions of colors. May be repeated for credit up to a maximum of 20 units when content varies. Prerequisite: graduate standing or consent of instructor. Twelve hrs. lab.

6099 Introduction to Instructional Multimedia (4)
The foundations, history and applications of multimedia. Terms, concepts, and effectiveness of multimedia and its implementation in the classroom. Production and evaluation of multimedia-based projects. Integration of multimedia using scanners, videodisks, and CD-ROMs. Prerequisites: T ED 5099, EDUI 5090 or demonstrated equivalent.

6220 Introduction to Web Database Design for Educators (4)

An overview of database concepts, design and development in educational settings. The topics include: relational models, data manipulation languages, application interfaces, access languages, database modeling, design and development, and database access through the Web. Prerequisite: graduate standing or consent of instructor. Twelve hrs. lab.

6230 Advanced Web Database Design for Educators (4)

An advanced treatment of database concepts, design and development pertinent to educational uses. This course is on the server side dealing with issues such as relational models, data manipulation languages, access languages, database modeling, design and development, and database access through the Web. Prerequisites: EDUI 6220; graduate standing or consent of instructor. Twelve hrs. lab.

6701 Introduction to Online Teaching and Learning (4.5)

Design and delivery of online coursework with consideration of principles of teaching and learning, the virtual classroom, synchronous vs. asynchronous teaching and learning, copyright and fair use, accessibility, appropriate learning strategies in onground and online classes, potential for interactivity, and contrast between the principles and practices of onground and online teaching and learning.

6702 Teaching Models for Online Instruction (4.5)

Teaching models and their relationship to curriculum development, to student learning, to assessment, and to learning psychology. Special attention to the application of models of teaching to online instruction, different learning styles, various teaching and learning situations, needs of learners with accessibility issues, and limitations of current technologies. Prerequisite: EDUI 6701.

6703 Technology Tools for Online Instruction (4.5)

Design and construction of online environments for teaching and learning. Attention to platform, browser, system differences and limitations as well as to synchronous, asynchronous, and web-based delivery systems. Differences among online delivery providers, emphasis on maximum accessibility. Prerequisites: EDUI 6701, 6702.

6704 Designing Curriculum for Online Instruction (4.5)

Incorporating onground and online teaching strategies and concepts into the design of an online course, including objectives, assignments, assessment, collaboration, participation, and course materials. Models of teaching and learning outcomes in onground and online courses. Practice in linking appropriate teaching models and designated learning outcomes with attention to differing learning styles. Prerequisites: EDUI 6701, 6702, 6703.

6705 Educational Planning and Development for Online Programs (4.5)

History of innovation in education and its effect on educational culture and thought. Organizational and managerial issues, problems, decision-making and solutions for successful implementation of online programs. Solutions to educational problems common to onground and online teaching environments as well as consideration of educational problems unique to online education such as intensive faculty development and support. Prerequisites: EDUI 6701, 6702, 6703, and 6704.

6706 Research in Online Teaching and Learning (4.5)
Research methods in education, both quantitative and qualitative, with attention to sources, collection, and uses of data. Critical analysis of research on online teaching and learning. Preparation of a research project to include references, rationale, and outline. Offered collaboratively with library staff. Prerequisites: EDUI 6701, 6702, 6703, and 6704. Satisfies the University Writing Skills Requirement only for M.S. Education, Option in Online Teaching and Learning Students if passed with a "B" or better.

6707 History and Culture of Online Learning Communities (4.5)
The development of the cyberclassroom of today from both traditional distance learning correspondence courses and early networked virtual realities with attention to the history and culture of education. Evolution of onground and online teaching and learning roles, development of institutional responsibilities, and growth of degree, certificate, and enrichment programs. Prerequisites: EDUI 6701, 6702, 6703, and 6704.

6772 Content Development for Online Learning (4.5)
Creating course materials specific to various learning environments: corporate, academic, military, industrial, enrichment, online and onground. Differences between training and education with emphasis on relevant teaching and learning strategies for each modality. Completion of online teaching components suitable to at least two different environments. Prerequisites: EDUI 6701, 6702, 6703, and 6704.

6773 Supervising and Evaluating Online Teaching (4.5)
Effective delivery of online materials within the context of educational theories of supervisory functions. Adaptation of techniques, including clinical supervision, for promoting and supporting teacher growth and development in the online environment. Online mentoring of new online teachers. Prerequisites: EDUI 6701, 6702, 6703, and 6704.

6774 Current Issues in Online Learning (4.5)
Controversies, problems, and promises of online teaching and learning, including examination of the role of gender, class, race in online teaching and learning, the potential impact of corporate influences on traditional educational paradigms, and the future of both online and onground education. Prerequisites: EDUI 6701, 6702, 6703, and

6704.

- 6780** Building the Online Environment (4.5)
Designing and implementing an online teaching site, including assignments, interactivity, contact protocols, syllabus, course materials, and research and development resources for student use. Presentation of materials in various formats including PDF, Shockwave, Flash, and HTML. Prerequisites: EDUI 6701, 6702, 6703, and 6704.
- 6781** Creating Digital Media for Online Instruction (4.5)
Making multimedia materials available in the online classroom with texts, images, sounds, videos, animations. Needs of students with accessibility challenges. Prerequisites: EDUI 6701, 6702, 6703, and 6704.
- 6782** Designing and Implementing User Interfaces for Online Instruction (4.5)
Using principles of user interface, audience analysis, discourse communities, and educational psychology to design online educational sites which reflect the needs of teachers, learners, and the global community. The effectiveness of colors, images, animations, and interactivity to facilitate communication with online students. Accessibility issues will be stressed. Prerequisites: EDUI 6701, 6702, 6703, and 6704.
- 6783** Providing Interactivity in the Online Environment (4.5)
Using latest and most sophisticated web resources to create learning environments that maximize interactivity, collaboration, document sharing, assessment, and access to multimedia materials. Prerequisites: EDUI 6701, 6702, 6703, and 6704.
- 6899** Project (2-5)
Development of an original product (teaching project, implementation plan, program evaluation proposal) which is identified in the research course and summarized in a written abstract. Both the project and the abstract are submitted to the program faculty which specify their formats. Supervision by a faculty committee, at least one of whom must be a Cal State Hayward faculty member. Prerequisites: EDUI 6500 or 6705 and Advancement to Candidacy. Maximum of five units per student.
- 6900** Independent Study (1-4)
- 6910** University Thesis (4-5)
Developmental writing of a formal research paper on online teaching and learning for submission to the university in a specified format. Supervised by an EDUI committee, at least one of whom must be a CSUH faculty member. Defense normally required. Prerequisites: EDUI 6701, 6702, 6703, and 6704, and graduate standing.
- 6999** Issues in Education Interdisciplinary Studies (4)
Readings, discussion, and research on contemporary and/or significant issues in education interdisciplinary

studies. May be repeated for credit when content varies.



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Department Information

Master of Social Work

Social Work

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College of Arts, Letters, and Social Sciences
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Professors: Terry Jones (Chair), James J. Kelly, Sonjia P. Redmond, Young I. Song

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Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

The Department of Social Work offers graduate study leading to the degree Master of Social Work (M.S.W.). This advanced generalist degree program is designed to train social workers for leadership and direct practice positions in social work, and is in candidacy for accreditation from the Council on Social Work Education. The program has a multicultural focus which prepares social work students to work in both non-profit and public agencies and to be proficient in working with diverse multicultural populations in urban and suburban communities.

The M.S.W. program is a full-time two year program for students who have recently completed a baccalaureate program, as well as for those who have been working in social work agencies and want to upgrade their skills and professional preparation.

The objective of the M.S.W. program is to address the growing need for social workers to work with individuals, families, groups and organizations charged with responding to societal problems such as poverty, family instability, mental illness, child welfare, aging, and urban renewal. An additional focus is to work with target populations in ways that enable and empower them to participate in the social work change process. The program will also prepare individuals to be agents for change and to work effectively in an increasingly complex, culturally and racially diverse society and to understand and respond to racism, sexism,

homophobia and other forms of oppression that create and maintain barriers to an individual's well-being and effective participation in American society.

Students in the M.S.W. program will develop the analytical skills needed to explore new models of social work services delivery and organizational design. In addition, they will have an extensive field experience in which they will work with skilled professional social workers and apply the analytical and social work skills learned in the classroom.

Career Opportunities

Graduates of the M.S.W. program are prepared to work with individuals, families, groups and organizations in both public and non-profit practice. The State of California is experiencing an acute shortage of individuals prepared for leadership roles in social work practice. The State also has a critical shortage of social workers trained at the master's level and this is expected to increase well into the 21st century. In child welfare alone, it is estimated that the ten largest county welfare agencies have an immediate need for 3,400 social workers. The need is greatest in mental health, in agencies dealing with the aged, and in the juvenile justice system. Both the Alameda County and the Contra Costa County social service agencies all report a shortage of M.S.W.-level social workers.

Admission

The M.S.W. degree program is open to students planning a career in social work who have a baccalaureate degree from an accredited institution and who have earned an overall grade point average of 2.6 (on a 4.0 scale) in their last 90 quarter units (60 semester units) of undergraduate work. Students with a GPA below 2.6 may be admitted based on an evaluation of their student profile, including work experience, resume, letters of recommendation, and personal statement (see below).

In addition to the "University Graduate and Post-baccalaureate Application," all applicants should submit: (1) a personal statement (2-3 pages) with their application stating their reasons for pursuing the M.S.W. degree, describing their relevant work experience, and explaining their past academic performance; (2) three letters of recommendation (letters from prior instructors preferred); and (3) a resume. Successful experience in social work or social work-related positions will be considered in evaluating applications.

Admission to the university and admission to the M.S.W. degree program are separate steps. It is suggested that application for admission to the university (Part A of the application) be filed together with the form for entry into the degree program (Part B of the application).

Student Standing and Progress toward the Degree

1. There are three categories of student status that reflect your progress toward the degree. You are in "Conditionally Classified Graduate" status when you have been admitted to the M.S.W. degree program, but have not yet completed the prerequisites for the "Classified Graduate" status in the M.S.W.

degree program.

2. You achieve "Classified Graduate" status when you have satisfactorily completed all the prerequisites for the M.S.W. degree program and satisfied the University Writing Skills requirement. (See "Prerequisites for 'Classified Graduate' Status" below.)
3. You are "Advanced to Candidacy" when you have completed the core courses with a 3.0 GPA or better.

Note: If you fail to maintain progress by falling below a 3.0 GPA in your graduate courses for two or more consecutive quarters, you will be academically disqualified from the university.

Prerequisites for "Classified Graduate" Status

As prerequisites to "Classified Graduate" status, you must satisfy the University Writing Skills Requirement and have satisfactorily completed Statistics 1000 or equivalent, a course in human biology or anatomy and physiology with a grade of "C" or better, and a course in abnormal psychology or psychology of the brain with a grade of "C" or better. These courses must be taken before you attempt the core graduate courses.

Degree Requirements

The M.S.W. degree program requires completion of 89 quarter units, distributed among core courses, option courses, elective courses, and the graduate thesis. Of these, at least 76 units must be completed in residence after being admitted to the program (transfer units are limited to 13 quarter units). No course numbered 1000 to 2999 (or equivalent if taken elsewhere) may be used as part of the 89-unit graduate degree program.

A grade point average of 3.0 must be maintained in the 89 quarter units taken to satisfy the degree requirements. All graduate degree requirements must be completed within the five (5) years prior to graduation.

Curricular Requirements

A. Core Requirements (48 units)

Prerequisite courses (STAT 1000 or equivalent, human biology or anatomy and physiology, and abnormal psychology or psychology of the brain) must be completed before taking the required courses.

SW 6000, 6001, 6002 Human Behavior and Social Environment I, II, III (4, 4, 4)

SW 6010 Race, Gender, and Inequality in Social Work Practice (4)

SW 6011, 6012 Generalist Practice I, II (4, 4)

SW 6020, 6021, 6022 Field Instruction I, II, III (4, 4, 4)

SW 6030, 6031 Social Welfare Policy and Services I, II (4, 4)

SW 6032 Social Work Research (4)

B. Options (25 units)

Select one of the following options:

1. *Children, Youth, and Families*

SW 6500 Case Management: Children, Youth, and Families (4)

SW 6510 Multicultural Perspective of Practice: Children, Youth, and Families (4)

SW 6520 Social Work Administration: Children, Youth, and Families (4)

SW 6530, 6531, 6532 Field Instruction IV, V, VI (4, 4, 4)

SW 6540 Integrative Seminar (1)

2. *Community Mental Health*

SW 6505 Case management: Community Mental Health (4)

SW 6515 Multicultural Perspective of Practice: Community Mental Health (4)

SW 6525 Social Work Administration: Community Mental Health (4)

SW 6530, 6531, 6532 Field Instruction IV, V, VI (4, 4, 4)

SW 6540 Integrative Seminar (1)

C. Electives (8 units)

Select 8 units from the following courses:

EPSY 6029 Seminar in Chemical Dependency (2), 6403 Psychotherapy for Children (4), 6406 Seminar in Human Sexuality (2), 6500 Cognitive Behavior Therapy (4), 6784 Pharmacology and Counseling (3); SW 6550 Social Work Psychosocial Rehabilitation (4), 6551 Program Evaluation in Social Services (4), 6552 Legal Issues in Social Work Practice (4), 6553 Assessment and Treatment of Substance Abuse (4), 6554 Occupational Social Work (4), 6555 School Social Work (4), 6556 Human Sexuality and Social Work (4), 6557 Sex Roles and Gender Discrimination: Women's Issues in Social Work (4), 6558 Supervision and Staff Development (4), 6559 Youth and the Justice System (4)

D. Capstone Experience (8 units)

SW 6909 Departmental Thesis (4) (Must be repeated once for credit for a total of 8 units.)

Incompletes

If you accumulate more than 8 units of work graded "I" (Incomplete Authorized), you may not register for courses applicable to the degree until the coursework is completed and the "I" grades are changed to passing grades.

Capstone Experience

You complete the program with a Departmental Thesis (SW 6909). You may either sign up individually with a faculty advisor or meet with your advisor in a scheduled graduate course. A faculty member serves as director of your departmental thesis. Two copies of the departmental thesis are required for the department.

A grade of "RP" (Report in Progress) may be given for a thesis that is not completed at the end of the quarter. The "RP" grade must be changed to a passing grade within five (5) years of your initial enrollment in a thesis course or it will become an "F."

Granting the Degree

Upon satisfactory completion of all requirements for the degree, the department will recommend that you be granted the Master of Social Work degree. You must file for graduation with the

Graduate Courses

Department of Social Work by the end of the second week of the quarter prior to the quarter in which you expect to graduate.

The course prefix for the following courses is SW.

- 6000** Human Behavior and Social Environment I (4)
Theoretical perspectives examining human development and behavior across the life span including the analysis of the influence of social, political, historical and cultural variables. Processes associated with physiological, psychological, cognitive and social development over the life span from birth through adolescence. Co-requisite: SW 6010.
- 6001** Human Behavior and Social Environment II (4)
Builds upon knowledge regarding theoretical perspectives explaining human development and behavior across the life span including influences of social, political, historical, and cultural variables. Includes normative physiological, psychological, cognitive and social development from young adulthood to death. Prerequisite: SW 6000; Co-requisite: SW 6011.
- 6002** Human Behavior and Social Environment III (4)
Builds on behavioral sciences. Problems in living and psychopathology are discussed in terms of the developmental history, the social and cultural context, and future consequences for the individual and the family. Prerequisite: SW 6001; Co-requisite: SW 6012.
- 6010** Race, Gender and Inequality in Social Work Practice (4)
The impact of race, racism, gender, sexism, and inequality in social work practice on diverse ethnic/racial populations. Effective problem-solving when confronted with institutional barriers and interpersonal conflicts in agency and community-based social work practice with minority populations. Co-requisite: SW 6020.
- 6011** Generalist Practice I (4)
Theoretical and practice foundations for advanced social work. Prevention, crisis and short-term intervention approaches focusing on translating theoretical understanding into multicultural service delivery and interventions with poor, vulnerable, and oppressed populations. Prerequisite: SW 6010; Co-requisite: SW 6021.
- 6012** Generalist Practice II (4)
Assumptions, concepts, principles, and values of generalist practice examined from a cross-cultural perspective regarding professional relationships, social work roles, treatment processes, and service delivery models with individuals, families, groups, organizations, and communities. Prerequisite: SW 6011; Co-requisite: SW 6022.
- 6020** Field Instruction I (4)

Supervised practice experience in a community social agency based on students' learning needs, interest, and option. Development of the foundation of generic interventive modalities in individuals, families, groups and communities with emphasis on multicultural practice. Co-requisite: SW 6010. Two hrs. seminar, 16 hrs. agency placement.

- 6021** Field Instruction II (4)
Continuation of supervised practice in a community social agency on an advanced level with individuals, families, groups, and communities with emphasis on multicultural practice. Prerequisite: SW 6020; Co-requisite: SW 6011. Two hrs. seminar, 16 hrs. agency placement.
- 6022** Field Instruction III (4)
Continuation of supervised practice in community social agency on an advanced level of practice with individuals, families, groups, and communities with emphasis on multicultural practice. Prerequisite: SW 6021; Co-requisite: SW 6012. Two hrs. seminar, 16 hrs. agency placement.
- 6030** Social Welfare Policy and Services I (4)
Theoretical and practice foundations for advanced social work with children, youth, women and families. Prevention strategies, crisis and short-term approaches, specifically as they apply to key problems and issues faced by children, youth, women and families. Prerequisite: SW 6010; Co-requisite: SW 6020.
- 6031** Social Welfare Policy and Services II (4)
Programs of social insurance and social assistance, income transfer and income maintenance; analyses of issues with regard to entitlements, coverage and eligibility. Prerequisite: SW 6030; Co-requisite: SW 6021.
- 6032** Social Work Research (4)
The role of research in social work, the logic of research, the stages of underlying research process, various types of research designs, techniques of data collection and analysis, and strategies for evaluating service delivery in all areas of practice. Prerequisite: SW 6010; Co-requisite: SW 6022.
- 6500** Case Management: Children, Youth, and Families (4)
Strategies of casework management with children, youth, and families. Principles of small and large group management, time management, and coordination of services and interagency cooperation. Issues of controlling, coordinating, directing, and planning services for clients in urban and suburban settings. Prerequisite: SW 6010; Co-requisite: SW 6530.
- 6505** Case Management: Community Mental Health (4)
Strategies of casework management in a mental health context. Principles of small and large group management, time management, coordination of services, and interagency cooperation. Additional issues include

controlling, coordinating, directing, and planning service delivery in urban and suburban communities. Prerequisite: SW 6010; Co-requisite: SW 6530.

- 6510** Multicultural Perspective of Practice: Children, Youth, and Families (4)
Theory and practice with ethnically, racially, religiously diverse populations utilizing a multi-dimensional multicultural framework and case materials to analyze treatment issues and empowerment strategies for children, youth, and families. Prerequisite: SW 6010; Co-requisite: SW 6531.
- 6515** Multicultural Perspective of Practice: Community Mental Health (4)
Theory and practice with ethnically, racially, religiously diverse populations utilizing a multidimensional, multicultural framework and case materials to analyze treatment issues and empowerment strategies in community mental health. Prerequisite: SW 6010; Co-requisite: SW 6531.
- 6520** Social Work Administration: Children, Youth, and Families (4)
Issues of management and organizational behavior within human service systems focused on children, youth, and families. A focus on leadership, decision-making, conflict resolution, program and staff development, fiscal management with boards and volunteers. Prerequisite: SW 6010; Co-requisite: SW 6532.
- 6525** Social Work Administration: Community Mental Health (4)
Issues of management and organizational behavior within human service systems focused on public and non-profit agencies delivering mental health services. Leadership, decision-making conflict resolution, program and staff development and fiscal management with boards and volunteers. Prerequisite: SW 6010; Co-requisite: SW 6532.
- 6530** Field Instruction IV (4)
Supervised social work practice in a community agency with focus on advanced direct practice skills and administrative program development areas with emphasis on multi-cultural practice. Prerequisite: SW 6022; Co-requisite: SW 6909. Two hrs. seminar, 16 hrs. agency placement.
- 6531** Field Instruction V (4)
Continued supervised social work practice in a community agency at an advanced level in direct practice and administration within student's area of concentration. Preparation for professional employment with emphasis on multicultural practice. Prerequisite: SW 6530; Co-requisite: SW 6909. Two hrs. seminar, 16 hrs. agency placement.
- 6532** Field Instruction VI (4)
Continued supervised social work practice in a community agency at an advanced level in direct and indirect practice and administration within student's area of concentration.

Preparation for professional employment emphasizing multicultural practice. Prerequisite: SW 6531; Co-requisite: SW 6540. Two hrs. seminar, 16 hrs. agency placement.

- 6540** Integrative Seminar (1)
Concepts from field education and thesis reviewed and meshed to join students' practical and research experience, thereby enhancing their understanding of their roles as social workers. Co-requisite: SW 6532.
- 6550** Social Work Psychosocial Rehabilitation (4)
Concepts of philosophy of psychosocial rehabilitation as the dominant modality in contemporary community mental health programs. Principles of crisis intervention, particularly in relation to the prevention of suicide and family violence. Prerequisite: SW 6010; Co-requisite: SW 6530 or 6532.
- 6551** Program Evaluation in Social Services (4)
Prevailing types of program evaluation and preparation for continual evaluation checks conducted within service agencies. Conceptualization of service delivery systems. Program planning evaluation, monitoring, impact evaluation, cost-benefit and cost-effectiveness analysis. Prerequisite: SW 6010; Co-requisite: SW 6530 or 6532.
- 6552** Legal Issues in Social Work Practice (4)
Legal aspects concerning children, family, and the aged, considering issues such as abortion, illegitimacy, right to treatment, mental health commitment procedures, rights of the elderly, children's rights, marriage, and divorce. Familiarity with legal assistance programs. Prerequisite: SW 6010; Co-requisite: SW 6530 or 6532.
- 6553** Assessment and Treatment of Substance Abuse (4)
Social work practice with individual alcoholics and substance abusers, their family systems, and their community network. Awareness of the prevalence of alcoholism and substance abuse and significance for clinical social work practice. Dynamics and treatment of disease. Prerequisite: SW 6010; Co-requisite: SW 6530 or 6532.
- 6554** Occupational Social Work (4)
Significance of work life factors on the biopsychosocial functioning of clients and the interface of person, family, and employment. Concepts of human growth and behavior, issues of engagement, diagnostic assessment, and intervention from the social work perspective. Prerequisite: SW 6010; Co-requisite: SW 6530 or 6532.
- 6555** School Social Work (4)
Social work and the public school as a process in school-community-pupil relations. Attention to school as a social institution and its organization. Social work services in schools as a specialized field of social work practice. Prerequisite: SW 6010; Co-requisite: SW 6530 or 6532.
- 6556** Human Sexuality and Social Work (4)

Exploration of human sexuality and how social workers relate to sexually oppressed groups. Surveys a range of sexuality-related issues encountered in therapeutic relationships as part of administrative duties and at the policy level. Prerequisite: SW 6010; Co-requisite: SW 6530 or 6532.

6557 Sex Roles and Gender Discrimination: Women's Issues in Social Work (4)

Historical and contemporary causes of gender discrimination against women. Special focus on women at risk for mental health problems, violence, and poverty along with other critical issues affecting women such as substance abuse and eating disorders. Prerequisite: SW 6010; Co-requisite: SW 6530 or 6532.

6558 Supervision and Staff Development (4)

Review of philosophy, objectives, principles, and methods of social work supervision, staff development, and consultation. Similarities and differences in the roles, knowledge, and skills required, emphasizing teaching-learning-evaluation components. Prerequisite: SW 6010; Co-requisite: SW 6530 or 6532.

6559 Youth and the Justice System (4)

The juvenile justice system at the micro and macro level. Informal and formal intervention strategies, theoretical constructs, and policies impacting children, youth, and families within the juvenile justice system. The impact of poverty, racism and issues of diversity. Prerequisite: SW 6010; Co-requisite: SW 6530 or 6532.

6909 Departmental Thesis (4)

Developing and writing a research paper for submission to the department, which specifies its format. Supervision by a departmental faculty member. Oral defense is required. Prerequisites: advancement to candidacy and consent of thesis advisor. Must be repeated once for credit for a total of 8 units.

6999 Issues in Social Work (1-4)

Readings, discussion, and research on contemporary and/or significant issues in social work. May be repeated for credit when content varies.



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Department Information

M.S. in Educational Leadership

Educational Leadership

Department Information

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Department of Educational Leadership
College of Education and Allied Studies
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Professor: Emily Lowe Brizendine

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Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

The mission of the Department of Educational Leadership is to prepare and influence bold, socially responsible leaders who will transform the world of schooling. Our central role is to ignite the leadership capacity needed to create vital, democratic, and caring places for powerful teaching and learning.

The department offers graduate study leading to the Master of Science degree in Educational Leadership as well as programs approved by the California Commission on Teacher Credentialing leading to the Preliminary Administrative Services Credential (Tier I), Professional Administrative Services Credential (Tier II), and Internship Credential in Administrative Services (Education Code 44225 et al.). Students seeking the degree and/or any of the Administrative Services Credentials must meet the general university requirements as well as the departmental requirements listed below. Additional advising and information are available

through the department and on the College of Education and Allied Studies website at: <http://www.edschool.csu Hayward.edu>. Entry to all programs is currently limited to fall quarter only.

Career Opportunities

Completion of the credential and masters programs enables graduates to obtain an administrative credential that allows them to assume administrative positions at all levels of the K-12 public educational system. Various positions include those at school sites administration (e.g., principal, vice principal, dean of students), and district level administration (curriculum coordinator, staff development coordinator, special programs coordinator, personnel director, assistant superintendent, superintendent, etc.). In addition, graduates also obtain many positions at the county and state level offices.

Faculty

The department has six full-time professors and instructors with earned doctorates who have had extensive experience in administrative positions at various levels in the public schools before joining the faculty. Their previous positions include principal, vice-principal, district curriculum coordinator, staff development coordinator, county training center director, personnel director, assistant superintendent and superintendent. Several have extensive experience in large scale school reform efforts and educational research. The faculty draws its strength from their diversity of experiences, professional and research interests, expertise, gender, cultural, racial and ethnic backgrounds. They are actively engaged with schools in the Bay Area, serving as consultants (nationally and internationally) and coaches in many facets of schooling. They are recognized as leaders in numerous regional, statewide, and national networks and professional organizations. The faculty is complemented by a select group of lecturers who are respected practicing administrators in Bay Area school districts and county education offices.

Special Features

Cohort Groups: In the fall quarter, all students are admitted into class groups, called cohorts, whose members take at least three courses and fieldwork together as a group during fall-winter-spring. Preliminary Administrative Credential Candidates (including interns) take three additional required courses on an individual basis. The three-quarter cohort time frame permits examination of issues as recurring themes.

School District Collaboration: Some cohort programs are unique in that they involve school districts in identifying educational administration candidates. These include the Leadership Academy and the Diversity in Leadership Internship Program (DLP). Students in the DLP cohort require nomination by their districts for admission. Leadership Academy member districts nominate half the Academy program participants.

The Internship Program: The department offers two ways to acquire an Internship Administrative Services Credential: the Diversity in Leadership Internship Program (DLP) and the Individual Internship Option. These programs allow candidates to serve in an administrative capacity while completing credential

requirements and are open only to students who are recommended by their districts and who hold either a full or a part-time administrative position. Students in the Individual Internship Option can participate in any cohort, but must register for internship fieldwork and attend an internship seminar once a month. Students in the Diversity in Leadership Program must be given 15 days of released time to attend day time classes. The common bond of DLP participants is the commitment to improving achievement of all students and to creating an inclusive learning environment that values and reflects the diversity of American society.

Admission

A candidate must be admitted to the university, consistent with requirements and procedures explained in this catalog. Interested candidates apply for admission to the department and to the university at the same time. Candidates should contact the department office (edld@csuhayward.edu) or go to the department website (www.edschool.csuhayward.edu) in early January for fall quarter entrance. All master's degree candidates enter as credential students and must therefore meet credential admission requirements. Applications for admission to the department are online at the departmental website. All admissions materials should be sent to the CSUH Credential Student Service Center (CSSC), AE 235, 25800 Carlos Bee Blvd., Hayward, CA 94542.

Additional requirements for admission to the M.S. in Educational Leadership and/or the Preliminary Administrative Services Credential include:

- A bachelor's degree
- 3.0 GPA or equivalent on all post-baccalaureate work
- Successful passage of CBEST
- A current, valid basic teaching credential or services credential (Pupil Personnel Services, Adult Education, Librarianship, Health Services School Nurse, or Clinical Rehabilitative Services)
- A minimum of three years full-time teaching or service experience as documented by district verification (form available on department website)
- Internship candidates must verify administrative position (form available on department website)
- A current resume showing evidence of leadership experience
- Three recommendations (form available on department website)
- A one-page statement of professional goals
- University application, including two sets of transcripts

Requirements for the Professional Administrative Services Credential Program include:

- Current Preliminary Administrative Services Credential
- Verification of position as a school administrator (form available on website)
- For "Classified Graduate" status and Advancement to Candidacy, M.S. students must have successfully met the University's Writing Skills Requirement
- For the M.S. degree university admission requirements, see the Graduate and Post-baccalaureate Studies chapter at the beginning of the graduate section of this catalog.

M.S. Degree Requirements

1. A minimum of 45 quarter units of approved work, at least 32 of which must be in residence, and all completed within a five-year period.
2. A 3.0 GPA or better in all 45 quarter units offered as satisfying the requirements of the degree program.
3. Satisfactory completion of the University Writing Skills requirement (required for "Classified Graduate" standing).
4. Satisfactory completion of EDLD 6908 Graduate Synthesis in Educational Leadership which includes a comprehensive examination.

Curricular Requirements (43-46 units)

The established pattern of required and approved courses is designed to meet both the preliminary credential and degree requirements. Students already holding credentials from other institutions take the degree and/or program requirements listed below and any additional courses required by department advisor to meet current credential mandates.

A. Complete the following courses (34-37 units):

EDLD 6000 Introduction to Educational Leadership (4)
 EDLD 6020 Research in Education (4)
 EDLD 6300 The Administration of Curriculum Development (4)
 EDLD 6400 Instructional Leadership (4)
 EDLD 6410 Supervision and Staff Development (4)
 EDLD 6550 School Site Leadership and Organizational Behavior (4)
 EDLD 6600 School Law and Finance (4)
 EDLD 6720 Solving School Problems through the Application of Research (4)

EDLD 6908 Graduate Synthesis in Educational Leadership (4)
 or EDLD 6899 Project (2-5)

B. Electives selected from the following or equivalent courses, through consultation with advisor (9 units):

EDLD 6025, 6026, 6027 Research Practicum I, II, III (2 each),
 6201 Research Seminar (1) can be repeated three times, 6610
 Service-Learning for School Leaders (3), 6710 Seminar in

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Professional Ethics (4), 6730 School Administrators' Application of Computer Technology (3), 6817, 6818, 6819 Assessment, Mentoring and Support Practicum (3 each), 6851, 6852, 6853 Professional Practicum I, II, III (2 each), 6860 Developing an Inquiring Community (3), 6865 Focus on Learning (3), 6870 Professional and Organizational Development (3), 6999 Issues in Educational Leadership (4)

Curricular Requirements (54 units)
EDLD 6000 Introduction to Educational Leadership (4)
EDLD 6410 Supervision and Staff Development (4)
EDLD 6720 Solving School Problems through the Application of Research (4)
EDLD 6801, 6802, 6803 Fieldwork I, II, III (4, 4, 4)
EDLD 6814, 6815, 6816 Internship Seminar (1, 1, 1)
EDUI 6331 Collaborative Leadership I (4)
T ED 6020 Research in Education (4)
T ED 6124 Advanced Study in Multicultural Education (4)
T ED 6300 Foundations of Curriculum Development (4)
T ED 6700 Advanced Educational Psychology (4)
T ED 6702, 6703, 6704 Research Seminar I, II, III (1, 1, 1)
T ED 6901 Graduate Synthesis (4)

The Joint Doctoral Program (JDP) in Educational Leadership is designed to prepare outstanding educational leaders who will create change and promote equity and scholastic achievement in the 252 school districts located in the 14 counties that constitute the metropolitan Bay Area. The program leads to a Doctorate in Education (Ed.D.) in Educational Leadership. Four distinguished Bay Area universities have combined their expertise and resources to offer this program.

The JDP is jointly administered by the University of California at Berkeley, California State University at Hayward, San Francisco State University, and San Jose State University. This new and innovative UCB-CSU doctoral program in educational leadership prepares reform-minded students who, upon graduation, are qualified to fill positions as administrators in school districts, county offices of education, and other school consortia.

The program's unique and innovative curriculum provides students with a strong academic foundation in urban issues, and training to develop skills in educational leadership. The program's course of study is based on both theory and practice-based residencies in local school districts, and develops the capacity and competency of school administrators in the four thematic areas of: 1) systemic educational reform, 2) curriculum, instruction, assessment, 3) budgeting, financial planning and resource allocation, and 4) excellence and equity. It also utilizes a student-cohort model that provides support and builds professional relationships among peers. The program accommodates the needs of working professionals, by offering coursework during the summer, and on evenings and weekends during fall and spring semesters on a rotating basis among the partner campuses.

The program also requires that students participate in two years of professional residencies in area schools and school districts to develop practical research skills and acquire relevant experience in educational administrative and budgetary matters that affect the success of school reforms. It offers working professionals the opportunity to gain both academic and "real-world" experience to ensure that they are prepared to effectively address the challenges facing schools in the United States. The program immerses its students in an exploration of critical challenges faced by educational leaders, while providing enriching educational opportunities that are available only in dynamic urban settings. In all aspects of its teaching, learning and research activities, the program advances a moral vision of equity and diversity in education. For a list of the JDP courses, see the "Educational Leadership Courses (Joint Doctoral Program)" section at the end of this chapter.

Students complete a minimum of 91 semester units and the following requirements:

1. satisfactory performance in courses in all four thematic areas;
2. participation in quantitative and qualitative methodology courses;
3. completion of four Professional Residencies and accompanying Residency reports;
4. submission of two pre-qualifying papers, approved by faculty advisors;
5. satisfactory performance on qualifying examination and approval of dissertation prospectus;
6. completion and defense of dissertation.

Admission

Approximately 15 students are admitted each year as a cohort. Classes begin in the summer session on the University of California (Berkeley) campus. Courses offered in the fall are on the UC Berkeley campus and spring quarter courses are offered on a rotating basis on the three California State University (CSU) partner campuses. Students are admitted as University of California students by a joint committee of the CSU campus partners and UC Berkeley and pay University of California fees. Students also have a CSU "home" campus during the course of the program.

Applicants must complete the following by the time the program begins:

- Master's degree
- Current Professional Administrative Credential (Tier II) or comparable certification
- Recent GRE (taken within the last five years)

You may request a program brochure by visiting the Department

of Educational Leadership (College of Education and Allied Studies) website at:
<http://edschool.csu Hayward.edu/Departments/EDLD>. Click on "Degrees/Programs," then "Joint Doctoral Program." Applications are available on the UC Berkeley Graduate School of Education website for the joint doctoral program at:
<http://gse.berkeley.edu/program/JDEL/jdel.html>.

For additional questions, contact:

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Credentials

Preliminary Administrative Services Credential (Tier I) (36 units)

EDLD 6000 Introduction to Educational Leadership (4)
EDLD 6300 The Administration of Curriculum Development (4)
EDLD 6400 Instructional Leadership (4)
EDLD 6410 Supervision and Staff Development (4)
EDLD 6550 School Site Leadership and Organizational Behavior (4)
EDLD 6600 School Law and Finance (4)
EDLD 6801, 6802, 6803 Fieldwork I, II, III (12)

Professional Administrative Services Credential (Tier II) (24 units)

A preliminary credential is required as a prerequisite.

EDLD 6817 Assessment, Mentoring and Support Practicum (3)
EDLD 6818 Assessment, Mentoring and Support Practicum (3)
EDLD 6819 Assessment, Mentoring and Support Practicum (3)
EDLD 6851 Professional Seminar I (2)
EDLD 6852 Professional Seminar II (2)
EDLD 6853 Professional Seminar III (2)
EDLD 6860 Developing an Inquiring Community (3)
EDLD 6865 Focus on Learning (3)
EDLD 6870 Professional and Organizational Development (3)

Twelve additional units (120 hours) may be taken through professional organizations.

Internship Credential in Administrative Services (45 units)

EDLD 6000 Introduction to Educational Leadership (4)
EDLD 6300 The Administration of Curriculum Development (4)
EDLD 6400 Instructional Leadership (4)
EDLD 6410 Supervision and Staff Development (4)
EDLD 6550 School Site Leadership and Organizational Behavior

Educational Leadership Courses

- (4)
EDLD 6600 School Law and Finance (4)
EDLD 6804, 6805, 6806 Internship Fieldwork I, II, III (18)
EDLD 6814, 6815, 6816 Internship Seminar I, II, III (3)

The course prefix for the following courses is EDLD.

- 6000** Introduction to Educational Leadership (4)
Introductory seminar that includes legal, fiscal and administrative basis for school organization; leadership theories; the governance and relationship of local school districts with county, state, federal agencies and other political entities. Prerequisite: graduate standing and one year of teaching experience. (F)
- 6020** Research in Education (4)
Seminar in methods and procedures of research tools in education; sources and uses of data. Critical analysis of published research; preparation of a research project to include references, rationale, and outline. Prerequisite: Advancement to Candidacy or consent of instructor. (Y)
- 6025** Research Practicum I (2)
Group supervision of a one-quarter field-based practicum focusing on school site needs assessment. Regularly scheduled seminars. Prerequisites: admission to Department of Educational Leadership program; completion of EDLD 6000, 6400, and 6550. Co-requisite: concurrent enrollment in EDLD 6720.
- 6026** Research Practicum II (2)
Group supervision of a one-quarter field-based practicum experience in designing and using a variety of data collection methods. Regularly scheduled seminars. Prerequisites: admission to Department of Educational Leadership program; completion of EDLD 6000, 6400, 6550, and 6720. Co-requisite: concurrent enrollment in EDLD 6020.
- 6027** Research Practicum III (2)
Group supervision of a one-quarter field-based practicum experience emphasizing data analysis and presentation. Regularly scheduled seminars. Prerequisites: admission to Department of Educational Leadership program; completion of EDLD 6000, 6020, 6400, 6550, and 6720. Co-requisite: concurrent enrollment in EDLD 6908.
- 6201** Research Seminar (1)
Research issues and methodology for school site inquiry. Online instruction, threaded conversations, and seminars will guide and extend individual research initiatives, establish critical review pairings, and focus master's cohort commentary on selected issues of research and school leadership. May be taken up to three times for credit. Prerequisites: EDLD 6020, 6720, and 6908.
- 6300** The Administration of Curriculum Development (4)

The history, theoretical background and elements of curriculum development; strategies for effecting curriculum change; implementation procedures for mandated and special programs (including state mainstreaming requirement); use of research and program evaluation. Prerequisite: graduate standing and one year of teaching experience. (Y)

- 6331** Collaborative Leadership I (4)
(See EDUI 6331 in the graduate Teacher Education chapter for course description.)
- 6400** Instructional Leadership (4)
Critical analysis of the nature of effective instruction for all students. Learning theories, teaching/learning styles, classroom management, assessing pupil progress, helping teachers meet individual and group needs, basic classroom observation techniques for instructional improvement, and laws affecting instruction. (Y)
- 6410** Supervision and Staff Development (4)
Theory of supervisory functions. Survey of techniques that provide for staff development with emphasis on clinical supervision. Systematic planning and procedures in design and delivery of inservice training programs. Prerequisite: EDLD 6000 or department approval. (Y)
- 6550** School Site Leadership and Organizational Behavior (4)
Basic operational tools and procedures for prospective principals. Situational analysis of administrative problems via application of behavioral science theories and concepts. Prerequisites: graduate standing and one year teaching experience. (Y)
- 6600** School Law and Finance (4)
Legal and fiscal aspects of school operation for beginning administrators. Overview of forces which shape legislative provisions; case law and funding patterns at local, state and national levels. District policy and practices related to law and finance. (Y)
- 6610** Service-Learning for School Leaders (3)
Designed to provide leaders with understanding of service learning teaching and strategies to manage and empower service learning in school sites and districts.
- 6710** Seminar in Professional Ethics (4)
Morals and ethics in educational leadership. Underlying assumptions of educational decision-making and nature of choices, responsibilities and relationships which people in various leadership roles must confront, reflect on, and act upon. (Y)
- 6720** Solving School Problems through the Application of Research (4)
Identifying and interpreting research, including action research, on specific school problems. Application of findings to solution of these problems. Influence of research, including action research, on educational

practices. Required course to complete M.S. in Educational Leadership. Prerequisite: graduate standing.

6730 School Administrators' Application of Computer Technology (3)

Identification of school management issues which can be addressed through computer technology/software packages. Use of software packages for school administrative functions such as scheduling, budgeting, and attendance. Problem-solving practice. Prerequisite: basic computer skills.

6801, Fieldwork I, II, III (4, 4, 4)

6802, Supervised experiences in selected areas of
6803 administration/supervision, generally in a school setting, but other community agencies may be used. Regular reports and conference required. CR/NC grading only. Open only to matriculants in Educational Leadership. Prerequisite: department approval. (A)

6804, Internship Fieldwork (6 each)

6805, Sequential supervised experiences in most areas of
6806 administration/supervision for candidates serving as part-time or full-time administrators on an Internship Credential. Regular reports and conferences required. Open only to candidates in the Internship Program. CR/NC grading only. Prerequisite: departmental approval. (F, W, Sp)

6814, Internship Seminar (1 each)

6815, Intensive studies designed to help integrate each
6816 candidate's sequential internship fieldwork experiences with coursework and deal with issues common to initial administrative positions. Open only to candidates in the Internship Program. CR/NC grading only. Prerequisite: departmental approval. (F, W, Sp)

6817, Assessment, Mentoring, and Support Practicum
6818, (3 units each)

6819 A one-year, advanced professional practicum sequence. Individual candidate assessment and planning for professional development. Design of individual professional growth and support plan with school district and university mentors, on-site visits and observations, and monthly colloquia. CR/NC grading only. Prerequisites: Preliminary Administrative Credential, administrative position, and consent of advisor. (F, W, Sp)

6821, Practicum Seminar I, II, III (3 each)

6822, Group supervision of a one-year, advanced fieldwork
6823 practicum sequence. Regularly scheduled seminars, on-site visits, and observations with school district administrators and district and university mentors. Individual assessment and design of professional growth plan. CR/NC grading only. Prerequisites: Preliminary Administrative Services Credential; administrative position. (F, W, Sp)

6826 Practicum Seminar I (4)

Group supervision of a one-quarter fieldwork practicum

sequence. Regularly scheduled seminars, on-site visits, and observations with school district administrators, and district and university mentors. Individual assessment and design of professional growth plan. Credit/No Credit grading only. Prerequisite: admission to Preliminary Administrative Services Credential program, West Contra Costa USD/Educational Leadership partnership. (F, W, Sp)

6827 Practicum Seminar II (4)
Group supervision of a one-quarter fieldwork practicum sequence. Regularly scheduled seminars, on-site visits, and observations with school district administrators, and district and university mentors. Individual assessment and design of professional growth plan. Credit/No Credit grading only. Prerequisite: admission to Preliminary Administrative Services Credential program, West Contra Costa USD/Educational Leadership partnership. (F, W, Sp)

6828 Practicum Seminar III (4)
Group supervision of a one-quarter fieldwork practicum sequence. Regularly scheduled seminars, on-site visits, and observations with school district administrators, and district and university mentors. Individual assessment and design of professional growth plan. Credit/No Credit grading only. Prerequisite: admission to Preliminary Administrative Services Credential program, West Contra Costa USD/Educational Leadership partnership. (F, W, Sp)

6851, Professional Seminar I, II, III (2 each)
6852, A three-quarter series of seminars. Individual mentoring
6853 and professional support, critical inquiry into the five Advanced Leadership Seminar themes; formative and summative assessment. Prerequisites: EDLD 6817, 6818, 6819; administrative position; Preliminary Administrative Credential, and consent of advisor.

6860 Developing an Inquiring Community (3)
The first course in a three-quarter integrated series. Focus on developing community and inquiry methods such as action research. Based on five major themes: organizational and cultural environment; dynamics of strategic issues management; ethical and reflective leadership; analysis and development of public policy; management of information systems and human and fiscal resources. Prerequisites: EDLD 6817, 6818, 6819; administrative position; Preliminary Administrative Credential; consent of advisor.

6865 Focus on Learning (3)
The second course in a three-quarter integrated series. Focus on student, adult, and organizational learning. Based on five major themes: organizational and cultural environment; dynamics of strategic issues management; ethical and reflective leadership; analysis and development of public policy; management of information systems and human and fiscal resources. Prerequisites: EDLD 6817, 6818, 6819, 6860; administrative position;

Preliminary Administrative Credential and consent of advisor.

- 6870** Professional and Organizational Development (3)
The third course in a three-quarter integrated series. Focus on the professional development of staff and parents and the development of communication and information systems in the school. Based on five major themes: organizational and cultural environment; dynamics of strategic issues management; ethical and reflective leadership; analysis and development of public policy; management of information systems and human and fiscal resources. Prerequisites: EDLD 6817, 6818, 6819, 6860, 6865; administrative position; Preliminary Administrative Credential and consent of advisor.
- 6899** Project (2-5)
Development of an original product which is summarized in a written abstract. Both the project and abstract are submitted to department, which specifies their formats. Supervision by a departmental committee, at least one of whom must be a Cal State, Hayward faculty member. Prerequisite: EDLD 6020. Maximum of five units per student. (A)
- 6900** Independent Study (1-4)
- 6908** Graduate Synthesis in Educational Leadership (4)
Students synthesize their degree program experiences in coursework, fieldwork and research into a coherent framework for their own leadership role and plan their future professional development. Includes comprehensive exam. (Y)
- 6909** Departmental Thesis (2-5)
Development and writing of a research paper for the submission to the department which specifies its format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense required. Prerequisite: graduate standing. Maximum of 5 units per student. (A)
- 6910** University Thesis (1-6)
Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense required. Prerequisite: graduate standing. Maximum of 6 units per student. (See also, "University Thesis Writing Guide," available in Warren Hall 859.) (A)
- 6999** Issues in Educational Leadership (4)
Readings, discussion, and research on contemporary and/or significant issues in educational leadership. May be repeated for credit when content varies.

Educational Leadership Courses (Joint Doctoral Program)

The course abbreviation for the following courses is UEJD. Units are given in quarter units; hours are hours per week for a semester of 15 weeks.

- 6274** Measurement in Education and the Social Sciences (4.5)
Constructing an instrument and investigating its measurement properties (specifically validity and reliability); linking qualitative and quantitative measures in context of interviewing, standardizing testing, and performance assessment, examining classical and modern testing approaches from conceptual and practical points of view. Co-requisite: admission to Joint Doctoral Program in Educational Leadership. Three hrs. lect.
- 6275** Data Analysis in Educational Research (6)
Introduces students to quantitative statistical methods for educational research. Emphasizes parameter estimation and hypothesis testing, in particular group differences based on means, medians, proportions and correlation coefficients. Co-requisite: admission to Joint Doctoral Program in Educational Leadership. Four hrs. lect.
- 6277** Systemic Educational Reform in Urban School Districts (4.5)
Examines major obstacles to systemic educational reform in urban school districts; policies, practices and beliefs that advance or hinder efforts to close achievement gap; what makes certain strategies more successful than others; ability to go to scale with promising practices. Prerequisite: admission to joint doctoral program in Educational Leadership. Three hrs. lect.
- 6278** Urban Issues in Education I (4.5)
Examines relationship of city school systems to their evolving urban context; analysis of reform strategies that impact urban schools; roles of key reformers; race and class as frames for understanding and improving educational contexts for urban youth. Prerequisite: admission to joint doctoral program in Educational Leadership. Three hrs. lect.
- 6290** Budgeting Financial Planning, and Resource Allocation Theory, Policy, and Practice (4.5)
Broad, sophisticated, analytical, and evidence-based understanding of the political and economic forces that influence the resource allocation policies, strategies, and behaviors of school districts throughout the budgetary cycle, including periods when the budget is either increasing or decreasing. Prerequisite: admission to joint doctoral program in Educational Leadership. Three hrs. lect.
- 6291** Purposes and Values in Urban Educational Leadership (4.5)
Relationships among multiple, competing purposes of public education; dilemmas rooted in history of persistent race and class linked inequities; pursuit of educational quality and equity in urban school systems as the organizing problem for educational leadership. Prerequisite:

admission to joint doctoral program in Educational Leadership. Three hrs. lect.

- 6292** Achieving Educational Equity and Excellence in Practice (4.5)
Broad, sophisticated, research-based, and historical understanding of the manner in which societal beliefs, political arrangements, and public policies have influenced educational outcomes, with respect to educational opportunities afforded to racial, linguistic, and ethnic minority students. Co-requisite: admission to Joint Doctoral Program in Educational Leadership. Three hrs. lect.
- 6293** Curriculum, Instruction, Assessment, and Professional Development Strategies in Language and Literacy (4.5)
Designed to provide the student with a broad, sophisticated, analytical, and research-based understanding of the conditions that either facilitate or inhibit the successful implementation of demonstrably effective instructional practices and professional development programs in language and literacy. Co-requisite: admission to Joint Doctoral Program in Educational Leadership. Three hrs. lect.
- 6295** Curriculum, Instruction, Assessment, and Professional Development Strategies in Mathematics and Science (4.5)
Provides the student with a broad, sophisticated, analytical, and research-based understanding of the conditions that facilitate or inhibit successful implementation of demonstrably effective instructional practices and professional development programs in mathematics, biological and physical sciences. Prerequisite: admission to joint doctoral program in Educational Leadership. Three hrs. lect.
- 6296** Curriculum, Instruction, Assessment, and Professional Development Strategies in History and the Social Sciences (4.5)
Designed to provide the student with a broad, sophisticated, analytical, and research-based understanding of the conditions that either facilitate or inhibit the successful implementation of demonstrably effective instructional practices and professional development programs in history and the social sciences. Co-requisite: admission to Joint Doctoral Program in Educational Leadership. Three hrs. lect.
- 6297** Advanced Budgeting, Financial Planning, and Resource Allocation Theory, Policy, and Practice (4.5)
Designed to provide the student with a broad, sophisticated, analytical, and evidence-based understanding of financial planning and resource management for school district administrators. Co-requisite: admission to Joint Doctoral Program in Educational Leadership. Three hrs. lect.

6300 Research Seminar in Systemic Educational

Reform (4.5)

Advanced group study in educational leadership on systemic educational reform. Topics vary and may consist of organized lecturers, or seminar discussions, related chiefly to the research area in which the group is working. Co-requisite: admission to Joint Doctoral Program in Educational Leadership. Three hrs. lect.

- 6310** Research Seminar in Educational Equity (4.5)
Advanced group study in educational leadership on educational equity. Topics vary and may consist of organized lecturers, or seminar discussions, related chiefly to the research area in which the group is working. Co-requisite: admission to Joint Doctoral Program in Educational Leadership. Three hrs. lect.
- 6320** Research Seminar in Curriculum, Instruction, Assessment, and Professional Development (4.5)
Advanced group study in educational leadership on curriculum, instruction, assessment and professional development. Topics vary and may consist of organized lecturers, or seminar discussions, related chiefly to the research area in which the group is working. Co-requisite: admission to Joint Doctoral Program in Educational Leadership. Three hrs. lect.
- 6330** Research Seminar in Budgeting, Financial Planning, and Resource Allocation Theory, Policy and Practice (4.5)
Advanced group study in educational leadership in budgeting, financial planning, and resource allocation theory. Topics vary and may consist of organized lecturers, or seminar discussions, related chiefly to the research area in which the group is working. Co-requisite: admission to Joint Doctoral Program in Educational Leadership. Three hrs. lect.
- 6460** Research Practicum in Educational Administration (4.5)
This course engages Ed. D. students in collecting and analyzing data on efforts to improve educational practices or to solve important problems in school systems. Co-requisite: admission to Joint Doctoral Program in Educational Leadership. Three hrs. lect.
- 6461** Field-based Residency in Educational Administration (4.5)
Supervised field-based experience in educational administration centering on systemic educational reform. Prerequisite: admission to joint doctoral program in Educational Leadership. Three hrs. lect.
- 6462** Field-based Residency in Educational Equity I (4.5)
Supervised field-based experience in educational administration centering on advancing the goal of educational equity. Co-requisite: admission to Joint Doctoral Program in Educational Leadership. Three hrs. lect.

6463 Field-based Residency in Curriculum Instruction, Assessment and Professional Development (4.5)
Supervised field-based experience in educational administration centering on curriculum or instructional strategies. Co-requisite: admission to Joint Doctoral Program in Educational Leadership. Three hrs. lect.

6464 Field-based Residency in Budgeting, Financial Planning and Resource Allocation (4.5)
Supervised field-based experience in educational administration centering on financial planning and budgeting to maximize use of resources. Co-requisite: admission to Joint Doctoral Program in Educational Leadership. Three hrs. lect.



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Department Information

M.A. in Sociology

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Department of Sociology and Social Services
College of Arts, Letters, and Social Sciences
Office: Meiklejohn Hall 3095
Phone: (510) 885-3173

Professors: Diane R. Beeson (Chair), Benjamin P. Bowser, Benjamin G. Carmichael, Juan L. Gonzales Jr., Sonjia P. Redmond, Karl L. Schonborn, Young I. Song, Willem W. Van Groenou

Associate Professors: Nan P. Chico, Efren N. Padilla

Assistant Professors: Maxine Craig, Carl Stempel, Rebecca A. Van Voorhis

Lecturers: Vibha P. Chandra, John Dale, Michael K. Schutz

Graduate Advisor: Maxine Craig

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

The Department of Sociology and Social Services offers graduate study leading to the degree of Master of Arts in Sociology with a thesis, examination, or special project. The candidate is responsible for the fulfillment of the general requirements stated in this catalog as well as the specific requirements of the department stated below.

Admission ("Classified Standing")

The student should note that admission to the university as a post-baccalaureate student does not in itself constitute admission to the department's program. In general, the program is open to graduates of accredited institutions who have (1) completed coursework equivalent to that required in the lower and upper division core in Sociology at Cal State Hayward; (2) achieved not less than a 3.0 grade point average in all graduate and undergraduate work; (3) submitted to the department letters of reference from two former instructors who are familiar with the student's academic work; and (4) submitted a writing sample to the department. For "Classified Graduate" status, the student

must have fulfilled the University Writing Skills requirement.

In exceptional cases, a student who has earned less than a 3.0, but above a 2.5 grade point average, may be admitted to "Conditionally Classified Graduate" standing.

Maintenance of "Classified Graduate Standing"

To maintain "Classified Graduate" standing a grade point average of at least 3.0 must be achieved in all courses taken in the approved program, whether taken at Cal State Hayward or at some other accredited institution. If a candidate's grade point average falls below 3.0, the candidate shall be placed on probation at the end of that quarter. If while on probation the candidate fails to make progress toward raising his or her grade point average toward a 3.0, the candidate is subject to disqualification at the discretion of appropriate Cal State Hayward authorities. Disqualified students will not normally be considered for readmission to Cal State Hayward for at least one year after disqualification.

Advancement to Candidacy

A student who holds "Classified Graduate" standing may be Advanced to Candidacy for the master's degree when the student has:

1. Filed an approved program of study with the department
2. Completed at least 12 quarter units of approved graduate-level work beyond the baccalaureate degree with a grade point average of 3.0 or better
3. Been recommended for Advancement to Candidacy by the department.

Curricular Requirements (45 units)

Forty-five (45) quarter units of approved courses earned in graduate standing of which 32 quarter units must be completed in residence. With departmental approval, up to 12 quarter units of upper-division work required to remove undergraduate deficiencies can be counted toward the 45 quarter units required for the degree.

All Students must complete (A) and (B) and one of four options under (C).

A. Core Requirements (20 units)

- SOC 6111 Advanced Sociological Research Methods I (4)
- SOC 6112 Advanced Sociological Research Methods II (4)
- SOC 6311 Seminar in Sociological Theory I (4)
- SOC 6312 Seminar in Sociological Theory II (4)
- STAT 3010 Statistical Methods in the Social Sciences (4)

B. Topics Seminars in Sociology (12 units)

- SOC 6800 Topics Seminar (4) (May be taken three times for credit)

C. Students Must Choose One of the Four Capstone Experiences (13 units)

1. *University Thesis*

Note: Total units of 6908 and 6910 combined must equal nine (9) units with advice from your thesis committee chair.

- a. SOC 6908 Thesis Development (1-4)
Prerequisites: graduate standing; advanced to candidacy; secured thesis committee chair's written approval
- b. SOC 6910 University Thesis (1-8)
Prerequisites: graduate standing; SOC 6908
- b. Electives chosen under advisement from upper division courses and graduate seminars in Sociology, Statistics, or closely related fields (4)

2. *Comprehensive Examination*

- a. Electives chosen under advisement from upper-division courses and graduate seminars in Sociology, Statistics, Foreign Languages and/or closely related fields (13)
- b. Area Comprehensive Examination (in four areas)
 - (1) Theory
 - (2) Methods
 - (3) Substantive area (elected by candidate with departmental approval)
 - (4) Substantive area (elected by candidate with departmental approval)

Before a student may take the Comprehensive Examination, (s)he must be Advanced to Candidacy. Failure to pass the examination twice results in dismissal from the program.

3. *Project*

- a. Electives chosen under advisement from upper-division courses and graduate seminars in Sociology, Statistics, Foreign Languages, and/or closely related fields (8)
- b. SOC 6899 Project (5)
Before a student may register for SOC 6899, (s)he must have the departmental advisor's approval and be Advanced to Candidacy.

4. *Departmental Thesis*

Note: Total units of 6908 and 6909 combined must equal five (5) units with advice from your thesis committee chair.

- a. SOC 6908 Thesis Development (1-4 units)
Prerequisites: graduate standing; advanced to candidacy; secured thesis committee chair's written approval
- b. SOC 6909 Departmental Thesis (1-4 units)
Prerequisites: graduate standing; SOC 6908

- c. Electives chosen under advisement from upper-division courses and graduate seminars in Sociology, Statistics, Foreign Languages, and/or closely related fields (8)

Upper Division Courses Acceptable for the Master's Degree

All sociology courses in the 3000-4000 series are acceptable choices in the master's program.

Graduate Courses

The course prefix for the following courses is SOC.

- 6111** Advanced Sociological Research Methods I (4)
Application of scientific methods to the analysis of social phenomena; methodological orientations in sociology; types of research procedure, nature of sociological variables and their statistical treatment. Two hrs. seminar; 4 hrs. lab. Prerequisites: "Classified Graduate" standing and consent of instructor.
- 6112** Advanced Sociological Research Methods II (4)
Development of individual projects, illustrating study designs, applications of scientific method in the collection, analysis and presentation of data at advanced levels. Two hrs. seminar; 4 hrs. lab. Prerequisites: "Classified Graduate" standing; SOC 6111.
- 6311** Seminar in Sociological Theory I (4)
Modern schools of sociological thought with a focus on functionalism, conflict theory, and symbolic interactionism. Examination of contemporary developments, with an emphasis on postmodern theories. Consideration of theory as a response to social, cultural, political and academic change. Prerequisites: "Classified Graduate" standing and consent of instructor.
- 6312** Seminar in Sociological Theory II (4)
Contemporary thematic and conceptual issues in the study of class, gender, race and other categories of difference and inequality. Application of issues to development of students' interests and thesis topics. Major Prerequisites: "Classified Graduate" standing; SOC 6311.
- 6800** Topics Seminar (4)
Presentation of selected topics beyond regular courses. Subject will vary from time to time. May be taken three times for unit credit with change in course content. Prerequisites: "Classified Graduate" standing and consent of instructor. (Y)
- 6898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 8 units. A maximum of 4 units will be accepted toward the Sociology major. CR/NC grading only. Prerequisites: at least a 3.0 GPA; departmental approval of activity.
- 6899** Project (5)

Development of an original product (i.e., video documentary) which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their formats. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense may be required. Prerequisite: graduate standing. Maximum of 5 units per student.

6900 Independent Study (1-4)

6908 Thesis Development (1-4)

Development and writing of a research paper in preparation for completing a departmental or university thesis. Supervision by a faculty committee, chaired by a regular member of the department. May be repeated once for a maximum of four units. Prerequisites: graduate standing; must be advanced to candidacy; must have secured thesis committee chair's written approval.

6909 Departmental Thesis (1-4)

Completion of a research paper for submission to the department, which specifies its format. Supervision by a faculty committee, chaired by a regular member of the department. Oral defense normally required. Prerequisites: graduate standing; SOC 6908.

6910 University Thesis (1-8)

Completion of a formal research paper for submission to the university in the specified format. Supervision by a faculty committee, chaired by a regular member of the department. Oral defense normally required. Prerequisites: graduate standing; SOC 6908.

6999 Issues in Sociology (4)

Readings, discussion, and research on contemporary and/or significant issues in sociology. May be repeated for credit when content varies.



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HELP



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Department Information

Department of Educational Psychology
College of Education and Allied Studies
Office: Art and Education Bldg. 369
Phone: (510) 885-3011

Professors Emeriti: Theodore G. Alper, Steven E. Crapo, Phyllis G. Kaplan, Donald P. McKillop, Harry M. Overline, Douglas G. Sprague

Professors: Jacki L. Anderson, Mary P. diSibio (Chair), Ann Halvorsen, Dan Romero, Arthurlene G. Towner

Associate Professors: Bonnie S. Ho, Greg Jennings

Assistant Professors: John M. Davis, Terry Soo-Hoo, Marcy E. Stites, Steve Williams

Lecturer: Maureen P. Kennedy

Graduate Coordinators:

M.S. Special Education

Phyllis Kaplan (Mild/Moderate), Jacki L. Anderson
(Moderate/Severe)

M.S. Counseling

Clinical Child/School Psychology: Greg Jennings

Marriage and Family Therapy (Hayward and Contra Costa):
Dan Romero

School Counseling, and Marriage, Family Therapy: Marcy
Stites

Please consult the 2006-2007 online catalog for any changes that

Program Description

may occur.

Note: modifications in program requirements are anticipated for the 2004-05 academic year due to changes in CCTC standards. Refer to the department website and/or program advisors for updated revisions.

The Educational Psychology Department is primarily a graduate department offering master's degrees and credential programs. Educational Psychology post-baccalaureate and graduate courses (5000- and 6000-level courses) are open only to students who have been admitted to, and remain in good standing in programs within the department. This restriction does not apply to students enrolled in the Special Education Option in Liberal Studies, the combined program in Teacher Education and Special Education (TED/SPED), or EPSY 5021. Potential applicants interested in the master's programs are encouraged to take courses in psychology, sociology, human development, and/or anthropology.

The Department of Educational Psychology offers a number of programs leading to the M.S. in Counseling, the M.S. in Special Education, and/or related credentials. These programs train psychological specialists who desire to work as school counselors, school psychologists, special education professionals, and community college counselors. Other programs prepare individuals for work as counselors, psychotherapists, or special education professionals in non-school settings where assistance with problems related to family, marriage, or personal adjustment is provided.

Contra Costa Campus

The department offers at the Contra Costa Campus (located in Concord) an M.S. degree program in Counseling with an Option in Marriage and Family Therapy. A departmental brochure describing both Hayward and Contra Costa programs may be requested by telephone at (510) 885-3011, or in writing. Current information on the Contra Costa programs may also be obtained by calling (925) 602-6700.

Program Offerings

Undergraduate

Liberal Studies Option in Special Education

(See the Liberal Studies chapter in the undergraduate section of this catalog.)

Graduate

Master of Science in Counseling

Option in Clinical Child/School Psychology

Option in Marriage and Family Therapy

Master of Science in Special Education

Option in Mild-Moderate Disabilities

Option in Moderate-Severe Disabilities

Credentials

Pupil Personnel Services

- School Psychology Specialization

- School Counseling Specialization

Special Education

- Education Specialist: Mild-Moderate Disabilities, Level I (Preliminary) and Level II (Professional)
- Education Specialist: Moderate-Severe Disabilities, Level I and Level II
- Internship (Level I) for Education Specialist Mild-Moderate and Moderate-Severe Disabilities

Other Programs

A department-approved Certificate in Chemical Dependency Studies (available in Extended and Continuing Education).

Admission

Educational Psychology students are admitted once a year, in the fall quarter. Students applying for the Level I Special Education credential programs who have general teaching credentials may be admitted conditionally each quarter. The level I TED/SPED joint program begins summer quarter and students must apply for admission through the Teacher Education department during the preceding winter quarter. See the graduate Teacher Education chapter in this catalog for details and deadlines. Teachers who hold valid Level I Specialist credentials may apply directly to the Educational Psychology department for admission to the Level II Professional Credential program.

Only 13 non-residence units taken in undergraduate, "Unclassified Post-baccalaureate," "Classified Post-baccalaureate," and/or extension status can be applied to a degree program. (Transfer units are included in the 13 non-residence units which are permitted.)

Interested individuals should contact the department office to obtain the appropriate admission packet which contains descriptive materials and necessary forms. These packets are available after October 15 and the department will accept applications beginning November 1. All admissions materials, such as recommendation letters, must be in by April 15. Test scores may be submitted after April 15. Call the Admissions Office for their admission deadlines for university applications. Applications received after this date run the risk of not being accepted by the university or the department. Notification of any action taken by this department will be mailed on, or before, June 15. Please note that students are admitted by the university, not the department. The department recommends admission to the university, but only the university may admit students. Only the university admission document can validate and verify admission.

Procedures

1. Apply to the Cal State Hayward Admissions Office. This department cannot process your request for entry until notification that your application and fee have been received at the Cal State Hayward Admissions Office.
2. Complete the departmental application.
3. Recommendation forms should be completed by persons who know of your academic and/or professional abilities. Ask them

to fill out the form and send it to you in a sealed envelope. At least one should be from a faculty member who is acquainted with your academic ability and promise. All programs require three letters of recommendation.

4. Complete a personal statement in which you describe your professional goals, the extent of commitment to these goals, and your assessment of your strengths and weaknesses relative to achieving these goals. Most applicants find that an adequate length is two to four pages.
5. Submit a photocopy of all your transcripts to the department office, in addition to the official copies you send to the Cal State Hayward Admissions Office.
6. Department applications must be submitted as a complete packet except for GRE or MAT test scores.
7. Send or have sent to the department office, scores from either the aptitude section of the Graduate Record Exam (GRE) or the Miller Analogies Test (MAT). These tests are administered by the Assessment and Testing Office at Cal State Hayward and the Educational Testing Service.
8. Personal or group interviews with faculty are required for local applicants. Arrangements for these are described in the department admission packet.
9. Special Education students may submit applications in person directly to the Education Psychology department for admission to the Level I Specialist Credential programs if they have already completed a Multiple or Single Subject (general education) credential. If not, Level I Specialist applicants for admission to the Level I Preliminary Credential program in the areas of mild-moderate or moderate-severe disabilities should submit applications directly to the Teacher Education department (AE 242, ext. 3027) for the "TED/SPED" Option.

Applicants for admission to the Professional Level II Credential programs or the master's degree program in the areas of mild-moderate and/or moderate-severe disabilities may apply directly for admission to the Special Education Option through the Department of Educational Psychology. Applicants for admission to Level II credential programs must hold a valid Level I credential from an accredited program. Complete applications must be submitted in person to a Special Education faculty member at the time of the interview.

10. Degree candidates must take the Writing Skills Test during the first quarter of attendance after admission to the department if they have not previously satisfied the requirement (see the Graduate and Post-baccalaureate Studies chapter in this catalog). Satisfaction of this requirement is a prerequisite for "Classified Graduate" status. Documentation of the completion and passing of the WST must be sent by the applicant to the Educational Psychology office. This information is not automatically forwarded to individual departments. *Note:* Applicants who receive a CBEST score of 53 or higher in the written section are not required to take the WST.

11. Students applying for a program leading to a credential from the Commission for Teacher Credentialing must take the California Basic Education Skills Test (CBEST) before commencement of the quarter in which they are to be admitted. As the testing is for diagnostic purposes, only a record of completion is required. Consult the Office of Assessment and Testing for times and dates of the testing.
12. Credential candidates must apply through the Cal State Hayward Credentials Office for a "Certificate of Clearance" (which includes a current TB test) if field work in public schools is anticipated (unless they possess a valid California Teacher's Credential).

Applicants may contact the department's Graduate Records Secretary for clarification of their requirements, or for an update on the state of their application or their progress in their degree or credential programs: (510) 885-3011.

Advising

Students who are accepted into the department will normally be admitted in "Conditionally Classified Graduate" status until satisfaction of all prerequisites and the University Writing Skills requirement is documented for the Educational Psychology office, at which time a change to "Classified Graduate" status will be requested by the department. The student is assigned an official advisor from the faculty of the department and must consult his or her advisor prior to registration for each quarter. The student should maintain close contact at all times with the advisor for advice and information.

Advancement to Candidacy

Formal Advancement to Candidacy for the master's degree requires prior completion of the following steps:

1. Successful completion in "Classified Graduate" status of three or more courses at the 6000 level (minimum of 12 units) within the Educational Psychology Department.
2. Successful completion of all required departmental examinations and prerequisites.
3. Maintenance of a 3.0 or better GPA in all departmental coursework and overall coursework.
4. Acceptance by the department of a proposed formal program of study.
5. Recommendation by two faculty members who have reviewed the students record and affirmed that the student has met academic and professional conduct standards.

Note: A similar process is followed for Special Education Credential students to be moved from special to full status admission.

Cause for Discontinuance

Students may be discontinued from the program at any time "for cause." This includes poor academic or fieldwork performance.

"For cause" also includes behavior which is destructive to students or faculty, and/or interferes with the educational environment, and/or represents a threat to potential clients. It also includes student behaviors which are inconsistent with the legal, ethical, and/or personal responsibilities of professional counselors and teachers.

Degree Requirements

In order to earn a master's degree, students must fulfill all of the following requirements:

1. Satisfy the University Writing Skills requirement or pass the CBEST writing portion with a score of 53 or higher.
2. Hold Advanced to Candidacy standing.
3. Complete 72 units (Counseling) or 45-47 units (Special Education) of approved graduate work, of which:
 - a. all must have been earned within the five years just preceding completion of the requirements for the degree.
 - b. not fewer than 32-34 units (for 45-47-unit degrees) or 59 units (for 72-unit degrees) must have been completed in residence.
 - c. not fewer than 23-24 units (for 45-47-unit degrees) or 36 units (for 72-unit degrees) must have been in courses in the 6000 series.
 - d. not more than 9 units may have been for a University Thesis or 5 for a project or a Departmental Thesis.
 - e. not more than 13 units may be transfer, extension (including Open University), and/or taken in "Unclassified" or "Classified Post-baccalaureate" status.
 - f. not more than 15 units with a "CR" grade may be used for a 45-unit degree; not more than 24 units with a "CR" grade may be used for a 72-unit degree in Counseling.
4. Complete a satisfactory program of study as determined by the department with any substitutions approved by the Dean of the College of Education and Allied Studies.
5. Obtain at least a 3.0 grade point average in
 - a. all post-baccalaureate units undertaken
 - b. all post-baccalaureate units undertaken at Cal State Hayward
 - c. all units offered as satisfying the requirements of the degree program
6. Successfully complete an acceptable thesis, project or comprehensive examination as determined and approved by the department.

M.S. in Counseling

There are two options and two areas of emphasis within the M.S. degree in Counseling. These are designed to ensure the most thorough preparation for the profession and its subspecialties, as well as to provide the student a broad experience with points of view and philosophy in both theory and practice. The faculty is committed to the intellectual and social-emotional growth of the student as well as his or her professional preparation.

For administrative purposes, faculty and students are organized into three programs, all of which lead to the M.S. in Counseling. Potential applicants are invited to seek appointments with faculty representatives of the three programs to discuss their interests and philosophical orientations.

Licenses Related to Counseling Programs

The department does not issue licenses but does offer courses which are designed to meet the educational requirements of two State of California licenses. All licenses require additional experience beyond degrees, as well as written and oral exams administered by the appropriate board of the State of California.

MFT

The M.S. Counseling degree has an option designed to meet the requirements of Sections 4980.37, 4980.40 and subdivisions (a) and (d) of Section 4980.41, Article 1 (Regulation: Chapter 13, Marriage, Family Therapy, of the Business and Professions Code, State of California). Students are advised to acquire and read the laws governing MFT licensure from the Board of Behavioral Sciences in Sacramento.

See your program advisor in the Educational Psychology department for the procedures required for application for this license. State documents must be requested by the applicant from the Board of Behavioral Science Examiners, 400 R Street, Sacramento, CA 95814-6240.

Grades: If a candidate for the university recommendation for MFT licensure has more than one "C" grade among the courses listed on the Board of Behavioral Sciences approval form, that form cannot be approved by the Designee of the Chief Academic Officer of Cal State Hayward.

Field Work Credit: Field work or internship courses represent the student's efforts and growth in the interpersonal skills basic to marriage, family, and child counseling. A student who receives a grade of "NC" (no credit) for one quarter is on probation regarding continuation in the MFT approval track. A second grade of "NC" will disqualify the student for continuation in the MFT option and ultimate university recommendation for the license. Further, candidates may be disqualified from this program for actions judged by the faculty to reflect unethical, unprofessional, or incompetent behavior or interpersonal skills.

Educational Psychology License

The Educational Psychology license is issued by the Board of Behavioral Sciences. A credential in School Psychology and three years of related experience are currently required.

Core Requirements for M.S. in Counseling

(72 units)

The M.S. degree in Counseling requires 72 units organized according to university requirements (see the Graduate and Post-baccalaureate Studies chapter in this catalog). Core requirements are established to ensure that each degree candidate obtains adequate breadth in subject matter, field experiences, and research.

I. Prerequisites (15 units minimum)

A baccalaureate degree with a major in psychology or in child or human development plus a statistics course. For applicants with baccalaureates in other majors, the following courses are required and will provide adequate background for a counseling graduate program:

1. An introductory course in descriptive statistics (3 units)
2. A course in abnormal or pathological behavior (3 units)
3. A course in learning (3 units)
4. A course in developmental psychology or human or child development (3 units)
5. A course in personality theory or development (3 units)

II. Core Requirements (36-45 units)

A. *Competency Area Requirements (27 units)*

Students are required to demonstrate competency in the seven areas listed below. With the Dean's approval, students may substitute alternative related courses.

1. Basic theoretical and research knowledge of systems of counseling and psychotherapy (4 units)

EPSY 6750 Foundations of Counseling (4)

2. Knowledge of psychological, biological, and social development over the lifespan and related psychotherapeutic interventions (4 units)

EPSY 6302 Individual Development (4)

3. Knowledge of group counseling and psychotherapy, consultation, systems analysis and change agents in organizations (4 units)

EPSY 6762 Group Procedures and Facilitation (4)

4. Knowledge of theory and procedures for collecting and evaluating clinical assessment data (4 units)

EPSY 6701 Appraisal Procedures: Standardized (4) or
EPSY 6720 Theory and Assessment of Cognition (4)

5. Cultural perspectives in counseling: acquiring understanding of, and sensitivity to, individuals from diverse backgrounds and the interpersonal skills to work with them. Included are social class, ethnic, racial,

sexual, and lifestyle differences (4 units)

EPSY 6752 Cross Cultural Counseling (4)

6. Ability to conduct and interpret research (4 units)

EPSY 6023 Research in Applied Behavioral Sciences (4)

7. Laws and ethical principles as they apply to the practice of professional counseling (3 units)

EPSY 6785 Law and Ethics in Counseling (3)

B. Fieldwork Requirement (9 units)

A minimum of three quarters of fieldwork is required in the application of counseling procedures and assessment techniques in fieldwork settings.

EPSY 6670 Field Work Group Supervision I (3)

EPSY 6671 Field Work Group Supervision II (3)

EPSY 6672 Field Work Group Supervision III (3)

C. Capstone Experience (0-9 units)

Students must successfully complete either a University Thesis, a Departmental Thesis, a Project, or a Comprehensive Examination, and should select option (1), (2), (3), or (4).

1. EPSY 6899¹ Project (2-5) or EPSY 6021 Thesis-Project Seminar (3)

2. EPSY 6909¹ Departmental Thesis (2-5) or EPSY 6021 Thesis-Project Seminar (3)

3. EPSY 6910² University Thesis (1-9) or EPSY 6021 Thesis-Project Seminar (3)

4. Comprehensive Examination (0)

The Comprehensive Examination consists of a written review and synthesis of the degree competencies developed by the student followed by an oral examination over these competencies.

III. Option/Area of Emphasis (16-23 units)

A student may choose to complete an option and/or an area of emphasis. Options can be recognized on diplomas and transcripts, emphases will not.

A. Options (19-22 units)

1. Clinical Child/School Psychology (19 units)

EPSY 6403 Psychotherapy for Children (4)

EPSY 6500 Cognitive Behavior Therapy (4)

EPSY 6669 Seminar in Mental Health Consultation (3)

EPSY 6911 Developmental Assessment Practicum (4)

EPSY 6912 Personality Assessment (4)

2. Marriage and Family Therapy (20-22 units)

EPSY 6025 Psychopathology of Childhood (4) or EPSY 6026 Psychopathology in Adulthood (4)

EPSY 6027 Chemical Dependence Theory (4) or EPSY 6029 Seminar in Chemical Dependency (2)

EPSY 6400 Family Psychotherapy (4)
EPSY 6403 Psychotherapy for Children (4)
EPSY 6406 Seminar in Human Sexuality (2)

EPSY 6500 Cognitive Behavior Therapy (4) or EPSY 6751 Counseling and Psychotherapy Theory (4)

B. Areas of Emphasis (16-23 units)

1. Cross-cultural Counseling (16 units)

EPSY 6751 Counseling and Psychotherapy Theory (4)
EPSY 6754 Cross-Cultural Consultation (4)
EPSY 6764 Intervention Strategies for Systems and Organizational Change (4)

Choice of one course from the following (4 units):

ANTH 3740 Cross-Cultural Studies in Child Rearing (4); SOC 3520 Sociology of Minority Groups (4)

2. Child/Adolescent Psychotherapy (22-23 units)

EPSY 5021 Introduction to Educating all students in Diverse Classrooms (4)
EPSY 6025 Psychopathology of Childhood (4)
EPSY 6400 Family Psychotherapy (4)
EPSY 6403 Psychotherapy for Children (4)
EPSY 6500 Cognitive Behavior Therapy (4)
EPSY 6783 Seminar: Contemporary Issues (2-3)

C. Electives (3-20 units)

These electives are in addition to the option or emphasis selected above. Courses listed above as alternatives under emphases may be used as electives if not otherwise chosen.

Other courses recommended as electives:

ANTH 3740 Cross-Cultural Studies in Child-Rearing (4), 3745 Human Sexuality: Anthropological Perspectives (4); COMM 4830 Intercultural Communication (4); EPSY 5610 Micro Counseling I (2), 5620 Micro Counseling II (2), 6029 Seminar in Chemical Dependency (2), 6131 Assessments: Students with Mild to Moderate Disabilities (5), 6301 Pediatric Psychology (4), 6402 Couples Therapy (4), 6406 Seminar in Human Sexuality (2), 6610 Graduate Seminar I (2), 6620 Graduate Seminar II (2), 6630 Graduate Seminar III (2), 6660 Fieldwork I (2-4), 6661 Fieldwork II (2-4), 6662 Fieldwork III (2-4)

EPSY 6746 Neuropsychology of Learning Disabilities (4), 6770 Internship (2-6), 6786 Child Abuse Assessment (1), 6810 Advanced Graduate Seminar I (2), 6820 Advanced Graduate Seminar II (2), 6830 Advanced Graduate

Seminar III (2), 6860 Advanced Fieldwork I (2-4), 6861 Advanced Fieldwork II (2-4), 6870 Advanced Field Work Group Supervision I (3), 6871 Advanced Field Work Group Supervision II (3), 6872 Advanced Field Work Group Supervision III (3), 6880 Advanced Internship (2-15), 6894 Supervision Fieldwork I (2), 6895 Supervision Fieldwork II (2), 6896 Supervision Fieldwork III (2)

E S 3105 Afro-American Identity (4), 3310 Native American World View (4), 4290 Latino Politics and Public Policy (4); HDEV 3800 Human Development and Interaction (4), 4004 Current Issues in Aging (4), 4325 Lesbian and Gay Lifespan Development (4), 4350 Intimate Relationships Throughout the Life Span (4), 4400 Adolescence (4)

PSYC 3420 Stress and Coping (4), 3520 Interpersonal Processes (4), 3540 Groups and Organizations (4), 4300 Motivation (4), 4320 Physiological Psychology (4), 4360 Psychopharmacology (4); SOC 3410 Sociology of the Family (4), 3411 Sociology of Gender (4), 3520 Sociology of Minority Groups (4), 3750 Alcohol and Drug Abuse (4); SPPA 6060 Advanced Study of Language Disorders in Children (4)

Public Administration courses may be used as electives by students completing the combined program with Public Administration.

Counseling Programs of Study

Clinical Child/School Psychology

Clinical Child/School Psychology Option
Marriage and Family Therapy Option
School Psychology Credential

Faculty: Theodore G. Alper, John M. Davis, Mary P. diSibio, Bonnie S. Ho, Greg Jennings (Coordinator), Marcy Stites

The Clinical Child/School Psychology (CCSP) program at CSUH is committed to a training philosophy that promotes the educational and social-emotional development of children, youth, and families. It is considered essential that each student develop sound professional values along with the acquisition of professional knowledge. An ecological human development perspective and collaborative consultation skills are emphasized, with the understanding that the ability to work collaboratively with families, teachers, and communities is critical to helping children succeed. As a fundamental principle of ethical practice, assessment, consultation, and intervention skills are inextricably linked throughout the curriculum. Program development and evaluation skills are also emphasized in order to ensure that graduates are well prepared to promote effective system-level intervention programs for meeting the needs of children, schools, families, and communities.

Multicultural issues are addressed as an integral and essential component of every course the department offers. It is the mission of the department, College of Education and Allied Studies, and university to prepare leaders for a diverse society. It is also the explicit goal of the Clinical Child/School Psychology

program to prepare students to work effectively with children and families across the full spectrum of culture, ethnicity, and individual differences. The program is also developing training experiences that emphasize the development of skills in cultural competency.

The Clinical Child/School Psychology program provides the only course of study in the department leading to the School Psychology credential. This program also offers the academic and minimum fieldwork requirements for the Marriage and Family Therapy license and the Educational Psychology license.

The candidate for a credential must demonstrate an increasing ability to establish constructive interpersonal relationships with persons of differing ages, cultures, and experiential backgrounds (including children who may have endured severe physical or emotional trauma) in a manner that promotes confidence, mental health, social adjustment, and learning. The candidate must demonstrate increasing ability to establish satisfactory working relationships with parents, teachers, school personnel, and other community members involved in a particular case. The candidate must also demonstrate increasing ability to apply professional methods and techniques at proficiency levels significantly higher than those generally required in academic coursework.

To ensure that candidates have opportunity to develop the skills necessary for credential eligibility, specific credential competencies have been integrated into all courses required for a credential. In order to demonstrate at least minimal competencies in the required skills, therefore, the credential candidate must earn a grade of "B" or higher in each of these courses. In the event that a candidate does not achieve the criterion of "B" work in a required course, (s)he must consult immediately with the faculty, to determine a plan that will provide opportunity for remediation. Any candidate who receives a grade of "C" or lower in a required course will be classified automatically as probationary in the credential program; a second grade of "C" or lower will be considered sufficient basis for disqualification from the credential program and the related Master of Counseling degree program. Students are expected to have completed all prerequisites before entering the program. Candidates must take all courses that are required by the program, degree, and credential at California State University, Hayward.

Fieldwork and practical experiences, as evaluated by faculty and field supervisors, must also reflect a candidate's ability to meet the competencies specified in the program documents. Professional and interpersonal skills are the primary determinants of success in these settings. Any candidate who receives a grade of "NC" (No Credit) in a required fieldwork or internship course will be classified automatically as probationary in both the credential program and the Master of Counseling degree program. A meeting with the Coordinator of the School Psychology program will be required before additional registration in fieldwork or internship courses will be considered valid for credit toward a credential. A second grade of "NC" will be considered sufficient basis for disqualification from the credential program and the Master of Counseling degree program.

The program supports the development of the professional

maturity of all candidates. The CCSP faculty evaluates candidates' professional and interpersonal maturity throughout the program. Only students who have demonstrated a high level of professional and personal integrity consistent with the role of the school psychologist will be recommended for the Pupil Personnel Services Credential in School Psychology upon completion of coursework, fieldwork, internship and Praxis exam results.

Candidates who fail to demonstrate professional and personal responsibility (as evidenced by violations of professional, interpersonal trust, or ethical practice) are subject to termination from the CCSP Program.

Marriage and Family Therapy

Marriage and Family Therapy Option

Child/Adolescent Psychotherapy Emphasis

Faculty: Steven E. Crapo, John M. Davis, Donald P. McKillop, Harry Overline, Dan Romero (Coordinator), Terry Soo-Hoo, Douglas G. Sprague

The faculty supervising this program are committed to training psychotherapists and mental health specialists for a variety of settings, such as private practice, social service agencies, schools, universities, hospitals, businesses, and industry.

Students admitted to this program of study will focus on the M.S. in Counseling with the option in Marriage and Family Therapy. Although students may pursue additional emphases, the main focus of this program is on training psychotherapists who eventually plan to obtain a California license to practice marriage and family therapy. The program provides a course of study leading toward completion of the academic requirements and the 150 hours clinical experience required for application for the MFT license.

Graduates have been hired to work with clients in a wide range of agencies and businesses. Some are counselors in junior colleges and college counseling centers. Others are drug and alcohol abuse counselors in hospitals, family therapists-on-site in schools, advocates for the mentally ill, child therapists in therapeutic nursery schools, assessment counselors, information and referral clinicians in employee assistance programs, individual and family therapists for police departments, organizational development specialists, and human resource professionals in business and industry.

A number of graduates have pursued doctoral-level work in clinical and counseling psychology or education after completing their master's degree in this program. Over the years, students have been accepted to programs in many universities, including the University of Missouri, the University of California at Berkeley, Michigan State University, Stanford University, California School of Professional Psychology, the Wright Institute, the University of Florida, the University of Texas, and the University of Wisconsin.

Students are trained for clinical work with individuals who are struggling with normal life problems, as well as individuals with more extensive psychopathology. Coursework covering various theories of individual, child, couple and family therapy prepares

students well for advanced post-graduate internship work in clinical specializations of their choice. Students, as part of their clinical skills development, are also trained to lead counseling groups of children or adults.

Students take both evening and day classes. The program, however, cannot be completed entirely through evening classes. All classes are offered at the Hayward campus.

The Marriage and Family Therapy program is designed to encourage growth and development of the students enrolled. Expansion of students' awareness and perspectives is emphasized. The faculty are licensed as marriage and family therapists or as psychologists. They are involved in clinical practices and are committed to preparing psychotherapists and consultants.

School Counseling, and Marriage, Family Therapy

Faculty: Theodore G. Alper, Mary P. diSibio, Bonnie S. Ho, Greg Jennings, John M. Davis, Marcy Stites (Coordinator)

Students enrolled in this program complete the M.S. in Counseling with a focus on both School Counseling and Marriage and Family Therapy (MFT). They are prepared to participate in, and to provide leadership for, a highly collaborative, prevention-based model for service delivery in the 21st century. This model involves the weaving together of educational services with community health, mental health, and other social services, as well as a strong focus on family issues and school-based/linked services.

The School Counseling and MFT program is a two-year course of study that leads to the Pupil Personnel Services (PPS) School Counseling Credential and meets the academic requirements, as well as the minimum 150 hours of experience required for the MFT license. Students enroll in a full-time course load each quarter (fall, winter, and spring) for two academic years. Courses are offered during the day, in the evening, and on weekends. The trainees participate in fieldwork at least 1 1/2 to 2 days per week (approximately 12-15 hours/week) each year, for a total of 600 hours.

Coursework and fieldwork experiences emphasize the development of the student's ability to provide comprehensive developmental school counseling programs meeting national and state standards. Students acquire the skills to develop classroom and small group guidance curriculum. They also learn to conduct individual and group therapy, guidance counseling, consultation, and to provide leadership in the creation and evaluation of integrated, comprehensive prevention and intervention programs. In the fieldwork experience, trainees have specific assigned activities and supervised experiences related to the California Credentialing Standards for the PPS School Counseling Credential, and to the MFT licensing qualifications of the Board of Behavioral Sciences.

To be admitted to the program, students must complete five departmental prerequisites with a grade of "B" or higher (see prerequisites listed under "Core Requirements for M.S. in

Credentials in Counseling

Counseling" earlier in this chapter. In addition, applicants must have taken the GRE or MA and CBEST exams prior to entering the program.

The department is committed to interdisciplinary training and the delivery of prevention, family-centered, school-based/linked mental health services. Students enrolled in this program, therefore, take many of their basic courses with faculty and students who are enrolled in other specialist programs such as marriage and family therapy, school psychology, and special education. The candidate must satisfy all credential competency requirements as defined in the approved credential document.⁶ Specifically, the candidate must achieve a grade of "B" or higher in the required courses. If a grade of "B" or higher is not earned, the candidate must immediately consult with the faculty to determine the academic work necessary to achieve competency level. (The original grade will not be changed, however.) Two grades of "C" or lower in required courses are sufficient basis for disqualification from the program (as stated in the University Catalog). Candidates must also successfully complete 600 hours of fieldwork in schools and pass the CBEST exam in order to be eligible for the PPS School Counseling Credential.

Pupil Personnel Credential: School Counseling Specialization (90 units)

The Pupil Personnel Credential (School Counseling Specialization) is offered through the School Counseling, and Marriage, Family Therapy program. This credential is required for work as a counselor in the public schools, and is approved by the California Commission of Teacher Credentialing (CCTC). The commission sets the standards and competencies for the state, and Cal State Hayward's program is designed to incorporate all knowledge, skills and practical experiences required to meet those expectations.⁶

The School Counseling Credential program is a two-year course of study that reflects an integration of local program needs, the campus mission, and the direction provided by the National Standards and National Model of the American School Counselor Association (ASCA) and the National Career Development Guidelines (NOICC). The program is designed to train competent practitioners who are prepared to be leaders in building comprehensive, results-based school counseling programs that serve the needs of all pupils. The program provides training in mental health services using an integrated model designed to serve marriage and family therapists, school counseling and school psychology students. The school counseling students, however, will receive additional training and experience to prepare them to effectively perform the functions of a school counselor. The School Counseling Credential program includes specific training in guidance program models, guidance program development/implementation, and in the comprehensive and developmental school guidance curricula for academic, career, and personal/social development. Students also learn team building, management, and accountability for a comprehensive guidance program.

The M.S. in Counseling (or an acceptable equivalent) is required.

I. Prerequisites (15 units)

The prerequisites are the same as for the M.S. in Counseling. (Prerequisites are not included in the 76-87 units required for the Pupil Personnel Credential.) Coursework as follows:

Learning (3)
Statistics (3)
Personality (3)
Abnormal psychology (3)
Human, child, or adolescent development (3)

II. Course Requirements (64 units)

EPSY 5610 Micro-Counseling I (2)
EPSY 6022 Program Evaluation (3)
EPSY 6023 Research in Applied Behavioral Sciences (4)
EPSY 6025 Psychopathology of Childhood (4)
EPSY 6302 Individual Development (4)
EPSY 6400 Family Psychotherapy (4)
EPSY 6403 Psychotherapy for Children (4)
EPSY 6500 Cognitive Behavior Therapy (4)
EPSY 6610 Graduate Seminar I (2)
EPSY 6620 Graduate Seminar II (2)
EPSY 6630 Graduate Seminar III (2)
EPSY 6669 Seminar in Mental Health Consultation (3)
EPSY 6701 Appraisal Procedures: Standardized (4)
EPSY 6750 Foundations of Counseling (4)
EPSY 6752 Cross-Cultural Counseling (4)
EPSY 6762 Group Procedures and Facilitation (4)
EPSY 6765 Psychological and Counseling Services in Schools and Higher Education (2)
EPSY 6785 Law and Ethics in Counseling (3)
EPSY 6786 Child Abuse Assessment (1)
EPSY 6810 Advanced Graduate Seminar I (2)
EPSY 6820 Advanced Graduate Seminar II (2)

III. Fieldwork (minimum 18 units)

EPSY 6670 Fieldwork Group Supervision I (3)
EPSY 6671 Fieldwork Group Supervision II (3)
EPSY 6672 Fieldwork Group Supervision III (3)
EPSY 6770 Internship (2-6) (may be taken multiple quarters)

IV. Capstone Experience (4 units)

Complete both A and B

A. EPSY 6205 Advanced Pupil Personnel Specialist (4)

B. Passing score on Comprehensive Exam in School Counseling (0)

Pupil Personnel Credential: School Psychology Internship and School Psychology Specialization

This combined credential program is offered by the Clinical Child/School Psychology faculty.

The school psychologist is a clinical child psychologist who functions within the school organization. The school psychologist

provides consultation and services for enhancement of the cognitive, social and emotional development of children and adolescents within the school environment; provides programs for the development of the staff; has responsibility for the prevention, assessment, and remediation of the behavioral and learning difficulties of children; and often becomes the primary resource for the emotionally troubled children and their parents. The school psychologist serves the schools as the expert in psycho-educational measurement, program evaluation, and research.

School Psychology Internship (99 units)

This program prepares students to undertake a full-time (1200-hour) Internship in School Psychology, as required by the National Association of School Psychologists and, as of July, 1996, by the Commission on Teacher Credentialing of the State of California. (Note that the Internship Credential would serve to qualify a student for internship status, and thus would have to be earned prior to the actual internship year itself.)

Prerequisites are not included in the 99 units required for the School Psychology Internship Program. Prerequisite units are minimum values; all Cal State Hayward courses have more units.

I. Prerequisites (18 units)

- An Introduction to Statistics (e.g., STAT 1000) (3)
- Abnormal Psychology (e.g., PSYC 4410) (3)
- Developmental Psychology (e.g., PSYC 4420) (3)
- Learning Theory (e.g., PSYC 4210) (3)
- Personality Theory (e.g., PSYC 4610) (3)
- Psychological Tests and Measurements (e.g., PSYC 3200) (3)

II. Required Courses (81 units)

- EPSY 5610 Microcounseling I (2)
- EPSY 6022 Program Evaluation (3)
- EPSY 6023 Research in Applied Behavioral Sciences (4)
- EPSY 6025 Psychopathology of Childhood (4)
- EPSY 6301 Pediatric Psychology (4)
- EPSY 6302 Individual Development (4)
- EPSY 6400 Family Psychotherapy (4)
- EPSY 6403 Psychotherapy for Children (4)
- EPSY 6500 Cognitive Behavior Therapy (4)
- EPSY 6610 Graduate Seminar I (2)
- EPSY 6620 Graduate Seminar II (2)
- EPSY 6630 Graduate Seminar III (2)
- EPSY 6669 Seminar in Mental Health Consultation (3)
- EPSY 6720 Theory and Assessment of Cognition (4)
- EPSY 6746 Neuropsychology of Learning Disabilities (4)
- EPSY 6752 Cross-Cultural Counseling (4)
- EPSY 6762 Group Procedures and Facilitation (4)
- EPSY 6765 Psychological and Counseling Services in Schools and Higher Education (2)
- EPSY 6785 Law and Ethics of Counseling (3)
- EPSY 6810 Advanced Graduate Seminar I (2)
- EPSY 6820 Advanced Graduate Seminar II (2)
- EPSY 6830 Advanced Graduate Seminar III (2)
- EPSY 6911 Developmental Assessment Practicum (4)
- EPSY 6912 Personality Assessment (4)

EPSY 6000-level course, refer to the department website and/or program advisor

Special
Education
Programs of
Study

M.S. in Special
Education

III. Required Fieldwork (18 units)

- EPSY 6670 Fieldwork Group Supervision I (3)
- EPSY 6671 Fieldwork Group Supervision II (3)
- EPSY 6672 Fieldwork Group Supervision III (3)
- EPSY 6870 Advanced Fieldwork Group Supervision I (3)
- EPSY 6871 Advanced Fieldwork Group Supervision II (3)
- EPSY 6872 Advanced Fieldwork Group Supervision III (3)

School Psychology Specialization (139 units)

This program includes the 99 units required for the School Psychology Internship specialization described in the previous section (81 units of required courses; 18 units of required fieldwork). In addition students must complete the following:

Required Fieldwork (36 units)

- EPSY 6880 Advanced Internship (take three times--12 units each)

Required Capstone Experience (4 units)

- EPSY 6205 Advanced Pupil Personnel Specialist (4)
-

Faculty: Jacki L. Anderson (Coordinator, Moderate-Severe Disabilities), Ann T. Halvorsen, Phyllis G. Kaplan (Coordinator, Mild-Moderate Disabilities), Steven L. Williams

The Special Education program prepares its students for careers in direct teaching and for leadership roles in Special Education. Programs are offered which lead to the Master of Science degree and/or to the Education Specialist: Mild-Moderate and Moderate-Severe Credentials. The Preliminary Level I Credential is obtained in conjunction with the Multiple Subject Credential through the Department of Teacher Education. Applicants who have a general education credential or those who are applying for a Professional Level II Credential are admitted through the Department of Educational Psychology.

The emphasis is on providing students with a wide range of practical methods for enhancing the lives of individuals with exceptional needs. To this end, coursework is taught by successful practitioners in the field. Also, the programs provide extensive supervised fieldwork in settings that are appropriate to each student's professional goals.

The M.S. in Special Education may be obtained (a) in conjunction with Level I and II credentials, or (b) through a combination of Level I, II, and research coursework listed below. Candidates who want to pursue only the master's degree without Specialist teaching credentials will follow the program outlines below. These candidates may obtain an M.S. degree in either Mild-Moderate or Moderate-Severe Disabilities. The master's degree requirements include both preliminary Level I coursework and fieldwork, as well as Level II advanced study.

Applicants will apply for admission to the Department of Educational Psychology: Special Education Option, and will follow

the departmental as well as the university application procedures.

The number of units required for the degree is 45-47 units (32-34 units in residence).

I. Prerequisite Course (4 units)

EPSY 5021 Introduction to Educating all Students in Diverse Classrooms (4)

II. Options

Choose one option.

A. Mild-Moderate Option (33-34 units in Mild-Moderate core)

1. Level I (20-21 units)

EPSY 6120 Communication: Collaborative Teaming and Management (4)

EPSY 6127 Instructional and Behavioral Support: Mild-Moderate Disabilities (4)

EPSY 6128 Instructional and Behavioral Support Fieldwork (4) or EPSY 6870 Advanced Fieldwork Group Supervision (3)

EPSY 6131 Assessments: Students with Mild to Moderate Disabilities (5)

EPSY 6133 Curriculum: Students with Mild to Moderate Disabilities (4)

2. Level II (13 units)

EPSY 6129 Advanced Study in Collaborative Service Delivery, Education and Transition (4)

EPSY 6134 Advanced Instructional and Behavioral Supports: Mild-Moderate (5)

EPSY 6206 Advanced Studies in the Education of Students with Mild to Moderate Disabilities: Emerging Research and Practice (2)

EPSY 6830 Advanced Graduate Seminar III (2)

B. Moderate-Severe Option (33-34 units in Moderate-Severe core)

1. Level I (20-21 units)

EPSY 6120 Communication: Collaborative Teaming and Management (4)

EPSY 6137 Instructional and Behavioral Support: Moderate-Severe Disabilities (4)

EPSY 6140 Curriculum: Students with Moderate-Severe Disabilities (4)

EPSY 6142 Assessment: Students with Moderate-Severe Disabilities (5)

EPSY 6860 Advanced Fieldwork (2-4) or EPSY 6870 Advanced Fieldwork Group Supervision (3)

2. Level II (13 units)

EPSY 6129 Advanced Study in Collaborative Service Delivery, Education and Transition (4)

EPSY 6141 Advanced Instructional and Behavioral Supports: Moderate-Severe (5)

EPSY 6207 Advanced Studies in the Education of Students with Moderate to Severe Disabilities: Emerging Research and Practice (2)

EPSY 6830 Advanced Graduate Seminar III (2)

Mild-Moderate and Moderate-Severe Options
Elective (3 units)

Choose one of the following:

EPSY 6124 Advanced Study in Augmentative
Communication and Assistive Technology (3)

EPSY 6130 Advanced Studies in Service Learning and
Positive School Climate (3)

EPSY 6143 Advanced Studies in Individual and School-
wide Positive Behavior Supports (3)

EPSY 6145 Advanced Studies in Adolescent Learning and
Secondary Curriculum (3)

III. Additional Master's Degree Requirements (9-10
units)

EPSY 6023 Research in Applied Behavioral Sciences (4)

and

Select five or six units from the following:

EPSY 6021 Thesis-Project Seminar (3) or EPSY 6899

Project (2-5) or EPSY 6909 Departmental Thesis (2-5) or

EPSY 6910 University Thesis (1-9)

Credentials in
Special
Education

Education Specialist Credential: Mild-Moderate and
Moderate-Severe Disabilities (Level I) (46 units)

Required Courses

EPSY 5021 Introduction to Educating all Students in Diverse
Classrooms (4) or T ED 5500 Teaching Special Populations in
General Education Settings (4)

EPSY 5125 Educational Practices: Mild-Moderate Disabilities (4)
or EPSY 5136 Educational Practices: Moderate-Severe
Disabilities (4)

EPSY 5126 Special Education Law and Program Design (4)

EPSY 6120 Communication: Collaborative Teaming and
Management (4)

EPSY 6127 Instruction and Behavioral Support: Mild-Moderate
Disabilities (4) or EPSY 6137 Instructional and Behavioral
Support: Moderate-Severe Disabilities (4)

EPSY 6128 Instructional and Behavioral Support Fieldwork (4),
SPED students only or EPSY 6860 Advanced Fieldwork I (4),
SPED students only

EPSY 6131 Assessments: Students with Mild to Moderate
Disabilities (5) or EPSY 6142 Assessment: Students with
Moderate-Severe Disabilities (5)

EPSY 6133 Curriculum: Students with Mild-Moderate Disabilities
(4) or EPSY 6140 Curriculum: Students with Moderate-Severe
Disabilities (4)

EPSY 6800 Student Teaching (Mild-Moderate) (8) or EPSY 6801 Student Teaching (Moderate-Severe) (8)

EPSY 6810 or 6820 Advanced Graduate Seminar I or II (2)

EPSY 6870 Advanced Field Work Group Supervision I (3)

Concurrent Education Specialist: Mild-Moderate and Moderate-Severe (Level I) and Multiple Subject Credential Program (72 units; 80 units for TED students only)

If you are in the Concurrent Education Specialist and Multiple Subject Credential program (TED/SPED), complete the following courses in addition to the 42 units listed above for the Level I Mild-Moderate or Moderate-Severe Disabilities Education Specialist Credential. (*Note: These requirements will be changing with the new standards for Multiple Subjects Programs, and will be available from the TED and EPSY Departments and on line by June 2004.*)

Required Courses (30-41 units)

T ED 5350 Curriculum and Instruction: Mathematics in the Elementary School (3)

T ED 5352 Curriculum and Instruction: Reading in the Elementary School--A (4)

T ED 5353 Teaching Models (3)

T ED 5354 Student Teaching I (4), TED and SPED

T ED 5356 Curriculum and Instruction: Reading in the Elementary School--B (2)

T ED 5357 Curriculum and Instruction: Teaching Science in Elementary School (3)

[T ED 5359 Student Teaching II (6), TED students only]

T ED 5360 Curriculum and Instruction: Language Arts in the Elementary School (3)

[T ED 5361 Student Teaching III (6), TED students only]

T ED 5365 Curriculum and Instruction: Social Studies in the Elementary School (2)

T ED 5366 English as a Second Language (ESL) and Bilingual Methods (2)

T ED 5500 Teaching Special Populations in General Education Settings (4) *or* EPSY 5021 Introduction to Educating all Students in Diverse Classrooms (4)

Special Education Teacher Internship Program for Education Specialist Credentials

Mild-Moderate Disabilities, Level I (49 units plus TED units above)

Moderate-Severe Disabilities, Level I (49 units plus TED units above)

If you are already working in this area with emergency credentials or no credentials, this program will allow you to earn your Education Specialist credential while continuing to teach part-time. You will complete all coursework that students would complete who are pursuing currently approved Education Specialist Level I credential programs. You will, however, be able to work up to

80% time in one of the area districts with which CSUH has an approved Specialist Intern Program. In addition you will be placed as a student teacher under the supervision of a master teacher for required fieldwork across ages and with general education students.

Mild-Moderate Disabilities: Required Coursework (49 units)

- EPSY 5021 Introduction to Educating all Students in Diverse Classrooms (4)
- EPSY 5125 Educational Practices: Mild-Moderate Disabilities (4)
- EPSY 5126 Special Education Law and Program Design (4)
- EPSY 6120 Communication: Collaborative Teaming and Management (4)
- EPSY 6127 Instruction and Behavioral Support: Mild-Moderate Disabilities (4)
- EPSY 6131 Assessments: Students with Mild to Moderate Disabilities (5)
- EPSY 6133 Curriculum: Students with Mild-Moderate Disabilities (4)
- EPSY 6770 Internship (2, 2, 2)
- EPSY 6783 Seminar: Contemporary Issues (3)
- EPSY 6820 Advanced Graduate Seminar II (2)
- EPSY 6870 Advanced Fieldwork Group Supervision I (3)
- EPSY 6880 Advanced Internship (4, 2)

Moderate-Severe Disabilities: Required Coursework (49 units)

- EPSY 5021 Introduction to Educating all Students in Diverse Classrooms (4)
- EPSY 5126 Special Education Law and Program Design (4)
- EPSY 5136 Educational Practices: Moderate-Severe Disabilities (4)
- EPSY 6120 Communication: Collaborative Teaming and Management (4)
- EPSY 6137 Instructional and Behavioral Support: Moderate-Severe Disabilities (4)
- EPSY 6140 Curriculum: Students with Moderate-Severe Disabilities (4)
- EPSY 6142 Assessment: Students with Moderate-Severe Disabilities (5)
- EPSY 6783 Seminar: Contemporary Issues (3)
- EPSY 6770 Internship (2, 2, 2)
- EPSY 6810 Advanced Graduate Seminar I (2)
- EPSY 6870 Advanced Fieldwork Group Supervision I (3)
- EPSY 6880 Advanced Internship (4, 2)

In addition to Specialist courses you will complete the TED portion of TED/SPED as well (see above), unless you hold a valid California general education credential.

Professional Education Specialist Credential: Mild-Moderate and Moderate-Severe Disabilities (Level II) (26 units)

Prerequisite

CSUH Level I Credential Program or equivalent from Level I approved credential programs.

Required Coursework

EPSY 6129 Advanced Study in Collaborative Service Delivery,

Post- Baccalaureate Courses

Education and Transition (4)

EPSY 6134 Advanced Instructional and Behavioral Supports: Mild-Moderate (5) or EPSY 6141 Advanced Instructional and Behavioral Supports: Moderate-Severe (5)

EPSY 6206 Advanced Studies in the Education of Students with Mild to Moderate Disabilities: Emerging Research and Practice (2) or EPSY 6207 Advanced Studies in the Education of Students with Moderate to Severe Disabilities: Emerging Research and Practice (2)

EPSY 6630 Graduate Seminar III (2)

EPSY 6810 Advanced Graduate Seminar I (M/S) (2) or EPSY 6820 Advanced Graduate Seminar II (M/M) (2)

EPSY 6830 Advanced Graduate Seminar III (2)

EPSY 6871 Advanced Fieldwork Group Supervision II (M/M) (3) or EPSY 6872 Advanced Fieldwork Group Supervision III (M/S) (3)

Electives

Select 6 units (two courses) from the following:

EPSY 6124 Advanced Studies in Augmentative Communication and Assistive Technology (3)

EPSY 6130 Advanced Studies in Service Learning and Positive School Climate (3)

EPSY 6143 Advanced Studies in Individual and School-wide Positive Behavior Supports (3)

EPSY 6145 Advanced Studies in Adolescent Learning and Secondary Curriculum (3)

The course prefix for the following courses is EPSY.

5021 Introduction to Educating all Students in Diverse Classrooms (4)
Basic concepts, issues and best practices in special/general education, and the development of curriculum and instructional strategies to address diverse student needs (including disabilities) in general education settings.

5125 Educational Practices: Mild-Moderate Disabilities (4)
Methods, materials, media and technology that enhance the learning process of students with mild-moderate disabilities. Teaching such students from diverse cultural, linguistic, and ethnic backgrounds in special and general education settings.

5126 Special Education Law and Program Design (4)
Laws and regulations that affect the lives of individuals with disabilities and their families. These laws and regulations relate to program design, program evaluation, family involvement, and the overall IEP process.

Graduate Courses

- 5136** Educational Practices: Moderate-Severe Disabilities (4)
Inclusive educational practices for students with moderate-severe disabilities and the philosophical, theoretical and technological foundation required for implementation of curriculum and methodology, and the basis for curriculum design.
- 5610** Microcounseling I (2)
Development and practice of the basic skills of counseling, especially the skills of listening. Use of brief videotaped counseling sessions ("microcounseling"). Students will role-play to observe, analyze, and evaluate techniques of counseling.
- 5620** Microcounseling II (2)
Development of the counselor's ability to influence others. Use of brief videotaped counseling sessions ("microcounseling"). Students will role-play to observe, analyze, and evaluate techniques of counseling.
Prerequisite: EPSY 5610.
- 5767** Film in Counseling Psychology (2)
Selected modern film presentations. Issues include wellness and illness, social and existential issues which transcend common diagnostic formulations as explored by film and masters of therapeutic interventions.
- 5900** Independent Study (1-4)

The course prefix for the following courses is EPSY.

- 6021** Thesis-Project Seminar (3)
(See description of EPSY 6899, 6909, 6910 for definitions of project, departmental thesis, university thesis.) Group supervision approach to completion of project or thesis.
Prerequisites: "Classified Graduate" student, permission of instructor. May be repeated for credit. (A)
- 6022** Program Evaluation (3)
Theory and procedures for designing and conducting formative and summative evaluations of educational and human service programs. Prerequisite: EPSY 6023, or T ED 6020, or SAS 6020, or consent of instructor. (Y)
- 6023** Research in Applied Behavioral Sciences (4)
Survey of research philosophy and methods for conducting studies in settings employing counselors, educators, and psychologists. Prerequisite: EPSY 6701 or instructor's permission. Three hrs. seminar, 2 hrs. act. (Y)
- 6025** Psychopathology of Childhood (4)
Seminar in developmental psychopathology; advanced case study, differential diagnosis, assessment procedures, treatment and placements. Prerequisites: EPSY 6720 and EPSY 6912. (Y)

- 6026** Psychopathology in Adulthood (4)
Theoretical and clinical approaches to conceptualization, differential diagnosis, and assessment of psychopathology through adulthood. Application of theories of psychopathology to counseling and psychotherapy. Prerequisite: consent of instructor. (Y)
- 6027** Chemical Dependence Theory (4)
Theory and research relating to chemical dependence as a variable in counseling. Focus on concepts of dependence, the disease model, identification, assessment, and family dynamics. Covers addiction to alcohol and other mood altering chemicals. (Y)
- 6029** Seminar in Chemical Dependency (2)
Survey of concepts of alcoholism and other chemical substance dependency. Assessment and treatment modalities applied to addictive disorders. (Y)
- 6120** Communication: Collaborative Teaming and Management (4)
Development of collaborative consultation, communication, teaming and problem-solving skills necessary for the coordinated delivery of educational services for students with disabilities.
- 6124** Advanced Studies in Augmentative Communication and Assistive Technology (3)
Provides candidates with skills pertinent to assessment and design of individualized augmentative/alternative communication, to assistive technology, legislation and policy relevant to the area, and to strategies for accessing and integrating technology into instruction.
- 6127** Instruction and Behavioral Support: Mild-Moderate Disabilities (4)
Specific instructional and curriculum strategies. Positive behavioral support interventions that enhance the teaching/learning process for mild-moderate and at-risk students from diverse cultural, linguistic and/or ethnic backgrounds.
- 6128** Instructional and Behavioral Support Fieldwork (4)
Fieldwork reinforcing the skills, abilities, and strategies introduced specifically in EPSY 6127. Co-requisite: concurrent enrollment in EPSY 6127.
- 6129** Advanced Study in Collaborative Service Delivery, Education, and Transition (4)
Facilitates Level II candidates' advanced skill development in leadership, cross-cultural communication, professional development collaboration and networking across transdisciplinary teams with educators and community agencies. Teamwork throughout critical transition periods, interagency service coordination, school reform models, effective transition within diverse restructured and inclusive schools. Prerequisites: EPSY 5021, 5126, 6120.

- 6130** Advanced Studies in Service Learning and Positive School Climate (3)
Designed for Level II candidates to enhance their teaching/learning skills and abilities as they relate to individual, group, and school-wide climates. Community involvement and service education explored in order to understand the connection between compassionate education and positive, productive, student, schools, family, community outcomes. Inclusion and collaboration with students, their families, schools, and communities.
- 6131** Assessments: Students with Mild to Moderate Disabilities (5)
Responsible assessment practices which take into account the diverse backgrounds and needs of children. "Assessment" includes not just testing, but a broad spectrum of activities used to diagnose a student's needs. Review of current assessment procedures and advocacy for responsible assessment practices for all students.
- 6133** Curriculum: Students with Mild-Moderate Disabilities (4)
Reinforce and enhance already existing skills, abilities and knowledge of instructional procedures, technology, positive behavioral approaches and curriculum development employed with mild-moderate and at-risk students from diverse cultural, linguistic, and/or ethnic backgrounds.
- 6134** Advanced Instructional and Behavioral Supports: Mild-Moderate (5)
Provides candidates with advanced strategies in behavioral, social, environmental, and instructional areas to facilitate students' inclusion in home, school, and community. Prerequisite: Level I Mild/Moderate Credential.
- 6137** Instructional and Behavioral Support: Moderate-Severe Disabilities (4)
Techniques for developing and implementing effective instruction for students with moderate to severe disabilities. A variety of assessment, classroom management and positive behavioral support strategies which provide the basis for instruction to meet the individual needs of a diverse population of learners. Co-requisite: concurrent enrollment in EPSY 6860. Prerequisite: EPSY 5136.
- 6140** Curriculum: Students with Moderate-Severe Disabilities (4)
Curriculum and instruction for basic skill development across motor, communication, social behavior, and academic areas. Infusion of skills within functional activities.
- 6141** Advanced Instructional and Behavioral Supports: Moderate-Severe (5)
Provides candidates with advanced strategies in behavioral, social, environmental and instructional areas to facilitate students' inclusion in home, school, and

community. Prerequisite: Level I Moderate/Severe Credential.

- 6142** Assessment: Students with Moderate-Severe Disabilities (5)
Issues, purposes, and methods relevant to the assessment of students with moderate to severe disabilities for educational programming, including appropriate selection and interpretation of a variety of assessment approaches. Follow-up on intervention strategies in EPSY 6137 with more sophisticated behavioral and instructional techniques. Prerequisite: EPSY 6137.
- 6143** Advanced Studies in Individual and School-wide Positive Behavior Supports (3)
Advanced information in positive behavioral supports and school-wide systems for positive respectful discipline and student support. Candidates take on supervised leadership roles in school settings.
- 6144** Inclusive Education: School and Community (4)
Strategies for including students with severe disabilities in integrated school and community settings. Emphasis on functional programming and interactions and friendships with non-disabled peers, with practical applications in local schools. Prerequisites: EPSY 5021, 5136. (W)
- 6145** Advanced Studies in Adolescent Learning and Secondary Curriculum (3)
Provides Level II candidates with specialized competencies and experiences beyond the basic program focusing on the adolescent/adult with mild-moderate-severe disabilities. Includes instruction, transition, social supports, and secondary curricula with school to work and career emphasis.
- 6200** Grief Counseling (2)
The unique problems and situations of people facing loss, grief, and bereavement. Emotional reactions to death and loss. Counseling strategies based on stress reduction and the development of positive resolutions.
- 6201** Marketing Psychological Services (2)
The process of planning, implementing, and marketing psychological skills in a business or private practice. Topics include defining deliverables, customers, selling cycles, pricing, and market strategy.
- 6202** Parents and Professional Relations (2)
Knowledge and skills needed for effective interaction with parents of students with special needs. Familiarity with the legal basis, current research and practices related to parent involvement in special education.
- 6203** Inclusive Education Seminar (2)
Advanced knowledge and hands-on skills for teachers delivering instruction within inclusive general education classrooms and school communities. Field experiences focusing on specific issues in inclusive education.

- 6204** Assertiveness Training (2)
Students are trained in the use of individual and group counseling techniques to help passive and aggressive individuals express themselves in a responsible, assertive manner.
- 6205** Advanced Pupil Personnel Specialist (4)
Advanced professional preparation in the theory and practice of pupil personnel services. CR/NC grading only. Prerequisite: second-year standing in School Psychology or School Counseling.
- 6206** Advanced Studies in the Education of Students with Mild to Moderate Disabilities: Emerging Research and Practice (2)
Candidates acquire skills in the analysis and synthesis of pedagogical and research foundations, as well as in policy and legislation which inform best practice in education of students with mild-moderate disabilities. Prerequisites: a valid Level I Education Specialist Credential in Mild-Moderate Disabilities, including EPSY 5021, 5121, and 6126, or demonstrated equivalent coursework, a valid Induction Plan; and EPSY 6129, 6134, 6630, 6830, 6871. Co-requisite: EPSY 6820.
- 6207** Advanced Studies in the Education of Students with Moderate to Severe Disabilities: Emerging Research and Practice (2)
Candidates acquire skills in the analysis and synthesis of pedagogical and research foundations, as well as in policy and legislation which inform best practice in education of students with moderate-severe disabilities. Prerequisites: a valid Level I Education Specialist Credential in Moderate-Severe Disabilities, including EPSY 5021, 5121, and 6126, or demonstrated equivalent coursework; a valid Induction Plan; and EPSY 6129, 6141, 6630, 6830, 6872. Co-requisite: EPSY 6810.
- 6301** Pediatric Psychology (4)
Clinical issues in the growth and maturation of cognition, psychomotor performance, and ego development; anomalies of development and integration and related problems of social-emotional adjustment. Emphasis on the period of infancy and childhood. Prerequisite: consent of instructor. (W)
- 6302** Individual Development (4)
Theory and research covering individual growth over the life span. Emphasis on the interaction of biological and social factors and their psychological consequences, especially as to definition of normal crises and related levels of therapeutic intervention. (Y)
- 6331** Collaborative Leadership I (4)
(See EDUI 6331 in the graduate Teacher Education chapter for course description.)
- 6400** Family Psychotherapy (4)
Discussion and activities in psychotherapeutic techniques.

Theory and research dealing with family interaction and communication. Diagnostic and intervention methods for dysfunctional family systems. Three hrs. seminar, 2 hrs. act. (Y)

- 6402 Couples Therapy (4)
Theory and techniques of counseling clients in couples, with an emphasis on spousal relationships. Assessment and treatment planning with issues of communication, intimacy, sexuality, goals, domestic violence, marriage, and divorce. Three hrs. seminar, 2 hrs. act. (Y)
- 6403 Psychotherapy for Children (4)
Introduction to the theories, research and techniques of psychotherapeutic assessment and treatment of children. Activities include class involvement in psychotherapy methods. Three hrs. lect., 2 hrs. act. (Y)
- 6406 Seminar in Human Sexuality (2)
Physiological, psychological, social and cultural variables as they affect sexual identity, sexual behavior and sexual disorders. Clinical treatment of sexual problems. Prerequisites: EPSY 6750; instructor's permission.
- 6500 Cognitive Behavior Therapy (4)
Principles and practice of cognitive and behavior therapies, including meta models and transformational linguistics of communication theories. Emphasis on possibilities for integrated therapeutic approach. (F)
- 6600 Clinic Rounds (1)
Regularly scheduled seminar with Director of Community Counseling Center. Discussion of procedures, good practices, assignment of cases, and Center ethics, rules, responsibilities. Required of all graduate students assigned as trainees to the Center. CR/NC grading only. May be repeated for up to 8 units.
- 6610, 6620, 6630 Graduate Seminar I, II, III (2, 2, 2)
Introductory considerations of application of theory and current research to professional settings; problems in use of professional techniques and methods. Prerequisite: concurrent registration in fieldwork. (Y)
- 6660, 6661, 6662 Fieldwork I, II, III (2-4)
Individual supervision of assigned fieldwork. Prerequisite: departmental approval. CR/NC grading only (A).
- 6669 Seminar in Mental Health Consultation (3)
Theory and techniques of mental health consultation. Consideration of institutional and group factors as they affect and condition the adjustment problems of individuals. Techniques and strategies available to psychologists for affecting changes in the mental health climate of schools. Prerequisite: EPSY 6861. (Y)
- 6670, 6671, 6672 Field Work Group Supervision I, II, III (3, 3, 3)
Group supervision of assigned field work. Prerequisite: approval of instructor. CR/NC grading only. (A)

- 6700** Advanced Education Psychology (4)
Systematic analysis of general principles of motivation and learning as applied to educational processes. Prerequisite: upper division learning course. (Y)
- 6701** Appraisal Procedures: Standardized (4)
Seminar in measurement theory applied to the development and evaluation of standardized tests used in counseling. Activity includes administration and supervision of above instruments. A miscellaneous course fee will be charged for materials. Please consult the quarterly Class Schedule for the current fee. Prerequisites: STAT 1000 or 1100, or equivalent. Three hrs. seminar, 2 hrs. act. (Y)
- 6720** Theory and Assessment of Cognition (4)
Concepts of intelligence and their use in mental testing. Major types of individually administered intelligence tests, their uses and interpretation. A miscellaneous course fee will be charged for materials. Please consult the quarterly Class Schedule for the current fee. Prerequisite: EPSY 6701 or equivalent. (Y)
- 6746** Neuropsychology of Learning Disabilities (4)
Diagnosis and rehabilitation of learning disabilities emphasizing a neuropsychological approach. A miscellaneous course fee will be charged for materials. Please consult the quarterly Class Schedule for the current fee. Prerequisite: course work in cognition and development assessment or consent of instructor. (Sp)
- 6750** Foundations of Counseling (4)
The principles and concepts of counseling, including communication dynamics, intervention techniques, and development of a personal theory of counseling. Prerequisite: "Classified Graduate" status in department or consent of instructor. Three hrs. lect., 2 hrs. act. (Y)
- 6751** Counseling and Psychotherapy Theory (4)
Examination of current theories of counseling and psychotherapy; development of individual counseling approach. Prerequisite: EPSY 6750. Three hrs. lect., 2 hrs. act. (Y)
- 6752** Cross-Cultural Counseling (4)
Focus on cross-cultural counseling and psychotherapy, cultural values and personality formation; value orientation inherent in counseling and psychotherapy; psychological effects of cultural racism; effects of sex roles and life styles within different cultures. Three hrs. lect. plus one three-day workshop. (A)
- 6754** Cross-Cultural Consultation (4)
Consultation with schools, agencies, institutions concerning emotional issues in mixed cultural/ethnic situations. Clinical application of current theories, research in counseling and psychotherapy. Reading, examination of case materials. Prerequisite: EPSY 6752 or consent of instructor. (Y)

- 6756 Brief Psychotherapy: Dynamic and Strategic (2)
Principles, concepts, and techniques of brief psychotherapy with emphasis on cognitive-behavioral and strategic approaches. (Y)
- 6758 Practicum in Counseling (3)
Introductory learning experience to prepare graduate students for professional counseling in clinical settings. Students will receive information, practice, counseling skills and develop a professional perspective. Repeatable for one additional quarter for credit. (A)
- 6762 Group Procedures and Facilitation (4)
Theories, principles of group dynamics and processes facilitating individual, small group, and organizational change. Interpersonal skills in group process. Clinical analysis of actual group experiences. Prerequisite: EPSY 6750 or PUAD 6812 or instructor's consent. Not open to students with credit for PUAD 6762. Three hrs. lect., 3 hrs. lab. (Y)
- 6764 Intervention Strategies for Systems and Organizational Change (4)
Facilitator's role in organizational, systems change: schools, agencies, industry. Diagnosis, intervention strategies for planned or indirect organizational, systems change. Actual experience with intervention models, case problems. Prerequisite: EPSY 6750 or consent of instructor. Not open to students with credit for PUAD 6764. Three hrs. seminar, 2 hrs. act. (Y)
- 6765 Psychological and Counseling Services in Schools and Higher Education (2)
The administration and organization of psychological and counseling services in the schools and higher education: concepts, responsibilities, and functions of the psychologist, counselor and student support services. Different sections will focus on K-12 or higher education. May be repeated for credit. Prerequisite: consent of instructor. (Y)
- 6770 Internship (2-6)
Individually supervised experience in a professional setting utilizing the full range of competencies in the student's concentration. Prerequisite: departmental approval. CR/NC grading only. May be repeated for two additional quarters. (A)
- 6783 Seminar: Contemporary Issues (2-3)
Seminar in theoretical, research, and counseling approaches concerning special issues and populations, such as delinquents, drug users, aged, the poor. May be taken up to three times for credit with different content. Prerequisites: "Classified Graduate" status in department and instructor's permission. Offered as two- or three-hour seminar. (Y)
- 6784 Pharmacology and Counseling (3)
Utilization of theory and research from the psychiatric and psycho-pharmacological disciplines to increase

counselors' knowledge of the medical treatments for psychiatric disorders. Overview of medications prescribed for children and adults with psychological and developmental disorders. The interface between psychotherapy and these medications.

- 6785** Law and Ethics in Counseling (3)
Professional ethics and statutory, regulatory and decisional laws currently applicable to the practice of counseling and psychotherapy. Confidentiality, mandated reporting laws, family and child laws as they affect clinical practice. The relationship between a counselor's personal values and his or her professional behavior and ethics. (Y)
- 6786** Child Abuse Assessment (1)
Legal and clinical aspects of child abuse as an issue in counseling and psychotherapy practice. Child abuse reporting laws and procedures, the psychological and family system variables important in assessment, and both individual and family treatment strategies. CR/NC grading only. (Y)
- 6787** Gerontology Counseling (4)
Counseling issues in treating the elderly; transitions, family processes, and significant life events; assessment of psychopathology and planning for treatment of elders, both individually and within a family structure. (Y)
- 6788** Domestic Abuse Counseling (1)
Detection, assessment, and diagnosis of spousal or partner abuse. Clinical issues regarding emotional abuse and violence in domestic relationships. Interventions for the treatment of couples in abusive relationships.
- 6800** Student Teaching (Mild-Moderate) (8)
Student teaching under the supervision of a master credentialed teacher and a member of the college faculty. Open only to students who have been admitted to the credential program. Concurrent enrollment in the student teaching seminar, EPSY 6810, is required. (Sp)
- 6801** Student Teaching (Moderate-Severe) (8)
Student teaching under the supervision of a master credentialed teacher and a member of the college faculty. Open only to students who have been admitted to the credential program. Concurrent enrollment in the student teaching seminar, EPSY 6810, is required. (Sp)
- 6810,** Advanced Graduate Seminar I, II, III (2, 2, 2)
6820, Relationship of theory and current research to
6830 professional practice; consideration of ethical and legal principles, socio-cultural issues, and research techniques in professional settings. (Y)
- 6860,** Advanced Fieldwork I, II, III (2-4 each)
6861, Individual supervision of assigned field work. Prerequisite:
6862 one year of approved supervised field work in the area of concentration and Department approval. CR/NC grading only. (A)

- 6870, 6871, 6872 Advanced Field Work Group Supervision I, II, III (3, 3, 3)
6872 Group supervision of assigned field work. Prerequisite: one year of approved supervised field work in the area of concentration and approval of instructor. CR/NC grading only. (A)
- 6880 Advanced Internship (2-15)
Individually supervised experience in a professional setting utilizing the full range of competencies in the student's concentration. Prerequisite: one year of approved supervised field work or internship in the area of concentration and Department approval. May be repeated two additional quarters for a maximum of 36 units. CR/NC grading only.
- 6894, 6895, 6896 Supervision Fieldwork I, II, III (2, 2, 2)
6895, 6896 Completion, under college faculty direction, of actual problems involving supervisory duties. Prerequisites: department approval, advance application, or EPSY 6670. (Y)
- 6897 Supervision Internship (2-6)
On-the-job completion of field duties normally carried by directors or supervisors of pupil personnel services. Prerequisites: EPSY 6670, department approval, advance application. Concurrent registration in EPSY 6894, 6895, or 6896. (A)
- 6898 Cooperative Education (1-4)
Supervised work experience in which students complete academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 8 units. CR/NC grading only. (A)
- 6899 Project (2-5)
Development of an original product which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their formats. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense may be required. Prerequisite: graduate standing. Maximum of 5 units per student.
- 6900 Independent Study (1-4)
- 6909 Departmental Thesis (2-5)
Development and writing of a research paper for submission to the department which specifies its format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense normally is required. Prerequisite: graduate standing. Maximum of 5 units per student.
- 6910 University Thesis (1-9)
Development and writing of a formal research paper for submission to the University in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty

member. Oral defense is normally required. Prerequisite: graduate standing. Maximum of 9 units per student. (See also, "University Thesis Writing Guide," available in WA 859.)

6911 Developmental Assessment Practicum (4)
Clinical practice under supervision with individually administered tests. A miscellaneous course fee will be charged for materials. Please consult the quarterly Class Schedule for the current fee. Prerequisite: EPSY 6720. Twelve hrs. lab. (Y)

6912 Personality Assessment (4)
Study of instruments and procedures commonly employed in clinical study of emotional and social adjustments. A miscellaneous course fee will be charged for materials. Please consult the quarterly *Class Schedule* for the current fee. Prerequisite: EPSY 6720. (Y)

Footnotes

¹Students completing a Project or a Departmental Thesis and registering for 6899 or 6909, even if combined with EPSY 6021, are limited to a total of 5 units. EPSY 6021 can be repeated for a total of 6 units; however, only five of these six units may be applied to the M.S. degree for students doing a Project or Departmental Thesis.

²Students completing a University Thesis may enroll in EPSY 6021 for up to 9 units.

³California Commission of Teacher Credentialing (CCTC) approval of revised program documents for new Standards and Competencies pending.



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Department Information

Program Description

Major Requirements

Special Majors and Certificates

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Academic Programs and Graduate Studies
Office: Warren Hall 859
Phone: (510) 885-3716, Fax: (510) 885-4777

Professors: Carl J. Bellone (Associate Vice President, Academic Programs and Graduate Studies)

Coordinator: Rosanne Harris

Please consult the 2006-2007 online catalog for any changes that may occur.

The purpose of the Special Major and the Special Certificate programs is to allow students, with the advice and approval of knowledgeable faculty and administrators, to design their own academic programs tailored to their unique needs and interests.

An essential feature of any Special Major program is its interdisciplinary nature. At least two separate degree-granting programs must be involved. A graduate Special Major must be approved no later than the time when the student has fewer than 32-39 quarter units to complete for the degree. This is to ensure that a significant portion of the program is planned in advance by the student and his/her faculty advisors, and that the residence requirement can be met. The diploma will read "Special Major in (program title)."

The Special Major program should not be seen as a device to avoid certain requirements of a regular major, nor as a means to gain admission to an impacted program. Likewise, a Special Major cannot be developed in areas such as architecture, agriculture, and home economics where the campus currently lacks the necessary faculty expertise and physical facilities. Finally, a Special Major is not a self-study, independent study, or external degree program.

The university offers the Special Major program for both the M.A. and M.S. degrees. There is not a clear distinction between the

(M.A./M.S.)

two degrees so normally the decision about the assignment of a Special Major reflects the type of degree offered by the departments involved. A Special Major must be a coherent program of 45-52 units organized around a broad academic theme. The title should be short (three to five words) and should describe the central academic theme of the program and not the student's career objective unless the two coincide. A graduate Special Major must be fully approved before the student has fewer than 32-39 quarter units to complete for the degree so the residence requirement can be met. (A maximum of 13 non-resident units is allowed.)

A department with a regular master's degree program (the sponsoring department) must certify that the prospective Special Major student would be eligible for admission to its program as a "Conditionally Classified" or "Classified Graduate" student. (However, the student who obtains an approved Special Major is not admitted to the regular graduate program, but to the Special Major program under the Office of Academic Programs and Graduate Studies.)

A graduate Special Major must consist of 45-52 quarter units of which at least half must be in graduate (6000-level) courses and at least 32-39 must be in residence in the program at Cal State Hayward. No more than 9 units may be in supervisory courses such as Independent Study, Project, Department or University Thesis, Field Work, Co-op Ed, and/or Internship. Graduate level courses in at least two different departments must be involved in the program. No course enrollment used in the Special Major can be older than five years at the intended time of graduation. A 3.00 grade point average is required for completion of the graduate Special Major. If a student has not satisfied the University Writing Skills requirement, admission is in "Conditionally Classified" status until the requirement is satisfied.

A student is Advanced to Candidacy if, after completion of half the program, a 3.0 GPA is attained by a "Classified Graduate." Failure to achieve Candidacy will void the Special Major contract. The student must comply with the standard master's degree requirements for all students listed in the Graduate and Post-baccalaureate Studies chapter at the beginning of the graduate section of this catalog.

Procedure

A student who contemplates developing a Special Major must have an overall undergraduate and postbaccalaureate grade point average of at least 2.70 ("B-," Adequate). Forethought and planning need to precede any formal action. An information packet is available from the Office of Academic Programs and Graduate Studies, WA 859, or by calling (510) 885-3716, or on the web at www.csuhayward.edu/cap/grspec.html.

The prospective Special Major student must prepare a one-page prospectus of at least 200 words describing the theme or central academic focus of the proposed program (including the departments to be involved), the reasons why the objective cannot be fulfilled through a regular master's degree program, the academic and experiential background the student will bring to the program, the occupational goals of the student in relation to the proposal, the approximate time frame for completion of the

degree, and other pertinent information. A sample prospectus for a hypothetical Special Major is included in the information packet. The student must also contact three faculty advisors in the involved departments, secure their support, and nominate them as his/her Special Major committee. (One of these faculty members should be designated as chair of the committee.)

The prospectus and the names of the sponsoring department chair and three faculty advisors (and their departments) must be submitted to the Special Major Coordinator in the Office of Academic Programs and Graduate Studies before the student has fewer than 32-39 units to complete in the master's degree. (A maximum of 13 non-resident units is allowed.)

If the proposal is found academically sound and logistically feasible by the Associate Vice President of Academic Programs and Graduate Studies, the Special Major Coordinator will forward copies of it to the proposed faculty committee members along with an explanation of the Special Major policies and procedures, copies of the student's transcripts, and a form for development and approval of the specific program of courses.

The three-person committee and the student must meet at a mutually acceptable time to design the program (i.e. to prepare the list of required and elective courses and to determine the appropriate culminating experience). When this is done, the form is completed, signatures of approval are affixed, and it is returned to the Special Major Coordinator by the committee chair.

The Associate Vice President will review the proposal and, if it satisfies university requirements, the coordinator will send a copy to the dean of each college in which the student will be taking courses. The Associate Vice President of Graduate Studies will also designate the college from which the student is to graduate. The college deans will have ten working days (two weeks) to enter any objections. If none is received, the Associate Vice President will act on the proposal. If an objection is received, the Associate Vice President will hold the proposal pending resolution by the college dean, committee, and the student.

When the proposal is approved, the student must have at least 32-39 quarter units to complete for the degree. (Units in the quarter in progress can only be counted if the Add/Drop deadline has not been passed.) When the proposed program has been approved by the Associate Vice President, a final copy will be typed in the Office of Academic Programs and Graduate Studies, the student and the Special Major Coordinator will sign it, and copies will be distributed. The student will receive a copy of his/her approved Special Major program at this time.

If any alterations of the approved program are necessary, the student calls the Special Major Coordinator in the Office of Academic Programs and Graduate Studies to initiate a "Change in Special Major Requirements" form with the chair of his/her faculty advisory committee. A petition must be approved by the advisor (committee chair), the dean of the college from which the student will graduate, and the Special Major Coordinator. Upon completion of 23 units with a 3.00 GPA and satisfaction of the University Writing Skills Requirement, a "Classified Graduate" student should request the committee chair to submit a "Change

Special Certificates

in Graduate Status" form to the Registrar's Office.

The Special Major student files for graduation by filling out the "Degree Candidacy Form" with the Special Major Coordinator during the first two weeks of the quarter immediately preceding the final quarter before graduation. The graduation check for the Special Major is performed in the Graduation Evaluations section of the Registrar's Office upon receipt of the "Degree Candidacy Form."

A student who is writing a University Thesis should be aware of the thesis requirements and deadlines published in the Catalog and in the University Thesis Writing Guide (available in WA 859). The University Thesis must be submitted to the Thesis Office in Academic Programs and Graduate Studies no later than three weeks before the end of the last quarter. In addition to the mandatory university copy and any personal copies, the student must order at least one bound copy of the thesis for the chair of his/her committee.

A program leading to the award of a Special Certificate must consist of at least 20 quarter units of upper division and/or graduate courses. A minimum grade point average of 2.00 is required for all the courses comprising the Special Certificate program. The program must provide a logical and coherent pattern of preparation for a limited objective. The title of the proposed certificate should be brief (three to five words) and must carry no connotation of meeting a licensing requirement for professional practice.

Procedure

The following procedure applies to Special Certificate programs consisting largely of postbaccalaureate and/or graduate courses.

The student develops a proposed program with the advice and approval of a faculty member knowledgeable in the field of study. A typed copy of the proposed program, with advisor and student approval, is forwarded by the advisor to the dean of the college in which the preponderance of courses will be taken. If the dean approves, s(he) signs and sends the proposal to the Special Major Coordinator in the Office of Academic Programs and Graduate Studies. The coordinator then sends a copy of the proposal to each of the other three college deans.

The deans have ten working days to enter an objection. If none is received and the Associate Vice President of Academic Programs and Graduate Studies judges the proposal to be sound, the program will be approved. If any college dean objects, s(he) must file written objections with the Special Major Coordinator within the ten days. These will be considered by the Associate Vice President in deciding whether or not to approve the program.

The student is notified in writing by the Special Major Coordinator as to the final action on his/her proposal. A copy of an approved program is filed in the student's folder in the Registrar's Office. Upon completion of the Special Certificate program, the student applies to the Registrar's Office and pays the required fee to

receive the certificate.



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Department Information

Certificates

Engineering

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- ▶ [Graduate Courses](#)

Department of Engineering
College of Science
Office: ST 680
Phone: (510) 885-2654

Professors: Joyendu Bhadury (joint appointment in Engineering and Management/Finance), Dean Fearn (joint appointment in Engineering and Statistics), Anthony Lima (Economics), Saeid Motavalli (Chair), Ytha Yu (Mathematics/Computer Science)

Associate Professors: Assim Sagahyoon (joint appointment in Engineering and Mathematics/Computer Science), Helen Zong

Assistant Professors: David Bowen, Roger Doering (joint appointment in Engineering and Mathematics/Computer Science), Assim Sagahyoon (joint appointment in Engineering and Mathematics/Computer Science), Eric A. Suess (joint appointment in Engineering and Statistics)

Please consult the 2006-2007 online catalog for any changes that may occur.

The Department of Engineering offers accelerated post-baccalaureate certificate programs in Engineering Management and Quality Management. The Engineering Management Certificate is designed for engineering practitioners who wish to expand their careers to management and want to acquire a basic understanding of the theory and fundamentals of management. The Quality Management Certificate is designed for engineers and scientists working in production facilities who are engaged in quality improvement projects and who wish to acquire a basic understanding of the fundamentals of quality management and the application of quality improvement techniques. In addition, these certificate programs offer advanced students currently enrolled in the B.S. in Engineering program an opportunity to broaden their employment options.

Prerequisite for enrollment in the Engineering Management Certificate or Quality Management Certificate programs: calculus background equivalent to MATH 1304 and 1305, or a B.S. in Engineering or one of the other sciences.

Post-
baccalaureate
Courses

Engineering Management (16 units)

Required Courses

- ENGR 5180 Product/Process Design (4)
- ENGR 5300 Quality Engineering (4)
- ENGR 6200 Project Management (4)
- MGMT 6130 Enterprise Planning and Control (4)

Quality Management (16 units)

Required Courses

- ENGR 5300 Quality Engineering (4)
- ENGR 6300 Applied Quality Assurance (4) (or completion of STAT 3503 and 6509)
- MGMT 6526 Quality Management (4)
- STAT 5601 Introductory Statistics and Probability for Science and Engineering (4) (or completion of STAT 3401 and 3502)

The course prefix for the following courses is ENGR.

- 5180** Product/Process Design (4)
Investigation of the product and process design cycle as a source of competitive advantage. Topics include functional maps, aggregate planning, cross-functional integration, design for manufacturability, and the design-build-test cycle. Case studies and site visits used extensively to reinforce concepts presented in lectures and reading assignments. Prerequisites: ENGR 2070, 3140 or departmental approval.
- 5200** Systems Simulation (4)
Design and analysis of manufacturing and service systems by simulation. Function of random variables. Random number and function generators, programming and characteristics of simulation languages. Prerequisites: CS 1160, ENGR 3841, STAT/ENGR 3601 or departmental approval.
- 5280** Design and Management of Human Work Systems (4)
Qualitative principles and techniques used to maximize labor productivity, employee satisfaction, and organizational performance in work settings. Topics include worker motivation and incentive systems, leadership, worker autonomy, work groups and participatory organizational structures including quality control circles, total productive maintenance teams, and socio-technical systems. Prerequisites: ENGR 3020, ENGR/PSYC 3190 or departmental approval.
- 5300** Quality Engineering (4)
Quality control, reliability, maintainability, and integrated logistic support. Statistical theory of process control and sampling inspection. Risks associated with decisions based on operating characteristics of control charts and sampling plans. Reliability and life testing methods.

Graduate Courses

Economics of statistical QC. Cross-listed with STAT 5300.
Prerequisites: STAT/ENGR 3601 or 5601, or departmental approval.

- 5601** Introductory Statistics and Probability for Science and Engineering (4)
(See STAT 5601 for course description.)

The course prefix for the following courses is ENGR.

- 6200** Project Management (4)
Application of project management from both strategic and operational points of view. Quantitative methods such as project planning, budgeting, evaluation, selection, scheduling and control are demonstrated by using MS project via PERT/CPM. Early identification of potential problems, with implementation of alternative solutions and risk management. Prerequisites: STAT 1000 or STAT/ENGR 3601 or 5601, or departmental approval.
- 6300** Applied Quality Assurance (4)
Application of quality engineering and management techniques during the design and improvement of processes and procedures. Topics include the application of statistical and optimization techniques used for process improvements. Design of Experiments (DOE), multivariate regression, and quality improvement techniques such as Six Sigma will be presented. Cross-listed with STAT 6300. Prerequisites: STAT/ENGR 3601 or 5601, or departmental approval.
- 6400** Research Methods in Engineering Management (4)
An application-oriented course with emphasis on quantitative techniques in engineering management. Topics include: decision-making under uncertainty, risk analysis, network analysis such as PERT and CPM, multi-criteria decision-making and cost optimization.
- 6899** Project (1-4)
Completion of a research or applied project, accompanied by a written report. The report is submitted to the department, which specifies its format. A departmental faculty member supervises the project. Oral defense may be required. Prerequisites: Advancement to Candidacy and consent of project advisor.
- 6900** Independent Study (1-4)
Course is based on selected research topics agreed upon by the student and the faculty supervising the course. A plan of work completion must be submitted and approved prior to proceeding with the project. The student will provide progress reports and a final report prior to final presentation to the committee.



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Department Information

Speech Communication

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Department of Communication
College of Arts, Letters, and Social Sciences
Office: Meiklejohn Hall 3011
Phone: (510) 885-3292 FAX: (510) 885-4099

Professors Emeriti: John Hammerback, Daniel S. Prentice

Professors: Thomas S. McCoy, Sally K. Murphy, Anne L. Pym,
Robert L. Terrell, Gale Young

Assistant Professors: Lonny J. Brooks, James Forsher, Valerie Sue

Lecturers: Michael Ackley, Deborah M. Alexander, Tom Ferentz,
Marsha Ginsburg, Veronica Martinez, Eric Ronning, Agha Saeed,
Rick Tejada-Flores

Graduate Coordinator: Anne L. Pym

Please consult the 2006-2007 online catalog for any changes that may occur.

M.A. in Speech Communication

The Department of Communication offers graduate study leading to the Master of Arts degree in Speech Communication. The candidate must observe the general requirements for the Master of Arts degree stated in the Graduate and Post-baccalaureate Studies chapter in this catalog as well as specific departmental requirements stated here and more fully in the Graduate Handbook issued by the department (copies available upon request). University requirements include the 32-unit residence requirement, the 5-year rule in currency of subject matter, the minimum number of units of 6000-level courses, a 3.00 GPA, and the University Writing Skills Requirement.

The candidate is also responsible for:

1. consulting an advisor and planning a tentative program with that advisor.
2. completing the prerequisites to the program and all program requirements.

Program Description

Students who complete the Master of Arts degree in Speech Communication will gain understanding and expertise in public, professional, and personal communication. By enabling them to critically analyze and improve spoken and written messages, the program prepares students to play valuable roles in business, industry, government, and education; to pursue doctoral study; and to communicate effectively in day-to-day life.

The study of Speech Communication includes theories and critical methods of rhetoric and communication, as well as critical analysis of messages as they occur within and across public, interpersonal, and organizational contexts, and across disciplines. The department focuses upon relating theory to practice in ways that recognize and explore the profound influences of ethics and cultural experience on how we communicate. Cal State Hayward's Speech Communication program is widely and highly regarded for its excellence in preparing business, government, and teaching professionals and Ph.D. students.

Career Opportunities

Students with an M.A. in Speech Communication are educated to speak, think, and write clearly and effectively. Because these are highly sought after skills, graduates are valuable employees in many jobs, including but not limited to teaching, consulting, human resources, personnel, communication training in organizations, management, banking, sales, government, and politics. The degree is also excellent preparation for Ph.D. and law degrees.

Faculty: Areas of Specialization

The graduate faculty is comprised of six full-time professors committed to teaching excellence and research. The faculty are well respected and are involved in professional organizations, in campus activities, and in community service.

Lonny Brooks, Ph.D. 2004, University of California, San Diego; M.L.I.S. 1995, University of California, Los Angeles: organizational communication, information technologies, critical ethnography, communication theory and research

John Hammerback, Ph.D. 1970, Indiana University; M.A. 1965, University of Oklahoma: modern rhetorical theory, rhetorical criticism, ethnic public address

Sally Murphy, Ph.D. 1986, University of Minnesota; M.A. 1975, University of New Mexico: conversation analysis, research methods, persuasion theory, communication theory, teaching speech communication

Daniel Prentice, Ph.D. 1972, University of California, Los Angeles; M.A. 1967, University of California, Los Angeles: communication theory, organizational communication, female/male communication, small group, nonverbal communication

Anne Pym, Ph.D. 1987, Pennsylvania State University; M.A. 1971, University of Washington: critical/postmodern theories of discourse, rhetorical criticism, modern rhetorical theory, public address, classical rhetoric, ethics of communication, rhetoric of popular culture

Gale Young, Ph.D. 1978, University of California, Los Angeles; M.A. 1970, University of California, Los Angeles: intercultural communication, interpersonal communication, communication theory

Areas of Emphasis

Students in the department take regularly offered seminars and upper division courses in rhetorical studies, organizational communication, interpersonal communication, and intercultural communication. In addition, students may choose among special topics seminars, upper division courses, and independent study. Advisors work with students to create programs of study that meet their goals.

Features

Teaching Associates: Qualified students may be granted opportunities to teach, to assist in forensics, or to assist a professor on a project. To be eligible for consideration in teaching COMM 1000 and/or 1004, students must show satisfactory achievement in COMM 6250 (Teaching Public Speaking and Interpersonal Communication), successful completion of specified coursework, and must have mentored with a faculty member in the course(s) they wish to teach. Interested students should consult with the Graduate Coordinator or the department Chair.

Forensics Program: First year graduate students who have no experience in forensics may participate on the forensics team. Those who have participated in forensics may gain experience in directing forensics by assisting with the forensics team.

Communication Laboratory: In addition to classroom study of interpersonal, intercultural, organizational, and public communication, we sponsor a Communication Laboratory open to the campus community that provides communication-related support services. Upper division Speech Communication majors and graduate students serve as tutors who help students research, organize, outline and deliver oral presentations. Students are encouraged to volunteer in the Lab to gain valuable teaching experience and to serve other students. Graduate students may also serve as paid lab assistants.

Annual Conference in Rhetorical Criticism: The Department of Speech Communication hosts the Hayward Conference in Rhetorical Criticism in early May of each year. Students from across the nation submit scholarly papers to the Conference where they participate in group sessions to receive written, and oral critique of their work by faculty critics. Commended papers are read before the entire assembly and published in the annual Conference Journal.

Work Study: If you are interested in the work study program, consult with the Financial Aid Office in WA 545.

Internships: With the permission of your committee chair, students may earn up to four units of internship credit by working in the Communication Lab, by mentoring in COMM 1000 or 1004, by assisting in the Forensics Program, by internship through Co-op Education, by internship in Organizational Communication, or by other work-related internships.

Grad Forum: Grad Forum is the department organization open to all graduate students. The Grad Form elects officers and meets regularly to socialize, to discuss research, and to discuss concerns and problems.

Scholarships and Awards

- The Karl Robinson Scholarship is awarded to outstanding Speech Communication students and M.A. candidates who show potential for excellence in scholarly achievement.
- The Outstanding Graduate Student Award is given to students who demonstrate outstanding scholarship, leadership, and contribution to the program.
- The Outstanding Teaching Associate Award is given to students who demonstrate outstanding performance in teaching.

Admission

Application for admission includes two parts: (1) submit the university application form, with fee, to the Admissions Office, Warren Hall 200, Cal State Hayward, Hayward, CA 94542; (2) submit the department application form, a statement of purpose, three letters of recommendation, and a sample of scholarly writing to the Graduate Coordinator, Department of Communication, Cal State Hayward, Hayward, CA 94542. Both university and department application forms are available at the Department of Communication Office, MI 3011. You may be admitted under one of the following:

"Classified Graduate" Standing

For admission with "Classified Graduate" standing to the M.A. program in Speech Communication, students must (1) submit an application to pursue a specific program of graduate study and be accepted by the department and the university; (2) have completed a baccalaureate major in Speech Communication from an accredited institution, or appropriate preparatory coursework approved by the faculty; (3) have maintained an overall grade point average of at least 3.00; and (4) satisfied the University Writing Skills Requirement.

"Conditionally Classified Graduate" Standing

If a student's speech communication major did not include prerequisite courses, if a student's degree is in another field, or if the University Writing Skills Requirement has not been satisfied, it may be possible to be admitted with "Conditionally Classified Graduate" standing. In this case, students are admitted graduate students but have conditions to meet. Student status will remain conditional until the work is completed with a minimum of "B" or better grades and the Writing Skills Test has been passed. (See the following section, "Degree Requirements," for prerequisite courses.)

Degree Requirements

The M.A. in Speech Communication requires completion of 46 units in an approved program of study, with grades of "B" or better in all courses. Of the 46 units, a minimum of 34 must be in courses at the 6000 level. A minimum of 8 units must be theory courses, and a minimum of 24 units (six courses) in regular

graduate seminars. Up to 12 units at the 4000 level may count toward graduation. Up to 8 units of Independent Study may be taken (by advisor approval). Not more than two Independent Study units may be taken as mentee or intern credit. Up to 8 units of graduate seminars outside the Communication department may be taken (by advisor approval).

For those who lack the appropriate preparatory coursework, COMM 1000 or COMM 4350, and COMM 1004 may be required. In addition, the following four-unit courses are required as prerequisites and should be taken at their first offering if not previously completed: COMM 3411 or 4411; COMM 3510; COMM 4810; COMM 4201; and COMM 4615. Undergraduate courses which may be applied to the M.A. degree are listed below.

At least 32 units must be completed in residence. A total of eight quarter units of Independent Study and of graduate-level coursework in outside departments may be applied to the M.A.

Writing Skills Requirement

All students must successfully pass the Writing Skills Test to become fully "Classified Graduate" students. Graduate students must take the CSU Writing Skills Test in their first quarter of their residency.

Attainment of "Classified Graduate" Standing

To attain "Classified Graduate" standing, a student must have completed all prerequisites with grades of "B" or better and passed the Writing Skills Test. Notify the graduate advisor immediately upon completion, and request that s(he) complete the necessary paper work.

Advancement to Candidacy

To be Advanced to Candidacy for the M.A. degree in Speech Communication, the student must:

1. be a "Classified Graduate" student in good standing;
2. complete 12 quarter units beyond the prerequisites with at least "B" grades;
3. choose a program advisor;
4. submit a study plan for completion of the degree program to the program advisor;
5. satisfactorily defend the thesis proposal or project proposal, if applicable;
6. show evidence of progress and ability to complete the program.

Capstone Experiences

The M.A. degree may be completed in one of the following ways, with approval of the advisor: Thesis, Project, or Comprehensive Examination.

1. Thesis (5-9 units) Upon approval of his/her graduate committee, a student may elect the thesis program; s(he) will carry out research on a specific topic in the field and will report, review, and file the results; s(he) will be examined on the thesis

(see 3, below); the thesis may carry up to nine units of credit if a University Thesis and five units if a Departmental Thesis.

2. Project (5 units) Upon approval of his/her graduate committee, a student may elect the Project option (5 units); enrollment commits the student to a production of a piece of work which is to follow prescribed forms; a permanent record is to be filed in the departmental office.
3. Comprehensive Examination: A student may elect a program made up entirely of a minimum of 45 hours of approved coursework. A comprehensive examination must be passed.

Examinations

1. Students electing the Thesis option will sit for oral examination of the thesis proposal and a defense of the thesis at its completion.
2. Students electing the Project option (5 units) will substitute the oral examination of their project for two hours of written examination.
3. Satisfactory achievement on comprehensive written and oral examinations will be required of students electing the coursework and project options. For the comprehensive examinations, the student will be tested on (a) Rhetorical Theory/Methods/Analysis, (b) Communication Theory/Methods/Analysis, and (c) Area of Emphasis, and, if elected by the student, a cognate field such as history, English, political science, public administration, etc.

Students must be prepared to be examined on all coursework taken during their graduate study, including all required courses and any coursework in progress during the quarter of examination. *Rhetorical Theory/Methods/Analysis* includes history of rhetoric, rhetorical theory, critical theories of rhetoric, rhetorical criticism, public address, argumentation, etc. *Communication Theory/Methods/Analysis* includes interpersonal communication, organizational communication, intercultural communication, research methods, etc. The *Area of Emphasis* is to be decided in conjunction with graduate committee.

Curricular Requirements

I. Required Courses (24 units)

A. Core Courses (16 units)

- COMM 6000 Introduction to Graduate Study (4)
- COMM 6010 Seminar in Theories in Communication (4)
- COMM 6020 Seminar in Communication, Media, and Society (4)
- COMM 6030 Capstone Seminar: Rhetoric, Communication, and Media (4)

B. Select at least one course from the following (4 units):

- COMM 6300 Seminar in Motion Picture Theory and Research (4), 6450 Seminar in Political Communication Theory and Research (4), 6600 Seminar in Organizational Communication (4), 6700 Seminar in Communication

Campaigns Theory and Research (4)

C. Select at least one course from the following (4 units):

COMM 6250 Teaching Speech Communication (4), 6810 Seminar in Intercultural Communication (4)

II. Elective Courses (22 units)

The following courses, or their approved transfer equivalents, are acceptable electives for the degree. Some of these courses may be required by the student's committee.

Upper Division Elective Courses:

(Note that no more than 22 units of the degree program can be in undergraduate courses.)

COMM 4201 Comparative Traditions of Rhetoric, 4350 Persuasive Speaking (with permission), 4411 Principles of Argumentation, 4460 American Public Address, 4610 Rhetoric of Popular Culture, 4615 Modern Rhetorical Theory, 4700¹ Topics in Speech Communication (topics may include: political communication, ethics of communication, persuasion theory, listening, feminist perspectives on communication, non-western theories of rhetoric, rhetoric and the media), 4810 Human Communication Theory, 4830 Intercultural Communication, 4840 Organizational Communication, 4850 Gender and Communication, 4855 Family Communication, 4858 Communication in Personal Relationships, 4860 Ethnic Public Address, 4870 Methods of Research in Speech Communication, 4880 Communication and Conflict Resolution

Elective Graduate Seminars:

COMM 6100 Topics in Speech Communication (topics may include: argumentation theory, conversation analysis, freedom of speech, conflict resolution, rhetorical criticism, communication ethics, group process, public address), 6200 Internship in Speech Communication (1-4), 6250 Teaching Speech Communication, 6400 Seminar in Rhetorical Studies, 6500 Seminar in American Public Address, 6600 Seminar in Organizational Communication, 6700 Seminar in Communication Campaigns Theory and Research, 6800 Seminar in Interpersonal Communication, 6810 Seminar in Intercultural Communication

Other Elective Courses:

COMM 5183 Directing Forensics (2), 6898 Cooperative Education (1-4), 6899 Project (5), 6900 Independent Study (1-4), 6909 Departmental Thesis (1-5), 6910 University Thesis (1-9)

III. Capstone Experience

If a comprehensive examination is not selected as the capstone experience, a thesis or project must be completed.

may be taken more than once for credit, with permission of the instructor and the student's advisor. This is indicated in the description of the course.

Post-Baccalaureate

- 5183** Directing Forensics (2)
Practical experience in organizing and managing a speech and debate program. Prerequisites: COMM 4183 or consent of instructor. Repeatable once for credit. May be applied to the M.A. degree with approval.
- 5900** Independent Study (1-4)
May be applied to the M.A. degree with approval.

Graduate

The following graduate seminars, except COMM 6000 and COMM 6400, are offered on a rotating basis. Therefore, some 6000-level courses may not appear in a given academic year.

- 6000** Introduction to Graduate Study (4)
Develop attitude and skills of scholarly writing; engage questions about approaching and justifying research, conduct literature reviews, practice scholarly writing of research proposals, conduct advanced library research, and consider the place of ethics in research. Prerequisites: graduate standing and consent of instructor.
- 6010** Seminar in Theories in Communication (4)
Theories of communication across the discipline of communication, interactions among theories, development of theories of communication, and the relationship of theory to criticism and practice. Prerequisite: COMM 6000.
- 6020** Seminar in Communication, Media, and Society (4)
A study of the history of the discipline, including media and modes of communication; interactions of technologies of communication with society within contexts of public and professional communication from local to international levels. Prerequisite: COMM 6000.
- 6030** Capstone Seminar: Rhetoric, Communication, and Media (4)
Integrate study of media and modes of communication within public and professional spheres of communication, engaging tensions among theory, criticism, research, practice, service, and ethics; across research in rhetoric, communication, and media. Prerequisite: COMM 6000.
- 6100** Topics in Speech Communication (4)
Presentation of selected topics in speech communication beyond regular course offerings. Subjects will vary and will be specified at time of offering. May be repeated for credit with change in course content. Prerequisite: consent of instructor. (Y)
- 6200** Internship in Speech Communication (1-4)

Supervised experience in a variety of communication activities inside and outside the University. Repeatable up to four units total in the M.A., up to six units total (combined with units from Co-Op Ed.) in the B.A. CR/NC grading only. Prerequisite: department approval. (A)

- 6250** Teaching Speech Communication (4)
The theories of learning and motivations to learn. Development of strategies to communicate course content to encourage learning for the diversity of students in the communication classroom.
- 6400** Seminar in Rhetorical Studies (4)
Selected topics from the philosophy and theory of rhetoric and public address, with original investigations by the student in areas of particular interest; special attention to the literature relating to selected topics. May be repeated once for credit. (Sp)
- 6500** Seminar in American Public Address (4)
Advanced historical and critical studies, with emphasis on original research of selected topics and with special attention to the uses of theories of history and primary research materials. May be repeated once for credit. (Y)
- 6600** Seminar in Organizational Communication (4)
Oral communication in organizational settings including the design, implementation and management of communication systems. Research and theories of organizational communication. May be repeated once for credit. Prerequisite: consent of instructor. (Y)
- 6700** Seminar in Communication Campaigns Theory and Research (4)
Theory in relation to research, practice, and criticism of communication campaigns in public and professional settings. Theories of persuasion; media effects, relationships between public relations, advertising, and media; ethics in public relations and advertising. Prerequisite or co-requisite: COMM 6000.
- 6800** Seminar in Interpersonal Communication (4)
Critical examination of research, theory, and methods in interpersonal communication; analysis of verbal and nonverbal message forms affecting the nature of human interaction. Prerequisites: COMM 1004 and 4820 or 4810; or consent of instructor. May be repeated once for credit. (Y)
- 6810** Seminar in Intercultural Communication (4)
The theory, research and practice of intercultural communication examined in light of the relevant social, political, and historical contexts. Emphasis on particular domestic U.S. or international cultures may vary. Prerequisite: COMM 4830 or consent of instructor. May be repeated once for credit.
- 6898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or

volunteer activities. May be repeated for up to 8 units. A maximum of 4 units will be accepted toward the M.A. in Speech Communication. CR/NR grading only. Prerequisites: minimum 3.0 GPA, departmental approval of activity. (A)

- 6899** Project (5)
Development of an original product which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their formats. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense may be required. Prerequisite: graduate standing. Maximum of 5 units per student. (A)
- 6900** Independent Study (1-4)
- 6909** Departmental Thesis (1-5)
Development and writing of a research paper for submission to the department which specifies its format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense normally required. Prerequisite: graduate standing. Maximum of 5 units per student.
- 6910** University Thesis (1-9)
Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense normally required. Prerequisite: graduate standing. Maximum of 9 units per student. (See also "University Thesis Writing Guide" available in WA 859.)
- 6999** Issues in Speech Communication (4)
Readings, discussion, and research on contemporary and/or significant issues in speech communication. May be repeated for credit when content varies.

Footnote

- 1** May be applied to the M.A. degree with approval.



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Department Information

M.A. in English

English

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Department of English
College of Arts, Letters, and Social Sciences
Office: Warren Hall UM79
Phone: (510) 885-3151

Professors Emeriti: Zelda Boyd, Jacob Fuchs, Sara McAulay

Professors: Eileen Barrett, Charles DeBose, Jacqueline Doyle, Stephen D. Gutierrez, Kathleen Margaret Lant, E. J. Murphy, Alden Reimonenq, Marilyn N. Silva (Chair)

Associate Professor: Alison M. Warriner

Assistant Professors: Debra Barrett-Graves, Dennis M. Chester, Susan A. Gubernat, Eve M. Lynch, Margaret Tomlinson-Rustick, Ke Zou

Lecturers: Cynthia H. Andrzejczyk, Sartaz Aziz, Scott D. Bentley, Mary C. D'Alleva, Jeanne M. Ekdahl, Susan H. Fox, Eva V. Fuchs, Dorothy Gilbert, Kathleen R. Grow, Herman G. Haluza, Jr., James P. Hausken, Rochelle M. Nameroff, Maureen C. Newey, Michael A. Rovasio, Paul E. White

Graduate Coordinator: Jacqueline Doyle

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

The university offers the Master of Arts degree in English. Although there is no separate degree offered in Creative Writing, it is possible to satisfy the thesis option for the M.A. in English by work in fiction, verse, or drama. The student seeking a degree must observe the general university requirements stated elsewhere in this catalog as well as the specific departmental requirements stated here.

Admission

To apply for admission to the Master of Arts program in English, the student must fill out the proper forms (obtained from and returned to the Admissions Office). The Admissions Office will then send the application to the English Department where it will

be accepted or rejected. Also see admission requirements for the TESOL Option.

To be admitted to the M.A. program in English, the student must: (1) hold the B.A. degree from an accredited college or university, with a major in English, and (2) have an undergraduate GPA in English courses of at least 3.0. If the student cannot comply with these requirements, he or she may petition the department by letter for special consideration. A student not admitted to the program because of deficiencies is urged to enroll in the university as an "Unclassified Post-baccalaureate" student to overcome these deficiencies.

Upon admittance to the graduate program in English, the student should immediately arrange through the English Department Office to consult a graduate advisor on selecting courses and satisfying the department's M.A. Foreign Language Requirement (see "Foreign Language Requirement" in the "Degree Requirements" section).

All students except those who are "Classified Graduate" students in English must have the written permission of an English graduate advisor to enroll in a graduate course in English.

"Classified Graduate" Status and Advancement to Candidacy

The student is normally admitted to the program in English as a "Conditionally Classified Graduate" student. One condition to his or her being a "Classified Graduate" is that (s)he pass ENGL 6001 with a grade of "A" or "B". Another is that the student must satisfy the University Writing Skills requirement. There may be other conditions to his or her "Classified Graduate" status if (s)he has been admitted to the program with deficiencies; the student should consult with a graduate advisor to determine whether this is the case. After all conditions have been met, the student will be granted "Classified Graduate" status as a graduate student in English. To Advance to Candidacy for the M.A. in English, the student must satisfy the department's M.A. Foreign Language Requirement and complete 20 quarter-units of graduate coursework (including ENGL 6001) acceptable for the M.A. Also see admission requirements for the TESOL Option.

Degree Requirements

The student must complete, with a grade point average of 3.0 or above, 45 quarter-units of credit approved by a graduate advisor. At least 28 of the 45 quarter-units must be in English courses numbered 6000-6999 other than 6501-6509 (TESOL courses), 6900 (Independent Study), and 6910 (University Thesis). ENGL 6001 is a required course. The remaining quarter-units (up to 17) may be taken in any combination of English courses numbered 4000-4999, 6501-6509, 6900, and 6910. Also see requirements for the TESOL Option.

The thesis is optional. The student may elect to take 9 of his or her quarter-units in ENGL 6910 to write an approved thesis or equivalent work in fiction, verse, or drama. The student who elects to write a thesis must comply with the thesis instructions of the Department of English as well as those in the University Thesis Writing Guide available in WA 859. For those who elect a thesis, one exit examination in a historical period of British or American

M.A. in English: TESOL Option

Literature is also required. For those who do not elect a thesis, two exit examinations in historical periods of British or American Literature are required.

Foreign Language Requirement

The student must demonstrate a reading knowledge of a foreign language. Consult a departmental advisor for details.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate and Post-baccalaureate Studies chapter at the beginning of the graduate section of this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills requirements.

Applying for Graduation

A student must apply formally to graduate with a master's degree, by submitting a "Candidate for Degree" card during the Add/Drop period for the quarter before the one in which (s)he expects to graduate. Also during the quarter before the one in which the student expects to graduate, (s)he must ask the department's Graduate Coordinator to send a "Major Check" sheet to the Graduate Evaluations Office.

Admission

To be admitted to the M.A. in English with a Teaching English as a Second Language (TESOL) Option, students must hold a relevant baccalaureate degree (English, Linguistics, Speech Communication are obvious examples), with a 3.0 overall GPA, and have completed the following prerequisite courses (40 units) or their equivalents:

ENGL 3005 Study of Language (4)
ENGL 3010 Modern English Grammar (4)

ENGL 3015 Introduction to Phonology (4) or SPPA 3855
Introduction to Phonetics (4)

ENGL 3020 Advanced Expository Writing (4)
ENGL 3040 Linguistic History of the English Language (4)
ENGL 4040 Language in the U.S.A. (4)
COMM 4830 Intercultural Communication (4)

ANTH 3800 Language and Culture (4) or HDEV 4520 Language
Acquisition and the Symbolic Function (4)

Two courses in modern British or American literature

Required Courses (45 units)

ENGL 6501 and 6502 Theory and Practice of Teaching ESL I
and II (8)
ENGL 6503 Second-Language Acquisition (4)
ENGL 6504 Morphology and Lexical Semantics (4)
ENGL 6506 Sociolinguistics (4)
ENGL 6507 Testing and Evaluation for Teaching ESL (4)

Graduate Courses

ENGL 6508 Supervised Tutoring/Teaching (8)
ENGL 6509 Computer Assisted Language Learning and Teaching (4)
ENGL 6750 Theory and Practice of Composition (4)
ENGL 6909 Departmental Thesis (5)

"Classified Graduate" Status and Advancement to Candidacy

Students are normally admitted to the master's program in English as "Conditionally Classified Graduate" students. Once the students have completed any outstanding prerequisite courses and have passed the Writing Skills Test, they may apply for "Classified Graduate" status. In order to advance to candidacy, students must have completed 24 units of graduate-level coursework with grades of "B" and higher.

Applying for Graduation

Students must apply formally to graduate with a master's degree by submitting a "Candidate for Degree" card during the Add/Drop period for the quarter before the one in which they expect to graduate. They must ask the English Department's Graduate Coordinator to send a "Major Check" sheet to the Graduate Evaluations Office.

The course prefix for the following courses is ENGL.

- 6001** Introduction to Graduate Studies (4)
Introduction to the major research tools for the study of English; survey and evaluation of various methods in literary criticism. Required for M.A. in English. (Y)
- 6070** Graduate Workshop in Fiction (4)
Writing of long and short fiction. Theory and analysis of the art of fiction. For the prospective professional writer. Prerequisite: graduate standing in English and ENGL 4070 or consent of instructor. Maximum total credit: 8 units. May be repeated once for credit with consent of instructor.
- 6075** Graduate Workshop in Poetry (4)
Writing of poetry. Theory and analysis of the art of poetry. For the prospective professional writer. May be repeated once for credit with consent of instructor. Prerequisites: graduate standing in English and ENGL 4075 or consent of instructor.
- 6080** Seminar in Critical Theory of Literature (4)
Study of major contemporary critics and critical approaches to literature. Maximum total credit: 8 units. Second credit by consent of instructor. Prerequisite: graduate standing.
- 6085** Seminar in Feminist Criticism (4)
Feminist criticism and its application to literary works. Literary works followed by feminist critical analyses of those works. Prerequisite: graduate standing in English.
- 6100** Seminar in Medieval Literature (4)
Study of major works, authors, and literary topics of the medieval period; at least one work read in the original

language. Maximum total credit: 8 units. Second credit by consent of instructor. Prerequisite: ENGL 4151 or consent of instructor. (Y)

- 6215** Seminar in Renaissance Literature (4)
Study of major works, authors, and literary topics of the Tudor and Stuart periods. Maximum total credit: 8 units. Second credit by consent of instructor. Prerequisite: ENGL 4220 or 4251 or 4252 or 4810, or consent of instructor. (Y).
- 6350** Seminar in Restoration and 18th-Century British Literature (4)
Study of major works, authors, and literary topics of the Restoration and the 18th century. Maximum total credit: 8 units. Second credit by consent of instructor. Prerequisite: ENGL 4325 or 4813 or 4831, or consent of instructor. (Y)
- 6405** Seminar in 19th-Century British Literature (4)
Study of major works, authors, and literary topics of the Romantic and Victorian periods. Maximum total credit: 8 units. Second credit by consent of instructor. Prerequisite: ENGL 4411 or 4412 or 4832, or consent of instructor. (Y)
- 6501** Theory and Practice of Teaching ESL I (4)
Focuses on current research as well as practical, innovative methods for teaching ESL to adult learners. Prerequisite: graduate standing.
- 6502** Theory and Practice of Teaching ESL II (4)
Focuses on current research as well as practical, innovative methods for teaching ESL to adult learners. Prerequisite: ENGL 6501.
- 6503** Second-Language Acquisition (4)
Psycholinguistic and sociolinguistic processes as well as affective factors involved in the acquisition of a second language, with emphasis on adult learners of English. Prerequisite: graduate standing.
- 6504** Morphology and Lexical Semantics (4)
Investigation of the structural composition of English words, with emphasis on processes of word formation and theories of meaning and meaning change. Analysis of errors made by ESL learners. Prerequisite: graduate standing.
- 6506** Sociolinguistics (4)
Relationship between language and society. Language variation associated with different geographic, ethnic, and socioeconomic groups and social situations. Implications for teaching English as a Second Language. Prerequisite: graduate standing.
- 6507** Testing and Evaluation for Teaching ESL (4)
Methods of assessing proficiency in speaking, understanding, reading, and writing a second language. Examines adequacy of traditional evaluation methods as well as procedures in test construction and evaluation. Prerequisite: graduate standing.

- 6508** Supervised Tutoring/Teaching (4)
Supervised work with students in ESL classes and tutorials. Course must be repeated as required in the TESOL option for maximum credit of 8 units. Prerequisites: ENGL 6501 and 6502.
- 6509** Computer Assisted Language Learning and Teaching (4)
Methods of integrating the computer into teaching ESL to adult learners. Considers theoretical and practical issues. Prerequisites: graduate standing, ENGL 6501, 6502, and 6503.
- 6600** Seminar in American Literature to 1900 (4)
Study of major works, authors, and literary topics before 1900. Maximum total credit: 8 units. Second credit by consent of instructor. Prerequisite: ENGL 4634 or 4635 or 4636 or 4860, or consent of instructor. (Y)
- 6608** Supervised Composition Teaching/Tutoring (4)
Supervised practice in composition classes and tutorials. Prerequisite: ENGL 6750.
- 6650** Seminar in Women's Literature (4)
Literary works written in English by women authors throughout the ages. May be repeated once for credit with consent of instructor. Prerequisite: graduate standing in English.
- 6660** Seminar in 20th Century British Literature (4)
Study of major British works, authors, and literary topics of the 20th century. Prerequisite: ENGL 4816 or 4827 or 4833 or 4876 or consent of instructor. May be repeated for credit.
- 6665** Seminar in 20th Century American Literature (4)
Study of major American works, authors, and literary topics of the 20th century. Prerequisite: ENGL 4637 or 4827 or 4870 or 4876 or consent of instructor.
- 6670** Studies in Literary Nonfiction (4)
Historical, cultural, and/or pedagogical perspectives on various forms of literary nonfiction. May be repeated once for credit, with consent of instructor. Prerequisite: graduate standing.
- 6675** Studies in Poetry and Poetics (4)
Prosody and other formal issues; theory and practice of one poet or of a particular "school" or movement; relationships between poetry and cultural contexts. May be repeated once for credit when content varies, with consent of instructor. Prerequisite: graduate standing.
- 6690** Seminar in African-American Literature (4)
Major works, authors, and literary topics of the 19th and 20th centuries. May be repeated for credit with consent of instructor. Prerequisite: graduate standing in English and ENGL 4636 or 4637 or 4690 or 4860 or 4870 or consent of instructor.

- 6695** Post-Colonial Literature (4)
The politics and poetics of the literature of previously colonized peoples in the aftermath of European and American imperialism. May be repeated once for credit with consent of instructor when content varies.
Prerequisite: graduate standing
- 6740** Seminar in Children's Literature (4)
Intensive study of authors, genres, or movements in literature for children. Topics vary; consult the department. May be repeated for credit. Prerequisites: graduate standing and ENGL 4740, or consent of instructor.
- 6745** Critical Approaches to Children's Literature (4)
A variety of critical approaches to children's literature (e.g., feminist, postcolonial, marxist, psychoanalytic), and their bearing on contemporary literary and cultural studies.
- 6750** Theory and Practice of Composition (4)
Focus on current research in theory and methods of teaching composition. Prerequisite: consent of instructor.
- 6760** Theory and Practice of Writing Across the Curriculum (4)
Pedagogies incorporating writing throughout the disciplines; writing problems encountered by native and non-native English speakers; strategies for responding to student writing; technologies helpful for student writers; methods for working with students individually and in groups. Prerequisite: consent of instructor.
- 6770** Theory and Practice of Teaching Literature (4)
Theory and methods for teaching literary genres and periods appropriate for high school and community college literature courses. Prerequisite: graduate standing in English or consent of instructor.
- 6898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 8 units. A maximum of 4 units will be accepted toward the English major. CR/NC grading only. Prerequisites: at least 3.0 GPA, departmental approval of activity. (A)
- 6900** Independent Study (1-4)
- 6909** Departmental Thesis (1-5)
Development and writing of a research paper for submission to the department, which specifies its format. The written project, focusing on TESOL research, includes a survey of current literature and a bibliographical essay on an important issue in the field. Supervised by a departmental committee, at least one member of which must be a Cal State Hayward faculty member. Oral defense is normally required. Prerequisite: graduate standing. Maximum 5 units per student.
- 6910** University Thesis (1-9)

Development and writing of a formal research paper for submission to the University in the specified bound format. Supervision by a departmental committee, at least one member of which must be a Cal State Hayward faculty member. Oral defense normally required. Prerequisites: Advancement to Candidacy and an approved thesis proposal. Maximum of 9 units per student. (See also, "University Thesis Writing Guide," available in WA 859.) (A)

6999 Issues in English Language and Literature (4)
Readings, discussion, and research on contemporary and/or significant issues in English language and literature. May be repeated for credit when content varies.



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Speech Pathology and Audiology

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Department Information

Department of Communicative Sciences and Disorders
College of Arts, Letters, and Social Sciences
Office: Music and Business Bldg. 1099
Phone: (510) 885-3233

Professor Emeritus: William S. Rosenthal

Professors: Jan A. Avent, Norma S. Rees

Assistant Professors: Jillian Barrett, Patricia Lohman-Hawk, Janet P. Patterson, Robert C. Peppard

Adjunct Faculty: Susan Carlson, Audra Elliott, Bonnie Groth, Nidhi Mahendra, Shelley Simrin, Michaela Sullivan, Susan Walburn

Graduate Coordinator: Robert C. Peppard

Please consult the 2006-2007 online catalog for any changes that may occur.

M.S. in Speech Pathology and Audiology

Program Description

The Master of Science degree in Speech Pathology and Audiology is offered in the Department of Communicative Sciences and Disorders. The objective of this program is the professional preparation of each student, academically and clinically, for state licensure, clinical certification by the American Speech-Language-Hearing Association, and the credential as a public school Speech, Language and Hearing Specialist.

Speech-language pathology and audiology are the professions which help adults and children overcome disabilities of speech, language and hearing.

This program has developed a reputation for rigorous and balanced professional training. The master's degree program is accredited by the American Speech-Language-Hearing Association.

Career Opportunities

Students who complete the Master of Science degree in Speech Pathology and Audiology are eligible for ASHA certification,

California state licensure, and in most cases the Clinical Rehabilitative Services Credential in Language, Speech and Hearing or Audiology. Speech-language pathologists work in a variety of settings which include hospitals, schools, rehabilitation centers, community speech and hearing clinics, public schools, and private practice.

Faculty

The Communicative Sciences and Disorders faculty is comprised of five full-time professors and two clinical directors. Each of these professional faculty and staff has clinical and/or research interests that encompass the full range of communicative disorders. Regular guest lecturers supplement the academic offerings. Faculty, professional staff, and part-time supervisors who are active in the community provide clinical supervision.

Features

The Speech Pathology and Audiology Program operates the Center for Communicative Disorders, an on-campus facility that provides clinical services to speech, language, and hearing impaired individuals from Bay Area communities. Students who are enrolled in the Speech Pathology and Audiology master's program do much of their initial observations and clinical training in this facility. The program also maintains a fully equipped speech and hearing science laboratory for students who wish to pursue research interests.

Internships

Clinical internships are considered part of the professional training of all graduate students. The department places students in settings that meet each student's interests and training requirements. Students may apply for internships in more than two dozen hospitals, rehabilitation facilities, and clinics in the Bay Area. More than twenty-two school districts provide additional internship settings.

Scholarships

- The most usual form of financial aid is in the form of guaranteed student loans. However, other types of financial aid are available. The university supports the following programs:

- State University Grant
- Federal Perkins Loan
- Federal Stafford Loan (including unsubsidized)
- Federal Work-Study
- Federal Supplemental Loans for Students
- Cal State Hayward Scholarships

- The Department of Communicative Sciences and Disorders recommends the award of certain forms of financial aid within the University. They include the following:

- Graduate Equity Fellowship*, up to \$4000 for certain under-represented minorities or handicapped, for full-time graduate study.

- Betsy Lindeman Rosenthal Memorial Fund*, non-interest loans, \$500 - \$1500 for graduate students in Communicative Sciences and Disorders.

Excellence in Aphasia Group Treatment Award, \$3500 scholarship for a graduate student in Communicative Sciences and Disorders

Stephanie Amore Memorial Fund, endowment earnings benefit students in the department

Stephanie Kalman Foundation Scholarships, \$3000 scholarships for undergraduate and graduate students in Communicative Sciences and Disorders

- The department maintains a current file of scholarship and grant sources from within the University, CSU system and professional associations (ASHA, CSHA, NSSLHA, ASHA Foundation, and NBASLH/BACA).
- Occasionally, funds are available for Research and Teaching Assistantships, and Student Assistantships (clerical).

Admission

"Classified Graduate" Standing

For admission with "Classified Graduate" standing to the program leading to the Master of Science degree in Speech Pathology and Audiology the student must:

1. make application to pursue a specific program of study and be accepted by the department and the university;
2. possess a baccalaureate degree from an accredited college or university with a major in Speech Pathology and Audiology or the equivalent coursework in Speech Pathology and Audiology with another degree. Preparatory coursework completed at other institutions must correspond in scope and content with required and elective courses offered on this campus;
3. possess an overall grade point average of 3.0 or better covering the last 90 quarter units of course work;
4. present evidence of having satisfactorily completed a minimum of 60 clock hours of supervised clinical practica in speech, language, and hearing;
5. submit a statement of purpose which, when reviewed by the faculty as a whole, is considered to demonstrate the level of content, clarity, and style necessary to participate in graduate education at Cal State Hayward;
6. submit three letters of recommendation from appropriate persons who can and do attest to the candidate's high potential for graduate study;
7. fulfill the University Writing Skills requirement.

"Conditionally Classified Graduate" Standing

A student who holds a baccalaureate degree from an accredited institution, but who does not meet other requirements named in (2), (3), and (4) in the previous section may, on recommendation

of the graduate faculty in Speech Pathology and Audiology, be admitted with "Conditionally Classified" standing. The status remains conditional until the student has demonstrated capability in preparatory requirements, has received recommendation to "Classified" standing by the Speech Pathology and Audiology Graduate Faculty Committee, and has passed the Writing Skills Test.

Advancement to Candidacy

To be Advanced to Candidacy for the M.S. degree in Speech Pathology and Audiology, the student must:

1. be a "Classified Graduate" student in good standing;
2. complete at least 12 units in graduate work in Speech Pathology and Audiology with a GPA of at least 3.0;
3. complete a minimum of 2 units of SPPA 6056 and/or SPPA 6156 with a grade of "B" or better;
4. file with his or her advisor an approved study plan for completion of the degree program;
5. defend satisfactorily his or her thesis proposal, if a thesis capstone is selected; and
6. show evidence of progress and ability to complete the program.

Degree Requirements

The Speech Pathology and Audiology Program in the Department of Communicative Sciences and Disorders offers graduate study leading to the Master of Science Degree in Speech Pathology and Audiology. The candidate must observe the specific requirements stated in this chapter and more fully in the M.S. brochure issued by the program. (Copies available upon request.) In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate and Post-baccalaureate Studies chapter at the beginning of the graduate section of this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills requirement.

Because it is the objective of this program to prepare each student academically and clinically for any or all of clinical certification by the American Speech-Language-Hearing Association, state credential as a speech, language and hearing specialist, and state licensure, each student's program must be individually planned to reflect prior undergraduate, graduate and professional experience. Consequently, it is imperative that each student consult a departmental advisor within the first quarter of residence to plan a tentative program.

The program leading to the M.S. degree in Speech Pathology and Audiology requires completion of at least 45 quarter units of credit with grades of "A" or "B" from the courses listed below. The work must be completed within five calendar years after admission to the program. At least 32 units must be completed in residence.

- I. Required Courses (33 units)
 - SPPA 6000 Research Methods in Communicative Sciences and Disorders (4)
 - SPPA 6010 Advanced Speech and Hearing Science (4)
 - SPPA 6020 Advanced Vocal Rehabilitation (4)
 - SPPA 6030 Clinical Organization and Management (4)
 - SPPA 6040 Advanced Seminar in Speech, Language, and Hearing Disorders (4)
 - SPPA 6050 Neuropathologies in Speech and Language (4)
 - SPPA 6060 Advanced Study of Language Disorders in Children (4)
 - SPPA 6110 Advanced Audiology (4) or SPPA 6120 Amplification and Aural Rehabilitation (4)
 - SPPA 6156 Graduate Practicum in Audiologic Assessment (1)

- II. Elective Courses (12 units)
Select 12 units from the following:

SPPA 6052 Clinical Methods and Procedures in Communicative Disorders (2), 6040 Advanced Seminar in Speech, Language, and Hearing Disorders (4), 6056 Graduate Practicum in Speech-Language and Audiology (1-5), 6066 Clinical Internship (2-6) or 6910 University Thesis (2-8), 6110 Advanced Audiology (4) or 6120 Amplification and Aural Rehabilitation (4) (whichever was not taken as a required course), 6156 Graduate Practicum in Audiologic Assessment (1-5), 6220 Dysphagia (2), 6221 Principles of Accent Reduction (2), 6223 Early Language Assessment and Intervention (2), 6224 Issues in Ethics (2), 6225 Dementia (2), 6226 Traumatic Brain Injury (2), 6900 Independent Study (1-5); EPSY 5021 Introduction to Educating all Students in Diverse Classrooms (4)

In order to meet certification, licensure and credential requirements, and specific student interests, other electives may be chosen from related areas of Biological Sciences, Psychology, Statistics, Human Development, Speech Communication, Health Sciences, and Anthropology. These electives must be approved by a graduate faculty advisor.

Examinations

1. Satisfactory achievement on a comprehensive written examination is required for completion of the program. For this comprehensive examination, the student will select one primary management area, either Speech-Language Pathology or Audiology. The student will take a six-hour examination in this area of emphasis plus a two-hour examination in the other management area. The student need not have taken all courses listed below. However, material covered in these courses may be included in the examinations.
2. Satisfactory achievement on an oral examination will be required following the student's comprehensive written examination and covering all course work and clinical practice. A second oral examination will be required as a defense of thesis for those choosing the thesis capstone.

Capstone Experiences

Clinical- Rehabilitative Services Credential

Graduate Courses

The student may elect one of three programs after consultation with his or her advisor:

1. Forty-five units of approved coursework including Clinical Internship.
2. Forty-five units of approved coursework including University Thesis.
3. Forty-five units of approved coursework without either Internship or University Thesis. Option number (3) should be considered only by students who have previously completed extensive paid professional clinical work in Speech-Language Pathology and/or Audiology.

Language, Speech and Hearing/Audiology
The Speech Pathology and Audiology faculty in the Department of Communicative Sciences and Disorders have developed a program of graduate study designed to fulfill the requirements for the *Clinical-Rehabilitative Services Credential in Language, Speech and Hearing/Audiology*. This credential is required for employment in the public schools.

Individuals wishing to obtain this credential must meet all requirements of the Master of Science degree in Speech Pathology and Audiology, including an internship in the public schools (SPPA 6066 for 6 units), and a 4-unit, advisor-approved course in Educational Psychology (EPSY 5021).

Because students enter Cal State Hayward with differing academic and clinical backgrounds, it is imperative that each student consult a department advisor in the planning of a course of study within the first quarter of enrollment.

The course prefix for the following courses is SPPA.

- 6000** Research Methods in Communicative Sciences and Disorders (4)
Applied research methods in the field of communicative disorders, including literature search techniques, research designs, statistical tests, and scholarly report preparation. Required individual research project and written assignment. Prerequisites: graduate standing and consent of graduate advisor. (F)
- 6010** Advanced Speech and Hearing Science (4)
Selected topics in acoustic and physiological phonetics, speech perception and psychoacoustics with laboratory application in the analysis of normal and disordered speech and voice patterns. Prerequisites: graduate standing and/or SPPA 3854, 3855, or consent of instructor. (F)
- 6020** Advanced Vocal Rehabilitation (4)
Assessment procedures for differentiating various organic

and non-organic laryngeal dysfunctions in adults and children with emphasis on the selection and application of appropriate treatment methods. Prerequisites: graduate standing; SPPA 4853 and/or consent of instructor. (W)

- 6030** Clinical Organization and Management (4)
Principles and procedures underlying patient selection, appropriate placement, family counseling, and utilization of allied professions in the treatment of adults and children in clinic and school settings. Organizing, administering and supervising speech, language and hearing programs in accordance with pertinent State and Federal regulations. Prerequisites: graduate standing and consent of instructor. (Sp)
- 6040** Advanced Seminar in Speech, Language and Hearing Disorders (4)
Selected topics in speech, language and hearing beyond regular course offerings. Topics vary to include recent developments in areas such as autism, bilingualism, child language disorders, deafness, fluency, evaluation and management of hearing loss. May be repeated for credit with change in course content. Prerequisites: graduate standing and consent of instructor. (Y)
- 6050** Neuropathologies in Speech and Language (4)
Seminar in the evaluation and treatment of dysarthrias and other speech, language, and voice problems associated with neuropathologies in children and adults, e.g. cerebral palsy, myasthenia and dystrophies. Prerequisites: graduate standing; SPPA 3853, 4853 and/or consent of instructor. (Sp)
- 6052** Clinical Methods and Procedures in Communicative Disorders (2)
Basic principles of client treatment and management, including structuring the therapy session, designing therapy hierarchies, data collection, working with families, reinforcement, and documentation. CR/NC grading only. Prerequisite: prior or concurrent enrollment in SPPA 6056. (Y)
- 6054** Fluency Rounds (1)
Review, discussion, and planning of fluency cases currently being evaluated and treated at the CSUH Speech, Language, and Hearing Clinic. CR/NC grading only. May be repeated once for credit. Co-requisite: SPPA 6056.
- 6056** Graduate Practicum in Speech-Language and Audiology (1-5)
Development, implementation and evaluation of individualized therapy plans administered in both individual and group settings. Report writing and oral case presentations. Thirty (30) hours of patient contact per unit of credit. May be repeated for credit. Prerequisites: graduate standing; SPPA 4856 and/or consent of instructor. (A)
- 6060** Advanced Study of Language Disorders in

Children (4)

Evaluation and treatment procedures applicable to clinic and classroom settings. Emphasis on the evaluation of semantic and pragmatic functions and the establishment of functional language. Prerequisites: graduate standing; SPPA 4865 and/or consent of instructor. (F)

6064 Advanced Seminar in Fluency Disorders (4)

In-depth study of techniques for the diagnosis, management, and modification of fluency disorders, including stuttering and cluttering. Intended for individuals seeking fluency specialization. Prerequisite: SPPA 4864, 30 hours of supervised practicum in fluency disorders, or consent of instructor.

6066 Clinical Internship (2-6)

Field placement in supervised and approved settings such as public schools, hospitals, and community speech-language and hearing clinics. May be repeated for credit. Prerequisites: graduate standing and consent of graduate advisor. (Y)

6070 Augmentative/Alternative Communication-Assistive Technology for Speech-Language Pathologists (4)

Principles of augmentative/alternative communication for both children and adults. Hardware, software, and peripheral equipment for assessment, system fittings, and intervention. Open to SPPA graduate students and Speech Pathology professionals. Prerequisites: SPPA 4854, 4865, or consent of the instructor. (Y)

6110 Advanced Audiology (4)

The theory and procedures for evaluating auditory development and function in young children and adults. Including, but not limited to, speech audiometry, immittance audiometry, and visual reinforcement audiometry. The application of test data to aural rehabilitation. Prerequisites: graduate standing; SPPA 3859, 4861, 4855 or consent of instructor. (Y)

6120 Amplification and Aural Rehabilitation (4)

Hearing aids and their application in the aural rehabilitation process. The history of hearing aids, current standards, regulations, and electro-acoustic real ear measures and clinical procedures for the selection and evaluation of hearing aids and ear molds. Prerequisite: graduate standing and/or consent of instructor. (Y)

6156 Graduate Practicum in Audiologic Assessment (1-5)

Supervised clinical diagnosis of hearing disorders including history taking, test administration, data analysis, patient counseling, oral and written case presentation. Thirty (30) hours of patient contact per unit of credit. May be repeated for credit. Prerequisites: graduate standing and consent of graduate advisor. (A)

6220 Dysphagia (2)

Principles of the diagnosis and treatment of swallowing

disorders including the anatomy/physiology of normal swallowing, the radiographic modified barium swallow, and management/treatment techniques. Prerequisites: graduate standing, SPPA 3854, 4853, and/or consent of instructor. CR/NC grading only.

- 6221** Principles of Accent Reduction (2)
Basic principles used to improve the pronunciation of non-native speakers of English. Topics include speaker attitudes and expectations, dialect diversity, phoneme contrasts, American English stress and intonation patterns, and syllable and word reduction. Open to SPPA graduate students and Speech Pathologist professionals. Prerequisites: SPPA 3855, 4863; or consent of instructor. CR/NC grading only.
- 6223** Early Language Assessment and Intervention (2)
Provides information and develops skills for working with the birth to 3 population at risk for speech and language delays and/or disorders including: children of substance abuse pregnancies, premature birth, chromosomal disorders, developmental delay, and pervasive developmental disorders. Topics include characteristics of these populations, appropriate assessment procedures, family-centered services, and transdisciplinary approaches. Limited to SPPA majors. CR/NC grading only.
- 6224** Issues in Ethics (2)
The American Speech-Language-Hearing Association's (ASHA) Code of Ethics with specific discussion on conflict of interest, the effect of managed care, and insurance reimbursement. Prerequisite: SPPA major, minor or consent of instructor. CR/NC grading only.
- 6225** Dementia (2)
Causes and management of dementia. Special consideration of speech-language clinical issues. Prerequisite: consent of instructor. CR/NC grading only.
- 6226** Traumatic Brain Injury (2)
Seminar in the evaluation and treatment of cognitive-linguistic deficits following traumatic brain injury. Prerequisite: consent of instructor. CR/NC grading only.
- 6898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off campus paid or volunteer activities. May be repeated for up to 4 units. Not applicable to the M.S. in Speech Pathology. CR/NC grading only. Prerequisites: at least a 3.0 GPA; departmental approval of activity. (A)
- 6900** Independent Study (1-5)
- 6910** University Thesis (2-8)
Development and writing of a formal research paper for submission to the University in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense normally required. Prerequisite: graduate standing.

Maximum of 8 units per student. (See also, "University Thesis Writing Guide" available in WA 859.)

6999 Issues in Speech Pathology and Audiology (4)
Readings, discussion, and research on contemporary and/or significant issues in speech pathology and audiology. May be repeated for credit when content varies.



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Department Information

M.A. in Geography

Geography

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Department of Geography and Environmental Studies
College of Arts, Letters, and Social Sciences
Office: Robinson Hall 220
Phone: (510) 885-3193, 885-3193, FAX: (510) 885-2353

Professor Emeritus: Herbert M. Eder

Professors: David J. Larson (Chair), Scott Stine

Associate Professors: Karina Garbesi, Michael Lee, Gang Li, David Woo

Lecturer: Ellen L. Woodard

Graduate Coordinator: David Woo

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

Graduate study is offered leading to the degree of Master of Arts in Geography, with a choice of ten specialties: biogeography, cartography, environmental resource management, economic geography, regional planning, historical geography, geographic information systems (G.I.S.), physical geography, regional geography, and urban geography. The seminars focus on intensive, directed readings interspersed with discussions of the content, principles, methods, and techniques of the selected topic or theme. The intent is to develop a subject to its research frontiers emphasizing an awareness of problems and their significance for the discipline. Seminars are accompanied or followed by directed research yielding oral and written reports. Their purpose is to expand beyond the recognition of problems to the guided investigation of a topic or theme. The seminars are supplemented by independent study and ultimately by research culminating in a University Thesis or a Departmental Thesis or a Project that allows and motivates the student to advance further in a chosen specialty. The candidate is responsible for the fulfillment of the specific requirements of the department stated below.

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate and Post-baccalaureate Studies chapter of this catalog. These requirements include the 32-unit residence requirement, the five-year rule on the currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills requirement.

Admission

"Conditionally Classified Graduate" Status

Admission to this university in some category of post-baccalaureate status is the prerequisite for entry into the graduate program. Graduate courses in Geography are open to students who have completed the prerequisites and/or obtained the consent of the instructor. Credit may be given for equivalent courses taken at other accredited institutions; undergraduate deficiencies may be corrected while the student is in "Conditionally Classified Graduate" status.

A student must complete the following requirements to be admitted to the program with "Conditionally Classified Graduate" status:

1. File the CSU "Graduate and Post-baccalaureate Application," which is available from the Admissions Office. The student should also submit two copies each of transcripts from all universities or colleges attended and a departmental application (available from the department office) as a declaration of intent to pursue the M.A. degree program in Geography.
2. Have a 2.5 or higher GPA in all undergraduate work; and have a 3.0 or higher GPA in all upper division and graduate work in Geography prior to request for entry into the program.

Note: If a student has earned less than a 2.5 grade point average in all undergraduate work, or if (s)he has less than a 3.0 grade point average in upper division and graduate courses in Geography, (s)he must continue coursework in "Unclassified Post-baccalaureate" status until (s)he has removed the deficiencies and demonstrated his/her ability to meet the requirements of the graduate program.

3. The Graduate Record Examination (GRE) Aptitude Test is not required, but students are strongly encouraged to take this test and submit their scores to the Geography Department prior to application for admission to the M.A. degree program in Geography.

"Classified Graduate" Status

A student must complete the following requirements to be admitted to the program with "Classified Graduate" status:

1. Complete the following undergraduate courses or their equivalents, or demonstrate a competency by examination in:

GEOG 3120 Climatic Change (4) or GEOL 3110 Principles of Geomorphology (4) or GEOG 3115 Physical Landscape Analysis (4)

GEOG 3410 Air-Photo Interpretation (4)
GEOG 3600 Cartographic Principles and Graphic
Communication (4)
GEOG 3000-level course in applied field studies, with consent
of advisor (4)
GEOG 4000-level course on the growth of geographic
thought, with consent of advisor (4)

Note: Up to 10 units of undergraduate courses may be taken as
electives applicable toward the 45 units for the M.A. degree.

2. File an intended program of study with the departmental
Graduate Advisor;
3. Complete the upper division course prerequisites for the
seminars in the intended program of studies;
4. Complete at least 12 quarter units considered applicable by the
department toward the M.A. degree requirements, including at
least 3 quarter units of graduate-level (6000 series) work in
residence at this university;
5. Be recommended for "Classified Graduate" status by the
department; and
6. Fulfill the University Writing Skills requirement.

Maintenance of "Classified Graduate" Status

To maintain "Classified Graduate" status a student must maintain
a 3.0 or higher GPA must be attained on all work taken in the
approved program of study, whether at Cal State Hayward or at
any other college or university. Only courses with grades of "C"
and higher are acceptable for courses applicable to degree
requirements in Geography.

If a candidate's GPA drops below 3.0, the department will notify
the Graduate Dean to place the student in "Conditionally
Classified Graduate" status and the university will place the
student on Academic Probation until (s)he has remedied his or her
deficiencies and has been recommended by the department for
return to "Classified Graduate" status. Failure by a student to
return to "Classified Graduate" status in two additional quarters of
study (or following completion of 15 additional quarter units) shall
result in his or her being academically disqualified from the
departmental program.

Advancement to Candidacy

Admission to "Classified Graduate" status does not imply that a
student will be Advanced to Candidacy for the M.A. degree. A
student with "Classified Graduate" status will be Advanced to
Candidacy for the M.A. degree when (s)he has satisfied the
following requirements:

1. Demonstrated proficiency in either a modern foreign language,
or in statistical methods as they apply to geography, or in
mathematics.
 - a. Languages which are acceptable without special

arrangements are Chinese, French, German, Japanese, Russian, Spanish, and Swedish. Any other modern foreign language may be substituted, provided the thesis advisor, the student, and the graduate advisor agree that the language is an integral part of the projected program of study for the M.A. degree.

"Proficiency" in a foreign language means the completion (with a grade point average of 2.5 or better) of two years of college-level instruction in the language or demonstrating, by written examination, a reading competency at this level.

- b. Statistical methods may be used to satisfy this requirement provided the thesis advisor, the student, and the graduate advisor agree that such methods form an integral part of the projected program of study for the M.A. degree.

"Proficiency" in statistical methods is defined as satisfactory completion of the equivalent of:

STAT 1000 Elements of Probability and Statistics and STAT 3010 Statistical Methods in the Social Sciences, plus one 4000-level statistics course (STAT 4601 recommended). The student will also be required to demonstrate by examination the ability to solve a geographic problem using the computer.

- c. Mathematics may be used to satisfy this requirement provided the thesis advisor, the student, and the graduate advisor agree.

"Proficiency" in mathematics is defined as satisfactory completion of the equivalent of Trigonometry and Analytic Geometry (MATH 1300); Calculus I, II, III (MATH 1304, 1305, 2304); and either Linear Algebra (MATH 2101) or one other upper division mathematics course, except MATH 4021, 4022, 4023.

2. Declared an intention to complete either a thesis or a project
3. Been recommended for Advancement to Candidacy by the department.

Degree Requirements

To be eligible for the M.A. degree in Geography a student must:

1. have been Advanced to Candidacy;
2. have completed 45 quarter units of graduate work of which:
 - a. all must have been earned within the five years just preceding the completion of the requirements for the degree;
 - b. not fewer than 32 units must have been completed in residence;
 - c. not fewer than 23 units must have been in geography courses in the 6000 series, including the thesis or project;
 - d. not more than 6 units may have been for a University Thesis

(GEOG 6910) nor more than 4 for a project (GEOG 6899);
and

- e. not more than 13 units may have been for extension and/or transfer course credit, as approved by the department;
3. have completed a satisfactory program of study as approved by the department, to include:
 - a. GEOG 6010 Seminar on Research Theory and Philosophy of Geography (4)
 - b. four graduate seminars in geography (12)
(*Note:* GEOG 6850 Geographic Internship and/or GEOG 6900 Independent Study may not be used to meet this requirement.)
 - c. elective courses (graduate or upper division) in geography taken as a graduate student (12-15)
 - d. elective courses (graduate or upper division) outside of geography in one or more closely related fields (8-13)

(*Note:* A student with a baccalaureate degree in a closely related field may take these elective courses in geography.)
 - e. a University Thesis or Departmental Thesis or Project (4-6)
4. have obtained a grade point average of 3.0 or higher in
 - a. all post-baccalaureate units undertaken;
 - b. all 45 units offered as satisfying the requirements of the M.A. degree program;
5. have been recommended for the M.A. degree in Geography by the department.
6. have satisfied the University Writing Skills requirement.

Upper Division Courses Acceptable for the Master's Degree

All upper division Geography courses are acceptable for the M.A. degree program.

Graduate Courses

The course prefix for the following courses is GEOG.

- 6010** Seminar on Research Theory and Philosophy of Geography (4)
A search for common theory and philosophy in modern geography. Focus on proposal development with the intent of giving graduate students a framework for their thesis or project research development. Prerequisite: GEOG 4000-level course on the growth of geographic thought, with consent of instructor.
- 6100** Seminar in Physical Geography (3)
Selected topics and directed research in physical

geography based upon intensive readings, group discussion, and oral and written reports. Prerequisite: two upper division courses in physical geography (3100-4100 series), or equivalent, or consent of instructor.

- 6400** Seminar in Historical Geography (3)
Selected topics and directed research in historical geography based upon intensive readings, group discussion, and oral and written reports. Prerequisite: GEOG 3360 or two upper division courses in history or consent of instructor.
- 6500** Seminar in Regional Geography (3)
Selected regions of the world based upon directed research, group discussion, and oral and written reports. Prerequisites: two regional courses in geography or consent of instructor.
- 6660** Seminar in Human Impacts on the Natural Environment (3)
Selected topics in human/environment relationships and their effects upon landscape change and environmental problems. Prerequisites: one of ENVT 4100; GEOG 4320, 4330, 4350; or consent of instructor.
- 6750** Seminar in Environmental Planning (3)
Selected topics and processes used in environmental planning based upon application of environmental knowledge and skills in problem solving. Prerequisite: ENVT 4100 or consent of instructor.
- 6850** Geographic Internship (4-6)
Individual students are assigned to public, private, or volunteer agencies and are supervised jointly by agency personnel and the course instructor. Students exchange experiences in group session and are subject to review by instructor. Prerequisite: "Classified Graduate" status. (F, W, Sp)
- 6899** Project (2)
Development of an original product which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their formats. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense may be required. Prerequisite: graduate status. Maximum of 4 units per student. (A)
- 6900** Independent Study (1-4)
- 6909** Departmental Thesis (1-5)
Development and writing of a research paper for submission to the department which specifies its format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense normally required. Prerequisite: graduate status. Maximum of 5 units per student. (A)
- 6910** University Thesis (1-6)
Development and writing of a formal research paper for

submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense normally required. Prerequisite: graduate status. Maximum of 6 units per student. (See also, "University Thesis Writing Guide," available in WA 859.) (A)

6999 Issues in Geography (4)
Readings, discussion, and research on contemporary and/or significant issues in geography. May be repeated for credit when content varies.



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Department Information

M.S. in Statistics

Statistics

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Department of Statistics
School of Science
Office: North Science 229
Phone: (510) 885-3435

Professors: Dean H. Fearn, Elliott Nebenzahl, Julia A. Norton
(Chair), Michael L. Orkin, Bruce E. Trumbo

Assistant Professor: Eric A. Suess

Lecturers: Ward A. Rodriguez, Clyde N. Sugahara

Graduate Coordinators: Bruce E. Trumbo, Eric A. Suess

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

The Department of Statistics offers graduate study leading to the degree Master of Science in Statistics. The program is flexible in order to serve the needs of students with varying backgrounds in Statistics and Mathematics and with different career objectives. The program includes options in actuarial statistics, biostatistics, computational statistics, and mathematical statistics. All students, however, are expected to master a wide variety of applied statistical and probabilistic techniques and the theoretical foundations on which these techniques rest. They are expected to be familiar with recent developments and to be able to use the statistical literature to learn new techniques and theories throughout their professional careers. In addition to the general requirements stated elsewhere in this catalog, a student must satisfy the departmental requirements stated in the following paragraphs.

Admission Requirements

1. A baccalaureate degree or equivalent.
2. Differential and Integral Calculus, including multiple integration and infinite series.

3. Departmental approval.
4. For "Classified Graduate" status, fulfillment of the University Writing Skills Requirement.

In addition to the above minimal requirements for admission, if students have some of the following background they will be at an advantage both as to selection for the program and optimal progress toward the degree if admitted:

- basic statistics and probability at the level of STAT 3401, 3502 (or beyond)
- additional mathematics at the level of MATH 2101 and 3100 or 3300 (or beyond)
- knowledge of a computer programming language
- experience in a setting where studies or experiments are conducted for the collection of data.

Advancement to Candidacy Requirements

1. Completion of at least 15 quarter units of approved work beyond the baccalaureate, with an average of "B" (3.0) or higher.
2. Departmental approval. (May be contingent upon a written or oral qualifying examination.)

Degree Requirements

Successful completion of the following unit, grade, and course requirements.

A. Unit and Grade Requirements

The M.S. program consists of at least 45 quarter units of approved upper division and graduate work. Of these, at least 29 units must be approved graduate (6000 level) courses. All work applied toward the 45 units must be at an average grade of "B" (3.0) or higher, and no graduate-level required course may be at a grade below "B."

B. Course Requirements (45 units)

Elective courses referred to in section # 4 below must be approved in writing in advance by an advisor.

1. *Required Upper Division Courses (16 units)*

MATH 3100 Linear Algebra (4) or MATH 3300 Analysis I (4)
STAT 3402 Introduction to Probability Theory II (4)
STAT 3503 Statistical Inference II (4)
STAT 4401 Introduction to Stochastic Processes (4)

Students entering the program with acceptable credit for any of these courses (or equivalents) will select additional courses from approved graduate-level coursework, section # 4 below, or courses from other departments designated as acceptable by a graduate advisor.

2. *Required Graduate-level Courses (17 units)*

STAT 6401 Advanced Probability I (4)

STAT 6501, 6502 Mathematical Statistics I and II (4, 4)
STAT 6509 Theory and Application of Regression (4)
STAT 6898 Cooperative Education (1-4) or STAT 6895
Practicum in Statistics (1-4)

3. *Option (12 units)*

Select one of the following options:

a. *Actuarial Statistics (12 units)*

Graduate coursework in the College of Business and Economics relevant to insurance, finance, and operations research is recommended. MATH 3100 is also recommended. Areas of interest include stochastic modeling, force of mortality, life tables, and other topics from actuarial mathematics.

Required Courses:

STAT 6402 Advanced Probability II (4)

One approved 6000-level course from the College of Business and Economics (4)

One course from STAT 6851-6859 Selected Topics in Actuarial and Decision Science (4)

b. *Biostatistics (12 units)*

Relevant coursework in biology should be undertaken at least at the undergraduate level, particularly in genetics. Advanced coursework in biological sciences is recommended. Topics of interest include logistic regression, clinical trials, survival analysis, and other topics from biostatistics.

Required Courses:

One approved upper-division or graduate-level course in biological sciences (4) (graduate-level preferred)

Two courses from STAT 6841-6849 Selected Topics in Biostatistics (8) or one from STAT 6841-6849 Selected Topics in Biostatistics and one from STAT 6860-6864 Selected Topics in Graduate Probability and Statistics (8)

c. *Computational Statistics (12 Units)*

Advanced coursework in applied mathematics and computer science is recommended. Topics include Monte Carlo simulations, Markov Chains, Monte Carlo methods, bootstrapping, and other computationally intensive methods.

Required Courses:

STAT 6515 Advanced Multivariate Analysis (4) or STAT 6601 Advanced Statistical Computing (4)

One approved upper-division or graduate-level course in computer science (4) (graduate-level preferred)

One approved course from STAT 6860-6864 Selected Topics in Graduate Probability and Statistics (4)

d. *Mathematical Statistics (12 units)*

Advanced coursework in mathematics is strongly recommended, particularly measure theory and real and complex analysis.

Required Courses:

STAT 6402 Advanced Probability II (4)

Two approved upper-division or graduate-level courses in mathematics. Ordinarily, these would be at the 6000-level. (8)

e. Theoretical and Applied Statistics (12 units)

Advanced coursework in mathematics is recommended. Topics include a broad background in the theory of probability and statistics and in the methodology of statistics.

Required Courses:

Three graduate electives in statistics, approved by a graduate advisor; at least two of these courses must relate to methodology. (12)

4. Graduate-level Elective Courses (0-16 units)

Additional graduate-level courses, if needed, for a total of at least 29 units at the 6000-level and 45 units overall are required. A graduate advisor may approve for inclusion in a student's program any 6000-level Statistics course or any course outside the department. A maximum of one course from outside the department may be counted in the 29-unit requirement.

Comprehensive Examination

Successful completion of a departmental examination is required. This written examination will cover the contents of the courses in the candidate's approved program. Other material may be included, the general nature of which will be specified in advance. The examination will generally be given only in the Fall and Spring quarters, and will cover both applied and theoretical topics.

In each quarter of offering, the department Chair will appoint three or more members of the graduate faculty to administer the examination. Each student will generally take the comprehensive examination in the quarter s(he) intends to graduate or in the preceding quarter, after consulting with the graduate advisor. Students enrolled in the actuarial statistics option may substitute a passing grade on an approved national actuarial exam for a designated portion of the comprehensive examination. The examination committee is the final departmental authority in deciding eligibility to take the examination.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate and Post-baccalaureate Studies chapter in the graduate section of this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills requirement.

Certificate Programs

Applied Statistics

For a description of the Certificate in Applied Statistics program, see the undergraduate Statistics chapter.

Mathematical Statistics

The Certificate in Mathematical Statistics is designed to enhance a student's understanding of theoretical statistics and probability in preparation for employment in the engineering, information science, and technology sectors. The certificate also prepares students for further graduate study.

The minimum required GPA for the awarding of the certificate is 3.0. Consult an advisor in the Department of Statistics for clarification and interpretation of requirements. The certificate consists of 16 graduate-level units, plus any necessary prerequisites. All required courses are cross-listed with Mathematics.

Prerequisites

STAT 6401 requires MATH 3300 and STAT 4401

STAT 6501 requires MATH 3300 and STAT 3402

STAT 6510 requires MATH 2101 and STAT 3503

A. Core Courses (12 units)

STAT 6401 Advanced Probability I (4)

STAT 6501 Mathematical Statistics I (4)

STAT 6502 Mathematical Statistics II (4)

B. Electives (4 units)

Choose at least one course from the following (*advisor approval required*):

STAT 6402 Advanced Probability II (4)

STAT 6510 Analysis of Variance (4)

STAT 6860-69 Selected Topics in Probability and Statistics (4)

Post-baccalaureate Courses

The course prefix for the following courses is STAT.

5300 Quality Engineering (4)
(See ENGR 5300 for course description.)

5601 Introductory Statistics and Probability for Science and Engineering (4)
Basic probability rules (independence, Bayes' Theorem), distributions (binomial, Poisson, normal, exponential), reliability. Descriptive, inferential statistics (control charts, estimation, hypothesis testing: one, two samples), correlation, regression. Emphasizes: computer analysis, simulation; science, engineering applications. Not open to those with credit for STAT/ENGR/MATH 3502. Cross-listed with ENGR 5601. Prerequisite: MATH 1305 or departmental approval.

Graduate Courses

The course prefix for the following courses is STAT.

- 6010** Applied Analysis of Variance (4)
Elementary analysis of variance including multiple comparisons. Factorial analysis of variance, interactions, repeated measures designs, random effects designs. Computer-facilitated analyses. Analysis of real data and written report required. Not for graduate credit in Statistics M.S. degree. Prerequisites: STAT 3010, 3031, or 3502. (Sp)
- 6011** Statistical Modeling for Management and Economics (4)
Concepts in statistics for management and economics. Probability and statistical models. Rare events, waiting time, qualitative and quantitative models. Bayes theorem. Estimation, inference. Linear and nonlinear models. Emphasis on computer estimation of models with statistical analysis of errors and attention to model assumptions. Restricted to post-baccalaureate students. May not be used for credit toward the M.S. in Mathematics or Statistics. Co-requisite: MATH 1820. (Y)
- 6020** Statistical Methods in Clinical Trials (4)
Experimental designs, statistical analyses, and clinical-scientific-regulatory issues common to clinical trials research. Includes writing analysis plan, conducting statistical analysis meeting constraints of regulatory agencies, reporting results, and data monitoring. Not for graduate credit in Statistics M.S. degree. Prerequisites: STAT 3503, 4000, or 6010. (Alt. Y)
- 6031** Introduction to Statistics for Bioinformatics (4)
Statistical methods for Bioinformatics. Topics chosen from: applying statistical techniques to explore large data sets, Bayesian statistics, stochastic processes, applied probability models, spatial segregation and clustering techniques, differential equations, discriminant analysis for understanding and manipulation of Genome. Not for graduate credit in Statistics M.S. degree. Prerequisites: MATH 1305 and STAT 3031. (W)
- 6300** Applied Quality Assurance (4)
(See ENGR 6300 for course description.)
- 6401,** Advanced Probability I, II (4 units each)
6402 Advanced treatment of probability theory and its applications. May include: conditioning, generating/characteristic functions, modes of convergence, limit theorems, renewal theory, Markov processes, combinatorial techniques, measure and integration. Cross-listed with MATH 6401, 6402. Prerequisites: MATH 3300 and either STAT 3402 or 4401. (6401: F; 6402: W)
- 6501,** Mathematical Statistics I, II (4 units each)
6502 Theory of point and interval estimation and hypothesis testing, from the Neyman-Pearson point of view. May include: decision theory, non-parametric inference, sequential analysis, multivariate analysis, robustness,

Bayesian methods, computer intensive methods. Cross-listed with MATH 6501, 6502. Prerequisites: MATH 3300, STAT 3402. (6501: W; 6502: Sp)

- 6509** Theory and Application of Regression (4)
Theory of least squares in model fitting. Computational methods in regression, including variable construction, ANOVA and ANCOVA. Model assessment, graphical techniques and assumption checking. Computer assisted analysis. Report writing. Prerequisite or co-requisite: STAT 3503. (Sp)
- 6510** Analysis of Variance (4)
The theory and application of the general linear model, the analysis of variance and covariance, application of generalized inverses and decomposition theorems from linear algebra. Cross-listed with MATH 6510. Prerequisites: MATH 2101, STAT 3503. (Alt. Y)
- 6515** Advanced Multivariate Analysis (4)
Advanced, computer intensive applications of multivariate analysis. Applications of linear algebra. Topics may include ANOVA, canonical correlation, discriminant functions, factor/cluster/spatial analysis. Emphasis on actual data, report writing. Prerequisites: STAT 3503, 4950; MATH 2101. (Alt. Y)
- 6601** Advanced Statistical Computing (4)
Implementation of computationally advanced statistical methods. Topics may include: bootstrap, EM algorithm, Bayesian methods, Markov Chain, Monte Carlo, neural networks, recent methodological advances. Prerequisites: senior or graduate standing, an upper division STAT course, MATH 2304. (Alt. Y)
- 6835** Statistical Pattern Recognition (4)
(See CS 6835 for course description.)
- 6841-** Selected Topics in Biostatistics (2-4)
6849 Methods in biostatistics extending beyond regular courses. Variable content to be specified at time of offering. May repeated for credit up to a maximum of 4 units when content varies. Prerequisites: STAT 3503, graduate standing, advancement to candidacy, and approval of a graduate advisor.
- 6851-** Selected Topics in Actuarial and Decision
6859 Science (2-4)
Methods in actuarial and decision science extending beyond regular courses. Variable content to be specified at time of offering. May repeated for credit up to a maximum of 4 units when content varies. Prerequisite: STAT 3402 or 4401.
- 6860-** Selected Topics in Graduate Probability and
6864 Statistics (2-4 units each)
Probability and/or Statistics extending beyond regular courses. Variable content to be specified at time of offering. May be repeated for credit. Prerequisites: graduate standing and consent of instructor. (Y)

- 6865 Mathematical Modeling (4)
(See MATH 6865 for course description.)
- 6870-6879 Seminar in Probability and Statistics (2-4 units each)
An intensive study of a selected topic in probability and/or statistics from current literature emphasizing student participation. May be repeated for credit. Prerequisites: graduate standing and consent of instructor. (Y)
- 6895 Practicum in Statistics (1-4)
Supervised experience tutoring, grading, or consulting through the Statistics Department Consulting Laboratory. Students complete academic assignments integrated with on- or off-campus paid or volunteer activities. May be repeated for credit up to a maximum of 4 units. Prerequisites: advancement to candidacy, approval of the graduate advisor. Five to twenty hrs. act.
- 6898 Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 4 units. A maximum of 4 units will be accepted toward the M.S. degree in Statistics. Prerequisites: at least 3.0 GPA and departmental approval of activity.
- 6900 Independent Study (1-4)
- 6999 Issues in Statistics (4)
Readings, discussion, and research on contemporary and/or significant issues in statistics. May be repeated for credit when content varies.



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Department Information

M.S. in Geology

Geology

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Department of Geological Sciences
College of Science
Office: North Science 329
Phone: (510) 885-3486

Professor: Detlef A. Warnke (Chair)

Associate Professor: Jeffery C. Seitz,

Assistant Professors: Mitchell Craig, Luther M. Strayer

Graduate Coordinator: Detlef A. Warnke

Please consult the 2006-2007 online catalog for any changes that may occur.

Faculty: Research Interests

Mitchell S. Craig, Ph.D., 1990, Georgia Institute of Technology;
geophysics, sedimentology

Jeffery C. Seitz, Ph.D., 1994, Virginia Polytechnic Institute and
State University; geochemistry, igneous petrology, education and
policy

Luther M. Strayer, Ph.D., 1998, University of Minnesota,
Minneapolis; structural geology, tectonics, Bay Area earthquake
geology, field geology

Detlef A. Warnke, Ph.D., 1965, University of Southern California;
oceanography, marine geology, geomorphology

Program Description

The Department of Geological Sciences offers graduate study leading to the Master of Science degree in Geology. This program is designed to prepare students for: (1) employment as geologists in government (city, county, regional, state, and federal) and private enterprise (engineering and geotechnical firms, mining and oil companies, etc.); (2) research at the doctoral level in various aspects of geology, geochemistry, geophysics, and oceanography, depending on their undergraduate background; and (3) the Community College Instructor Credential (the master's degree requirement). The department also provides continuing education

for professional geologists, engineers, planners, etc.

To serve graduate students who are employed during the day, all graduate courses in the Department of Geological Sciences are offered in the evenings and on weekends. In addition to regular catalog courses, recent graduate seminars and advanced topics courses have dealt with such subjects as computer applications in geology, rock mechanics, geothermal exploration, mineral resource evaluation, isotope geochemistry, marine geology, sedimentary models, tectonics and sedimentation. Students registered at Cal State Hayward may enrich their graduate programs by enrolling in courses through cross-registration at the University of California, Berkeley. Additional facilities and part-time employment may be secured through Co-op programs, the Lawrence Berkeley and Livermore National Laboratories, and the U.S. Geological Survey in Menlo Park.

Candidates for this degree must be prepared to engage in significant individual research. Lately, student research in this department has included such topics as contaminant hydrogeology, areal geology and slope stability, engineering geology, glacial geology, marine and geothermal geochemistry, mineral deposits, volcanic petrology, neotectonics, and fluvial and marine sedimentology. It is very important that prospective candidates determine whether their research interests coincide with those of the faculty members before applying. Interested persons are invited to contact the department directly for more details on the program and the availability of financial assistance. Qualifications and advancement in the graduate program are decided by the department Graduate Coordinator with the concurrence of the department faculty.

Environmental Geology Option

Students who complete a combination of appropriate courses in the Department of Geological Sciences and other departments and who complete an environmentally related thesis, will be allowed to receive the M.S. degree with the Environmental Geology Option. A list of appropriate courses for the option must be developed in consultation with the department faculty.

Admission

With the qualifications listed under "Conditionally Classified Graduate" status below, the M.S. degree program is open to any student in possession of a baccalaureate degree in Geology with coursework equivalent at least to the core requirements for the B.S. degree in Geology at Cal State Hayward. Students who do not meet those requirements will be considered on an individual basis and accepted only after approval by a majority of regular faculty members.

Applicants must have a GPA of at least 2.5 in all undergraduate work and at least 2.75 in all geology courses. Any undergraduate geology course with a "D" grade will have to be repeated. Students transferring from another graduate program must have a GPA of at least 3.0 in all graduate geology courses. (No more than 13 units may be transferred.)

Applications must be accompanied by two letters of recommendation from faculty members or work supervisors.

Conditionally Classified Graduate Status

Students who are otherwise qualified but have course deficiencies and/or have not satisfied the University Writing Skills requirement, will be accepted as "Conditionally Classified Graduate" students. Course deficiencies may be removed by enrolling on a "CR/NC" basis. (Students who wish to develop their writing skills should enroll in English 3000 or 3001.)

Classified Graduate Status

Students who fulfill all the requirements for admission to the program will be accorded "Classified Graduate" status once they have satisfied the University Writing Skills requirement. All deficiencies have to be removed, and the University Writing Skills requirement satisfied no later than the completion of 20 units of coursework applicable to the degree or the student will be disqualified.

Selection of Thesis/Project or Academic Advisor

Once "Classified Graduate" status has been attained, each student will be assigned a thesis or project advisor by the department chair after consultation with the student and the graduate coordinator. The faculty member chosen also will act as academic advisor.

Advancement to Candidacy

In order to be Advanced to Candidacy, the student must have:

1. been accorded "Classified Graduate" status
2. been assigned a thesis or graduate project advisor; and
3. submitted to the department an acceptable Thesis or graduate Project Prospectus describing the thesis research or graduate project work to be attempted (guidelines for preparation of the Prospectus may be obtained from the department office). The research topic must be approved in advance by the advisor.

Degree Requirements

1. Advancement to Candidacy
2. Satisfaction of university requirements described in the Graduate and Post-Baccalaureate Studies chapter at the beginning of the graduate section of this catalog. These include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills requirement
3. Completion of the study plan outlined below (45 units):
 - Two Graduate Seminars (GEOL 6811) (2, 2)
 - University Thesis (GEOL 6910) (9) or Project (GEOL 6899) (2-4)
 - Geology Graduate Courses (20-27)
 - Upper division/graduate electives in Geology and related fields (12)
4. Completion and defense of the University Thesis or completion

(and defense, if required) of the graduate Project.

Curricular Requirements

A. Graduate Geology Course Requirements

All students are required to take two graduate seminars (GEOL 6811), each 2 units. In addition, any combination of graduate geology courses and additional seminars except GEOL 6420 (Internship), GEOL 6900 (Independent Study), and GEOL 6910 (University Thesis) or GEOL 6899 (Project) must be taken for a total of 20-27 units.

B. Elective Course Requirement

Twelve units must be completed in courses selected from a list of approved upper division and graduate courses in Geology and related disciplines which is available from the department office; at least 4 units must be in Geology courses.

C. Basic University Requirements

These include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills requirement.

Students cannot receive credit toward the master's degree for:

- Courses taken to remove deficiencies
- Independent Study, GEOL 6900, in excess of 4 units
- Internship, GEOL 6420, in excess of 4 units
- University Thesis (GEOL 6910) in excess of 9 units, or Project (GEOL 6899) in excess of 4 units.
- Cooperative Education (GEOL 3898)

University Thesis

Requirements: Students must submit to the Thesis Committee, and defend orally, an acceptable University Thesis. The University Thesis is a formal paper reporting the results of original research. This research normally involves field and/or laboratory investigation. The thesis is submitted to the university in the bound format specified in the "University Thesis Writing Guide." A minimum of two copies of the thesis must be submitted to the Thesis Office (WA 859); one copy will be filed in the Department Office. The Thesis Committee comprises the faculty thesis advisor plus either (1) two other faculty members from the Department of Geological Sciences or other appropriate Cal State Hayward faculty, or (2) one other faculty member from the department and one or more qualified individuals from outside the university.

Units Required: GEOL 6910, University Thesis, for a total of 9 units; students may not register for more than 50% of the total units prior to starting the writing of their thesis.

Graduate Project

Requirements: Project students must submit to the department an abstract and acceptable graduate project (manuscript, map, computer model, education module). An oral defense may be required.

Units Required: GEOL 6899, Project, for a total of 2-4 units.

Other Requirements

Graduate Courses

Students filing for graduation are expected to know the procedures described in this catalog. (See "How to Apply for Graduation" in the Baccalaureate Degree Requirements chapter.)

Geology Courses

The course prefix for the following courses is GEOL.

- 6300** Quaternary Geology (4)
Evolution of climate and landforms of the Quaternary. Emphasis on interpretation of sedimentary deposits and erosional landforms. Techniques for determination of age relationships. Prerequisite: graduate standing in geology, geography, or permission of instructor.
- 6320** Groundwater (4)
Groundwater resource evaluation methods. Mathematical development of multi-dimensional flow equations. Introduction to computer models and numerical simulation to predict aquifer yields. Inorganic and organic groundwater contamination. Contamination transport processes. Three hrs. lect., 3 hrs. lab. and/or field trips. (Sp)
- 6420** Internship (1-4)
Professional experience for at least one quarter with a public or private organization involved in geologic studies, summarized in a written report. Credit/No Credit grading only. Prerequisites: "Classified Graduate" status and advisor's approval. No more than 4 units can be applied toward the master's degree. (A)
- 6620** Advanced Topics in Geology (4)
Selected advanced topics in geology. May be repeated with consent of instructor. Prerequisite: graduate standing or consent of instructor. Four hrs. lect. (Y)
- 6621** Advanced Topics in Geology with Laboratory (4)
Selected advanced topics in geology. May be repeated with consent of instructor. Prerequisite: graduate standing or consent of instructor. Three hrs. lect., 3 hrs. lab. (Y)
- 6811** Graduate Seminar (2)
Investigation of a selected geologic topic. May be repeated for credit with consent of instructor. Prerequisite: graduate standing or consent of instructor. Two hrs. seminar. (Y)
- 6899** Project (2)
Development of an original product (e.g., manuscript, education module, field map, computer model) that is summarized in a written abstract. Both project and abstract are submitted to the department, which specifies their format. Supervised by a departmental committee. Oral defense may be required. May be repeated for credit up to a maximum of 4 units. Prerequisite: graduate status and 32 units of coursework applicable to the master's degree.
- 6900** Independent Study (1-4)
CR/NC grading only. No more than 4 units may be applied

toward the master's degree. (A)

- 6910** University Thesis (1-9)
Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least two of whom must be Cal State Hayward faculty members. Oral defense required. CR/NC grading only. Prerequisites: "Classified Graduate" status and advisor's approval. Maximum of 9 units per student. (See also "University Thesis Writing Guide," available in WA 859.) (A)
- 6999** Issues in Geological Sciences (4)
Readings, discussion, and research on contemporary and/or significant issues in geological sciences. May be repeated for credit when content varies.

Marine Science Courses

(See the graduate [Marine Science chapter](#) for descriptions of the following courses.)

- M SC 6202 Oceanographic Instrumentation (6)
- M SC 6204 Sampling and Experimental Design (6)
- M SC 6242 Plate Tectonics (4.5)
- M SC 6246 Geology of the Monterey Bay Region (6)
- M SC 6248 Marine Benthic Habitat Techniques (6)
- M SC 6261 Ocean Circulation and Mixing (6)
- M SC 6262 Satellite Oceanography (6)
- M SC 6263 Application of Computers in Oceanography (6)
- M SC 6274 Advanced Topics in Oceanography (1.5-6)



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Teacher Education

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Department Information

Department of Teacher Education
College of Education and Allied Studies
Office: Art and Education Bldg. 242
Phone: (510) 885-3027, FAX: (510) 885-4632

Professor Emerita: Margaret C. Desmond

Associate Professor Emerita: JoAnn Aiello Hatchman

Professors: Antonio Andrade, Joan D. Davenport, Phillip E. Duren
Jean L. Easterly, Bijan Gillani, James L. Shanker, David R.
Stronck, James Zarrillo

Associate Professors: Valerie Helgren-Lempesis, Lettie Ramirez

Assistant Professors: Li-Ling Chen, Denise Fleming, Shira
Lubliner, James M. Mitchell, David A. Nickles, Catherine F. Reed,
Linda Smetana, Craig Wilson

Lecturers: Gary Amado, John M. Chavez, John Dunford, Harold L.
Erickson, Joan C. Ernst, Leo J. Hinkel, Sybil M. Hoffman, Alice
Kam, Kenneth Kaufman, R. Arthur Lopez, Elizabeth M. McCarthy,
Shannon Merrill, Ethel M. Murphy, Norma Quan, Suzanne
Sullivan, Gilbert C. Yee

Graduate Coordinator: James M. Mitchell

*Please consult the 2006-2007 online catalog for any changes that
may occur.*

General Information

The Department of Teacher Education offers post-baccalaureate and graduate programs to prepare teachers who are committed to improving school practices for California's diverse student populations and who can model such practices in their own classrooms.

Career Opportunities

The demand is rapidly increasing for teachers at all grade levels and in all subject matter areas. An expanding diverse student population, combined with the need to replace retiring teachers over the next several years, indicates a consistent job market. The current public interest in raising salaries and improving the teaching environment also creates more attractive career possibilities.

Faculty

The Department of Teacher Education faculty is comprised of professors committed to preparing teachers and other educational professionals to be effective in California's diverse schools. The faculty have recognized expertise and are active in the professional discipline of Teacher Education. They are supplemented by a select group of lecturers drawn from respected universities and public schools in the Bay Area.

Programs Offered

The Department of Teacher Education offers Multiple and Single Subject Teaching Credential Programs, a Master of Science Degree in Education, a Reading Specialist Credential Program, a Children's Literature Certificate Program, and a Cross-cultural, Language and Academic Development Certificate Program (CLAD).

Note: The Multiple and Single Subject Programs, the Reading Specialist Program, and the CLAD Certificate Program are accredited by the Commission on Teacher Credentialing (CTC) and the National Council for the Accreditation of Teacher Education (NCATE).

Option Areas

The Department of Teacher Education offers a Master of Science in Education with two Options: Curriculum, including seven patterns, and Reading Instruction.

Special Features

Credential Program Teams: All credential candidates become part of designated teams, each consisting of approximately 35 members. The team stays together for the full credential program, providing support and identity.

Field-Centered Credential Program Placements

Much of the program is conducted in public school settings. Student teaching/paid teaching occurs for three quarters, thereby integrating credential classes with real-life teaching experiences. Student teachers will be assigned to teaching experiences with children/young adults of racial, ethnic, or cultural backgrounds different from themselves.

Selection of Public Schools for Credential Programs

Selection of public schools for student teaching placement is based on the willingness of the schools' personnel to become part of a team and on evidence of their commitment to educational improvement.

Clear Credential Classes

State required Clear Credential classes for the California Professional Clear Credential are offered quarterly, at both the Hayward and Contra Costa campuses, during late afternoons or

early evenings. The three clear credential classes are: (1) T ED 5002 Advanced Study of Health Education; (2) T ED 5120 Computer-Based Technology in the Classroom II (4); and T ED 5500 Teaching Special Populations in General Education Settings (4). These classes are open to regular Cal State Hayward matriculated students and Open University students. Cardiac Pulmonary Resuscitation (CPR), is an additional state requirements for the Professional Clear Credential and can be taken at Cal State Hayward (KPE 1650), the Red Cross, or most hospitals.

Scheduling and Location of Master of Science, Specialist Credential, and Certificate Offerings
Courses leading to the Master of Science in Education, Reading Specialist Credential, and Certificate Programs are offered on the Hayward and Contra Costa campuses. A student may combine courses at the two locations. Most graduate classes are offered in the late afternoon and evening, except in summer quarter when both day and evening classes are scheduled.

The Walter J. McHugh Reading Center

The Walter J. McHugh Reading Center contains major reading series used in the schools of California and a wide selection of professional texts, journals, and materials in the field of reading, language arts, and social studies. The Environmental Education Resource Collection, a unique collection which holds and circulates environmental education instructional materials and references, is also housed in The McHugh Reading Center. The Cal State Hayward main library houses the Ruth K. Carlson Juvenile Literature Collection, one of the finest and largest of its kind.

The College of Education Credentials Student Service Center

The College of Education Credentials Student Service Center (CSSC) is provided as a service to all students and faculty involved in the credential programs. The CSSC provides the evaluations of coursework upon which the faculty make decisions as to the admission of an applicant to a program, as well as the recommendation for a credential upon a candidate's completion of a program. The CSSC also serves candidates filing new applications for the Preliminary Credential with CLAD emphasis when all work has been completed at Cal State Hayward. If an individual wishes to enter the Partial Credential program, there is a \$55.00 service charge to evaluate eligibility for current California credentials.

Scholarships

There are scholarships available for entering credential candidates, current credential candidates, and graduate students. Current offerings include such scholarships as the Laura Settle CRTA Scholarship, Virginia Ann Schlieper Multiple Subject Scholarship, John Hancock Mathematics Scholarship, Associated Students Scholarships, Helen Jacobsen Scholarship, Alpha Delta Kappa and Delta Kappa Gamma Scholarships, and the Ruth Carlson Student Teaching Scholarship. Applications are available through the Department of Teacher Education Office beginning in March and are collected during the spring quarter. Awarded recipients are notified in June.

Other scholarships include the Cooperative Education Community Service Scholarship Program (pre-candidates: Quin Kirby, WA 509, 510-885-3621), and the Graduate Equity Fellowship Program Award (Carl Bellone, WA 859, 510- 885-3716).

For information concerning the CSU International Programs, other study abroad programs, and student exchanges contact the Center for International Education (SSH 1325, 510-885-2880).

There are loans available to current credential and graduate students. Current offerings include the Faculty and Friends Student-Teacher Loan and the APLE student loans available for those candidates who have current student loans with no defaults (Financial Aid Office, WA 545, 510-885-3616).

Admission

Before applying for admission, all applicants should seek current application information from the Department of Teacher Education Office and/or make an appointment with the Graduate Coordinator.

Note: Department application deadlines differ from those listed by the university. Please contact the department for appropriate program application periods.

I. Multiple or Single Subject Credential Programs

Multiple Subject applicants (except for the undergraduate blended program; see the Liberal Studies chapter) must file with the Department of Teacher Education:

1. a completed University "Graduate and Post-baccalaureate Application"
2. a graduate application fee
3. a statement of residency if new to Cal State Hayward
4. two official copies of each transcript (and one additional copy or photocopy for the Department of Teacher Education)
5. a Department Application Form for the Multiple Subject Credential Program
6. verification of all prerequisites (see the Liberal Studies chapter in the undergraduate section of this catalog for the Multiple Subject Matter Preparation program.)

Single Subject applicants must file with the Department of Teacher Education:

1. a completed University "Graduate and Post-baccalaureate Application"
2. a graduate application fee
3. a statement of residency if new to Cal State Hayward
4. two official copies of each transcript (and one additional copy or photocopy for the Department of Teacher Education)

5. a Department Application Form for the Single Subject Credential Program
6. verification of all prerequisites (see the English, Kinesiology, Mathematics, Science, and Social Science chapters in the undergraduate section of this catalog for the Single Subject Matter Preparation programs which have been approved to date.)

Prerequisites

Each candidate must complete the following prerequisites before entering the Multiple Subject and Single Subject Teaching Credential Programs:

- Multiple Subject Preparation Program such as the Liberal Studies, Credential Track, or pass the CSET (Multiple Subject only); or a Single Subject Matter Preparation Program in your subject area or pass the CSET in your subject area (Single Subject only).
- U.S. Constitution course or exam
- MATH 4021-Number Systems course (Multiple Subject only) or its equivalent elsewhere.
- CBEST-California Basic Educational Skills Test, passing score
- All candidates must have a cumulative GPA of 2.67 with a GPA of 2.75 in the last 60 semester units.
- Three letters of recommendation verifying successful experiences in school/school-like settings. Prior experience is required. T ED 1500, Introductory Field Experience, or 3001, Exploring Education, may be taken as part of this requirement.
- Letter of reference from a permanent faculty member at the university in which you have taken your education courses (Individualized program only).

Selection Process

All candidates will be interviewed in the Art and Education Building. When you are called for an interview, you will be given the date, time and room number. Be prepared to discuss your status regarding prerequisites, employment history (paid and volunteer), and experience and interest in working with children/young adults. For the Individualized Credential Program, bring all transcripts. Applicants should be aware that a criminal record may preclude the issuance of a credential. Contact the Department of Teacher Education Chair if this is a concern.

Selection of applicants for credential programs is made by the faculty who use their professional judgment in applying the criteria listed in this catalog. The aim is to select those candidates who show promise of becoming the best possible teachers of children and youth.

Denial of admission may be for one or more of the following reasons: failure of applicant to fulfill the prerequisites, an incomplete or late application, the faculty finds one (or more) of

the admissions criteria is not met at a satisfactory level, the faculty finds the applicant to be less likely to succeed as a teacher than other applicants, the applicant has been convicted of a crime which will bar granting of a credential, and/or insufficient places in a program because of the allocation of university resources or surpluses of candidates in particular subject matter areas.

Applicants accepted into a credential program must immediately:

- file State Forms 41-CIC (Application for Character and Identification Clearance) and BID-7 (2-82) (two fingerprint cards), and submit a TB clearance dated within the past calendar year. A nonrefundable partial fee (money order or certified check made payable to Commission on Teacher Credentialing) must accompany Form 41-4. Upon completion of the program, applicants must pay the remaining credential application fee. (Contact the Credentials Office, AE 250, 510/885-2272.)
or
- file a copy of a previous/current California credential and a TB clearance dated within one calendar year of application.

II. Master of Science, Reading Specialist Credential, and Certificates

All Master of Science, Reading Specialist Credential, and Certificate Program applicants must file with the university Admissions Office:

1. a completed University "Graduate and Post-baccalaureate Application"
2. a graduate application fee
3. a statement of residency if new to Cal State Hayward
4. one official copy of all transcripts from all accredited institutions attended
5. a Department Application Form
6. a Personal Data Summary Form

Upon admission, the student is assigned an advisor. With the advisor, the student completes and files an approved program.

Prerequisites

All applicants must: (1) hold a baccalaureate degree from an accredited institution, (2) have earned an undergraduate GPA of 2.5 or better in the last two years or 90 quarter/60 semester units and a GPA of 3.0 or better (on a 4.0 scale) in all applicable post-baccalaureate work, (3) hold a valid basic California teaching credential, except those students applying for the Early Childhood Education and/or Environmental Education patterns in the M.S. Education Option in Curriculum, (4) have verified three years of successful teaching experience, as defined by the department.

Program Requirements

Each student is responsible for meeting university and department

Credential Programs

requirements and following procedures applicable to the program enrolled. Each student is responsible for:

1. pertinent information in the University Catalog;
2. relevant information in department bulletins, forms and handouts;
3. meetings with the advisor.

Credential requirements specified in this catalog are subject to changes made by the State of California. Contact the Department of Teacher Education for current regulations.

Multiple Subject Credential Program

There are currently seven program variants within the Multiple Subject Credential Program:

- Multiple Subject Credential Program with Cross-cultural, Language, and Academic Development (CLAD) Emphasis
- Multiple Subject Credential Program with Bilingual (Spanish-English) Cross-cultural, Language, and Academic Development (BCLAD) Emphasis
- Individualized Multiple Subject Credential Program
- Partial Multiple Subject Credential Program
- Multiple Subject Internship Credential
- Concurrent Multiple Subject and Education Specialist Credentials
- Blended Multiple Subject Credential/Liberal Studies Major

I. Types of Multiple Subject Credential Programs

A. *The Multiple Subject Credential Program with Cross-cultural, Language, and Academic Development (CLAD) Emphasis*

This is a four-quarter team program. Usually six teams begin in the summer quarter, four on the Hayward campus and two on the Contra Costa campus. One team begins in the winter quarter on the Hayward and Contra Costa campuses. Some teams have classes during the day and late afternoon; others in the evening. Student teaching is either two quarters in two different grade levels, K-3 and 4-8, including one quarter in a multicultural setting, or in a paid position and one other quarter of student teaching. The CLAD Emphasis requires the following additional requirements beyond the "basic" Multiple Subject credential: (1) 9 quarter units (or 6 semester units) of a foreign language; (2) T ED 5038 Multicultural Education, 4 units; and (3) T ED 5370 Second Language Acquisition, 3 units.

B. The Bilingual/Cross-cultural Emphasis in Spanish Multiple Subject Credential Program (BCLAD) Emphasis

The BCLAD Credential Program is a four-quarter team program (summer, fall, winter, and spring). It adheres to all the requirements of the Multiple Subject Credential Program. All candidates must speak and write fluently in both Spanish and English and take entry and exit examinations. In addition, T ED 5038, 5367, 5370, and 5371 (13 units) are required. Classes are taken on the Hayward campus with an evening Multiple Subject team, along with classes specifically required for the BCLAD emphasis. Candidates may student teach or have a contracted, paid, full or part-time (.5), K-8 teaching position.

C. The Individualized Multiple Subject Credential Program

This program is offered to approved candidates who have taken some credential courses in the past (Cal State Hayward and elsewhere), but need to finish all the requirements for a California Professional Clear Credential. Individualized Multiple Subject candidates can enter any quarter. Classes are taken with a Multiple Subject team. Candidates may student teach or have a contracted, paid, full or part-time, K-8 teaching position. If CLAD certification is desired, candidates must complete the CLAD courses (7 quarter units plus 9 quarter units of a foreign language).

D. The Partial Multiple Subject Credential Program

This program is offered to approved candidates who hold an out-of-state credential and a California Preliminary Credential, and who must complete course work for a California Professional Clear Credential. Candidates' previous work is evaluated by the Credentials Office and requirements for the Professional Clear Credential are identified. Candidates can enter any quarter. Classes are taken with a Multiple Subject team. Candidates do not have to apply to the University, but can take courses through Open University. If CLAD certification is desired, candidates must complete the CLAD courses (7 quarter units plus 9 quarter units of a foreign language).

E. Multiple Subject Internship Credential

Selected candidates are paid interns in districts.

F. Concurrent Multiple Subject and Education Specialist Credentials (Mild-Moderate and Moderate-Severe, Level I)

G. Blended Multiple Subject Credential/Liberal Studies Major

See Liberal Studies chapter.

II. Curricular Requirements (52 units)

The Multiple Subject Credential candidates in variants A-E above take the following courses on either the Hayward or

Contra Costa campus:

T ED 5350 Curriculum and Instruction: Mathematics in the Elementary School (3)

T ED 5351 Psychological Foundations of Education (3)

T ED 5352 Curriculum and Instruction: Reading in the Elementary School - A (4)

T ED 5353 Teaching Models (3)

T ED 5354 Student Teaching I (4)

T ED 5355 Sociological Foundations of Education (2)

T ED 5356 Curriculum and Instruction: Reading in the Elementary School - B (2)

T ED 5357 Curriculum and Instruction: Teaching Science in Elementary School (3)

T ED 5359 Student Teaching II (6)

T ED 5360 Curriculum and Instruction: Language Arts in the Elementary School (3)

T ED 5361 Student Teaching III (13)

T ED 5364 Classroom Management in the Elementary School (2)

T ED 5365 Curriculum and Instruction: Social Studies in the Elementary School (2)

T ED 5366 English as a Second Language (ESL) and Bilingual Methods (2)

- *Additional requirements for CLAD (16 units)*
9 quarter units of foreign language
T ED 5038 Multicultural Education (4)
T ED 5370 Second Language Acquisition (3)
- *Additional requirements for BCLAD (13 units minimum)*
Exit-level proficiency in Spanish at FSI-3
T ED 5038 Multicultural Education (4)
T ED 5367 Bilingual Methods (3)
T ED 5370 Second Language Acquisition (3)
T ED 5371 Classroom Implications of the Culture of the Latino Child (3)
- *State requirements*
The State requires that all Multiple Subject candidates: (1) have two different grade level placements, K-3 and 4-8, (2) teach in a multicultural setting for one quarter, (3) if employed in a private school, be placed in a public school for one quarter, and (4) if employed in a special education classroom, be placed in a "normal" classroom for two quarters. It may be necessary for some students to fulfill these requirements during the summer quarter.

III. Curricular Requirements for Concurrent Education Specialist/Multiple Subject Credentials (80 units for TED students)

If you are in the Concurrent Education Specialist: Mild-Moderate and Moderate-Severe (Level I) and Multiple Subject Credential Program complete the following courses:

EPSY 5125 Educational Practices: Mild-Moderate Disabilities (4) or EPSY 5136 Educational Practices: Moderate-Severe Disabilities (4)

EPSY 5126 Special Education Law and Program Design Content (4)

EPSY 6120 Communication: Collaborative Teaming and Management (4)

EPSY 6127 Instruction and Behavioral Support: Mild-Moderate Disabilities (4) or EPSY 6137 Instructional and Behavioral Support: Moderate-Severe Disabilities (4)

EPSY 6128 Instructional and Behavioral Support Fieldwork (4), SPED students only or EPSY 6860 Advanced Fieldwork I (4), SPED students only

EPSY 6131 Assessments: Students with Mild to Moderate Disabilities (5) or EPSY 6142 Assessment: Students with Moderate-Severe Disabilities (5)

EPSY 6133 Curriculum: Students with Mild-Moderate Disabilities (4) or EPSY 6140 Curriculum: Students with Moderate-Severe Disabilities (4)

EPSY 6870 Advanced Field Work Group Supervision I (3)

EPSY 6800 Student Teaching (Mild-Moderate) (8) or EPSY 6801 Student Teaching (Moderate-Severe) (8)

EPSY 6810 or 6820 Advanced Graduate Seminar I or II (2)

T ED 5350 Curriculum and Instruction: Mathematics in the Elementary School (3)

T ED 5352 Curriculum and Instruction: Reading in the Elementary School - A (4)

T ED 5353 Teaching Models (3)

T ED 5354 Student Teaching I (4), TED and SPED

T ED 5356 Curriculum and Instruction: Reading in the Elementary School - B (2)

T ED 5357 Curriculum and Instruction: Teaching Science in Elementary School (3)

T ED 5359 Student Teaching II (6), TED students only

T ED 5360 Curriculum and Instruction: Language Arts in the Elementary School (3)

T ED 5361 Student Teaching III (6), TED students only

T ED 5365 Curriculum and Instruction: Social Studies in the Elementary School (2)

T ED 5366 English as a Second Language (ESL) and Bilingual Methods (2)

T ED 5500 Teaching Special Populations in General Education Settings (4) or EPSY 5021 Introduction to Educating all Students in Diverse Classrooms (4)

IV. Curricular Requirements for Blended Liberal Studies Major/Multiple Subject Credential

T ED 3005, 3006 Intermediate Field Experience in the Elementary School A, B (1 unit each)

T ED 5347, 5348, 5349 Student Teaching A, B, C (4, 6, 9 units)

T ED 5038, 5350, 5351, 5352, 5353, 5355, 5356, 5357, 5360, 5364, 5365, 5366, 5370, as in II above.

(Also see Liberal Studies chapter in the undergraduate section of this catalog. T ED 5038, 5351, 5355, and 5370 double-count in the Liberal Studies Major.)

Single Subject Credential Program

There are currently four program variants within the Single Subject Credential Program:

- Single Subject Credential Program with Cross-cultural, Language, and Academic Development (CLAD) Emphasis
- Individualized Single Subject Credential Program
- Partial Single Subject Credential Program
- School Districts/Cal State Hayward Partnerships Single Subject Credential Programs

I. Types of Single Subject Credential Programs

A. *The Single Subject Credential Program with Cross-Cultural, Language, and Academic Development (CLAD) Emphasis*

This emphasis is a four-quarter team program (summer, fall, winter, and spring). Usually, two teams begin in the summer quarter, one on the Hayward campus and one on the Contra Costa campus. Classes are during the late afternoon and evening. Although Cal State Hayward summer quarter classes start in late June, classes for the Single Subject Credential Program start in mid-July, thereby giving candidates time to either complete any outstanding prerequisites or take courses for the California Professional Clear Credential and/or CLAD certification scheduled in the first five weeks of the summer quarter. The CLAD Emphasis requires the following additional requirements beyond the "basic" Single Subject credential: (1) nine quarter units (or six semester units) of a foreign language; (2) T ED 5038 Multicultural Education, 4 units; and (3) T ED 5370 Second Language Acquisition, 3 units.

Single Subject Credential candidates either student teach or have contracted, paid, full or part-time (.5) teaching positions, in their subject areas, in K-12 schools. All Single Subject candidates must teach: (1) two different grade levels, K-8, or 9-12 in their subject areas; (2) one quarter in a multicultural setting; and (3) if employed in a private school, one quarter in a public school. Because contracted, paid Single Subject candidates cannot leave their teaching positions to teach in a different grade level, multicultural setting, or public school, student teaching is also available during the first half of the summer quarter.

B. *The Individualized Single Subject Credential Program*

This program is offered to approved candidates who have taken some credential courses in the past (Cal State Hayward and elsewhere), but need to finish all the

requirements for a California Professional Clear Credential. Candidates can enter any quarter. Classes are taken with the Single Subject team. Candidates may student teach or have contracted, paid, full or part-time (.5), K-12 teaching positions in their subject areas. If a CLAD certification is desired, candidates must complete the CLAD courses (7 quarter units plus 9 quarter units of a foreign language).

C. The Partial Single Subject Credential Program

This program is offered to approved candidates who hold an out-of-state credential and a California Preliminary Credential, and who must complete course work for a California Professional Clear Credential. Candidates' previous work is evaluated by the Credentials Office and requirements for the Professional Clear Credential are identified. Candidates can enter any quarter. Classes are taken with the Single Subject team. Candidates do not have to apply to the university, but can take courses through the Open University option. If CLAD certification is desired, candidates must complete the CLAD courses (7 quarter units plus 9 quarter units of a foreign language).

D. Single Subject Internship Credential

Selected candidates are paid interns in districts.

II. Curricular Requirements (45-75 units)

Single Subject Credential applicants take the following courses on either the Hayward or Contra Costa campus:

A. Traditional Pathway (51-75 units)

Prerequisite for CLAD: Six quarter units of foreign language or other California Commission on Teacher Credentialing (CCTC) approved equivalent.

Required Courses (39 units)

- T ED 5110 Computer-Based Technology in the Classroom I (3)
- T ED 5301 Psychological Foundations in Middle and Secondary School Education (4)
- T ED 5305 Social/Cultural Context of Education (4)
- T ED 5311 Classroom Environment I (2)
- T ED 5312, 5313 Classroom Environment II, III (1, 1)
- T ED 5314 Teaching Special Populations in Regular Classrooms (2)
- T ED 5318 Professional Responsibilities (4)
- T ED 5320 Content Literacy (3)
- T ED 5326 Preparation to Teach English Learners in the Secondary Schools (4)
- T ED 5380 Classroom/School Health and Safety (2)
- T ED 5390 Instructional Methods for the Single Subject Classroom I (3)
- T ED 5391 Instructional Methods for the Single Subject Classroom II (2)
- T ED 5392 Instructional Methods for the Single Subject Classroom III (2)
- T ED 5393 Instructional Methods for the Single Subject Classroom IV (2)

Required Field Experience (12-36 units)

T ED 5381 Field Experience in the Single Subject Classroom A (4-12)
T ED 5382 Field Experience in the Single Subject Classroom B (4-12)
T ED 5383 Field Experience in the Single Subject Classroom C (4-12)

B. Alternative Pathway (45-69 units)

Prerequisite for CLAD: Six quarter units of foreign language or other California Commission on Teacher Credentialing (CTC) approved equivalent

Required Courses (33 units)

T ED 5306 Teaching and Learning in the Single Subject Classroom I (10)
T ED 5307 Teaching and Learning in the Single Subject Classroom II (5)
T ED 5308 Teaching and Learning in the Single Subject Classroom III (5)
T ED 5309 Teaching and Learning in the Single Subject Classroom IV (4)
T ED 5390 Instructional Methods for the Single Subject Classroom I (3)
T ED 5391 Instructional Methods for the Single Subject Classroom II (2)
T ED 5392 Instructional Methods for the Single Subject Classroom III (2)
T ED 5393 Instructional Methods for the Single Subject Classroom IV (2)

Required Field Experience (12-36 units)

T ED 5381 Field Experience in the Single Subject Classroom A (4-12)
T ED 5382 Field Experience in the Single Subject Classroom B (4-12)
T ED 5383 Field Experience in the Single Subject Classroom C (4-12)

- *State Requirements*

The State requires that all Single Subject candidates: (1) have two different grade level placements, K-8 and 9-12, in their subject areas; (2) teach in a multicultural setting for one quarter; (3) if employed in a private school, be placed in a public school for one quarter; and (4) if employed in a special education setting, be placed in a "normal" setting for two quarters. It may be necessary for some students to fulfill these requirements during the summer quarter.

M.S. in
Education

Admission

Upon admission to the university, a student with a baccalaureate degree usually is in "Unclassified Post-baccalaureate" standing. An "Unclassified Post-baccalaureate" student may enroll in those courses for which the prerequisites have been met. The department will not count courses taken to remove deficiencies toward degree requirements. No more than 13 units taken in "Unclassified Postbaccalaureate" status can be applied toward a master's degree. This includes approved credit-bearing extension

courses, transfer courses, and residence courses taken before admission to the master's degree program. Lower division, non-credit Extension, and Credit/No Credit (Pass/Fail) courses are not applicable to the degree except courses offered only for Credit/No Credit (Pass/Fail). Filing for a substitution for this last item is up to the student.

A student with minor deficiencies in the requirements below may be admitted to a program as a "Conditionally Classified Graduate" student.

To be awarded "Classified Graduate" standing, a student must:

1. have a GPA of 3.0 or better in all upper division work in the major and in all post-baccalaureate work;
2. hold a valid teaching credential and/or show evidence of successful classroom teaching experience as determined by the department. (May be waived for a student in the early childhood education or environmental education patterns within the Curriculum Option);
3. have met the University Writing Skills requirement.

Advancement to Candidacy

To be Advanced to Candidacy for the degree, a student must:

1. have met the University Writing Skills requirement;
2. be a "Classified Graduate" student in good standing;
3. Have completed at least 35 quarter units considered by the Department to be applicable toward the degree requirements with a GPA of 3.0 or better;
4. have an approved program of study for the degree (on a Major Check Form) signed by the advisor;
5. have completed or be currently enrolled in T ED 6020, Research in Education;
6. have been approved for Advancement to Candidacy by the department on recommendation of faculty teaching in the student's area of study. This is initiated by filing the form, Petition to Establish Thesis/Project Committee, with a thesis or project abstract attached, or by obtaining permission to register for the Graduate Synthesis course.

GPA Requirement

A student must maintain a GPA of 3.0 or higher in all courses taken in the approved program signed by the advisor, whether the courses are taken at Cal State Hayward or elsewhere. A student whose GPA falls below 3.0 will be placed on probationary status, will be subject to disqualification from the program, and may be recommended for dismissal from the university. (The department also requires that the use of the "CR/NC" grade option in any course applied to a master's and/or certificate program must be approved in advance by the Graduate Coordinator.)

Degree Requirements (45 units)

To receive the M.S. degree in Education, a student must have:

1. been Advanced to Candidacy;
2. completed 45 quarter units of approved graduate work, subject to the following conditions:
 - a. all units must have been earned within the past five (5) years immediately preceding completion of the requirements for the degree;
 - b. no fewer than thirty-two (32) quarter units may have been completed in residence (i.e., after admission to the program, as a regularly matriculated student) in the graduate program at Cal State Hayward;
 - c. no fewer than three (3) nor more than six (6) quarter units may have been assigned to a University Thesis nor more than five (5) to a Department Thesis or Project, nor fewer than four (4) in the Graduate Synthesis course;
 - d. no more than thirteen (13) quarter units of approved courses may be transferred from another institution, taken through approved extension courses (including Open University), or taken as an "Unclassified Post-baccalaureate" student;
 - e. at least twenty-two and one-half (22.5) quarter units must have been in courses in the 6000 series or equivalent graduate level;
3. satisfied the University Writing Skills requirement;
4. earned at least a 3.0 GPA in all post-baccalaureate work and in all graduate work at Cal State Hayward and in all units satisfying the requirements of the degree program;
5. completed a University Thesis acceptable to the university, or a Department Thesis or Project acceptable to the department faculty, or completed the Graduate Synthesis course which includes passing a Comprehensive Examination;
6. met, within five (5) years of admission to the program, the specific requirements of that program.

Graduation

A student must apply to graduate and request a degree check during the first two (2) weeks of the quarter prior to the quarter in which completion of the program is expected. This is done in the department office.

M.S. in Education, Option in Curriculum (45 units)

The Curriculum Option is designed to provide advanced special preparation or competencies for teachers and other educational professionals at all grade levels. The Curriculum Option is based on a core of four courses, including a thesis, project or graduate synthesis (comprehensive examination) course, with the remainder of the program containing specific required courses and electives. A candidate may choose one of the five specialized

patterns offered in the Curriculum Option:

I. Curriculum Option Specialized Patterns

- *Children's literature and reading* - a program designed to complement the literature-based reading program sponsored by the California State Department of Education and based upon skills and knowledge related to the California Reading Initiative, English/Language Arts Framework, Recommended Readings in Literature, Model Curriculum Standards, and the Handbook for Planning an Effective Literature Program. A California teaching credential is required.
- *Environmental education* - a program designed for teachers and other education professionals who wish to infuse environmental concepts into their curriculum or for specializing their teaching assignments.
- *Mathematics education* - a program designed for teachers who are interested in improving or updating their skills in mathematics instruction, as well as those who may wish to assume leadership roles in their districts. A California teaching credential is required.
- *Science/health education* - a program designed for teachers to develop and strengthen skills and understanding in the teaching of science and/or health and to integrate science/health across the curriculum. A California teaching credential is required.
- *Individualized program* - a program designed for teachers and other education professionals who, in consultation with the Graduate Coordinator, wish to develop an individualized program of electives appropriate to their professional goal(s).

II. Curricular Requirements

The Curriculum Option for the M.S. degree in Education requires completion of:

- a core of foundation courses,
- approved elective courses, which may be from a pattern or combination of two patterns.

A. Required Courses (15-18 units)

T ED 6020 Research in Education (4)
T ED 6300 Foundations of Curriculum Development (4)
T ED 6700 Advanced Educational Psychology (4)

Select one (1) of the following courses (3-6 units):

T ED 6899 Project (3-5)
T ED 6901 Graduate Synthesis (4)
T ED 6909 Departmental Thesis (3-5)
T ED 6910 University Thesis (3-6)

B. Elective Courses (27-30 units)

Select one of the following seven patterns with the approval of an advisor:

1. *Children's literature and reading*

Literature courses (12-18 units):

- ENGL 4720 Mythology (4)
- ENGL 4740 History of Children's Literature (4)
- T ED 5240 Children's Literature in Elementary Education (3)
- T ED 5241 Literature for Adolescents (3)
- T ED 5242 Teaching Multicultural Literature to Children (4)
- T ED 6245 Literature for the Young Child (4)
- T ED 6246 Critical Analysis of Children's Literature (3)

Reading courses (10-11 units):

- T ED 6230 Reading/Language Arts: Developing Fluent Readers and Writers (4)
- T ED 6231 Reading/Language Arts: Diagnosis (4)
- T ED 6232 Reading/Language Arts: Instructional Strategies (3)
- T ED 6240 Reading/Language Arts: Advanced Study of Adolescent Literacy (3)

Other electives selected with an advisor (0-8 units)

2. *Environmental education*

Complete the following courses (12-20 units)

- T ED 5413 Environmental Education in the Curriculum (4)
- T ED 5414 Field Trips and Community Resources for Environmental Education (4)
- T ED 6414 Organization of Resident Outdoor Education (4)
- T ED 6416 Development of Environmental Education (4)
- T ED 6417 Field Study in Environmental Education (4)

Other electives selected with advisor (7-18)

3. *Mathematics education*

Complete the following courses (17-20 units):

- T ED 6010 Seminar in Teaching and Learning Mathematics (4)
- T ED 6021 Seminar in Diagnosis and Treatment of Learning Difficulties in Mathematics (4)
- T ED 6030 Seminar on Problem Solving and Critical Thinking in Mathematics (4)
- T ED 6040 Advanced Curriculum and Instruction in Mathematics (4)
- T ED 6900 Independent Study (1-4)

Select additional mathematics courses with advisor (7-13 units)

Other electives selected with advisor (0-6 units)

4. *Science/health education*

Complete the following courses (8-12 units)

T ED 6050 Seminar in Science and Health Education Research (4)
T ED 6440 Curriculum in Science and Health Education (4) (T ED 6440 may be repeated once for credit.)

Select additional science courses with advisor (8-20 units)

Other electives selected with the advisor (0-15 units)

5. Individualized program

A student may, in consultation with the Graduate Coordinator, develop an individualized program of electives appropriate to the student's professional goal(s). The student must meet all other requirements and standards for the Curriculum Option.

M.S. in Education, Option in Educational Technology Leadership (45 units)

The Educational Technology Leadership Option provides the participants with additional technological knowledge and skills to create effective school district technology plans, to develop training programs for classroom teachers in the use of technology, to promote organizational change through technology, to manage technology resources and personnel in a school setting, and to apply their technical skills and knowledge to identify and utilize technological resources appropriately for the needs of the schools, school districts, and similar educational organizations. All the option's required courses address these technology needs of schools.

I. Prerequisites

Students must demonstrate knowledge and application of authoring systems, such as Hypercard, Director, Authorware, ToolBook, or must have experience with Web-based instruction. Basic knowledge of digital technologies and HTML is required. These proficiencies may be demonstrated through the completion of EDUI 6099 (Multimedia/Hypermedia), or equivalent courses, or through other evidence such as projects created, or multimedia development. Advanced proficiency in one platform (e.g. Macintosh, Windows, UNIX) is required. Students will be accepted into the program based on an interview by a committee where they demonstrate their technology competence. Students are also required to maintain their level of competency in technology as long as they are graduate students in the program.

II. Curricular Requirements (45 units)

A. Core Courses (26-29 units)

EDUI 6110 Web as an Interactive Educational Tool (4)
EDUI 6200 Developmental Theories and Educational Multimedia Design (4)
EDUI 6300 Culture and the Evolution of Educational Technology (4)
EDUI 6400 Educational Technology Planning for Innovation and Change (4)
EDUI 6500 Research in Educational Technology (4)
EDUI 6600 Educational Interface Design (4)
EDUI 6899 Project (2-5) or EDUI 6909 Departmental Thesis

(2-5)

B. Electives (16-19 units minimum)

EDUI 6098 (4), 6120 (4), 6130 (4), 6140 (4), 6150 (4), 6210 (4), 6315 (2); EDLD 6300 (4), 6410 (4); MM 6101 (4), 6102 (4), 6110 (4), 6120 (4), 6805 (1); PSYC 4200 (4), 4210 (4), 4220 (4), 4320 (4), 4345 (4); PUAD 6765 (4), 6811 (4), 6812 (4); STAT 3900 (4)

Since students come to the program with varying technology backgrounds and interests, they may choose graduate-level courses from other departments with advisor approval.

M.S. in Education, Option in Reading Instruction (45 units)

Note: The Department of Teacher Education is modifying the M.S. in Education, Option in Reading Instruction, to meet the new California reading standards. The description of this new reading option was not available in time for this catalog. For a full description of this program, contact the department office, or go to the College of Education and Allied Studies website (<http://www.edschool.csuhayward.edu>) and look under Teacher Education graduate programs. The description of this program will also be available in the online 2005-06 University Catalog available June 2005 at: <http://www.csuhayward.edu/ecat/index.html>.

The Reading Instruction Option is tailored to upgrade the teaching of reading at all grade levels and is open to teachers of regular classrooms, special education classrooms, special reading classes, basic adult education classes, and community college reading instructors. The Reading Instruction Option is based on a core of four courses, including a thesis, project, or graduate synthesis (comprehensive examination) course, with the remainder of the program containing specific required courses and electives. The Reading Instruction Option may be earned in conjunction with the Reading Specialist Credential by combining courses from the Reading Instruction Option and the Reading Specialist Credential (52-58 total quarter units).

The Option in Reading Instruction is tailored to upgrade the teaching of reading/language arts at all grade levels and is open to teachers in regular classrooms, reading specialists, special education teachers, adult basic education teachers, and community college instructors.

Prior to completion of the program, a student must present evidence of two years of successful teaching experience, as defined by the department. Check with the advisor.

Required Courses

Complete the following core courses (30 units)

T ED 6020 Research in Education (4)
T ED 6230 Reading/Language Arts: Developing Fluent Readers and Writers (4)
T ED 6231 Reading/Language Arts: Diagnosis (4)
T ED 6232 Reading/Language Arts: Instructional Strategies (3)
T ED 6233 Reading/Language Arts: Advanced Clinical

Experiences (6)
T ED 6234 Reading/Language Arts: Clinical Seminar (3)
T ED 6240 Reading/Language Arts: Advanced Study of Adolescent Literacy (3)
T ED 6250 Reading/Language Arts: Research and Evaluation (3)

Select one course in Children's Literature (3-4 units)

T ED 5240 Children's Literature in Elementary Education (3)
T ED 5241 Literature for Adolescents (3)
T ED 5242 Teaching Multicultural Literature to Children (4)
T ED 6245 Literature for the Young Child (4)

Select one of the following courses (1-6 units):

T ED 6899 Project (2-5)
T ED 6901 Graduate Synthesis (4)
T ED 6909 Departmental Thesis (2-5)
T ED 6910 University Thesis (1-6)

Electives selected with advisor (5-11)

Reading Specialist Credential Program (45 units)

Note: The Department of Teacher Education is modifying the Reading Specialist Credential Program to create the Reading Certificate and the Reading and Language Arts Specialist Credential which will meet the new California reading standards. The description of these new certificate and credential programs was not available in time for this catalog. For a full description of the new programs, contact the department office, or go to the College of Education and Allied Studies website (<http://www.edschool.csuhayward.edu>) and look under Teacher Education graduate programs. The description of these programs will also be available in the online 2003-04 University Catalog available June 2003 at: <http://www.csuhayward.edu/ecat/index.html>.

The Reading Specialist Credential is a competency-based program providing special training for teachers to become K-6, 7-12, or K-12 reading specialists or coordinators. A Reading Specialist Credential may be earned separately or in conjunction with a Master of Science in Education with the option in Reading Instruction. A California teaching credential is required.

The aim of the Reading Specialist Credential program is to develop the knowledge and skills of the classroom teacher, reading specialist, special education teacher, adult basic education teacher, and community college instructor.

The Reading Specialist Credential program is a competency-based program. Both entry and exit evaluations are made of each student's demonstration of the competencies. A student, after conferring with the advisor, is informed in writing of the specific objectives s/he must meet in order to be recommended for the Reading Specialist Credential.

I. Required Courses (31 units)

Complete the following courses (22 units):

T ED 6230 Reading/Language Arts: Developing Fluent

Readers and Writers (3)
T ED 6231 Reading/Language Arts: Diagnosis (4)
T ED 6232 Reading/Language Arts: Instructional Strategies (3)
T ED 6234 Reading/Language Arts: Clinical Seminar (3)
T ED 6240 Reading/Language Arts: Advanced Study of Adolescent Literacy (3)
T ED 6253 Reading/Language Arts: Comprehension and Study Strategies (3)
T ED 6254 Reading/Language Arts: Advanced Study of Early Literacy (3)

Supervised professional field work (9 units):
(Student must apply for all fieldwork during the quarter prior to taking the course.)

T ED 6233 Reading/Language Arts: Advanced Clinical Experiences (6)
T ED 6251 Reading/Language Arts: Field Experience (3)

II. Electives (6-7 units)

Select one (1) course in Children's Literature from the following courses (3-4 units):

T ED 5240 Children's Literature in Elementary Education (3)
T ED 5241 Literature for Adolescents (3)
T ED 5242 Teaching Multicultural Literature to Children (4)
T ED 6245 Literature for the Young Child (4)

Select one course from the following (3 units):

T ED 6210 Reading/Language Arts: Foundations (3)
T ED 6220 Reading/Language Arts: Meeting the Needs of Diverse Students (3)

Reading Specialist Credential and M.S.,
Option in Reading Instruction (53-58 units)
When the Reading Specialist Credential program and the Option in Reading Instruction for the Master of Science Degree in Education are taken concurrently, the following additional courses must be completed (8-13 units):

Complete the following courses (7 units)

T ED 6020 Research in Education (4)
T ED 6250 Reading/Language Arts: Research and Evaluation (3)

Select one of the following courses (1-6 units)

T ED 6909 Departmental Thesis (2-5)
T ED 6910 University Thesis (1-6)
T ED 6899 Project (2-5)
T ED 6901 Graduate Synthesis (4)

M.S. in Education, Option in Urban Teacher Leadership (54 units)

Curricular Requirements (54 units)

EDLD 6000 Introduction to Educational Leadership (4)
EDLD 6410 Supervision and Staff Development (4)

Certificate Programs

EDLD 6720 Solving School Problems through the Application of Research (4)
EDLD 6801, 6802, 6803 Fieldwork I, II, III (4, 4, 4)
EDLD 6814, 6815, 6816 Internship Seminar (1, 1, 1)
EDUI 6331 Collaborative Leadership I (4)
T ED 6020 Research in Education (4)
T ED 6124 Advanced Study in Multicultural Education (4)
T ED 6300 Foundations of Curriculum Development (4)
T ED 6700 Advanced Educational Psychology (4)
T ED 6702, 6703, 6704 Research Seminar I, II, III (1, 1, 1)
T ED 6901 Graduate Synthesis (4)

Children's Literature (17-18 units)

The Certificate Program in Children's Literature is designed to assist teachers in developing their knowledge and skills in children's literature. This program addresses the initiative of the English/Language Arts Framework, published in 1987, by the California State Department of Education and features "a literature-based program that encourages reading and exposes all students, including those whose primary language is not English, to significant literary works."

I. Required Courses (14 units)

Complete the following courses

ENGL 4740 History of Children's Literature (4)
T ED 5240 Children's Literature in Elementary Education (3)
T ED 5242 Teaching Multicultural Literature to Children (4)
T ED 6246 Critical Analysis of Children's Literature (3)

II. Elective (3-4 units)

Select one from the following courses

ENGL 4720 Mythology (4)
T ED 5241 Literature for Adolescents (3)
T ED 6245 Literature for the Young Child (4)

Cross-cultural, Language, and Academic Development (18-19 units)

This certificate program is a sequence of courses designed to expand the teaching skills of a trained, credentialed teacher in the English instruction of non-English or limited-English speaking students. The certificate is not a teaching credential; it supplements the teaching credential by adding the CLAD emphasis. Advisement regarding foreign language requirement and course equivalencies is provided by the Graduate Coordinator.

The CLAD certificate will help a teacher develop first and second language acquisition, methods and techniques for teaching a second-language and content areas through ESL strategies, appropriate materials for second language learners, ESL lesson plans to be implemented in classroom settings, and hands-on teaching ideas and materials.

Prerequisites: Foreign Language (minimum of nine college-level quarter units in a single language)

I. Required Courses (15 units)

Complete the following courses :

- T ED 5038 Multicultural Education (4)
- T ED 5370 Second Language Acquisition (3)
- T ED 5610 Methods and Materials for Teaching English as a Second Language and Bilingual Education (4)
- T ED 5612 Teaching Strategies I: SDAIE and Practicum (4)

II. Elective (3-4 units)

Select one course with consent of the advisor:

- ENGL 3005 Study of Language (4), 3010 Modern English Grammar (4), 3015 Introduction to Phonology (4), 3040 Linguistic History of the English Language (4), 4060 Topics in the Study of the English Language (4); T ED 5613 ESL Teaching Strategies II: Reading, Writing and Testing in the ESL Classroom (3), 6220 Reading/Language Arts: Meeting the Needs of Diverse Students (3)

Educational Technology Leadership (16 units)

This program is designed for educators and e-learning developers who serve as technology leaders in educational settings, as well as in industry. The program combines instructional design theories with a knowledge of emerging technologies and trains graduate students to assume leadership roles in the design and development of effective e-learning environments. The program advocates lifelong learning that allows students to nurture their personal and professional growth. The arenas in which Educational Technology Leadership graduates will be active include school districts, county offices of education, community colleges, the high tech industry as an e-learning developer, and the field of instructional design.

I. Prerequisites

Students must demonstrate knowledge and application of authoring systems, such as Hypercard, Director, Authorware, ToolBook, or must have experience with Web-based instruction. Basic knowledge of digital technologies and HTML is required. These proficiencies may be demonstrated through the completion of EDUI 6099 (Multimedia/Hypermedia), or equivalent courses, or through other evidence such as projects created, or multimedia development. Advanced proficiency in one platform (e.g., Macintosh, Windows, UNIX) is required. Students will be accepted into the program based on an interview by a committee where they demonstrate their technology competence. Students are also required to maintain their level of competency in technology as long as they are graduate students in the program.

II. Curricular Requirements

A. Core Courses (12 units)

- EDUI 6200 Developmental Theories and Educational Multimedia Design (4)
- EDUI 6300 Culture and the Evolution of Educational Technology (4)
- EDUI 6400 Educational Technology Planning for Innovation and Change (4)

Grading Practices and Disqualification

B. Electives (4 units minimum)

EDUI 6120 (4), 6130 (4), 6140 (4), 6150 (4), 6210 (4), 6315 (2); EDLD 6300 (4), 6410 (4); MM 6101 (4), 6102 (4), 6310 (4), 6410 (4), 6805 (1); PSYC 4200 (4), 4210 (4), 4220 (4), 4320 (4), 4345 (4); PUAD 6765 (4), 6811 (4), 6812 (4); STAT 3900 (4)

Special Grading Practices

The university has two post-baccalaureate grading patterns: "A," "B," "C," "D," "F" (including + and - except for "A+" and "D-"); and CR/NC (Credit/No credit). In the Department of Teacher Education the CR/NC boundary is based on the graduate standards: a "CR" grade indicates work at the "B-" or higher level and an "NC" indicates work at the "C+" or lower level. Under University policy, a graduate student is graded on the "A-F" system, excepting field supervision courses in the professional preparation programs which are only graded as CR/NC.

Disqualification

If a credential candidate earns a grade of "D" or "F" in a required credential course, the course must be repeated (within the department) and a "C-" grade or higher must be earned. A candidate who failed to maintain a cumulative GPA of 3.0 in any quarter will be notified that (s)he will be disqualified effective at the end of the subsequent quarter if the cumulative GPA then is not above 3.0.

A student who fails to demonstrate a high level of performance in the skills of writing, speaking, and language use is subject to re-evaluation and possible disqualification.

The behavior of teacher candidates is expected to be ethical and professional, both on campus and in the public schools. Unethical or unprofessional behavior constitutes grounds for disqualification.

Academic Dishonesty

The university, like all communities, functions best when its members treat each other with honesty, fairness, respect and trust. Deception for individual gain is an offense against the members of the entire community. It is the student teacher's responsibility to be informed of university regulations by reading the section on academic dishonesty, "How does Cal State Hayward define and handle academic dishonesty" in the Grading and Academic Standards chapter. Awarding a failing grade in the event of academic dishonesty is at the discretion of the faculty member.

The Department of Teacher Education adheres to all university rules regarding academic dishonesty and feels a particular responsibility to require the utmost professional accountability and academic honesty from students in our teaching programs. Academic dishonesty matters within the Department of Teacher Education will be brought up to the Student Affairs Committee in the presence of the department chair, the professor involved, and the student's team leader. Decisions regarding a specific course of action will be collectively decided.

Education: Interdisciplinary Courses

The course prefix for the following courses is EDUI.

For additional EDUI courses, see "Education: Interdisciplinary" in the graduate section of this catalog.

- 6098** Designing Effective Multimedia Instruction (4)
Effective design and development of multimedia material to promote optional interactivity, performance, and motivation. Evaluation of educational multimedia products, design and development of original software, and examination of research on electronic learning. Prerequisite: T ED 5099 or equivalent.
- 6110** Web as an Interactive Educational Tool (4)
Design of instructional delivery via the Internet based on a study of the range of Internet-student/interactions, application of appropriate learning strategies, the potential of recent developments in the design/development of instruction, advanced topics in multimedia design. Prerequisite: EDUI 5007 or consent of instructor.
- 6115** Web as a Collaborative Educational Tool (4)
Rationale for the use of, and the social and contextual theories for, the design of instructional delivery via the Web. Enables educators to design and create collaborative environment for teaching and learning. Social and cognitive theories provide the theoretical foundations. Current Web technology provides the tool for such a design. Prerequisite: EDUI 5007 or consent of instructor.
- 6120** Distance Learning Technologies and Applications (4)
Rationale for the use of and critical analysis of various types of distance learning technologies. Current transmission options for distance learning. Instructional strategies for teaching using distance technologies. Prerequisite: consent of instructor.
- 6130** Supervising and Evaluating Teaching with Technology (4)
Analysis of the nature of effective integration of technology in the classroom within the context of theory of supervisory functions. Examination of techniques, including clinical supervision for promoting and supporting teacher growth and development in the use of technology in instruction. Prerequisite: EDUI 6200 or EDUI 6210 or departmental approval.
- 6140** Professional Development with Educational Technologies (4)
How adults learn in the professional setting; maximizing human resources through quality support for training and development; how technology skills are acquired by the professional; creating and maintaining effective staff development programs in technology. Prerequisite: consent of instructor.
- 6150** Current Issues in Educational Technology (4)
Current topics related to the assimilation of technology and

planning in education. Prerequisite: completion of at least 12 units of the Educational Technology program.

- 6200** Developmental Theories and Educational Multimedia Design (4)
Identification of developmental theories in social and cognitive psychology, focusing on the characteristics of development, the nature of learning, the social influence on development and learning, and the foundation provided by these theories for the design of instructional multimedia programs. Three hrs. lect., 2 hrs. lab.
- 6210** Principles of Instructional Design (4)
Instructional design theories and models in technology; application of design principles in the evaluation and creation of instructional materials including text; teacher-mediated instruction in multimedia. Prerequisite: graduate standing or consent of instructor.
- 6240** Curriculum and Instruction in Mathematics, Science, and Technology (4)
Designed to improve teaching and learning in mathematics, science, and technology. Prepares students to design innovative, technology-based curriculum using sound pedagogical approaches for improving teaching in mathematics and science. Prerequisite: graduate standing or consent of instructor.
- 6300** Culture and the Evolution of Educational Technology (4)
Cultural contexts in which educational technologies are situated and the consequent impact on growth of such technologies. Application of postmodern, feminist and multicultural perspectives to examine technology within educational cultures. Prerequisite: Graduate standing or consent of instructor.
- 6315** Current Technologies in Education (2)
Current educational technologies and their use in the classroom. Repeatable for credit with approval of instructor (or department). Prerequisite: EDUI 5007 or consent of instructor.
- 6331** Collaborative Leadership I (4)
Collaborative leadership skills and understandings in reflective practice, communication, facilitating change, and sharing leadership. Designed for graduate students and/or working professionals with at least three years experience (e.g., teachers, administrators, counselors, psychologists). Cross-listed with EDLD/EPsy/KPE/T ED 6331.
- 6400** Educational Technology Planning for Innovation and Change (4)
History of creative innovation and its effects on educational culture and thought. Critical examination of current innovative technologies for instruction at all levels, pre-school through professional. Strategies for instructional technology planning. Prerequisite: EDUI 6210 or consent of instructor.

- 6410** Language Arts, Social Studies, and Educational Technology (4)
Teaching language arts and social studies curricula using technology. Social contexts in which educational technologies affect these subject areas, both present and future, are examined. Prerequisite: graduate standing or consent of instructor.
- 6450** Management of Educational Technology (4)
Organizational and managerial issues, problems, decision-making, and solutions for successful implementation of technology initiatives including distributed learning, distance learning, computer-aided education, and multimedia projects. Focus on technological solutions to educational problems and on planning, strategy formulation, and implementation of technology projects, addressing infrastructure decisions, system design and development, budgeting, resource management, project team dynamics, and evaluation. Three hrs. lect., 2 hrs. act.
- 6500** Research in Educational Technology (4)
Fundamental concepts in qualitative and quantitative research designs and program evaluation in Educational Technology. Statistical tools and procedures for data analysis and interpretation. Preparation of research proposal for project or thesis. Prerequisite: EDUI 6400 or consent of instructor.
- 6600** Educational Interface Design (4)
Current developments in cognitive science related to instructional technology. Human brain organization, the influence of environment upon memory and problem solving, how these issues can provide a foundation for progressive educational technology leaders. Prerequisite: consent of instructor. Three hrs. lect., 2 hrs. lab.
- 6741** Family, School, Community Collaborations (4)
Provides school administrators, teachers, psychologists, and counselors with a knowledge base for promoting family-community-school partnerships which will increase student academic success among ethnically, linguistically, culturally, and economically diverse populations. Participants examine ecological theoretical perspectives, engage in systemic analyses of real-world family-school-community relationships, and explore characteristics of effective family-school partnership programs.
- 6755** Cultural Diversity in the Workplace (4)
Theory and practice for working with diverse populations in organizations and school settings. Communication across cultures, developing programs and practices, and valuing diversity in organization.
- 6899** Project (2-5)
Development of an original product (teaching project, implementation plan, program evaluation proposal) which is identified in the research course and summarized in a written abstract. Both the project and the abstract are submitted to the program faculty which specify their formats. Supervision by a faculty committee, at least one of

Teacher Education Courses

whom must be a Cal State Hayward faculty member.
Prerequisites: EDUI 6500 or 6705 and Advancement to
Candidacy. Maximum of five units per student.

6900 Independent Study (1-4)

6909 Departmental Thesis (2-5)

Development and writing of a research paper (on a topic identified in EDUI 6500) submitted to Interdisciplinary Studies program faculty which specifies its format. Supervision by an Interdisciplinary Studies committee, at least one of whom must be a Cal State Hayward faculty member. Required presentation of thesis to program faculty and colleagues. Prerequisites: EDUI 6500 and Advancement to Candidacy. Maximum of five units per student.

6999 Issues in Education Interdisciplinary Studies (4)
Readings, discussion, and research on contemporary and/or significant issues in education interdisciplinary studies. May be repeated for credit when content varies.

The course prefix for the following courses is T ED.

For remedial and undergraduate course descriptions, see Teacher Education in the undergraduate section of this catalog.

Post-baccalaureate

5002 Advanced Study of Health Education (2)

Candidates develop advanced skills in delivery of comprehensive support for students' physical, cognitive, emotional and social well-being. Meets Standard 18 of the California Professional Induction Standards.

5021 Child Growth and Development (3)

Growth and development of the child: prenatal through childhood with special attention to the intellectual, social, and personality development in childhood. Influence of the home and school environment. (Y)

5038 Multicultural Education (4)

Nature of culture, manifestations of culture, cultural contact, cultural diversity in the United States and California. Learning about culturally-diverse students. General principles of culturally-responsive pedagogy.

5099 Classroom Computer Technologies (4)

The production, evaluation and utilization of technologies (especially emerging technologies) in education settings. Basics of various computer-based applications: word processing, desktop publishing, spreadsheets, databases, graphics, and telecommunications. Applications for these tools across disciplines. Commercially-available educational software examined for classroom effectiveness. Laser technologies (videodisk/CD-ROM) demonstrated. Prerequisites: California preliminary credential, clear or out-of-state credential, or admission to a credential program; proficiency in basic computer

operations and word processing; and consent of instructor.
(A)

5110 Computer-Based Technology in the Classroom I
(3)

General and specific knowledge and skills appropriate for beginning teachers. Hardware and software terminology, operation, troubleshooting, record management, e-mail, collaborative tools, copyright, privacy, security and safety issues. Relevance for K-12 student learning. Prerequisite: junior standing.

5120 Computer-Based Technology in the Classroom II (4)

Plan, select, evaluate, integrate technology in curriculum to optimize student learning. Collaborative and site-based planning. Software, web, multimedia applications. Prerequisite T ED 5110 or equivalent.

5240 Children's Literature in Elementary Education
(3)

A survey of children's literature including classics, picture books, myths, folktales, legends, biography, poetry, historical fiction and novels. Emphasis is placed on criteria for selection of good literature and teaching techniques. Prerequisite: consent of instructor. (Y)

5241 Literature for Adolescents (3)

Examination of the values to be found in folktales, classical myths and legends, as well as the body of contemporary writing, especially created to satisfy interests and needs of adolescents. (Y)

5242 Teaching Multicultural Literature to Children (4)

Analysis and selection of books focuses on multicultural populations that present accurate and positive depictions. Emphasis on the integration and use of these books in the classroom.

5300 Series: Professional Education Program Element

The 5300 courses are elements in the professional preparation program for Multiple Subject and Single Subject Teaching Credentials. Admission into the professional preparation programs of the Department of Teacher Education is required for each course in the series. The elements are taken in a set sequence. The sequence may differ among the variant programs. Each element is based upon the achievement of a specified set of professional teaching competencies. The elements include regular coursework or field work, individual or group study, and the demonstration of the competencies. Student counseling and screening is involved in each element. See the Department of Teacher Education for further information and exceptions.

5301 Psychological Foundations in Middle and
Secondary School Education (4)

Systematic analysis of teaching and learning using psychological theory and research. Emphasis on social

and cognitive development, learning processes, motivation, evaluation, and appropriate teaching principles for working with students with varying cultural and linguistic backgrounds, ages, and motivation levels. (Y)

- 5305** Social/Cultural Context of Education (4)
A study of the philosophy, history, and sociology of American education with emphasis on the relationship of religion, gender, ethnicity, social class and challenging conditions to teaching and learning in secondary school classrooms. Prerequisite: admission to the Single Subject Credential Program.
- 5306** Teaching and Learning in the Single Subject Classroom I (12)
Introduction to theory and practice for teaching in single subject classrooms. Focus on environment, development, assessment, professionalism, diversity, technology, and literacy. Prerequisite: admission to Single Subject Credential Program.
- 5307** Teaching and Learning in the Single Subject Classroom II (7)
Introduction to theory and practice for teaching in single subject classrooms. Focus on environment, development, assessment, professionalism, diversity, technology, and literacy. Application in beginning weeks of a teaching assignment. Prerequisite: T ED 5306.
- 5308** Teaching and Learning in the Single Subject Classroom III (7)
Theory and practice for teaching in single subject classrooms. Focus on environment, development, assessment, professionalism, diversity, technology, and literacy. Emphasis on individual differences among students. Prerequisites: T ED 5306, 5307.
- 5309** Teaching and Learning in the Single Subject Classroom IV (7)
Synthesis of theory and practice for teaching in single subject classrooms. Focus on environment, development, assessment, professionalism, diversity, technology, and literacy. Emphasis on individual differences among students. Prerequisites: T ED 5306, 5307, 5308.
- 5311** Classroom Environment I (2)
First of three courses in creating a productive classroom learning environment. Theories and models of classroom management, crisis prevention, conflict resolution for working with adolescent students. Introduction to school law. Prerequisite: admission to the Single Subject Credential Program.
- 5312** Classroom Environment II (1)
Second of three courses in creating a productive classroom learning environment. Additional theories and models of classroom management. Introduction to effective interpersonal communication skills for working with adolescent students, families, and colleagues. Prerequisite: admission to the Single Subject Credential Program.

- 5313** Classroom Environment III (1)
Third of three courses in creating a productive classroom learning environment. Continued application of effective classroom management strategies. Additional knowledge and skills for effective interpersonal communication with adolescent students, families, and colleagues. Prerequisite: admission to the Single Subject Credential Program.
- 5314** Teaching Special Populations in Regular Classrooms (2)
Developing basic knowledge, skills and strategies for differentiating instruction for special populations including students with disabilities, students on behavior plans, and gifted and talented students in the general education classroom. Meets SB-2042 requirements.
- 5318** Professional Responsibilities (4)
Capstone course to promote independent thinking, professional integrity a vision for school learning, and commitment to working collaboratively with colleagues to improve schools practices. Preservice teachers synthesize the relationship between course content in the credential program and its application in the student teaching experience. Prerequisite: admission to the Single Subject Credential program
- 5320** Content Literacy (3)
Examination of current theoretical, research, and practical knowledge on adolescent literacy. Emphasis on strategy-based literacy instruction to help students in grades 6-12 improve access to content areas textual materials and improve their literacy skills, Prerequisite: admission to the Single Subject Credential Program.
- 5326** Preparation to Teach English Learners in the Secondary Schools (4)
Principles, policies, and practices that address the English language and subject matter learning needs of English learners. Prerequisite: admission to the Single Subject Program.
- 5333** Teaching Performance Assessment for Early Completion (4)
Preparation assistance, administration and scoring of Teaching Performance Assessment for Multiple and Single Subject intern-candidates under SB-57 Early Completion. May be repeated twice for a total of 12 units. Prerequisites: must have passed Teaching Foundations exam and be classified as intern-candidate for Early Completion under SB-57.
- 5347** Student Teaching A in Blended Program (4)
First quarter of a supervised student teaching in an elementary school classroom for four mornings and one afternoon a week. CR/NC grading only. Prerequisites: admission to blended Multiple Subject Credential/Liberal Studies program, senior standing.
- 5348** Student Teaching B in Blended Program (6)

Second quarter of supervised student teaching in an elementary school classroom for four mornings and three afternoons a week. Minimum of one week solo teaching. CR/NC grading only. Prerequisite: T ED 5347.

- 5349** Student Teaching C in Blended Program (9)
Third quarter of supervised student teaching in an elementary school classroom for five mornings and two afternoons a week. Minimum of two-weeks of all-day, solo teaching. CR/NC grading only. Prerequisite: T ED 5348.
- 5350** Curriculum and Instruction: Mathematics in the Elementary School (3)
Theory, content and methods of teaching mathematics in the elementary classroom. Emphasis on the number systems, operations, problem solving, assessment, computer assisted instruction, resource materials, Specially-Designed Academic Instruction in English (SDAIE), and Complex Instruction. Concurrent enrollment in student teaching required. Prerequisite: MATH 4021 and admission to credential program. (Y)
- 5351** Psychological Foundations of Education (3)
Systematic analysis of psychological viewpoints, stages of growth and development, learning processes, and evaluation. Emphasis upon developing a consistent teaching theory based upon psychology, age-level characteristics, race, ethnicity, and social-class differences. Prerequisite: admission to credential program. (Y)
- 5352** Curriculum and Instruction: Reading in the Elementary School-A (4)
Development of a balanced, comprehensive program in reading, writing, and related language instruction. Emphasis on research, home/community literacy, concepts about print, phonemic awareness, phonics, other word identification strategies, vocabulary, comprehension, literature, English language learners. Prerequisite: admission to credential program.
- 5353** Teaching Models (3)
Models for teaching lessons which meet the developmental needs of students from varying cultural, linguistic, racial, and socioeconomic backgrounds. Planning, conducting, and evaluating instruction using each model. Adjusting model to individual learning modes and cognitive levels. Concurrent enrollment in student teaching required. Prerequisite: admission to credential program. (Y)
- 5354** Student Teaching I (4)
Introductory student teaching. Individual, small group, and total class lessons. Professional responsibilities of teachers. AV, handwriting performance tests. CR/NC grading only.
- 5355** Sociological Foundations of Education (2)
The history of elementary education in the United States. The effect of culture, ethnicity, gender, challenging condition, religious affiliation, and social class on the

history of teaching and learning in elementary school classrooms.

- 5356** Curriculum and Instruction: Reading in the Elementary School-B (2)
Development of a balanced, comprehensive program in reading, writing, and related language instruction. Emphasis on comprehension of expository texts, diagnostic strategies that guide teaching and assessment, English language learners. Prerequisite: admission to credential program.
- 5357** Curriculum and Instruction: Teaching Science in Elementary School (3)
Models, methods, and materials of teaching science in elementary schools. Planning, implementing, and evaluating instruction. Focus on Specially-Designed Academic Instruction in English (SDAIE). Development of cognitive skills, scientific attitudes, and hands-on activities. Concurrent enrollment in student teaching required. Prerequisite: admission to credential program. (Y)
- 5359** Student Teaching II (6)
Responsibility for individual, small group, and total class lessons in all subjects. Minimum of one consecutive week of solo teaching. Prerequisite: T ED 5354. CR/NC grading only.
- 5360** Curriculum and Instruction: Language Arts in the Elementary School (3)
Development of a balanced, comprehensive program in reading, writing, and related language instruction. Emphasis on structure of English, listening, oral language, spelling, English usage, writing, relationships among the language arts, curricular integration, English language learners. Prerequisite: admission to credential program.
- 5361** Student Teaching III (13)
Full-time student teaching. Students are expected to teach all subjects. Minimum of two consecutive weeks solo teaching. Prerequisite: T ED 5359. CR/NC grading only. (Y)
- 5364** Classroom Management in the Elementary School (2)
Models for managing school classrooms which meet the developmental needs of students from varying cultural, linguistic, racial, and socioeconomic backgrounds. Concurrent enrollment in student teaching or concurrent teaching experience required. (Y)
- 5365** Curriculum and Instruction: Social Studies in the Elementary School (2)
Theory and methods of teaching social studies in elementary schools. Emphases on utilization of the state framework, community resources, and integration of the social studies with global education and multicultural content. Prerequisite: admission to the credential program. (Y)

- 5366** English as a Second Language (ESL) and Bilingual Methods (2)
Bilingual education, English language development (ELD), content-based English as a Second Language (ESL), and Specially-Designed Academic Instruction in English (SDAIE). Federal and state laws regarding education of language minority students. Concurrent enrollment in student teaching required. Prerequisite: admission to credential program. (Y)
- 5367** Bilingual Methods (3)
Theory, content, materials of dual-language acquisition and development. Strategies for primary language instruction in various areas to provide equal access to the core curriculum.
- 5370** Second Language Acquisition (3)
Systems of language, including phonology, morphology, syntax and semantics; theories and factors in children's first and second language acquisition and development. Psychological, sociocultural, and pedagogical factors which impact on first and second language acquisition in classrooms.
- 5371** Classroom Implications of the Culture of the Latino Child (3)
Focus on major historical experiences of various Latino groups in the United States (pre-Columbian period, the Conquest, colonial period, years of independence, contemporary U.S. life) and their implications for the classroom teacher. Emphasis on cultural commonalities, demographics, immigration, educational patterns, and general relationships among Latinos and the majority culture which influence teaching and learning. Taught in Spanish. Prerequisite: permission of department.
- 5380** Classroom/School Health and Safety (2)
Preparation for learning to create a supportive, healthy environment for learning by all students. Effects of student health and safety on learning, legal responsibilities of teachers, communication skills, site and community resources. Includes conflict management, nutrition, substance abuse, lifestyles. Field component.
- 5381** Field Experience in the Single Subject Classroom A (4-12)
First supervised placement as an intern or student teacher in a single subject classroom. CR/NC grading only. Prerequisite: admission to Single Subject Credential Program.
- 5382** Field Experience in the Single Subject Classroom B (4-12)
Second supervised placement as an intern or student teacher in a single subject classroom. CR/NC grading only. Prerequisite: T ED 5381.
- 5383** Field Experience in the Single Subject Classroom C (4-12)
Third supervised placement as an intern or student teacher

in a single subject classroom. CR/NC grading only.
Prerequisite: T ED 5381, 5382.

5390 Instructional Methods for the Single Subject Classroom I (3)

Introduction to theory and practice of instructional methodology in a single subject classroom. Separate sections for art, English, foreign languages, mathematics, music, physical education, science, and social studies. Prerequisite: admission to Single Subject Credential Program.

5391 Instructional Methods for the Single Subject Classroom II (2)

Theory and practice of instructional methodology in a single subject classroom. Application in the beginning weeks of a teaching assignment. Separate sections for art, English, foreign languages, mathematics, music, physical education, science, and social studies. Prerequisite: T ED 5390.

5392 Instructional Methods for the Single Subject Classroom III (2)

Theory and practice of instructional methodology in a single subject classroom. Emphasis on individual differences among students. Separate sections for art, English, foreign languages, mathematics, music, physical education, science, and social studies. Prerequisites: T ED 5390, 5391.

5393 Instructional Methods for the Single Subject Classroom IV (2)

Synthesis of theory and practice of instructional methodology in a single subject classroom. Separate sections for art, English, foreign languages, mathematics, music, physical education, science, and social studies. Prerequisites: T ED 5390, 5391, 5392.

Other Post-baccalaureate Courses

5413 Environmental Education in the Curriculum (4)

Integration of environmental concepts into total school curriculum. Methods for outdoor teaching; development of individual and group projects using school grounds, nature areas, and parks as laboratories. Review of available curricula: pre-school, secondary, and adult education. (F)

5414 Field Trips and Community Resources for Environmental Education (4)

Organization of environmental educational field trips; identification and application of teaching resources available from agencies, organizations, and industry. May be repeated once for credit. (F)

5500 Teaching Special Populations in General Education Settings (4)

Development of effective patterns, strategies, materials to assist prospective teachers to work with the broad range of "identified," "gifted," and "at risk" students attending

schools in grades K-12. Overview of appropriate differentiated, individualized and classroom instructional strategies for general education settings. Three hrs. lect./disc., 2 hrs. act. (A)

- 5512** Reading/Language Arts for the Multiple Subject Teacher (4)
Examines current research and practice for literacy development for students in grades K-8. Includes, but is not limited to acquisition of literacy, phonemic awareness, word attack strategies, fluency, spelling, writing, comprehension, content area reading, assessment, English Language Learners, managing and organizing for instruction. Satisfies out-of-state Reading class requirement. Prerequisite: out-of-state basic multiple subject teaching credential or approval of instructor.
- 5513** Reading/Language Arts for the Single Subject Teacher (4)
Examines current research and practice for literacy development for students in grades 6-12, including literacy acquisition, phonemic awareness, word attack strategies, fluency, spelling, writing, comprehension, content area reading, assessment, intervention strategies, English Learners, and struggling readers. Satisfies out-of-state Reading requirement. Prerequisite: out-of-state basic single subject teaching credential or approval of instructor.
- 5610** Methods and Materials for Teaching English as a Second Language and Bilingual Education (4)
Strategies for teaching language development to limited-English Speaking students. Review and evaluation of available ESL and bilingual materials reflecting current ESL and bilingual methodologies. ESL and bilingual program models and current research. Review theories of first and second language acquisition. Designed for teachers of LEP students. Prerequisite: consent of instructor. (Y)
- 5612** Teaching Strategies I: Specially Designed Academic Instruction in English (SDAIE) and Practicum (4)
Teaching strategies for developing English language proficiency and providing access to core curriculum at grade level in English. Student development of cognitive academic language proficiency in preparation for mainstream curriculum. (Y)
- 5613** ESL Teaching Strategies II: Reading, Writing and Testing in the ESL Classroom (4)
Teaching strategies for guiding limited-English proficient students to English literacy using various language experience approaches and guided composition. Testing and assess LEP student skills in listening, speaking, reading, and writing. (Y)
- 5700** Reflections on Professional Practice: a Supportive Environment for Student Learning (2)
Theory, research, and best practice on establishing a productive environment in a K-12 classroom. Focus on creating an equitable classroom for all students.

Prerequisites: Preliminary or Level I Teaching Credential; admission to the Multiple Subject Credential program.

5702 Reflections on Professional Practice: Assessing Instructional Experiences (2)

Theory, research, and best practice on assessing the instructional experiences in a K-12 classroom. Focus on options for gathering, analyzing and sharing data.

Prerequisites: Preliminary or Level I Teaching Credential; admission to the Multiple Subject Credential program.

5703 Reflections on Professional Practice: Instructional Planning, The Lesson (2)

Theory, research, and best practice on instructional planning in a K-12 classroom. Focus on elements of effective lessons. Prerequisites: Preliminary or Level I Teaching Credential; admission to the Multiple Subject Credential program.

5704 Reflections on Professional Practice: Standards-Based Instruction (2)

Theory, research, and best practice for instruction in a standards-based system. Focus on instructional implications of California's K-12 content standards.

Prerequisites: Preliminary or Level I Teaching Credential; admission to the Multiple Subject Credential program.

5705 Reflections on Professional Practice: Instructional Planning (2)

Theory, research, and best practices on instructional planning in a K-12 classroom. Focus on units of study.

Prerequisites: Preliminary or Level I Teaching Credential; admission to the Multiple Subject Credential program.

5706 Reflections on Professional Practice: Standards-Based Assessment (2)

Theoretical foundations, research, and best practices on assessing student achievement of K-12 content standards. Focus on the development of reliable, valid, and pragmatic assessment. Prerequisites: Preliminary or Level I Teaching Credential; admission to the Multiple Subject Credential program.

5737 Electronic Professional Portfolio (3)

Design and creation of working, reflective electronic portfolio that demonstrates achievement of credential preparation standards.

5900 Independent Study (1-4)

Graduate

6010 Seminar in Teaching and Learning Mathematics (4)

Research and analysis of selected topics pertinent to Mathematics in the elementary school. Reports on current research, contemporary and experimental programs, and new materials. May be repeated for credit. Prerequisite: consent of instructor. (Y)

- 6015** Using Research to Improve Learning (4)
Analysis of research findings which focus on issues, problems and interests, related to learning. Development of recommendations for improved learning in specified classes, schools, and/or districts. (Y)
- 6020** Research in Education (4)
Seminar in methods and procedures of research tools in education; sources and uses of data. Critical analysis of published research; preparation of a research project to include references, rationale, and outline. T ED 5100 and course in statistics recommended. (A)
- 6021** Seminar in Diagnosis and Treatment of Learning Difficulties in Mathematics (4)
Causes and effects of mathematics learning disabilities. Methods and instruments useful in diagnosis and treatment. Evaluation of materials for the correction of mathematical learning problems. Prerequisite: consent of instructor. (Y)
- 6030** Seminar on Problem Solving and Critical Thinking in Mathematics (4)
Psychological and pedagogical aspects of problem solving and critical thinking in mathematics. Curriculum and teaching models with emphasis on classroom instruction. (Y)
- 6040** Advanced Curriculum and Instruction in Mathematics (4)
Historical and philosophical study of curriculum trends, modern curricular developments including use of newer instructional media, individualization of instruction, school computer usage, and evaluation techniques. (Y)
- 6050** Seminar in Science and Health Education Research (4)
Review of recent research concerning science and health education in grades K-14. Thinking of leading science and health educators regarding purposes and programs needed in the near future. Planning for change processes in schools. Prerequisite: consent of instructor. (Y)
- 6124** Advanced Study in Multicultural Education (4)
Analysis of research on educational policies and practices regarding the development of ethnic identity; compensatory and cross-cultural education. Application to implementation of school programs. Prerequisites: T ED 5038 or consent of instructor.
- 6125** Foundations of Early Childhood Curriculum (4)
Meeting the special curricular needs of young children, including the social, fine arts and basic skills. (Y)
- 6210** Reading/Language Arts: Foundations (3)
Exploration of theoretical and research perspective on how students learn to read and write; structure of the English language, relationships among the language arts and the physiological, psychological, socio-cultural and linguistic

aspects of literacy. (Y)

- 6220** Reading/Language Arts: Meeting the Needs of Diverse Students (3)
Second language acquisition, factors in learning to read and write; cultural factors and literacy development; instructional strategies for diverse students; multicultural children's literature; language, cultural and assessment; home-school literacy connections. (Y)
- 6230** Reading/Language Arts: Developing Fluent Readers and Writers (4)
Current research and practice for fluency development for K-12 students, including English language learners. Acquisition of print concepts, phonemic awareness, and word attack strategies; spelling; selection of appropriate materials; and creating readers who read for multiple purposes. (Y)
- 6231** Reading/Language Arts: Diagnosis (4)
Knowledge, practical experience, and case study approach for diagnosing reading/language arts difficulties for students in K-12. Emphasis on psychometric principles, standardized and informal measurements including an IRI battery. Prerequisite: T ED 6230 with a grade of "B-" or better. (Y)
- 6232** Reading/Language Arts: Instructional Strategies (3)
Design and implementation of research-based instructional interventions to assist non-readers and struggling-readers; alignment of instruction with results of assessment; exploration of effective interventions for K-12 students. Prerequisite: T ED 6231. (Y)
- 6233** Reading/Language Arts: Advanced Clinical Experiences (6)
Clinical experience working with elementary and secondary students and applying effective strategies and materials based on specific needs. Daily practice in assessing; tutoring, individual and group instruction; final report and parent. Prerequisite: T ED 6232. Co-requisite: must be taken concurrently with T ED 6234.
- 6234** Reading/Language Arts: Clinical Seminar (3)
Accompanying seminar for candidates participating in literacy clinic. Topics include, but not limited to, specialized strategies and materials, peer coaching, parent education, clinical report writing, and problem solving. Prerequisite: T ED 6232. Co-requisite: must be taken concurrently with T ED 6233.
- 6240** Reading/Language Arts: Advanced Study of Adolescent Literacy (3)
Current theoretical, research, and practical knowledge of adolescent literacy. Strategy-based literacy instruction to help students in grades 6-12 improve access to content-area textual material and improve their literacy and study skills. Prerequisite: T ED 6210 or 6230, or permission of instructor.

- 6245** Literature for the Young Child (4)
Focuses upon literature of many genre for the teaching of children from three to eight years. Includes picture books, classics, personified machine heroes, realistic books and others. Includes enrichment ideas which teachers can use for young children. Prerequisite: T ED 5240. (Y)
- 6246** Critical Analysis of Children's Literature (3)
Critical analysis of literature intended for children. Study of various literary forms. Extensive readings on children's literature. Prerequisite: 14 units in children's literature. May be repeated for credit. (Y)
- 6250** Reading/Language Arts: Research and Evaluation (3)
Introduction to research and evaluation of literacy development. Emphasis on understanding research terminology, review and analysis of literacy research and its application to the classroom, school, and other instructional settings. Needs assessment and other forms of program evaluation are reviewed. Prerequisites: T ED 6233, 6234. Must be taken before T ED 6020.
- 6251** Reading/Language Arts: Field Experience (3)
Observation and evaluation of an exemplary school's reading and language arts program. Observation and collaboration with a certified practicing reading specialist. Prerequisite: T ED 6232 or permission of instructor.
- 6252** Reading/Language Arts: Leadership and Professional Development (3)
Examines current theoretical, research, and practical knowledge on literacy leadership and professional development. Candidates develop evaluation, leadership, and presentation skills; improve practice and work effectively with schools and other agencies. Prerequisites: T ED 6210, 6232. (Y)
- 6253** Reading/Language Arts: Comprehension and Study Strategies (3)
Theory, research, and practice for reading comprehension and study skills, including concept and vocabulary development, understanding a variety of text structures and independent reading. Implications for K-12 students and English language learners.
- 6254** Reading/Language Arts: Advanced Study of Early Literacy (3)
Philosophy and practices of emergent literacy; examination of current research, theories and programs that assess, meet individual student needs, are developmentally appropriate and empower the teacher as decision-maker. Intensive tutorial experience with beginning reader required. Prerequisite: T ED 6231 or permission of instructor. (Y)
- 6300** Foundations of Curriculum Development (4)
Determinants of curricula in elementary and secondary schools. Effects of national goals, state legislation and

community forces on curriculum development. Theories and patterns of curriculum organization. K-14 curriculum sequences. (F, W)

- 6331** Collaborative Leadership I (4)
(See EDUI 6331 in the "Education: Interdisciplinary Courses" section earlier in this chapter for course description.)
- 6414** Organization of Resident Outdoor Education (4)
Problems and solutions for implementation, e.g., site, staff, health, finance, permission. Preparation, program, and classroom follow-up. A miscellaneous course fee will be charged. Consult the quarterly *Class Schedule* for the current fee. Prerequisite T ED 5413 or consent of instructor. (Y)
- 6416** Development of Environmental Education (4)
History, needs, conceptual framework, trends and types of programs in the United States and the world. Review of literature and dissertations and masters' theses. Prerequisites: T ED 5413, or consent of instructor. (Y)
- 6417** Field Study in Environmental Education (4)
Individual leadership experience in an environmental education program. Prerequisite: consent of instructor. May be repeated once for credit. (Y)
- 6440** Curriculum in Science and Health Education (4)
Analysis of various curricular programs and materials for the teaching of science and/or health in grades K-12.
- 6700** Advanced Educational Psychology (4)
Systematic analysis of general principles of motivation and learning as applied to educational processes. Prerequisite: Upper division learning course. (W, Sp)
- 6702** Research Seminar I (1)
Identify and gather appropriate school data that reveal areas in which certain groups of students are under-served. Valid analysis and presentation of that data discussed. Prerequisite: enrollment in the Urban Teacher Leadership graduate program.
- 6703** Research Seminar II (1)
Identify and gather appropriate school data that reveal areas in which certain groups of students are under-served. Valid analysis and presentation of that data discussed. Prerequisite: enrollment in the Urban Teacher Leadership graduate program.
- 6704** Research Seminar III (1)
Identify and gather appropriate school data that reveal areas in which certain groups of students are under-served. Valid analysis and presentation of that data discussed. Prerequisite: enrollment in the Urban Teacher Leadership graduate program.
- 6898** Cooperative Education (1-4)
Supervised work experience in which student completes

academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 4 units. No units may be counted toward credential programs. CR/NC grading only. Prerequisites: at least 3.0 GPA; departmental approval of activity. (A)

- 6899** Project (2-5)
Development of an original product which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their formats. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense may be required. Prerequisite: graduate standing. Maximum of 5 units per student. (A)
- 6900** Independent Study (1-4)
- 6901** Graduate Synthesis (4)
Alternative to thesis/project. Review of graduate program experiences, examination of recent issues in education, plans for current and future professional development and implementation of action research and assessment in the educational setting of the candidate. Includes comprehensive examination. Prerequisites: completion of all other M.S. degree coursework.
- 6909** Departmental Thesis (2-5)
Development and writing of a research paper for submission to the department which specifies its format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense normally required. Prerequisite: graduate standing. Maximum of 5 units per student.
- 6910** University Thesis (1-6)
Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense normally required. Prerequisite: graduate standing. Maximum of 6 units per student. (See also, "University Thesis Writing Guide," available in WA 859.) (A)
- 6999** Issues in Teacher Education (4)
Readings, discussion, and research on contemporary and/or significant issues in teacher education. May be repeated for credit when content varies.



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HELP



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M.S. in Health Care Administration

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Department of Public Affairs and Administration
College of Arts, Letters, and Social Sciences
Office: Meiklejohn Hall 4122
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Professors: O. Jay Umeh (Chair), Dvora Yanow

Assistant Professors: Ann L. Cunliffe, Toni F. Fogarty

Graduate Coordinator: Ann L. Cunliffe

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

The Department of Public Affairs and Administration, in cooperation with the Department of Nursing and Health Sciences in the College of Science and the College of Business and Economics, offers an interdisciplinary Master of Science in Health Care Administration degree. This degree is primarily designed for health care professionals who are currently in leadership/management positions and for health care professionals who aspire to leadership/management positions in either non-profit, for profit, or voluntary health care organizations. It is secondarily designed for students who are not currently in the health care field, but who desire a career in health care administration.

The objectives of the Master of Science in Health Care Administration are to prepare future health care administrators; enable current and future health care administrators to be more humanistic, effective, and change oriented; meet the need of health care organizations for well-trained and innovative administrators; and help health care organizations successfully meet the challenges of a rapidly changing environment.

This program is different from other health care administration master's degree programs because most of them emphasize the managed health care model. While this is the dominant model currently, our program takes a more comprehensive look at the role of health care in society, including a critical look at the

managed care model, the need for client-centered models, alternative medical models, wellness, and the development of healthy organizations and communities.

Students take required courses in leadership and change in health care organizations, health care financing and budgeting, health care policy, research methods, information technology in health care, and legal and ethical issues in health care.

They also take additional courses in one of the following option areas: Management and Change in Health Care, or Administration of Healthy Communities. Please note that the Administration of Healthy Communities Option is temporarily suspended.

Students in the M.S. in Health Care Administration program acquire the analytical skills needed to explore new models of health care delivery and organizational design. They also develop the leadership skills needed to discover and implement creative solutions to problems in the current health care system.

Career Opportunities

The nation's growing and aging population needs effective health care services from a variety of providers and community organizations. The M.S. in Health Care Administration prepares students for careers in health care administration in public organizations such as county health care agencies, hospitals (both public and private), health provider organizations such as HMO's, community health care organizations such as non-profit health care community-based organizations, and alternative community health care organizations. Health care professionals in nursing, radiology, physical therapy, and other medical services can advance their knowledge of health care policy-making, administration, and leadership with the M.S. in Health Care Administration.

Special Features

The M.S. in Health Care Administration is designed for working adults, and courses generally meet one night per week. The interdisciplinary design of the program enables students to take courses from faculty in public administration, nursing, health sciences, economics, management, and finance.

Admission

The M.S. in Health Care Administration degree is open to students planning a career or advancing a career in the health care field who have a baccalaureate degree from an accredited institution, and who have earned an overall grade point average of 3.0 (on a 4.0 scale) in the last two years or 90 quarter (60 semester) units of undergraduate work. Students with a GPA below 3.0 may be admitted based upon an evaluation of their student profile, including extensive work experience in positions of administration and management beyond the baccalaureate. In evaluating applications from such individuals, the department's Admissions Committee may ask an applicant to take the three foundation courses and reapply, so that a decision can be based on grades in those courses. The Graduate Record Exam (GRE) is not required.

In addition to the University Graduate and Postbaccalaureate Application, all applicants should submit (1) a statement of

purpose (2-3 pages) with their application stating their reasons for wanting to pursue the M.S. in Health Care Administration degree and describing their relevant work experience and their past academic performance; (2) two letters of recommendation (letters from prior instructors are preferred); and (3) a resume. Successful experience in positions of administrative leadership are considered in evaluating applications.

Admission to the university and admission to the M.S. in Health Care Administration degree program are separate steps. It is suggested that the application for admission to the university (Part A) be filed together with the form for entry into the degree program (Part B).

Student Standing and Progress toward the Degree

There are three categories of student status, which reflect student progress toward the degree: "Conditionally Classified Graduate" student, "Classified Graduate" student, and Advancement to Candidacy.

1. Students achieve "Conditionally Classified Graduate" status when they have been admitted to the M.S. in Health Care Administration degree program, but have not yet completed the prerequisites for the "Classified Graduate" status in the M.S. in Health Care Administration degree program.
2. Students achieve "Classified Graduate" status when they have satisfactorily completed the three foundation courses for the M.S. in Health Care Administration degree program or their equivalents, and satisfied the University Writing Skills requirement. (See "Prerequisites for "Classified Graduate" status below.)
3. Students are Advanced to Candidacy when they have completed the core courses with a 3.0 or better GPA.

Prerequisites for "Classified Graduate" Status

As prerequisites to "Classified Graduate" status, students must satisfy the University Writing Skills Requirement and satisfactorily complete three foundation courses: (1) PUAD 4830 Organization Theory and Human Behavior (with a grade of "B" or better) or MGMT 3614 Organizational Behavior (with a grade of "B" or better); (2) HCA 4200 Social Construction of Health Care (with a grade of "B" or better); and (3) STAT 1000 Elements of Probability and Statistics, or its equivalent (with a grade of "C" or better) or request to have one or more of them waived based upon coursework taken outside the Departments of Public Affairs and Administration, Management and Finance, or Statistics. These prerequisite courses should be taken before enrolling in the core graduate courses. Since no specific undergraduate major is required for admission to the program, when additional deficiencies are apparent, a student may be required to complete preparatory work in the deficient areas before attempting graduate-level study.

Degree Requirements

The M.S. in Health Care Administration program requires completion of 48 quarter units consisting of required core courses,

option area courses, and the capstone experience which may be a comprehensive exam, a project, or a departmental or university thesis. Of the 48 units, at least 35 units must be completed in residence (transfer units are limited to 13 quarter units), and at least 25 units must be in courses in the 6000 series. No course numbered 1000 to 2999 (or the equivalent, if taken elsewhere) may be used as part of the 48-unit graduate degree program.

No more than 8 units of Independent Study (HCA 6900) may be counted toward the 48 units required for the degree. Thesis, Project, or Graduate Synthesis (HCA 6901) credit may not exceed 4 units.

A grade point average of 3.0 must be maintained in all 48 quarter units taken to satisfy the degree requirements. Students who fail to maintain progress by falling below a 3.0 GPA in their graduate courses for two consecutive quarters will be academically disqualified by the university. All graduate degree requirements must be completed within five years.

Students accumulating more than 8 units of work graded "I" may not register for courses applicable to the degree until the "I" grades are removed.

Curricular requirements (48 units)

I. Required Core Courses (24 units)

HCA 6210 Leadership and Change in Health Care Organizations (4)

HCA 6230 Information Technology in Health Care (4)

HCA 6240 Health Care Financing and Budgeting (4)

HCA 6260 Health Care Policy Analysis (4)

HCA 6280 Legal and Ethical Issues in Health Care (4)

An approved 6000-level research course (4)

Note: Foundation courses (PUAD 4830 or MGMT 3614, HCA 4200, and STAT 1000) must be completed before taking the required courses. Core courses should be completed prior to enrolling in option courses.

II. Options (20 units)

Choose one of the following two options:

A. *Management and Change in Health Care* (20 units)

PUAD 6876 Financing Sustainable Health Care (4)

PUAD 6878 Transforming Health Care (4)

Select three of the following courses:

HCA 6220 Development of Healthy Organizations and Communities (4)

MGMT 6612 Seminar in Strategic Human Resources Management (4)

MGMT 6618 Human Resources Training and Development (4)

MGMT 6680 Seminar in Labor-Management Relations Administration (4)

MKTG 6005 Managing Marketing: Theory and Practice (4)

PUAD 6850 Human Resource Management in the Public

Sector (4)
PUAD 6851 Work and Organizations of the Future (4)

B. Administration of Healthy Communities (20 units)

PUAD 6897 Community Health Administration Practicum
(4)

Select two of the following:

HCA 6220 Development of Healthy Organizations and
Communities (4)

PUAD 6873 Community Health Policy and Program
Development (4)

PUAD 6876 Financing Sustainable Health Care (4)

PUAD 6879 Administration of Integrated Health Care (4)

PUAD Non-Profit Management Certificate Courses
offered through Extended Education (4)

Electives

Select two courses (8 units) from the Nursing and Health
Sciences, Public Affairs and Administration, or Business
Administration departments, or from other departments
with consent of advisor.

III. Capstone Experience (4 units)

Choose A, B, or C:

A. HCA 6909 Department Thesis (4) or HCA 6910 University
Thesis (4)

B. HCA 6899 Project (4)

C. HCA 6901 Health Care Synthesis (4) and Comprehensive
Exam

Capstone Experience

Students have a choice of completing the program with a
Departmental Thesis or University Thesis, Project, or
Comprehensive Exam. Students who wish to take the
Comprehensive Examination must enroll in HCA 6901 Graduate
Synthesis (4 units). Students completing HCA 6901 are eligible to
take the Comprehensive Exam, which is a proctored essay exam.
Students who fail the Comprehensive Exam may retake HCA
6901 and the exam one more time, or they may choose to enroll
in HCA 6909 Departmental Thesis or HCA 6910 University
Thesis, or HCA 6899 Project, They may not do all three.

Students who wish to take HCA 6909 Departmental Thesis (4
units) or HCA 6910 University Thesis (4 units) should be aware of
the procedural differences between a departmental and university
thesis. The university thesis requires a two-faculty member
committee and submission of the thesis to the university for final
approval and binding. Two bound copies are required (one for the
department and one for the university library). The university
thesis deadline dates are listed in the catalog each year. The
University Thesis Committee meets when called by the student or
the faculty. Students completing the departmental thesis may
either sign up individually with a faculty advisor or meet in a
scheduled graduate course. A departmental thesis is directed by
one faculty member. Two copies of the departmental thesis are

Graduate Courses

required for the department.

Students who wish to complete a project should enroll in HCA 6899 Project (4 units). A project has a strong practical action-oriented component accompanied by a written document. A project is directed by one faculty member. Two copies of the written component of the project are required for the department.

Grades of "SP" (Satisfactory Progress) may be given for a thesis that is not completed at the end of the quarter. The "SP" grade must be removed within five years or it will become an "F."

Granting the Degree

Upon satisfaction of all requirements for the degree, the department will recommend that the candidate be granted the Master of Science Degree in Health Care Administration. Students must file for graduation by the second week of the quarter prior to the quarter in which they expect to graduate.

The course prefix for the following courses is HCA.

- 6210** Leadership and Change in Health Care Organizations (4)
Issues and practices of health care administrators that impact leadership style. Emphasis on developing capacities for leading health organizations in a changing environment, in particular strategic planning, human resources management, facilitation, negotiation and collaboration skills, as well as those needed for innovation and creative management practice. Prerequisites: HCA 4200, and either PUAD 4830 or MGMT 3614.
- 6220** Development of Healthy Organizations and Communities (4)
Creation and maintenance of healthy organizations and healthy communities. Development of administrative practice to sustain well communities within the organization and without. Administering programs to sustain and promote well-being in the community and activate community resources. Prerequisites: HCA 4200, and either PUAD 4830 or MGMT 3614.
- 6230** Information Technology in Health Care (4)
The impact of information systems on the design and delivery of health care; different information technologies; use of information systems in policy making and quality assurance and improvement; relationship of information technology to organizational design. Prerequisites: HCA 4200; PUAD 4830 or MGMT 3614; STAT 1000 or its equivalent.
- 6240** Health Care Financing and Budgeting (4)
Functioning of health care markets; impact of economic incentives on health care decision-making; U.S. health care financing; impact of uninsured; role of nonprofit organizations; impact of managed care model; forecasting expenditures; role of technology, prices, utilization rates, and demographics. Prerequisites: HCA 4200; PUAD 4830

or MGMT 3614; STAT 1000 or its equivalent.

- 6260** Health Care Policy Analysis (4)
The health care policy process; impact of health care on broader social policy; influence of political and economic forces on health policies; impact of emerging models of health care such as community-based programs. Critical analysis of market-based models. Prerequisites: HCA 4200; PUAD 4830 or MGMT 3614; STAT 1000 or its equivalent.
- 6280** Legal and Ethical Issues in Health Care (4)
Contemporary legal issues in health care administration. Overview of recent health legislation and regulations. Personal and organizational liability; ethical issues in health care administration. Impact of the market model on health care delivery. Prerequisites: HCA 4200, and either PUAD 4830 or MGMT 3614.
- 6898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 4 units. A maximum of 4 units will be accepted toward the M.S. in Health Care Administration degree. CR/NC grading only. Prerequisites: at least a 3.0 GPA; the approval of the Health Care Administration Graduate Coordinator.
- 6899** Project (4)
Development of an original product which is summarized in a written abstract. Both the project and the abstract are submitted to the department, which specifies their formats. Supervision by a departmental faculty member. Oral defense may be required. Prerequisites: Advancement to Candidacy, approval of project supervisor.
- 6900** Independent Study (1-4)
- 6901** Graduate Synthesis (4)
Synthesis of health care administration theories, concepts, and issues through a critique of major readings in the field. Theory and practice in health care administration. Use of personal and professional knowledge to advance individual and organizational change. Required for Comprehensive Exam. Prerequisites: Advancement to Candidacy, approval of project supervisor.
- 6909** Department Thesis (4)
Development and writing of a research paper for submission to the department, which specifies its format. Supervision by a departmental faculty member. Oral defense normally required. Prerequisites: Advancement to Candidacy and consent of thesis advisor.
- 6910** University Thesis (4)
Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense normally required. Prerequisites: Advancement to

Candidacy and consent of Thesis Committee. (See also "University Thesis Writing Guide" available in WA 859.)

6999 Issues in Health Care Administration (4)
Readings, discussion, and research on contemporary and/or significant issues in health care administration. May be repeated for credit when content varies.



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Department Information

GRADUATE PROGRAMS

Telecommunication Systems

- ▶ [Department Information](#)
- ▶ [M.S. in Telecommunication Systems](#)

Department of Accounting and Computer Information Systems

(Telecommunications Management Option)

College of Business and Economics

Office: Music Business Building 2577

Phone: (510) 885-3397

E-mail: hdu@csuhayward.edu

Department of Mathematics and Computer Science

(Computer Technologies of Telecommunications Option)

College of Science

Office: North Science 335

Phone: (510) 885-3414

E-mail: leann@csuhayward.edu

http://www.mcs.csuhayward.edu/tcs_ms.html

Professors: Christopher L. Morgan (Mathematics and Computer Science), William R. Nico (Mathematics and Computer Science), Kenneth Pefkaros (Accounting and Computer Information Systems), Ytha Yu (Mathematics and Computer Science)

Associate Professors: Kevin A. Brown (Mathematics and Computer Science), Farzan Roohparvar (Mathematics and Computer Science)

Assistant Professors: Leann Christianson (Mathematics and Computer Science), Hongwei Du (Accounting and Computer Information Systems)

Graduate Coordinators: Hongwei Du (Telecommunications Management Option) and Leann Christianson (Computer Technologies of Telecommunications Option)

Please consult the 2006-2007 online catalog for any changes that may occur.

M.S. in Telecommunication Systems

Program Description

The Department of Accounting and Computer Information Systems (College of Business and Economics) and the Department of Mathematics and Computer Science (College of Science) offer graduate study leading to the degree Master of

Science in Telecommunication Systems. This program is designed to give students current knowledge in telecommunications core technology and problem solving experience in designing and implementing telecommunication systems.

The area of telecommunications requires a variety of technical and business-related skills. On the technical side, it requires knowledge and experience with computer network protocols, routing algorithms, network congestion control, error handling, network management, data compression and encryption, switching algorithms, operating systems principles and practices, computer architecture, and software development. On the business side, knowledge and experience is required in the areas of systems analysis, systems design, organizational management, service operations management, management of technology innovation, regulatory issues, public policy, and standards. Telecommunications rests upon engineering principles and concepts that draw upon physics.

The program provides opportunities for students to gain a deeper understanding of the basis for telecommunications technology and its application to business communication infrastructures. It is designed to offer both a theoretical background and practical experience beyond that covered in typical undergraduate degree programs. A theoretical background to support hands-on learning is imperative as the telecommunications industry and its technologies are transitory and rapidly evolving. Students can expect to have a number of different job classifications during their working lives.

The program emphasizes a systems aspect of telecommunications technologies that enables graduates to acquire high-demand knowledge and skills. Examples of current key aspects include: telecommunications management, telecommunication systems and products, telecommunications productivity tools, telecommunications business/industry, technology/engineering core.

Faculty

The faculty are drawn from both the Mathematics and Computer Science Department and the Department of Accounting and Computer Information Systems. They hold doctorates in a wide variety of areas, and have a strong commitment to high quality teaching. Faculty research interests include computer networking, Internet protocols, multimedia, satellite systems, collaborative systems, operating systems, distributed systems, computer graphics, software engineering, cryptography, and database systems.

Faculty Teaching and Research Interests

Kevin A. Brown, Ph.D. in Computer Science (1997), University of South Carolina. Interests: mobile and wireless networking, multimedia systems, and satellite and telecommunications management.

Leann Christianson, Ph.D. in Computer Science (1997), University of South Carolina. Interests: data compression, multimedia applications, network quality of service, and telecommunications.

Hongwei Du, Ph.D. in Operations Research (1994), Florida Institute of Technology. Interests: software engineering, artificial intelligence, computer systems development and management, e-commerce and internet applications, computer networking and telecommunications.

Levent Ertaul, Ph.D. in Engineering and Applied Sciences (1994), University of Sussex, England. Interests: computer networks security, cryptology, wireless networks and mobile agent security, and telecommunications security.

Christopher L. Morgan, Ph.D. in Mathematics (1969), Brandeis University. Interests: interactive remote management, telecommunications, multimedia, and software development.

William R. Nico, Ph.D. in Mathematics (1966), University of California, Berkeley. Interests: computer security, programming language design and implementation, theoretical computer science.

Kenneth Pefkaros, Ph.D. in Applied Mathematics (1972), University of Delaware. Interests: systems analysis, routing and data networking models, object-oriented analysis, databases, decision support systems, and operations research.

Farzan Roohparvar, Ph.D. in Electrical and Computer Engineering (1983), Iowa State University. Interests: VLSI design, computer architecture, distributed systems, operating systems design, microprocessor/memory chip design, digital design using Verilog HDL.

Ytha Yu, Ph.D. in Electrical Engineering (1970), University of California, Berkeley. Interests: database systems, web development, and computer networks.

Facilities

Telecommunications students at Cal State Hayward have access to some of the most modern and powerful computer and networking equipment available. The campus provides a network backbone, including connection to the Internet, an IBM 9377, a network of Unix workstations (mostly SUN SPARCstations), and hundreds of microcomputers. All mainframes and microcomputers are accessible from terminals located throughout campus and by modem and Internet off campus. Several computer labs on campus offer terminal access and assistance with problems.

Admission

To apply for admission to the M.S. program in Telecommunication Systems, a student must submit the proper forms, fees and transcripts to the university's Graduate Admissions Office which initially reviews each application to determine eligibility. The graduate coordinators then review the application, making the decision whether to accept or reject the applicant. A student wishing to enter this program must have a baccalaureate degree.

Admission Requirements for the Degree

Prerequisites consist of a satisfactory score on the Graduate Record Examination (GRE) or the Graduate Management Admissions Test (GMAT) and either coursework or completion of

a specified undergraduate major before the student can obtain full classification in the program. Students do not receive credit toward the master's degree for prerequisites. Students must have a grade point average of 2.75 in all undergraduate work and a 3.00 grade point average in their major, if applicable, or the required substitute coursework listed below.

Coursework and undergraduate major prerequisites for each option are outlined below.

Admission Requirements for Options

Computer Technologies of Telecommunications Option

Completion of a bachelor's degree in computer science, engineering or other field. Prerequisite courses include the following or equivalent:

CS 2430 Computer Organization and Assembly Language Programming
CS 3240 Data Structures and Algorithms
CS 3430 Computer Architecture
CS 3590 Data Communications and Networking
CS 4560 Operating Systems or CS 3560 Introduction to Systems Programming
CS 4590 Computer Networks
MATH 2150 Discrete Structures

An upper division course in probability or statistics (STAT/ENGR 3601, STAT/MATH 3401, or STAT/MATH 3502)

Telecommunications Management Option

Completion of an undergraduate major in Business Administration (with a MIS, CIS or Telecommunications Management option or emphasis) or an undergraduate degree in another area, together with the following coursework or equivalent:

CIS 3270 Algorithm Development and Programming or CIS 3275 Object-Oriented Programming or any advisor-approved equivalent third-generation programming language

MGMT 6000 Graduate Introduction to Quantitative Methods in Business

MGMT 6020 Graduate Introduction to Production and Operations Management or MGMT 6060 Graduate Introduction to Organization and Management

TC 3250 Introduction to Networks and Telecommunications Systems

TC 4266 Network Operating Systems and Architecture

TC 4300 Telecommunications Systems Analysis and Design or CIS 3281 Systems Analysis and Design

Telecommunication Systems Engineering Option

Completion of an undergraduate major in Electrical or Computer Engineering.

Writing Skills

Students must satisfy all university admission requirements including the University Writing Skills Requirement. Students who

have passed the University Writing Skills Requirement as undergraduates at CSU Hayward or another CSU campus are considered to have satisfied this requirement.

Advancement to Candidacy

Advancement to Candidacy is a university requirement for graduation. It is also a requirement for admission to the capstone experience. Requirements for Advancement to Candidacy are:

1. Classified student in good standing
2. Completion of at least 16 quarter units toward the degree, including at least two core courses in the program, with a "B" or better average.
3. Formal program of study approved by an advisor.

A student who has not met all of the above requirements may be admitted to the program at the discretion of the department as a "Conditionally Classified Graduate" student, provided the student's record clearly demonstrates the capability of meeting all these requirements.

No more than 20 quarter units taken while in "Conditionally Classified Graduate" status may be applied toward the master's degree. A "Conditionally Classified Graduate" student who has no course deficiencies, a "B" or better average in at least 12 quarter units of post-baccalaureate study, and has satisfied the University Writing Skills requirement should petition the graduate coordinator for admission to the master's degree program with "Classified Graduate" status. A maximum of 13 units taken as an "Unclassified Post-baccalaureate" student may be applied to a master's degree.

Degree Requirements

The M.S. in Telecommunication Systems consists of 45 units.

I. Core (12 units)

All students take the following core consisting of three classes that bring together the common principles, approaches, and working knowledge of a telecommunications professional.

TC 6101 Analysis and Design of Telecommunication Systems (4)

TC 6205 Routing and Data Networking Models in Telecommunications (4)

TC 6207 Telecommunications Management Systems (4)

II. Options (16 units)

Each student must select one of the following three options.

Computer Technologies of Telecommunications
This option focuses on telecommunication systems from a Computer Science/Computer Engineering perspective.

Four courses (16 units) selected from the following:

CS 6315 Object-oriented Software Development for Telecommunications (4)

CS 6522 Advanced WWW Software Development (4)

CS 6525 Network Security (4)

CS 6560 Operating Systems Design (4)
CS 6715 Data Compression (4)
TC/CS 6815 Artificial Intelligence in Telecommunications (4)

Telecommunications Management

This option focuses on business-oriented aspects of telecommunications. Particular emphases are on analysis and design and on managerial systems.

Four courses (16 units) selected from the following:

MGMT 6100 Quantitative Business Methods (4)
MGMT 6141 Service Operations Management (4)
MGMT 6470 Management of Technology and Innovation (4)
TC 6210 Collaborative Multimedia Networking and Telepresence (4)
TC 6284 Management of Satellite/Wireless Communications (4)

Telecommunications Systems Engineering

This option focuses on the fundamental technologies and technological systems that are used in telecommunications. *Students should contact the Department of Mathematics and Computer Science (Kevin Brown or Leann Christianson) regarding the status of this program.*

The following four courses (16 units):

CS 6752 Digital Signal Processing (4)
CS/TC 6844 Digital Image Processing (4)
TC/CS 6458 Optical Fiber Technologies (4)
A 6000-level TC course in advanced satellite communications and services, with consent of advisor (4)

III. Electives (12 units)

Students must select an additional 12 units of electives. Courses in any option may be selected. These additional electives need not be within the student's chosen option, and they may also include up to five units of independent study that is preparatory to the capstone experience.

IV. Capstone Experience (5 units)

All students must complete a capstone experience. The capstone experience consists of a project, normally involving a team of students, and an individual formal document from each student. Projects must be approved by a designated faculty committee and sponsored by a faculty advisor. All students must complete the following course to receive credit for their capstone experience: CS/TC 6899.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate and Post-baccalaureate Studies chapter at the beginning of the graduate section of this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills Requirement.

Graduate Courses

See the graduate [Business Administration](#) chapter for

Telecommunication (TC) course descriptions.



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Department Information

M.A. in History

History

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Department of History
College of Arts, Letters, and Social Sciences
Office: Meiklejohn Hall 4036
Phone: (510) 885-3207

Professor Emeritus: Richard J. Orsi

Professors: Dee E. Andrews (Chair), Richard A. Garcia, Gerald S. Henig, Henry F. Reichman

Associate Professors: Pablo Raul Arreola, Jr., Sophia Lee

Assistant Professors: Deana L. Heath, Nicole C. Howard, Robert A. Phelps, Nancy M. Thompson, Jessica Weiss

Lecturers: Roger L. Baldwin, Jeffrey M. Burns, Richard B. Speed, Terry P. Wilson

Graduate Coordinator: Sophia Lee

Please consult the 2006-2007 online catalog for any changes that may occur.

Program Description

The Master of Arts degree in History is designed to meet the varied needs and interests of students seeking an advanced degree in history. The program trains students in advanced skills in historical research, writing, and teaching. Four options permit students to plan their coursework to best suit their goals within the overall program requirements and the range of courses offered.

The program includes graduate course offerings in historical research and historiography, conference (seminar) courses, undergraduate or graduate elective units, and a culminating master's project. Elective units may be taken in other fields with the approval of the graduate coordinator. The master's project may be a university thesis, departmental thesis, examinations in major and minor fields, or a graduate project, depending on the option chosen.

Because the majority of students in the master's program are

employed full-time during the day, graduate courses are offered in the evening, usually on a one-night-a-week basis, in fall, winter, and spring quarters. This schedule allows students time to complete regular assignments, carry on research, and make regular progress toward the M.A. degree.

Career Opportunities

The master's program is especially suited to individuals interested in enhancing their careers as secondary school teachers, in qualifying as community college faculty, or training as historical editors, archivists and Bay Area or California historians. It is also useful for individuals interested in retraining for careers in history or in preparing for doctoral programs in history.

Faculty

Although most graduate students find it convenient to specialize in American and California history, the History Department faculty also includes specialists in European, Asian, and Latin American history. Qualified graduate students may usually carry out research and specialize in these areas as well. The full-time faculty are professional scholars, widely published in their respective fields and active in regional and national historical associations. The department has many years' experience in advising and training master's students in history.

Option Areas

The master's program offers four options: Thesis, Examination, Teaching, and Public History. The Thesis, Examination, and Teaching options differ chiefly in their required M.A. projects. The Public History Option has a distinct set of course requirements designed for training in that specialty.

Both the Thesis and Examination options are appropriate for those who plan to continue beyond the master's degree. The Teaching option is especially useful for individuals who currently teach or plan careers in teaching. The Public History option prepares students for non-academic work in history, such as Bay Area or California projects in the private or public sector or museum and archival work. It is generally expected that students in the Thesis and Public History options will pursue research at libraries and historical collections outside the university in completing their master's projects. Students in the Examination and Teaching options are more likely to complete their projects on campus.

Special Features

Research opportunities in Bay Area and California history abound at the University of California, Berkeley; the Bancroft Library; the National Archives at San Bruno; and numerous private collections in the region. The University Library provides excellent reference, Internet, and interlibrary loan services and contains substantial print and microfilm holdings.

Scholarships

Qualified history graduate students are eligible for graduate financial aid through the loan and fellowship programs administered by the Financial Aid Office. Small scholarships of \$100 to \$500, pending available funds, are awarded annually through the Evelyn Whitman Rice Memorial Fund to assist graduate students in completing their master's projects.

Admission

Admission to the master's program generally requires a B.A. degree major in History, or the equivalent, and a minimum GPA of 3.0 ("B") in the last two years of undergraduate work and 3.25 ("B+") in history. A one-page statement of purpose and two letters of recommendation must accompany applications. Interested students with degrees in related disciplines, such as American Studies, Ethnic Studies, Political Science, Art or Theater History, and Literature, and suitable academic backgrounds in history are encouraged to apply but will be required to enroll in the university as "Unclassified Postbaccalaureate" students to complete prerequisite coursework in history.

Students without necessary background in research or writing may also be admitted to the program as "Conditionally Classified Graduate" students with the requirement that they complete HIST 4030 and/or 4031 at a specified grade level before being admitted to "Classified Graduate" status. Students meeting all admissions requirements, and who have satisfied the University Writing Skills requirement, are eligible to be admitted as "Classified Graduate" students. Applicants should consult with the History Graduate Coordinator for advising.

Degree Requirements

The Master of Arts degree in History consists of 45 units. Each of the four options in the master's program requires a prescribed program of 45 units listed below. Reading proficiency in a foreign language is strongly encouraged, especially for those planning to pursue doctoral degrees or research careers.

I. Thesis Option (45 units)

A. Required Courses (17 units)

- HIST 6010 Seminar in History (5)
- HIST 6030 Graduate Historiography (4)
- HIST 6910 University Thesis (8)

B. Conference Course (16 units)

Four courses, including repeats, from the following in at least two areas. One Conference Course must be in the general area of the thesis topic.

- HIST 6100 Conference Course in Ancient and Medieval History (4)
- HIST 6200 Conference Course in European History (4)
- HIST 6300 Conference Course in Asian History (4)
- HIST 6400 Conference Course in United States History (4)
- HIST 6500 Conference Course in Latin American History (4)

C. Electives (12 units)

Twelve (12) units of upper division or graduate courses in History.

D. Complete an approved University Thesis. (See HIST 6910 above.)

II. Examination Option (45 units)

A. Required Courses (13 units)

HIST 6010 Seminar in History (5)
HIST 6030 Graduate Historiography (4)
Four units of HIST 6909 Departmental Thesis (1-4)

B. Conference Courses (20 units)

Five courses, including repeats, from the following in at least two areas:

HIST 6100 Conference Course in Ancient and Medieval History (4)
HIST 6200 Conference Course in European History (4)
HIST 6300 Conference Course in Asian History (4)
HIST 6400 Conference Course in United States History (4)
HIST 6500 Conference Course in Latin American History (4)

C. Electives (12 units)

Twelve (12) units of upper division or graduate courses in History.

D. Comprehensive Examination

Pass comprehensive written examinations in major and minor fields as prescribed by the department.

III. Teaching Option (45 units)

A. Required Courses (17 units)

HIST 6010 Seminar in History (5)
HIST 6030 Graduate Historiography (4)
HIST 6899 Project or HIST 6909 Departmental Thesis (4)
HIST 6900 Independent Study (4)

B. Conference Courses (16 units)

Four courses, including repeats, from the following in at least two areas:

HIST 6100 Conference Course in Ancient and Medieval History (4)
HIST 6200 Conference Course in European History (4)
HIST 6300 Conference Course in Asian History (4)
HIST 6400 Conference Course in United States History (4)
HIST 6500 Conference Course in Latin American History (4)

C. Electives (12 units)

Twelve (12) units of upper division or graduate courses in History.

D. Curriculum Project

Complete an approved curriculum Project. (See HIST 6899, 6909 above.)

IV. Public History Option (45 units)

A. Required Courses (25 units)

HIST 4032 Introduction to Public History (4)
HIST 6010 Seminar in History (5)
HIST 6030 Graduate Historiography (4)
HIST 6400 Conference Course in United States History (4)

HIST 6899 Project or HIST 6909 Departmental Thesis (3)
HIST 6901 Internship in Public History (5)

B. Conference Courses (12 units)

Three courses, including repeats, from the following in at least two areas:

HIST 6100 Conference Course in Ancient and Medieval History (4)

HIST 6200 Conference Course in European History (4)

HIST 6300 Conference Course in Asian History (4)

HIST 6400 Conference Course in United States History (4)

HIST 6500 Conference Course in Latin American History (4)

C. Electives (8 units)

Eight units of upper division or graduate courses in History.

Recommended Skills Courses: The department recommends that students select two or three courses from the following list, or others approved by their advisor, appropriate to their specific professional goals:

ANTH 3710 Anthropology and Museums, 4240 Data Analysis in Archaeology; ART 3701 Gallery and Museum Exhibition and Design; COMM/ART 4620 History of Photography; PUAD 4800 Public Administration and Society

D. Internship and Project

Complete an approved Internship and Public History Project. (See HIST 6899, 6901, 6909 under required courses.)

Upper Division Courses Acceptable for the Master's Degree

All History courses in the 3000-4000 series except 3400, 4030, and 4031 are acceptable courses in a master's program.

Advancement to Candidacy

In addition students must meet the requirements of Advancement to Candidacy confirming that a student is prepared to finish the degree and is recommended as a degree candidate. A Classified Graduate student in good standing is eligible to be advanced to candidacy for the master's degree after:

1. completing 12 quarter units applicable to the degree program
2. completing HIST 6010 and 6030
3. submitting a proposal for the Master's thesis, project, or two fields of examination to the Graduate Committee
4. obtaining the Graduate Coordinator's approval of the student's committee, comprised of at least two faculty members.

Courses

- 6010** Seminar in History (5)
Historical methodology including critical analysis and use of source materials, research and writing. Investigation of selected topics in political, economic, diplomatic, intellectual, and social history. Reports and discussion. Prerequisite: consent of instructor. (Y)
- 6030** Graduate Historiography (4)
Intensive readings in the classics of historical writing and the philosophy of history. Written critical analyses, both in- and out-of-class, are required. Open only to postbaccalaureate students. Prerequisite: consent of instructor. (Y)
- 6100** Conference Course in Ancient and Medieval History (4)
Readings and discussion in the significant historical literature of ancient and medieval Europe emphasizing the chief areas of historical controversy and interpretation. Study of the major historians. May be repeated for additional credit with other professors. Prerequisite: consent of instructor.
- 6200** Conference Course in European History (4)
Readings and discussion in the significant historical literature of modern Europe emphasizing the chief areas of historical controversy and interpretation. Study of the major historians. May be repeated for additional credit with other professors. Prerequisite: consent of instructor.
- 6300** Conference Course in Asian History (4)
Readings and discussion in the significant historical literature of Asia emphasizing the chief areas of historical controversy and interpretation. Study of the major historians. May be repeated for additional credit with other professors. Prerequisite: consent of instructor.
- 6400** Conference Course in United States History (4)
Readings and discussion in the significant historical literature of the United States emphasizing the chief areas of historical controversy and interpretation. Study of the major historians. May be repeated for additional credit with other professors. Prerequisite: consent of instructor.
- 6500** Conference Course in Latin American History (4)
Readings and discussion in the significant historical literature of Latin America emphasizing the chief areas of historical controversy and interpretation. Study of the major historians. May be repeated for additional credit with other professors. Prerequisite: consent of instructor.
- 6898** Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for up to 5 units. A maximum of 5 units will be accepted toward the History major. Prerequisites: at least a 3.0 GPA; departmental approval of activity. (A)
- 6899** Project (1-4)

Development of an original product which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their formats. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense may be required. Prerequisite: graduate standing.

6900 Independent Study (1-4)

6901 Internship in Public History (1-5)

Supervised field work in non-academic settings, such as museums, libraries, archives, private business and government agencies, or historical preservation programs. Prerequisite: consent of instructor. May be repeated, but maximum allowable credit is five units.

6902 Historical Editing (1-4)

Theory and method of editing scholarly historical journals. Experience editing a State Historical Society quarterly under the supervision of its editor. May be repeated for credit. Prerequisite: consent of instructor.

6909 Departmental Thesis (1-4)

Development and writing of a research paper for submission to the department which specifies its format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense normally required. Prerequisite: graduate standing.

6910 University Thesis (1-8)

Development and writing of a formal research paper for submission to the University in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State Hayward faculty member. Oral defense normally required. Prerequisite: graduate standing. (The University Thesis Writing Guide is available in Warren Hall, room 859.)

6999 Issues in History (4)

Readings, discussion, and research on contemporary and/or significant issues in history. May be repeated for credit when content varies.



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The California State University

► [Footnote](#)

The individual California State Colleges were brought together as a system by the Donahoe Higher Education Act of 1960. In 1972, the system became the California State University and Colleges and, in 1982, the California State University. Today the campuses of the CSU include comprehensive and polytechnic universities and, since July 1995, the California Maritime Academy, a specialized campus.

The oldest campus, San Jose State University, was founded in 1857 and became the first institution of public higher education in California. The newest, CSU Channel Islands, opened in fall 2002, with freshmen arriving in fall 2003.

Responsibility for the California State University is vested in the Board of Trustees, whose members are appointed by the Governor. The Trustees appoint the Chancellor, who is the chief executive officer of the system, and the Presidents, who are the chief executive officers of the respective campuses.

The Trustees, the Chancellor, and the Presidents develop systemwide policy, with actual implementation at the campus level taking place through broadly based consultative procedures. The Academic Senate of the California State University, made up of elected representatives of the faculty from each campus, recommends academic policy to the Board of Trustees through the Chancellor.

Academic excellence has been achieved by the California State University through a distinguished faculty, whose primary responsibility is superior teaching. While each campus in the system has its own unique geographic and curricular character, all campuses, as multipurpose institutions, offer undergraduate and graduate instruction for professional and occupational goals as well as a broad liberal education. All the campuses require a basic program of "General Education Requirements" for graduation, regardless of the type of bachelor's degree or major field selected by the student.

The CSU offers more than 1,800 bachelor's and master's degree programs in 240 subject areas. Many of these programs are offered so that students can complete all upper-division and graduate requirements by part-time, late afternoon, and evening study, or by distance learning from home or work via computer or television. In addition, a variety of teaching and school service credential programs is available. A number of doctoral degrees is

offered jointly with the University of California and with private institutions in California.

Enrollment in fall 2004 totaled 397,000 students, who were taught by some 21,000 faculty. The system awards more than half of the bachelor's degrees and 30 percent of the master's degrees granted in California. Nearly two million persons have graduated from CSU campuses since 1960.

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Dr. David S. Spence, *Executive Vice Chancellor and Chief Academic Officer*

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Office of the Chancellor

The California State University

401 Golden Shore, Long Beach, California 90802-4210

(562) 951-4000

Campuses - The California State University

California State University, Bakersfield

9001 Stockdale Highway, Bakersfield, CA 93311-1099

Dr. Horace Mitchell, President

(661) 664-2011; www.csub.edu

California State University, Channel Islands

One University Drive, Camarillo, CA 93012-8584

Dr. Richard Rush, President

(805) 437-8400; www.csuci.edu

California State University, Chico

400 West First Street, Chico, CA 95929-0150

Dr. Paul J. Zingg, President

(530) 898-4636; www.csuchico.edu

California State University, Dominguez Hills

1000 East Victoria Street, Carson, CA 90747-0005

Dr. James E. Lyons Sr., President

(310) 243-3300; www.csudh.edu

California State University, East Bay

25800 Carlos Bee Boulevard, Hayward, CA 94542-3011

Dr. Norma S. Rees, President

(510) 885-3000; www.csueastbay.edu

California State University, Fresno

5241 North Maple Avenue, Fresno, CA 93740

Dr. John D. Welty, President

(559) 278-4240; www.csufresno.edu

California State University, Fullerton
800 North State College Boulevard, Fullerton, CA 92834-9480
Dr. Milton A. Gordon, President
(714) 278-2011; www.fullerton.edu

California State University, Hayward
(Recently renamed California State University, East Bay. See above. The first catalog to reflect the name change will be the 2006-08 printed and 2006-07 online University Catalogs.)

Humboldt State University
One Harpst Street
Arcata, CA 95521-8299
Dr. Rollin C. Richmond, President
(707) 826-3011; www.humboldt.edu

California State University, Long Beach
1250 Bellflower Boulevard, Long Beach, CA 90840-0115
Dr. Robert Maxson, President
(562) 985-4111; www.csulb.edu

California State University, Los Angeles
5151 State University Drive, Los Angeles, CA 90032
Dr. James M. Rosser, President
(323) 343-3000; www.calstatela.edu

California Maritime Academy
200 Maritime Academy Drive, Vallejo, CA 94590
Dr. William B. Eisenhardt, President
(707) 654-1000; www.csum.edu

California State University, Monterey Bay
100 Campus Center, Seaside, CA 93955-8001
Dr. Peter P. Smith, President
(831) 582-3330; www.csumb.edu

California State University, Northridge
18111 Nordhoff Street, Northridge, CA 91330
Dr. Jolene Koester, President
(818) 677-1200; www.csun.edu

California State Polytechnic University, Pomona
3801 West Temple Avenue, Pomona, CA 91768
Dr. J. Michael Ortiz, President
(909) 869-7659; www.csupomona.edu

California State University, Sacramento
6000 J Street, Sacramento, CA 95819
Dr. Alexander Gonzalez, President
(916) 278-6011; www.csus.edu

California State University, San Bernardino
5500 University Parkway, San Bernardino, CA 92407-2397
Dr. Albert Karnig, President
(909) 880-5000; www.csusb.edu

San Diego State University
5500 Campanile Drive, San Diego, CA 92182
Dr. Stephen L. Weber, President

(619) 594-5000; www.sdsu.edu

San Francisco State University
1600 Holloway Avenue, San Francisco, CA 94132
Dr. Robert A. Corrigan, President
(415) 338-1111; www.sfsu.edu

San José State University
One Washington Square, San Jose, CA 95192-0001
Mr. Don Kassing, Interim President
(408) 924-1000; www.sjsu.edu

California Polytechnic State University, San Luis Obispo
One Grand Avenue
San Luis Obispo, CA 93407
Dr. Warren J. Baker, President
(805) 756-1111; www.calpoly.edu

California State University, San Marcos
333 S. Twin Oaks Valley Rd., San Marcos, CA 92096-0001
Dr. Karen S. Haynes, President
(760) 750-4000; www.csusm.edu

Sonoma State University
1801 East Cotati Ave., Rohnert Park, CA 94928-3609
Dr. Ruben Armiñana, President
(707) 664-2880; www.sonoma.edu

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401 Golden Shore, Long Beach 90802-4210

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Correspondence with Trustees should be sent:

c/o Trustees Secretariat
The California State University
401 Golden Shore
Long Beach, CA 90802-4210

Footnote

1 Appointment effective July, 2005.



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University Administration

University Administration and Professional Staff

Office of the President

President, Norma S. Rees

Staff Assistant to the President: Ronna Taylor

Executive Assistant to the President: Robert Brauer

Director, University Communications and Marketing: Jay Colombatto

University Advancement

Vice President, University Advancement: Robert Burt

Assistant to the Vice President/Development Assistant: Paris Winter

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Director, Advancement Services: Tom Froehlich

Director, Annual Giving: Lynn Strong

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Administrative Support, Academic Affairs: Gina Traversa

Deputy Provost: Pablo Raul Arreola

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Director, Academic Budgets and Operations: Anna Powers

Assistant Vice President, Enrollment Management (Interim): Raymond P. Wallace

Executive Director of Enrollment Services, Operations: Jeffrey D. Cook

Executive Director of Enrollment Services, Information Technology and Project Management: Bruce Purcell

Assistant to the Assistant Vice President, Special Projects: Glen Perry

Associate Director, Financial Aid: Rhonda Johnson

Assistant Director, Financial Aid: Amy Huie

Associate Director, Records and Registration: Evelyn Padua Andrews

Associate Director, Admissions and Evaluations: _____
Assistant Director, Student Information Lobby: Jeannette Monroe
Assistant Director, Recruitment, Tours, Events: Gail Grant
Assistant Director, Communications: Debra Flores-Victoria

Associate Vice President, Academic Programs and Graduate Studies: Carl Bellone

Associate Director, Academic Programs/Graduate Studies and Director, PACE: Deborah Baker

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Coordinator, Testing Office: Atanas Maximov

Coordinator, Academic Policies/Curriculum: Rosanne Moore

Director, Publications: Bonni Symington

Director, Online Teaching/Learning Program: Nan Chico

Director, Multimedia Program: James Petrillo

Graphics Designer: Jesse Cantley

Coordinator, University Honors Program: Stevina Evuleocha

Coordinator, General Education: Sally Murphy

Articulation Officer: Michelle La Centra

Assistant Vice President, Institutional Research and Assessment: Roseann R. Hogan

Associate, Academic and Institutional Studies: Thomas Kunselman

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Coordinator, Registration: Gail Turner

Database/Customer Relationship Manager: Julie Reynoso

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Director, Business and Outreach Programs: Raj George

Director, CableNet TV: Yann LeRenard

Director, Grants and Contracts: Peter Dahlin

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Associate University Librarian: Aline Soules

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Head, Access Services: _____

Head, Contra Costa Campus: Steve Philibosian

Assistant Collection Development Coordinator: Jennifer Laherty

Dean, Concord Campus: Peter A. Wilson

Executive Assistant to the Dean and Campus Budget Officer:

Katherine Wohrle
Director, Administrative Affairs: Barbara Beckman
Facilities Manager (Interim): Tim Brown
Coordinator, Student Information Lobby and Faculty Support
Services: Shauntay Larkins
Academic Advisor: Joanna Cady Aquilar
Academic Advisor: _____
Academic Advisor: Anne Scher
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Director, Community Affairs: Barbara Cella
Director, Student Affairs Programs: Kevin Horan
Student Affairs Counselor, SDRC: Leslie Duncan

Director, Faculty Development and The Faculty Center for
Excellence in Teaching: Julie Glass
Instructional Technology Consultant: Bernie Salvador
Director, Research and Sponsored Programs: Joseph Zelan
Associate Director: Vicky Jensen
Director, Student Center for Academic Achievement: Emily Nye

College Deans and Department Chairs

Dean, College of Arts, Letters and Social Sciences: Alden
Reimonenq

Special Assistant to the Dean: Julie Everhart

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Chair, Department of Anthropology: _____

Chair, Department of Art: Michael Henninger

Chair, Department of Communication: _____

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Zajac

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Beeson

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Director, Latin American Studies Program: Marcelo Paz

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Systems: Gary McBride
Co-Chairs, Department of Economics: Charles Baird, Nan
Maxwell
Chair, Department of Management and Finance: Joyendu
Bhadury
Chair, Department of Marketing and Entrepreneurship: Chong
Lee

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Assistant Dean: Jean Easterly
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Chair, Department of Chemistry: Richard Luibrand
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Executive Director, Student Academic Services and Director, EXCEL: Robert Mahoney
Academic Learning Skills Counselor: Margaret Lewis
Academic Life Planning Counselor: Scott Moresi
Academic Life Planning Counselor: Valerie Taniguchi
Director, Student Academic Services: Diana Balgas
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EOP Counselor: Veronica Fong
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EOP Retention Counselor: Lael Washington
EOP Admissions/Summer Bridge Coordinator: Enrique Mendoza
Director, Upward Bound: Wayne Kitchen
Assistant Director: Felita Clark
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Executive Director, Career Development Center and Technology Services, David Travis
Director, Career Development Center: Raphaella Ianniello
Associate Director, Career Development Center (Interim): Mark Reed
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Career Counselor: Phyllis Tang
Career Counselor: Andrea Wagner

Career Counselor: Lori Knight
Wellness Counselor: Lisa Smusz
Informational Technology Consultant: Errick Lewis
Web Technology Consultant: Diane George

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Director, Housing and Residential Life: Regina Metoyer
Residential Life Coordinator: Renae Wilkerson
Complex Coordinator: David Wildy
Director, Student Life Programs: Mary Fortune
Advisor: Tom Carroll
Advisor: Marguerite Hinrichs
Advisor: Terry Peppin

Director/Chief, Department of Public Safety: Janeith Glenn-Davis
Lieutenant: Arthur Nichols
Sergeant: Mario Lavagnino
Sergeant: Anthony Duenas
Sergeant: Darryl Major

Executive Director, University Union and Associated Students:
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Assistant Executive Director, Associated Students: Nathan Curtis
Director, Early Childhood Education Center: Karen Natrass
Coordinator, Building Operations: Jeff Kirker
Manager, Elite Catering and Food Services: Marita Cheng

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Emeriti

Directory of Academic Personnel

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-

Professors

AGIN, RHODA L. (1973), *Professor of Communicative Sciences and Disorders*: B.A., 1968, Brooklyn College; M.A., 1971, Ph.D., 1975, University of Illinois. Emerita, 1999

ALLEN, DORIS L. (1966), *Librarian*: B.A., 1957, San Francisco State College; M.L.S., 1963, University of California, Berkeley. Emerita, 1987

ALPER, THEODORE G. (1970), *Professor of Educational Psychology*: B.A., 1964, Michigan State University; M.S., 1966, California State College, Los Angeles; Ph.D., 1969, University of Oregon. Emeritus, 2002

AMEMIYA, FRANCES CAMPBELL (1964), *Professor of Mathematics*: A.B., 1935, A.M., 1936, University of California, Los Angeles; Ph.D., 1945, University of Michigan. Emerita, 1980

ANDERSON, THOMAS G. (1972), *Professor of Educational Psychology*: B.S., 1962, M.Ed., 1963, Pennsylvania State University; Ph.D., 1971, University of Pittsburgh. Emeritus, 1999

AUVENSHINE, MARTHA ANN (1974), *Professor of Nursing*: B.S., 1963, Texas Woman's University; M.N., 1971, Emory University; Ed.D., 1982, University of San Francisco. Emerita, 2003

BAALMAN, ROBERT J. (1965), *Professor of Biological Science*: B.S., 1960, M.S., 1961, Fort Hays Kansas State College; Ph.D., 1965, University of Oklahoma. Emeritus, 2000

BABLADELIS, GEORGIA (1966), *Professor of Psychology*: B.A., 1953, University of Michigan; M.A., 1957, University of California, Berkeley; Ph.D., 1960, University of Colorado. Emerita, 1994

BAILEY, CLAYTON G. (1968), *Professor of Art*: B.S., 1960, M.S., 1961, University of Wisconsin. Emeritus, 1996

BAIRD, JOHN E. (1967), *Professor of Speech Communication*: B.A., 1947, M.A., 1948, College of the Pacific; Ph.D., 1959, Columbia University. Emeritus, 1987

BARMETTLER-EWING, DORLESA (1965), *Professor of Educational Psychology*: B.A., 1950, University of California, Berkeley; M.S., 1966, California State College, Hayward; Ph.D., 1970, University of California, Berkeley. Emerita, 1991

BARRETT, G. HAROLD (1963), *Professor of Speech Communication*: A.B., 1949, M.A., 1952, University of the Pacific; Ph.D., 1962, University of Oregon. Emeritus, 1992

BARRY, JEANNE G. (1965), *Associate Professor of Mathematics and Computer Science*: B.S., 1953, University of Illinois; M.S., 1959, University of Pittsburgh. Emerita, 1994

BASSEN, PAUL C. (1968), *Associate Professor of Philosophy*: B.A., 1958, Cornell University; Ph.D., 1971, University of California, Berkeley. Emeritus, 2003

BASU, ASOKE K. (1968), *Professor of Sociology*: B.A., 1961, West Virginia University; M.A., 1963, Ph.D., 1966, Oklahoma University. Emeritus, 2000

BEAN, LOWELL J. (1966), *Professor of Anthropology*: B.A., M.A., 1961, Ph.D., 1970, University of California, Los Angeles. Emeritus, 1992

BELGUM, EVELYN H. (1965), *Professor of Teacher Education*: A.B., 1948, University of California, Berkeley; M.A., 1959, San Francisco State College; Ed.D., 1967, University of California, Berkeley. Emerita, 1986

BELTON, JOHN C. (1966), *Professor of Biological Science*: B.S., 1957, Lewis and Clark College; M.S., 1962, Ph.D., 1966, Oregon State University. Emeritus, 1988

BENSELER, ROLF W. (1968), *Associate Coordinator, Liberal Studies; Professor of Biological Science*: B.S., 1957, University of California, Berkeley; M.F., 1958, Yale University; Ph.D., 1968, University of California, Berkeley. Emeritus, 1995

BERGET, ELLSWORTH A. (1973), *Professor of Teacher Education*: B.A., 1964, Brigham Young University; M.Ed., 1971, University of Illinois; Ph.D., 1973, Syracuse University. Emeritus, 2000

BERROL, CYNTHIA (1976), *Professor of Kinesiology and Physical Education*: B.A., 1955, Brooklyn College; M.A., 1964, Mills College; Ph.D., 1978, University of California, Berkeley. Emerita, 2000

BLACK, JAMES M. (1962), *Professor of Art*: B.S., 1951, M.S., 1952, University of Wisconsin; M.F.A., 1953, Cranbrook Academy of Fine Arts. Emeritus, 1987

BLACKBURN, ROBERT W. (1981), *Professor of Educational Leadership*: A.B., 1957, Oberlin College; A.M., 1964, University of Pennsylvania; Ph.D., 1984, The Union for Experimenting Colleges and Universities. Emeritus, 1996

BONNIN, ROBERT M. (1968), *Professor of Teacher Education*: A.B., 1952, San Diego State College; Ed.D., 1970, University of California, Berkeley. Emeritus, 1989

BOTNARESCUE, HELEN M. (1968), *Professor of Teacher Education*: B.A., 1949, Denison University; M.A., 1965, Ph.D.,

1970, University of Alabama. Emerita, 1994

BOYD, ZELDA ARBER (1970), *Professor of English*: B.A., 1953, Cornell University; M.A., 1956, Columbia University; Ph.D., 1971, University of Michigan. Emerita, 2002

BOZAK, RICHARD E. (1964), *Professor of Chemistry*: B.S., 1956, University of Washington; Ph.D., 1959, University of California, Berkeley. Emeritus, 1998

BROCK, PHYLLIS J. (1963), *Professor of Kinesiology and Physical Education*: A.B., 1951, Chico State College; A.B., 1956, San Jose State College; M.A., 1963, Ed.D., 1968, University of California, Berkeley. Emerita, 1989

BROOKS, ELWOOD R. (1965), *Professor of Geological Sciences*: B.S., 1956, Michigan College of Mining and Technology; M.S., 1958, University of California, Berkeley; Ph.D., 1964, University of Wisconsin. Emeritus, 1997

BROWN, DONALD J. (1963), *Professor of Educational Psychology*: A.B., 1953, University of California at Los Angeles; M.A., 1955, Chico State College; Ph.D., 1960, Ohio State University. Emeritus, 1999

BROWN, PAULINE (1966), *Professor of Teacher Education*: A.B., 1941, A.M., 1959, Stanford University; Ed.D., 1966, Boston University. Emerita, 1984

BRYANT, JERRY H. (1963), *Professor of English*: B.A., 1951, M.A., 1955, Ph.D., 1959, University of California at Los Angeles. Emeritus, 1990

BULLOUGH, WILLIAM A. (1970), *Professor of History*: B.A., 1955, M.A., 1967, Ph.D., 1970, University of California, Santa Barbara. Emeritus, 1992

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CADOGAN, KEVIN D. (1969), *Professor of Chemistry*: B.S., 1960, Manhattan College; Ph.D., 1966, Cornell University. Emeritus, 2002

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CARTER, HARRY H. (1967), *Professor of Music*: B.M., 1955, University of Kentucky; M.M., 1956, University of Southern California; D.M.A., 1971, University of Illinois. Emeritus, 1994

CASTAGNOZZI, CAROL A. (1968), *Librarian*: B.A., 1966, Syracuse University; M.L.S., 1968, Rutgers University; M.A., 1977,

California State University, Hayward. Emerita, 2000

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CHAUFFE, LEROY (1968), *Professor of Chemistry*: B.S., 1959, Xavier University; M.S., 1961, Howard University; Ph.D., 1966, University of California at Davis. Emeritus, 2001

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CLAUS, PETER J. (1970), *Professor of Anthropology*: B.A., 1964, M.A., 1966, University of Wisconsin; Ph.D., 1970, Duke University. Emeritus, 2002

COGSWELL, HOWARD L. (1964), *Professor of Biological Science*: B.A., 1948, Whittier College; M.A., 1951, Ph.D., 1962, University of California, Berkeley. Emeritus, 1980

COHEN, ELEANOR D. (1968), *Professor of Music*: B.S., 1948, New York University; M.A., 1970, California State College, Hayward. Emerita, 1991

COLLINS, PAUL V. (1973), *Associate Professor of Teacher Education*: A.B., 1941, Livingstone College; M.S., 1960, Tennessee State University. Emeritus, 1983

CONNER, JACK E. (1962), *Professor of English*: B.A., 1939, B.S., 1942, Texas College of Arts and Industries; Ph.D., 1952, Stanford University. Emeritus, 1986

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COSTY, JAMES O. (1964), *Professor of Theatre Arts*: B.A., 1945, Santa Barbara College; M.A., 1946, University of Washington; Ph.D., 1954, University of Denver. Emeritus, 1980

CRAPO, STEVEN E. (1969), *Professor of Educational Psychology*: A.B., 1961, M.A., 1966, San Francisco State College; Ph.D., 1969, Arizona State University. Emeritus, 2001

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DELLA-DORA, DELMO (1973), *Professor of Teacher Education*: B.S., 1947, University of Michigan; M.Ed., 1952, Ed.D., 1960, Wayne State University. Emeritus, 1992

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DIEN, DORA SHU-FANG (1971), *Professor of Human Development*: A.B., 1961, University of California, Berkeley; M.A., 1962, University of Hawaii; Ph.D., 1971, Columbia University. Emerita, 1998

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DUGGER, MARGUERITE R. (1974), *Associate Professor of Educational Psychology*: B.S. 1938, Michigan State University; M.A., 1951, Ed.D., 1968, Wayne State University. Emerita, 1980

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EDWARDS, SCOTT E. (1966), *Professor of Political Science*: B.A., 1960, San Fernando Valley State College; Ph.D., 1964, Claremont Graduate School. Emeritus, 1994

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FAY, JAMES S. (1970), *Professor of Political Science*: B.A., 1963, Georgetown University; M.A., 1967, Graduate Faculty of The New School for Social Research; Ph.D., 1973, University of Michigan; J.D., 1980, University of California Hastings College of Law. Emeritus, 2001

FELTON, BETTE (1978), *Professor of Nursing*: B.S., 1969, University of California, San Francisco; M.S., 1973, University of New York at Buffalo; D.P.H., 1989, University of California, Berkeley. Emerita, 2003

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FERNANDEZ, JOSE A. (1970), *Professor of History*: B.Sc., 1960, Columbia University; M.A., 1966, Ph.D., 1970, Indiana University. Emeritus, 2001

FISHER, LEON H. (1971), *Professor of Physics*: B.S., 1938, M.S., 1940, Ph.D., 1943, University of California, Berkeley. Emeritus, 1983

FLOYD, RICHARD L. (1966), *Professor of Psychology*: B.S., 1960, University of Michigan; Ph.D., 1964, University of Minnesota. Emeritus, 1998

FORTHMAN, ROBERT C. (1970), *Professor of Sociology*: B.A., 1948, San Diego State College; M.S.W., 1952, D.S.W., 1970, University of California, Berkeley. Emeritus, 1986

FOWLER, PETER A. (1968), *Professor of Mathematics and Computer Science*: A.B., 1959, M.S., 1963, Ph.D., 1968, Rutgers University. Emeritus, 1999

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FREY, DAVID H. (1969), *Professor of Educational Psychology*: B.S., 1961, M.Ed., 1963, Xavier University; Ph.D., 1968, Purdue University; M.P.H., 1977, University of California, Berkeley. Emeritus, 1998

FRIEDMAN, MARTIN B. (1969), *Professor of English*: B.A., 1955, Dartmouth College; Diplome d'Etudes, 1956, Sorbonne; Ph.D., 1962, Yale University. Emeritus, 1997

FUCHS, JACOB (1971), *Professor of English*: B.A., 1961, M.A., 1964, University of California, Berkeley; Ph.D., 1972, University of California, Irvine. Emeritus, 2000

GARCIA-PANDAVENES, ELSA (1965), *Professor of Spanish*: B.A., 1958, M.A., 1960, Ph.D., 1970, University of California, Berkeley. Emerita, 1997

GEISER, PETER (1963), *Professor of Sociology*: A.B., 1934, University of Pittsburgh; M.S.W., 1948, Ph.D., 1960, University of Southern California. Emeritus, 1974

GENSER, EDWARD E. (1971), *Professor of Chemistry*: B.S., 1957, University of Arizona; Ph.D., 1962, University of California, Berkeley. Emeritus, 1998

GILES, JOHN C. (1964), *Professor of Physics*: B.Sc., 1955, University of Sheffield, England; Ph.D., 1958, University of Exeter, England. Emeritus, 1997

GILLIARD, FRANK D. (1966), *Professor of History*: B.A., 1957, University of Florida; M.A., 1961, Ph.D., 1966, University of California, Berkeley. Emeritus, 1998

GLINES, ELSA F. (1962), *Librarian*: B.A., 1951, University of Minnesota; M.S., 1952, Columbia University. Emerita, 1991

GOODRICK, RICHARD E. (1969), *Professor of Mathematics and Computer Science*: B.S., 1962, University of Washington; M.S., 1964, Ph.D., 1966, University of Wisconsin. Emeritus, 1991

GOTCHER, J. WILLIAM (1968), *Professor of Business Administration*: B.I.E., 1954, M.S., 1959, Georgia Institute of Technology; Ph.D., 1972, University of California, Berkeley. Emeritus, 1998

GOVE, CHARLES ALLEN (1966), *Professor of Music*: B.M., 1952, M.M., 1953, University of Illinois. Emeritus, 1992

GRAEVEN, DAVID B. (1970), *Professor of Sociology*: B.A., 1965, Luther College; M.A., 1967, Ph.D., 1970, University of Iowa. Emeritus, 1994

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GROSS, PHYLLIS (1965), *Professor of Biological Science*: B.A., 1937, San Jose State College; M.A., 1939, Stanford University. Emerita, 1978

GUTHRIE, JOHN A. (1971), *Professor of Educational Psychology*: B.A., 1955, M.A., 1956, Notre Dame University; Ph.D., 1961, Michigan State University. Emeritus, 1997

HALL, TOM (1971), *Professor of History*: A.B., 1963, San Diego State College; Ph.D., 1970, University of California, Davis. Emeritus, 2000

HAMMERBACK, JOHN C. (1968), *Professor of Speech Communication*: B.A., 1962, San Francisco State College; M.A., 1965, University of Oklahoma; Ph.D., 1970, Indiana University. Emeritus, 2003

HANCOCK, JOHN D. (1960), *Professor of Mathematics and Education*: B.A., 1948, University of Southern California; M.A., 1949, Ed.D., 1961, Stanford University. Emeritus, 1987

HANDY, OTIS (1969), *Associate Professor of Spanish*: B.A., 1950, University of California, Berkeley; M.A., 1964, San Francisco State College; Ph.D., 1979, University of California, Berkeley. Emeritus, 1991

HARPER, CHARLIE (1968), *Professor of Physics*: B.S., 1958, Morgan State College; M.S., 1960, Ph.D., 1965, Howard University. Emeritus, 2000

HARRELL, JEAN GABBERT (1964), *Professor of Philosophy*: A.B., 1943, University of California, Berkeley; Ph.D., 1950, Columbia University. Emerita, 1980

HARTLEY, SHIRLEY F. (1968), *Professor of Sociology*: B.S., 1950, University of California, Berkeley; M.S., 1963, San Jose State College; Ph.D., 1969, University of California, Berkeley. Emerita, 1986

HATCHMAN, JoANN (1987), *Associate Professor of Teacher Education*: B.A., 1967, M.A., 1972, San Francisco State University; Ed.D., 1978, Brigham Young University. Emerita, 2002

HEATH, HARRISON DUANE (1960), *Professor of Biological Science*: A.B., 1944, A.M., 1946, Ph.D., 1951, Stanford University. Emeritus, 1990

HEBLER, JANE ANN (1965), *Professor of Teacher Education*: B.A., 1949, M.A., 1953, Syracuse University; Ed.D., 1965, Stanford University. Emerita, 1987

HEINE, ROLAND D. (1969), *Professor of German*: Staatsexamen, 1967, Ph.D., 1970, University of Tuebingen. Emeritus, 2003

HESLET, FREDERICK E. (1968), *Professor of Educational Psychology*: B.A., 1962, La Verne College; M.A., 1965, University of Redlands; Ed.D., 1968, Ball State University. Emeritus, 2000

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HIRSCHFELD, SUE E. (1970), *Professor of Geological Sciences*: B.S., 1963, M.S., 1965, University of Florida; Ph.D., 1971,

University of California, Berkeley. Emerita, 2000

HORGAN, JEREMIAH M. (1972), *Professor of Educational Psychology*: B.S., 1960, Boston University; M.Ed., 1963, Massachusetts State College, Boston; M.Ed., 1965, Ph.D., 1971, University of Pittsburgh. Emeritus, 1994

HOWE, ALVIN E., (1969), *Associate Professor of Teacher Education*: B.S., 1962, Hanover College; M.A., 1964, Western Kentucky University; Ed.D., 1969, University of Southern Mississippi. Emeritus, 2001

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HUDSON, DON RICHARD (1965), *Professor of Kinesiology and Physical Education*: B.A., 1958, M.A., 1963, San Francisco State College; Ed.D., 1965, University of Utah. Emeritus, 1998

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JAY, EDWARD J. (1964), *Professor of Anthropology*: B.A., 1952, Queens College; M.A., 1957, Ph.D., 1963, University of Chicago. Emeritus, 1992

JAY, RICHARD E. (1964), *Professor of Economics and Social Sciences*: A.B., 1946, M.A., 1947, Texas Christian University; Ph.D., 1953, University of California, Berkeley; J.D., 1963, Boalt Hall, University of California School of Law. Emeritus, 1980

JESSNER, PETER HANS (1964), *Professor of Mathematics*: A.B., 1949, Harvard College; M.S., 1951, University of New Mexico; Ph.D., 1962, University of North Carolina. Emeritus, 1984

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JONES, JR., ALVIN H. (1972), *Professor of Educational Psychology*: B.S., 1960, Kent State University; M.A., 1967, Akron University; Ph.D., 1971, Arizona State University. Emeritus, 1998

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JUN, JONG S. (1968), *Professor of Public Administration*: LL.B., 1960, Taegu University; M.A., 1964, University of Oregon; Ph.D., 1969, University of Southern California. Emeritus, 2000

KAKIGI, RICHARD Y. (1973), *Professor of Statistics*: A.B., 1966, Ph.D., 1972, University of California, Berkeley. Emeritus, 1996

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KAPLAN, PHYLLIS G. (1971), *Professor of Educational Psychology*: B.S., 1962, Syracuse University; M.A., 1966, San Francisco State College; Ph.D., 1971, Wayne State University. Emerita, 2003

KEIL, IRENE L. (1969), *Associate Professor of Art*: B.A., 1967, California State College, Hayward; M.A., 1969, University of California, Berkeley. Emerita, 1983

KENNEDY-MINOTT, RODNEY G. (1966), *Professor of History*: B.A., 1953, M.A., 1954, Ph.D., 1960, Stanford University. Emeritus, 1980

KENNELLY, ROBERT A. (1967), *Vice-President, Administration; Professor of Geography & Environmental Studies*: B.A., 1948, M.A., 1950, Ph.D., 1952, State University of Iowa. Emeritus, 1983

KILGOUR, JOHN G. (1972), *Professor of Business Administration*: B.A., 1966, University of Connecticut; M.I.L.R., 1968, Ph.D., 1972, Cornell University. Emeritus, 2000

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KLAPP, STUART T. (1969), *Professor of Psychology*: B.E.E., M.S., 1959, Ohio State University; Ph.D., 1969, University of California, Berkeley. Emeritus, 2000

KOVACS, IVAN D. (1970), *Professor of Human Development*: B.A., 1953, College of Special Education, Budapest, Hungary; M.A., 1956, University of Budapest; M.A., 1960, Ph.D., 1967,

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MATHEWS, ALFRED (1963), *Director of Intramural and Intercollegiate Athletics; Professor of Kinesiology and Physical Education*: A.B., 1954, M.A., 1958, Ed.D., 1966, University of California, Berkeley. Emeritus, 1992

MATSUMOTO, ROY T. (1965), *Professor of Psychology*: B.A., 1962, University of Hawaii; M.A., 1964, Ph.D., 1965, State

University of Iowa. Emeritus, 2003

MATTHEWS, RICHARD (1972), *Professor of English*: A.B., 1961, Saint Patrick's College; S.T.B., 1963, Gregorian University, Rome; M.A., 1966, California State College, Hayward. Emeritus, 1990

MAYERS, EUGENE D. (1963), *Professor of Philosophy*: A.B., 1936, Yale College; LL.B., 1940, Yale School of Law; Ph.D., 1956, Columbia University. Emeritus, 1992

McAULAY, SARA W. (1984), *Professor of English*: B.A., 1971, California State University, Hayward; M.A., 1978, Fairleigh Dickinson University. Emerita, 2003

McCOWIN, JANET D. (1968), *Professor of Teacher Education*: B.S., 1949, Utah State University; M.A., 1962, Claremont College; Ed.D., 1970, University of California, Berkeley. Emerita, 1992

McCUNE, ELLIS E. (1967), *President; Professor of Political Science*: B.A., 1948, Ph.D., 1957, University of California, Los Angeles. Emeritus, 1991

McGINNIS, SAMUEL M. (1963), *Professor of Biological Science*: B.S., 1958, University of Wisconsin; Ph.D., 1965, University of California, Berkeley. Emeritus, 2000

McKILLOP, DONALD P. (1968), *Professor of Educational Psychology*: B.A., 1961, University of California, Berkeley; M.A., 1963, Ph.D., 1966, University of Michigan. Emeritus, 2001

McMICHAEL, GEORGE (1972), *Professor of English*: B.A., 1950, M.A., 1955, Ph.D., 1959, Northwestern University. Emeritus, 1991

MECHANIC, ARNOLD (1961), *Professor of Psychology*: B.A., 1954, Queens College; M.A., 1955, Ohio State University; Ph.D., 1960, University of California, Berkeley. Emeritus, 1992

MECKE, VIOLA (1970), *Professor of Educational Psychology*: B.A., 1951, University of Akron; M.A., 1955, Ph.D., 1958, Western Reserve University. Emerita, 1992

MERRIFIELD, CHARLES WARREN (1960), *Professor of Political Science*: A.B., 1935, M.A., 1935, University of Chicago; Ph.D., 1952, Claremont Graduate School. Emeritus, 1979

MEUTER, ROBERT G. (1965), *Librarian*: B.A., 1956, Golden Gate College; B.A., 1960, M.A., 1965, San Jose State College. Emeritus, 1986

MILLER, ROBERT R. (1970), *Professor of History*: A.B., 1948, M.A., 1951, Ph.D., 1960, University of California, Berkeley. Emeritus, 1980

MINTZ, LEIGH W. (1965), *Associate Vice President, Curriculum and Academic Programs; Professor of Geological Sciences*: B.S., 1961, M.S., 1962, University of Michigan; Ph.D., 1966, University of California, Berkeley. Emeritus, 2001

MITCHELL, BILL (1969), *Associate Professor of Business Administration*: B.M.E., 1962, Cornell University; M.S., 1963,

Harvard University; Ph.D., 1970, University of California, Berkeley. Emeritus, 1989

MITCHELL, LESLIE H. (1967), *Professor of Educational Psychology*: B.A., 1951, M.A., 1957, Ph.D., 1965, University of California, Berkeley. Emeritus, 1998

MOISEYEV, ALEXIS N. (1968), *Professor of Geological Sciences*: Licence ès science, 1955, Docteur de l'Université de Paris, 1959, Sorbonne; Ph.D., 1966, Stanford University. Emeritus, 1997

MONSON, RICHARD S. (1963), *Professor of Chemistry*: B.S., 1959, University of California at Los Angeles; Ph.D., 1964, University of California, Berkeley. Emeritus, 2000

MONTGOMERY, JOHN A. (1968), *Professor of Recreation and Community Education*: B.A., 1951, University of California, Berkeley; M.S., 1955, University of Illinois. Emeritus, 1991

MORBY, JOHN E. (1969), *Professor of History*: A.B., 1960, University of California, Berkeley; M.A., 1961, Harvard University; Ph.D., 1971, University of California, Berkeley. Emeritus, 1998

MOREHOUSE, WADE A., JR. (1982), *Professor of Accounting*: B.M.E., 1948, Rensselaer Polytechnic Institute; M.B.A., 1959, Ph.D., 1965, University of California, Berkeley; C.P.A., 1967, California. Emeritus, 1992

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MYERS, HAROLD W. (1965), *Professor of Art*: A.B., 1954, San Jose State College; M.F.A., 1959, Mills College. Emeritus, 1992

NANAO, KENJILO (1970), *Professor of Art*: M.F.A., 1970, San Francisco Art Institute. Emeritus, 1991

NEELY, ROBERT T. (1971), *Associate Professor of French*: A.B., 1955, M.A., 1957, Ph.D., 1965, University of Colorado. Emeritus, 1998

NEFF, JEROME P. (1970), *Professor of Music*: B.M., 1951, Eastman School of Music; M.M., 1957, University of Michigan. Emeritus, 1986

NELSON, MARVIN D. (1967), *Professor of Music*: B.Mus., 1951, Lewis and Clark College; M.A., 1972, California State University, Hayward. Emeritus, 1988

NETICK, ALLAN (1968), *Professor of Psychology*: B.A., 1958, Reed College; M.A., 1963, University of California, Berkeley; Ph.D., 1968, University of New Mexico. Emeritus, 1998

NICHOLS, JAMES L. (1966), *Director of PACE; Professor of Political Science*: B.A., 1954, University of Denver; M.A., 1956, Syracuse University; Ph.D., 1968, Stanford University. Emeritus, 1998

NIMMO, HARRY A. (1971), *Professor of Anthropology*: B.A.,

1958, University of Iowa; M.A., 1965, Ph.D., 1969, University of Hawaii. Emeritus, 1996

NOMIKOS, EUGENIA V. (1964), *Professor of History*: B.A., 1948, Hood College; M.A., 1950, Columbia University; Ph.D., 1962, Stanford University. Emerita, 1988

OBERG, MARILYN A. (1969), *Librarian*: B.A., 1961, M.L.S., 1963, University of California, Berkeley; M.P.A., 1976, California State University, Hayward. Emerita, 1997

ORSI, RICHARD J. (1969), *Professor of History*: B.A., 1961, Occidental College; M.A., 1965, Ph.D., 1973, University of Wisconsin. Emeritus, 2000

OSSMAN, EDWARD T. (1972), *Professor of Business Administration*: B.S.C., 1956, Loyola University; M.B.A., 1963, DePaul University; C.P.A., 1963, Illinois; Ph.D., 1971, Illinois Institute of Technology. Emeritus, 1998

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OZAKI, ROBERT SHIGEO (1960), *Professor of Economics*: B.A., 1956, Ohio Wesleyan; M.A., 1958, Ph.D., 1960, Harvard University. Emeritus, 1999

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PARK, HEEBOK (1967), *Professor of Statistics*: B.S., 1957, Seoul National University, Seoul, Korea; M.S., 1961, Ph.D., 1964, University of Chicago. Emeritus, 1996

PARNELL, DENNIS R. (1965), *Professor of Biological Science*: B.A., 1961, Whittier College; M.A., 1963, Ph.D., 1965, University of California, Los Angeles. Emeritus, 1990

PARTRIDGE, SCOTT H. (1970), *Professor of Business Administration*: B.S., 1954, Brigham Young University; M.B.A., 1966, University of Oregon; D.B.A., 1970, Harvard University. Emeritus, 1994

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PEDRICK, GEORGE B. (1970), *Professor of Mathematics and Computer Science*: B.S., 1949, M.S., 1953, Oklahoma State University; Ph.D., 1957, University of Kansas. Emeritus, 1991

PERAZZO, GEORGE J. (1973), *Professor of Educational Leadership*: B.A., 1950, M.A., 1952, San Jose State College; Ed.D., 1972, Brigham Young University. Emeritus, 1991

PERRINO, CHARLES T. (1966), *Professor of Chemistry*: B.S., 1962, State College at Indiana, Pennsylvania; Ph.D., 1966, Arizona State University. Emeritus, 2002

PERRIZO, JAMES D. (1970), *Professor of Art*: A.B., 1967, M.A., 1969, M.F.A., 1974, University of California, Berkeley. Emeritus, 1998

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PETERSON, DOUGLAS L. (1960), *Professor of English*: B.A., 1949; M.A., 1950; Ph.D., 1957, Stanford University. Emeritus, 1983

PETERSON, P. VICTOR JR. (1959), *Professor of Chemistry and Conservation*: B.A., 1947, San Jose State College; M.S., 1950, Stanford University; Ph.D., 1952, Cornell University. Emeritus, 1988

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PONCE DE LEON, LUIS (1972), *Professor of Spanish*: B.S., 1948, Instituto Nacional de Enseñanza Media; M.A., 1965, Ph.D., 1966, Stanford University. Emeritus, 1992

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PRESSLEY, BEATRICE O. (1970), *Professor of Educational Psychology*: B.S., 1959, M.Ed., 1962, University of Pittsburgh;

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PRESTON, DARYL WAYNE (1970), *Professor of Physics*: B.A., 1961, Austin College; Ph.D., 1970, University of Kansas. Emeritus, 2001

PUGLIESE, JOSEPH A. (1964), *Professor of Art*: B.A., 1950, Miami University; M.A., 1955, Ph.D., 1960, Ohio State University. Emeritus, 1988

PURVIS, COLBERT T. (1960), *Professor of Mathematics and Computer Science*: B.S., 1940, Georgia Teachers College; M.S., 1948, East Texas State Teachers College; Ph.D., 1957, George Peabody College. Emeritus, 1983

RAACK, RICHARD C. (1965), *Professor of History*: A.B., 1950, A.M., 1953, University of California, Los Angeles; Ph.D., 1957, Harvard University. Emeritus, 1990

RAILTON-RICE, ESTHER P. (1960), *Professor of Teacher Education*: B.S., 1951, Western Michigan University; M.S., 1955, University of Michigan; Ed.D., 1960, University of Illinois. Emerita, 1991

RAMOS, MELVIN J. (1966), *Professor of Art*: B.A., 1957; M.A., 1958, Sacramento State College. Emeritus, 1997

RATNER, MARC L. (1967), *Professor of English*: B.A., 1950, Fordham University; M.A., 1951, University of Pennsylvania; Ph.D., 1958, New York University. Emeritus, 1992

REEDER, RAY A. (1968), *Librarian*: B.A., 1952, M.A., 1955, New Mexico Highlands University; M.L.S., 1968, University of California, Berkeley. Emeritus, 1992

REUTER, WILLIAM C. (1965), *Professor of History*: A.B., 1955, M.A., 1959, Ph.D., 1966, University of California, Berkeley. Emeritus, 1995

RICE, RICHARD B. (1960), *Professor of History*: B.A., 1945, M.A., 1947, Ph.D., 1957, University of California, Berkeley. Emeritus, 1984

RIOS, HERMINIO C. (1975), *Professor of Teacher Education*: B.A., 1960, Fresno State College; M.A., 1970, University of Arizona; Ed.D., 1980, University of San Francisco. Emeritus, 1997

RIVENES, RICHARD S. (1964), *Professor of Kinesiology and Physical Education*: B.S., 1960, Washington State University; M.S., 1961, Ph.D., 1964, Pennsylvania State University. Emeritus, 1999

RODRIGO, ROBERT M. (1968), *Professor of Kinesiology and Physical Education*: A.B., 1958, M.A., 1963, San Francisco State College. Emeritus, 1990

ROSENTHAL, WILLIAM S. (1972), *Professor of Communicative Sciences and Disorders*: B.A., 1961, University of Chicago; M.A., 1966, George Washington University; Ph.D., 1970, Stanford University. Emeritus, 2002

ROSZAK, THEODORE (1963), *Professor of History*: B.A., 1955, University of California at Los Angeles; Ph.D., 1958, Princeton University. Emeritus, 1998

ROTHENBERGER, JOHN E. (1968), *Associate Professor of Anthropology*: B.A., 1953, Lehigh University; J.D., 1956, Yale Law School; Ph.D., 1970, University of California, Berkeley. Emeritus, 1987

RUBIN, NATHAN (1974), *Professor of Music*: Diploma 1949, Juilliard School of Music. Emeritus, 1999

SABHARWAL, RANJIT S. (1968), *Professor of Mathematics*: B.A., 1944, Sikh National College, Lahore; M.A., 1948, Punjab University, Solon; M.A., 1962, University of California, Berkeley; Ph.D., 1966, Washington State University. Emeritus, 1992

SALTZER, RUDOLPH B. (1965), *Professor of Music*: B.A., 1947, University of California at Los Angeles; M.S., 1952, D.M.A., 1964, University of Southern California. Emeritus, 1979

SAMOSKY, JACK A. (1972), *Professor of Speech Communication*: B.S., 1958, M.S., 1962, University of Wisconsin; Ph.D., 1974, Indiana University. Emeritus, 1999

SANDERS, DAVID L. (1972), *Professor of Mass Communication*: B.A., 1954, M.A., 1957, Ph.D., 1961, Stanford University. Emeritus, 1987

SAPONTZIS, STEVE F. (1971), *Professor of Philosophy*: B.A., 1967, Rice University; M. Phil., 1970, Ph.D., 1971, Yale University. Emeritus, 1999

SAUNDERS, RAYMOND J. (1968), *Professor of Art*: B.F.A. 1960, Carnegie Inst. Technology; M.F.A., 1961, California College of Arts and Crafts. Emeritus, 1987

SAWREY, WILLIAM L. (1960), *Professor of Psychology and Statistics*: A.B., 1949, Indiana University; Ph.D., 1952, University of Nebraska. Emeritus, 1990

SCHAEFER, SUSAN D. (1970), *Professor of Business Administration*: A.B., 1963; M.B.A., 1965, Ph.D., 1973, Stanford University. Emerita, 2001

SCHMID-CHARNOW, EDWARDINE M. (1970), *Professor of Mathematics and Computer Science*: B.A., 1963, University of Wisconsin; M.A., 1966, Ph.D., 1969, University of California, Berkeley. Emerita, 1995

SCHOENHOLZ, WALTER K. (1965), *Professor of Biological Science*: B.S., 1956, M.A., 1959, Ph.D., 1962, University of California, Berkeley. Emeritus, 1988

SCHUH, ALLEN J. (1971), *Professor of Business Administration*: B.S., 1963, San Diego State College; M.S., 1965, University of California, Berkeley; Ph.D., 1971, Ohio State University. Emeritus, 2000

SCHULAK, HELEN S. (1967), *Professor of Russian*: B.A., 1958, University of Toledo; M.A., 1960, University of Michigan; Ph.D., 1967, University of California, Berkeley. Emerita, 2000

SCHUSTERMAN, RONALD J. (1964), *Professor of Psychology*: B.A., 1954, Brooklyn College; M.A., 1958, Ph.D., 1961, Florida State University. Emeritus, 1994

SCUDDER, HARVEY I. (1966), *Professor of Microbiology*: B.S., 1939; Ph.D., 1953, Cornell University. Emeritus, 1980

SERVATIUS, JOANNA DEE (1986), *Professor of Educational Leadership and Interdisciplinary Studies*: B.A., 1969, University of California, Berkeley; M.S., 1976, California State University, Hayward; Ed.D., 1980, University of San Francisco. Emerita, 2002

SHANCK, ANN H. (1973), *Professor of Nursing*: B.S., 1949, Ohio State University; M.S., 1970, University of California, San Francisco. Emerita, 1991

SHAUDYS, VINCENT K. (1963), *Professor of Geography and Environmental Studies*: B.A., 1950, Duke University; M.A., 1953, Ph.D., 1956, Ohio State University. Emeritus, 1992

SHELTON, JOHN C. (1965), *Professor of Chemistry*: B.S., 1959, Lock Haven State College; Ph.D., 1964, Cornell University. Emeritus, 1997

SHEPP, ALAN M. (1971), *Professor of Art*: B.A., 1957, Bowling Green State University; B.F.A., 1958, Cleveland Institute of Art; M.F.A., 1963, University of Washington. Emeritus, 1997

SHERLOCK, BASIL J. (1971), *Professor of Sociology*: B.A., 1955, University of Illinois; M.A., 1959, Southern Illinois University; Ph.D., 1961, University of Colorado. Emeritus, 1998

SIEBER, JOAN E. (1970), *Professor of Psychology*: B.S., 1962, M.A., 1965, Ph.D., 1965, University of Delaware. Emerita, 2000

SIEBERT, ROGER D. (1968), *Librarian*: B.A., 1959, University of California, Davis; M.A., 1962, University of Wyoming; M.L.S., 1965, University of California, Berkeley. Emeritus, 1996

SIMON, ARTHUR B. (1972), *Professor of Mathematics and Computer Science*: B.S., 1949, St. Louis University; M.S., 1954, Miami University; Ph.D., 1957, Tulane University. Emeritus, 1991

SIMS, JOHN H. (1965), *Professor of Business Administration*: B.S., 1940, United States Naval Academy; M.B.A., 1950, Harvard University; Ph.D., 1971, University of California, Berkeley. Emeritus, 1983

SINGSON, RICARDO L. (1971), *Professor of Business Administration*: B.A., 1959, DeLaSalle College, Manila, P.I.; M.B.A., 1963, New York University; Ph.D., 1973, University of Washington. Emeritus, 2003

SMALL, WILEY C. (1968), *Professor of Psychology*: B.S., 1959, M.Ed., 1959, M.A., 1965, Ph.D., 1970, University of Missouri. Emeritus, 1986

SMITH, ALAN M. (1964), *Dean, College of Arts, Letters and Social Sciences; Professor of History*: A.B., 1959, Dickinson College; M.A., 1960, University of Pittsburgh; Ph.D., 1967, Johns Hopkins University. Emeritus, 1992

SMITH, ARLENE H. (1965), *Associate Professor of Kinesiology and Physical Education*: B.A., 1956, University of Redlands; M.A., 1960, California State College at Los Angeles. Emerita, 1997

SMITH, MARIANNE F. (1963), *Professor of Mathematics*: B.S., 1943, Queens College; M.S., 1944, Ph.D., 1947, University of Illinois. Emerita, 1985

SPARKS, RONALD L. (1969), *Librarian*: B.A., 1956, M.A., 1959, Indiana University. Emeritus, 1992

SPATTA, CAROLYN D. (1984), *Vice President, Administration and Business Affairs; Professor of Geography and Environmental Studies*: A.B., 1964, University of California, Berkeley; M.A., 1968, Ph.D., 1974, University of Michigan. Emerita, 1994

SPENCER, JAMES E. (1963), *Professor of Teacher Education*: B.A., 1950, Pomona College; M.A., 1957, Claremont Graduate School; Ph.D., 1967, University of California, Berkeley. Emeritus, 1982

SPITZER, RICHARD (1982), *Professor of Computer Information Systems*: B.S., 1951, M.S., 1953, Ph.D., 1957, University of California, Berkeley. Emeritus, 1992

SPRAGUE, DOUGLAS G. (1965), *Professor of Educational Psychology*: B.A., 1955, Carleton College; M.A., 1959, Ph.D., 1966, University of Minnesota. Emeritus, 2001

SPRUNG, DAVID R. (1970), *Professor of Music*: B.A., 1957, Queens College, City University of New York; M.F.A., 1959, Princeton University. Emeritus, 1992

STANIFORTH, GWENDOLYN E. (1964), *Associate Professor of English*: B.A., 1954, Illinois College; M.A., 1959, Ph.D., 1966, University of California at Los Angeles; H.L.D., 1979, Illinois College. Emerita, 1998

STANLEY, JUDITH M. (1969), *Professor of History*: B.A., 1958, Seton Hill College; M.A., 1960, Catholic University; Ph.D., 1969, University of California, Berkeley. Emerita, 1999

STAUDOHAR, PAUL D. (1969), *Professor of Business Administration*: B.A., 1962, University of Minnesota; M.B.A., 1966, M.A., 1968, Ph.D., 1969, University of Southern California. Emeritus, 2002

STEIN, DAVID B. (1971), *Professor of Music*: B.A., 1962, St. Olaf College; M.M., 1966, D.M.A., 1974, University of Illinois. Emeritus, 2002

STEVENS, JOHN M. (1965), *Professor of Teacher Education*: B.S.S., 1953, M.A., 1955, University of Chicago; Ed.D., 1965, University of California, Berkeley. Emeritus, 1983

STEVENS, MARY E. (1974), *Professor of Nursing*: B.S., 1960, M.S., 1970, University of California, San Francisco. Emerita, 1992

STITH, MORTON (1960), *Professor of English*: B.A., 1943, M.A., 1947, Wayne State University; Ph.D., 1952, University of Wisconsin. Emeritus, 1987

STOPER, ARNOLD E. (1968), *Professor of Psychology*: B.S., 1958, University of Illinois; Ph.D., 1967, Brandeis University. Emeritus, 2003

STRONG, DONALD J. (1963), *Psychologist, Counseling Services; Professor of Psychology*: A.B., 1950, Houghton College; M.A., 1951, University of Michigan; Ph.D., 1959, University of Denver. Emeritus, 1989

SUE, DERALD W. (1973), *Professor of Educational Psychology*: B.S., 1965, Oregon State University; M.S., 1967, Ph.D., 1969, University of Oregon. Emeritus, 2001

SULLIVAN, WILLIAM A. (1968), *Professor of History*: B.S., 1942, University of Wisconsin; M.A., 1947, Ph.D., 1951, Columbia University. Emeritus, 1986

SUNDERLAND, SUSAN E. (1973), *Professor of Recreation and Community Education*: B.S., 1963, M.S., 1970, University of Minnesota; Ed.D., 1982, University of California, Berkeley. Emerita, 2003

TANG, HWA (1969), *Associate Professor of Mathematics and Computer Science*: S.M., 1958, Ph.D., 1965, University of Chicago. Emerita, 2000

TEMKO, ALLAN B. (1971), *Professor of Art*: A.B., 1947, Columbia College. Emeritus, 1980

THOMAN, RICHARD S. (1972), *Professor of Geography & Environmental Studies*: B.A., 1941, M.A., 1948, University of Colorado; Ph.D., 1953, University of Chicago. Emeritus, 1983

TIERNEY, TIMOTHY M. (1970), *Professor of Kinesiology and Physical Education*: B.A., 1967, San Francisco State College; M.A., 1972, Stanford University. Emeritus, 2003

TOMANEK, THOMAS J. (1969), *Professor of Spanish*: Ph.D., 1955, Charles University, Prague. Emeritus, 1985

TOMBARI, HENRY A. (1976), *Professor of Management Sciences*: B.S., 1952, U.S. Naval Academy; B.C.E., 1956, Rensselaer Polytechnic Institute; M.S., 1967, U.S. Naval Postgraduate School; D.B.A., 1975, University of Maryland. Emeritus, 1992

TONTZ, JAY L. (1969), *Dean, College of Business and Economics; Professor of Economics*: B.A., 1960, Denison University; M.S., 1962, Cornell University; Ph.D., 1966, University of North Carolina. Emeritus, 2003

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TULLIS, RICHARD E. (1972), *Professor of Biological Science*: B.S., 1963, University of Washington; M.S., 1968, Ph.D., 1972, University of Hawaii. Emeritus, 2000

VAN AKEN, MARK J. (1966), *Professor of History*: A.B., 1944, University of Michigan; M.A., 1950, Ph.D., 1955, University of California, Berkeley. Emeritus, 1986

VANDENBURGH, WILLIAM G. (1960), *Professor of Kinesiology and Physical Education*: B.S., 1949, M.S., 1950, University of Washington; Ed.D., 1953, Columbia University. Emeritus, 1988

VEDER, ROBERT A. (1971), *Professor of Communicative Sciences and Disorders*: B.A., 1961, San Jose State College; M.A., 1964, Ph.D., 1966, University of Washington. Emeritus, 1998

VIDAL, ELIE R. (1965), *Professor of French*: A.B., 1952, M.A., 1953, Ph.D., 1957, University of Michigan. Emeritus, 1992

VrMEER, RICHARD W. (1965), *Chair, Department of Public Affairs and Administration; Professor of Public Administration*: A.B., 1961, University of California, Riverside; M.S., 1965, University of Southern California. Emeritus, 1997

WARRIN, DONALD O. (1969), *Professor of Portuguese*: B.A., 1960, University of Southern California; M.A., 1966, Ph.D., 1973, New York University. Emeritus, 1997

WATSON, R. THOMAS (1966), *Associate Professor of French*: A.B., 1952, Jacksonville State College; M.A., 1955, University of Washington; Ph.D., 1964, University of California, Berkeley. Emeritus, 1996

WEIDLICH, JOHN EDWARD (1964), *Professor of Mathematics and Computer Science*: B.S., 1948, M.S., 1950, Stanford University; Ph.D., 1961, University of California, Berkeley. Emeritus, 1989

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WHITEHEAD, MARIAN (1964), *Professor of Physics*: B.A., 1944, Reed College; M.A., 1945, Columbia University; Ph.D., 1951, University of California, Berkeley. Emerita, 1984

WHITNEY, ROBERT C. (1963), *Professor of Physical Science*: B.S., 1947, University of Washington; M.S., 1958, Ph.D., 1963, Cornell University. Emeritus, 1983

WILKERSON, WARNER B. (1972), *Librarian*: B.S., 1958, Texas College; M.S., 1960, Iowa State University; M.A., 1972, San Jose State College. Emeritus, 1999

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WOLGAST, ELIZABETH H. (1968), *Professor of Philosophy*: A.B., 1950, A.M., 1952, Cornell University; Ph.D., 1955, University of Washington. Emerita, 1994

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ROSEN, DAVID C. (2003), *Lecturer in Biological Sciences*: B.S., 1984, University of California, Santa Cruz; Ph.D., 1991, University of California, Berkeley

ROSS, RITA (2002), *Lecturer in Anthropology*: B.A., 1982, M.A., 1984, Ph.D., 1993, University of California, Berkeley

ROSS, STEVEN P. (2002), *Lecturer in Psychology*: B.S., 1972, University of California, Santa Barbara; M.S., 1979, California State University, Hayward; Ph.D., 1986, Professional School of Psychology

ROTH, ANNE (2004), *Lecturer in Management and Finance*: B.A., 1978, San Diego State University; M.A., 1983, University of California, Berkeley

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SHUMATE, MICHAEL S. (1989), *Lecturer in Recreation and Community Services*: B.S., 1986, M.P.A., 1989, California State University, Hayward; D.P.A., 1995, Golden Gate University

SCHUTZ, MICHAEL K. (2002), *Lecturer in Sociology and Social Services*: A.B., 1966, University of California, Berkeley; M.A., 1969, Ph.D., 1973, Northwestern University

SIEUX, LILY TOH (2002), *Lecturer in Accounting and Computer Information Systems*: B.A., 1973, Mills College; M.S., 1975, University of the Pacific; M.B.A., 1980, University of California, Berkeley

SIMUTIS, JEAN S. (1990), *Lecturer in Mathematics and Computer Science*: B.S., 1971, University of San Francisco; M.A., 1973, Ph.D., 1977, University of California, Davis

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SMITH, VALERIE J. (2004), *Lecturer in Marketing and Entrepreneurship*: B.S., 1989, M.A., 1998, California State University, Hayward

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SPROTT, RICHARD A. (2002), *Lecturer in Human Development*: B.A., 1987, University of Kansas; Ph.D., 1994, University of California, Berkeley

STANTON, F. VICTOR, JR. (1981), *Lecturer in Accounting*: B.A., 1971, San Jose State University; M.B.A., 1973, Golden Gate University

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STORCH, ARTHUR L. (1984), *Lecturer in Music*: B.S., 1977, Brooklyn College; M.M., 1979, Juilliard School of Music

SUGAHARA, CLYDE N. (2002), *Lecturer in Statistics*: B.A., 1973, University of Hawaii; M.S., 1980, University of Iowa; Ph.D., 1990, University of California, Berkeley

SULLIVAN, SUZANNE (1998), *Lecturer in Teacher Education*: M.T.S., 1976, Franciscan School of Theology/Graduate Theological Union

TEICHOLZ, MARC S. (1997), *Lecturer in Music*: B.A., 1985, Yale University; M.M., 1986, Yale School of Music; J.D., 1990, University of California, Berkeley

TEJADA-FLORES, RICK (1995), *Lecturer in Mass Communication* B.F.A., 1968, San Francisco Art Institute

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VILLANUEVA, LOUIS A. (2002), *Lecturer in Physics*: B.S., 1987, California State University, Hayward; Ph.D., 1993, Massachusetts Institute of Technology

WHITE, PAUL E. (2003), *Lecturer in English*: B.A., 1981, M.A., 1997, California State University, Hayward

WISHNIEWSKY, GARY L. (2003), *Lecturer in Management and Finance*: B.A., 1969, Antioch College; M.B.A., 1984, M.B.A., 1985, Ph.D., 1994, Golden Gate University

WILSON, TERRY P. (2003), *Lecturer in History*: B.A., 1963, Phillips University; M.A., 1965, University of Oklahoma; Ph.D., 1974, Oklahoma State University

WOODARD, ELLEN L. (2003), *Lecturer in Geography and Environmental Studies*: B.S., 1977, M.S., 1981, California State University, Hayward; Ph.D., 1994, University of California, Berkeley

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Policies, Credits, Acknowledgments

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Changes in Rules and Policies

Although every effort has been made to assure the accuracy of the information in this catalog, students and others who use this catalog should note that laws, rules, and policies change from time to time and that these changes may alter the information contained in this publication. Changes may come in the form of statutes enacted by the Legislature, rules and policies adopted by the Board of Trustees of the California State University, by the Chancellor or designee of the California State University, or by the President or designee of the campus. It is not possible in a publication of this size to include all of the rules, policies and other information that pertain to students, the institution, and the California State University. More current or complete information may be obtained from the appropriate department, school, or administrative office.

Nothing in this catalog shall be construed, operate as, or have the effect of an abridgement or a limitation of any rights, powers, or privileges of the Board of Trustees of the California State University, the Chancellor of the California State University, or the President of the campus. The Trustees, the Chancellor, and the President are authorized by law to adopt, amend, or repeal rules and policies that apply to students. This catalog does not constitute a contract or the terms and conditions of a contract between the student and the institution or the California State University. The relationship of the student to the institution is one governed by statute, rules, and policy adopted by the Legislature, the Trustees, the Chancellor, the President and their duly authorized designees.

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<http://www.bookstore.csuhayward.edu/>

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Appendix

California State University, Hayward Foundation, Inc.

The Foundation is a non-profit corporation established in 1963 to provide services to the University community which cannot be provided under normal State operations. It is governed by an eleven-member Board of Trustees, drawn from faculty, administration, students, and the community. It operates the Pioneer Bookstore, contracts for operation of food and vending services, provides accounting and management to the Instructionally Related Activities Board, and administers in trust the funds of various self-supporting University activities.

The Foundation supports research programs at Cal State Hayward through grant funds received from State, Federal, and other agencies. It helps initiate proposals, consults in the preparation of grant applications, gives guidance in the development of project budgets, and manages the accounting and preparation of reports for funded research projects.

Cal State Hayward Educational Foundation

Cal State Hayward recognizes that the margin of excellence in institutions of higher education depends increasingly on external funding from alumni, corporations, small businesses, and individual donors. In order to further the university's mission of service to the region, the Cal State Hayward Educational Foundation was formed in 1990 to help forge partnerships with the private sector. The foundation is managed by a board of trustees drawn from local businesses and corporations.

Career Placement

The Career Development Office may furnish, upon request, information about the employment of students who graduate from programs or courses of study preparing students for a particular career field. This information includes data concerning the average starting salary and the percentage of previously enrolled students who obtained employment. The information may include data collected from either graduates of the campus or graduates of all campuses in the California State University.

Grievance Procedures

Students who feel aggrieved in their relationships with the university, its policies, practices and procedures, or its faculty and staff and who seek information on grievance procedures may contact the Special Assistant to the Vice President, Student Judicial Affairs office (Warren Hall, Room 483). Also see the appropriate section of this chapter for the name and address of offices which handle a specific type of grievance.

Immigration Requirements for Licensure

The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (P.L. 104-193), also known as the Welfare Reform

Act, includes provisions to eliminate eligibility for federal and state public benefits for certain categories of lawful immigrants, as well as benefits for all illegal immigrants.

Students who will require a professional or commercial license provided by a local, state, or federal government agency in order to engage in an occupation for which the CSU may be training them must meet the immigration requirements of the new Personal Responsibility and Work Opportunity Reconciliation Act to achieve licensure. (Students in Biological Science, Educational Psychology, Engineering, Kinesiology, Nursing, and Teacher Education, in particular should be aware of these provisions.) Information concerning the regulation is available from Ray Wallace, Director, International Education Center, Support Building 1325, Tel. 510-885-2880.

Military Selective Service Act

The federal Military Selective Service Act (the "Act") requires most males residing in the United States to present themselves for registration with the Selective Service System within thirty days of their eighteenth birthday. Most males between the ages of 18 and 25 must be registered. Males born after December 31, 1959 may be required to submit a statement of compliance with the Act and regulations in order to receive any grant, loan, or work assistance under specified provisions of existing federal law. In California, students subject to the Act who fail to register are also ineligible to receive any need-based student grants funded by the state or a public post-secondary institution.

Selective Service registration forms are available at any U.S. Post Office and many high schools have a staff member or teacher appointed as a Selective Service Registrar. Applicants for financial aid can also request that information provided on the Free Application for Federal Student Aid (FAFSA) be used to register them with the Selective Service. Information on the Selective Service System is available and the registration process may be initiated online at <http://www.sss.gov>.

Nondiscrimination Policies

Age, Marital Status, Religion, or Sexual Orientation
By CSU Board of Trustees policy, the California State University does not discriminate on the basis of age, marital status, religion, or sexual orientation.

Disability

The California State University does not discriminate on the basis of disability in admission or access to, or treatment or employment in, its programs and activities. Section 504 of the Rehabilitation Act of 1973, as amended, and the regulations adopted thereunder and the Americans with Disabilities Act of 1990 prohibit such discrimination. Student inquiries concerning compliance may be addressed to Dr. Hal Gin, Executive Director, Student Development and Student Judicial Affairs (Warren Hall 483), 510-885-3763. Faculty and staff inquiries concerning compliance may be addressed to Ms. Dorian West, Director of Equal Employment Opportunity (Warren Hall 691B), 510-885-4918.

Gender Equity

The California State University is committed to providing equal

opportunities to male and female CSU students in all campus programs, including intercollegiate athletics.

HIV/AIDS

The hiring process and employment practices for University employees and the student admission process to the University or any program within or related to the University shall not include consideration of an individual's HIV/AIDS status or perceived inclusion in a high risk group.

Race, Color, and National Origin

The California State University complies with the requirements of Title VI and Title VII of the Civil Rights Act of 1964, as amended, and the regulations adopted thereunder. No person shall, on the basis of race, color, or national origin be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in any program of the California State University.

Sex

The California State University does not discriminate on the basis of sex in the educational programs or activities it conducts. Title IX of the Education Amendments of 1972, as amended, and the administrative regulations adopted thereunder prohibit discrimination on the basis of sex in education programs and activities operated by California State University, Hayward. Such programs and activities include admission of students and employment. Student inquiries concerning the application of Title IX to programs and activities of California State University, Hayward may be referred to Dr. Hal Gin, Executive Director, Student Development and Student Judicial Affairs (Warren Hall 483), 510-885-3763. Faculty and staff inquiries concerning the application of Title IX to programs and activities of California State University, Hayward may be referred to Ms. Dorian West, Director of Equal Employment Opportunity (Warren Hall 691B), 510-885-4918.

The California State University is committed to providing equal opportunities to male and female CSU students in all campus programs, including intercollegiate athletics.

Sexual Harassment

The University desires to maintain an academic and work environment which protects the dignity and promotes the mutual respect of all employees and students. Sexual harassment of employees or students is prohibited. In general, deliberate verbal comments, gestures, or physical contact of a sexual nature that are unsolicited and unwelcomed will be considered harassment (Title VII of the Civil Rights Act of 1964). Complaints by students should be directed to Dr. Hal Gin, Executive Director, Student Development and Student Judicial Affairs (Warren Hall 483), 510-885-3763. Faculty and staff complaints should be directed to Ms. Dorian West, Director of Equal Employment Opportunity (Warren Hall 691B), 510-885-4918.

Sexual Orientation

By CSU Board of Trustees policy, the California State University does not discriminate on the basis of sexual orientation.

Nonresident Tuition Exceptions

There are exceptions from nonresident tuition, including:

1. Persons below the age of 19 whose parents were residents of California but who left the state while the student, who remained, was still a minor. When the minor reaches age 18, the exception continues until the student has resided in the state the minimum time necessary to become a resident.
2. Minors who have been present in California with the intent of acquiring residence for more than a year before the residence determination date, and entirely self-supporting for that period of time. The exception continues until the student has resided in the state the minimum time necessary to become a resident.
3. Persons below the age of 19 who have lived with and been under the continuous direct care and control of an adult or adults, not a parent, for the two years immediately preceding the residence determination date. Such adult must have been a California resident for the most recent year. The exception continues until the student has resided in the state the minimum time necessary to become a resident.
4. Dependent children and spouse of persons in active military service stationed in California on the residence determination date. There is no time limitation on this exception unless the military person transfers out of California or retires from military service. If either of those events happen, the student's eligibility for this exception continues until he or she resides in the state the minimum time necessary to become a resident.
5. Military personnel in active service stationed in California on the residence determination date for purposes other than education at state-supported institutions of higher education. This exception continues until the military personnel has resided in the state the minimum time necessary to become a resident.
6. Military personnel in active service in California for more than one year immediately prior to being discharged from the military. Eligibility for this exception runs from the date the student is discharged from the military until the student has resided in state the minimum time necessary to become a resident.
7. Dependent children of a parent who has been a California resident for the most recent year. This exception continues until the student has resided in the state the minimum time necessary to become a resident, so long as continuous attendance is maintained at an institution.
8. Graduates of any school located in California that is operated by the United States Bureau of Indian Affairs, including, but not limited to, the Sherman Indian High School. The exception continues so long as continuous attendance is maintained by the student at an institution.
9. Certain credentialed, full-time employees of California school districts.

10. Full-time CSU employees and their children and spouse; State employees assigned to work outside the State and their children and spouse. This exception continues until the student has resided in the state the minimum time necessary to become a California resident.
11. Children of deceased public law enforcement or fire suppression employees who were California residents and who were killed in the course of law enforcement or fire suppression duties.
12. Certain amateur student athletes in training at the United States Olympic Training Center in Chula Vista, California. This exception continues until the student has resided in the state the minimum time necessary to become a resident.
13. Federal civil service employees and their natural or adopted dependent children if the employee has moved to California as a result of a military mission realignment action that involves the relocation of at least 100 employees. This exception continues until the student has resided in the state the minimum time necessary to become a resident.
14. State government legislative or executive fellowship program enrollees. The student ceases to be eligible for this exception when he or she is no longer enrolled in the qualifying fellowship.

Reporting Campus Emergencies

When reporting an on-campus emergency, call the following number:

On-campus Emergencies

Police, Fire, Medical: 911

Other frequently called numbers are:

On-campus Non-Emergencies

Police Business: x5-3791

Escort Service: x5-3791

Crime Prevention Service: x5-3791

Lost and Found Property: x5-3791

Parking Services: x5-3790

Student Health Services: x5-3735

Counseling and Psychological Services: x5-3690

University Information : x5-3000

Note: When using a non-campus phone, you must use the "885" prefix instead of "5" in the above extensions; when using a (white) campus phone, simply use the extensions.

Research with Human Subjects

The University has approved policies and procedures for the protection of human subjects in research, development, and related activities carried out by faculty, staff and students. An Institutional Review Board has been established to review research protocols in order to determine whether human subjects would be at risk and to protect their rights and welfare. Protocols must be approved before research commences. Further information and copies of the policy document may be obtained

from the office of the Director, Research and Sponsored Programs, WA 977, 885-4212 or online at:
http://www.csu Hayward.edu/ORSP/ORSP_Homepage.html.

Sexual Harassment

Sexual harassment is prohibited by law and by university policy. Sexual harassment is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature when:

- submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment, appointment, admission, or academic evaluation
- submission to such conduct is used as a basis for evaluation in personnel decisions or academic evaluations affecting an individual
- such conduct has the purpose or effect of unreasonably interfering with an individual's performance or of creating an intimidating, hostile, offensive, or otherwise adverse working or educational environment
- the conduct has the purpose or effect of interfering with a student's academic performance; creating an intimidating, hostile, offensive, or otherwise adverse learning environment; or adversely affecting any student.

Sexual harassment happens to both men and women. In determining whether conduct constitutes sexual harassment, the circumstances surrounding the conduct should be considered.

Sexual harassment may include one or more of the following: questions about one's sexual behavior; sexually oriented jokes; inappropriate comments about one's body and clothing; conversation filled with innuendoes and double meanings; sexually suggestive pictures or objects displayed to embarrass or humiliate; pinching, fondling, patting or kissing; requests for sexual intercourse; unfavorable consequences for refusing to submit.

Prevent sexual harassment. For more information on student, staff or faculty rights, see the Diversity and Equal Opportunity Web page at www.csu Hayward.edu/ODEO/.

Student Disciplinary Action

Applicants for admission and enrolled students are responsible for observing all legal regulations, deadlines, and procedures for access and retention in the university. Conduct which is incompatible with the educational mission of the university is subject to disciplinary action as provided in Section 41304, Title 5, *California Code of Regulations*.

Student Rights in Disciplinary Procedures

The administration of student discipline at the university guarantees procedural fairness to an accused student or student organization. Practices in disciplinary cases may vary in formality depending on the gravity of the offense and the sanctions which may be applied. Such sanctions will take into account the presence and conditions prescribed by the institution's policies for

student conduct, student academic standards, and Time, Manner, and Place regulations.

In all disciplinary situations, students who are charged with misconduct will be informed of the nature of the charges and be given a fair opportunity to refute the charges, provided an opportunity to participate in efforts to mediate a solution to problems, and to appeal decisions.

The following are student disciplinary procedures for the CSU. Information regarding non-academic student disciplinary matters should be referred to Student Judicial Affairs.

Inappropriate conduct by students or by applicants for admission is subject to discipline as provided in Sections 41301 through 41304 of Title 5, *California Code of Regulations*. These sections are as follows:

41301 Expulsion, Suspension and Probation of Students

Following procedures consonant with due process established pursuant to Section 41304, any student of a campus may be expelled, suspended, placed on probation or given a lesser sanction for one or more of the following causes which must be campus related:

- (a) Cheating or plagiarism in connection with an academic program at a campus.
- (b) Forgery, alteration or misuse of campus documents, records, or identification, or knowingly furnishing false information to a campus.
- (c) Misrepresentation of oneself or of an organization to be an agent of a campus.
- (d) Obstruction or disruption, on or off campus property, of the campus educational process, administrative process, or other campus function.
- (e) Physical abuse on or off campus property of the person or property of any member of the campus community or of members of his or her family or the threat of such physical abuse.
- (f) Theft of, or non-accidental damage to, campus property, or property in the possession of, or owned by, a member of the campus community.
- (g) Unauthorized entry into, unauthorized use of, or misuse of campus property.
- (h) On campus property, the sale or knowing possession of dangerous drugs, restricted dangerous drugs, or narcotics as those terms are used in California statutes, except when lawfully prescribed pursuant to medical or dental care, or when lawfully permitted for the purpose of research, instruction or analysis.
- (i) Knowing possession or use of explosives, dangerous

chemicals or deadly weapons on campus property or at a campus function without prior authorization of the campus president.

- (j) Engaging in lewd, indecent, or obscene behavior on campus property or at a campus function.
- (k) Abusive behavior directed toward, or hazing of, a member of the campus community.
- (l) Violation of any order of a campus president, notice of which had been given prior to such violation and during the academic term in which the violation occurs, either by publication in the campus newspaper, or by posting on an official bulletin board designated for this purpose, and which order is not inconsistent with any of the other provisions of this Section.
- (m) Soliciting or assisting another to do any act which would subject a student to expulsion, suspension or probation pursuant to this Section.
- (n) For purposes of this Article, the following terms are defined:
 - (1) The term "member of the campus community" is defined as meaning California State University Trustees, academic, non-academic and administrative personnel, students, and other persons while such other persons are on campus property or at a campus function.
 - (2) The term "campus property" includes:
 - (A) real or personal property in the possession of, or under the control of, the Board of Trustees of the California State University, and
 - (B) all campus feeding, retail, or residence facilities whether operated by a campus or by a campus auxiliary organization.
 - (3) The term "deadly weapons" includes any instrument or weapon of the kind commonly known as a blackjack, slingshot, billy, sandclub, sandbag, metal knuckles, any dirk, dagger, switchblade knife, pistol, revolver, or any other firearm, any knife having a blade longer than five inches, any razor with a unguarded blade, and any metal pipe or bar used or intended to be used as a club.
 - (4) The term "behavior" includes conduct and expression.
 - (5) The term "hazing" means any method of initiation into a student organization or any pastime or amusement engaged in with regard to such an organization which causes, or is likely to cause, bodily danger, or physical or emotional harm, to any member of the campus community; but the term "hazing" does not include customary athletic events or other similar contests or competitions.
- (o) This Section is not adopted pursuant to Education Code

Section 89031.

- (p) Notwithstanding any amendment or repeal pursuant to the resolution by which any provision of this Article is amended, all acts and omissions occurring prior to that effective date shall be subject to the provisions of this Article as in effect immediately prior to such effective date.

41302 Disposition of Fees: Campus Emergency;
Interim Suspension

The President of the campus may place on probation, suspend, or expel a student for one or more of the causes enumerated in Section 41301. No fees or tuition paid by or for such student for the semester, quarter, or summer session in which he or she is suspended or expelled shall be refunded. If the student is readmitted before the close of the semester, quarter, or summer session in which he or she is suspended, no additional tuition or fees shall be required of the student on account of the suspension.

During periods of campus emergency, as determined by the President of the individual campus, the President may, after consultation with the Chancellor, place into immediate effect any emergency regulations, procedures, and other measures deemed necessary or appropriate to meet the emergency, safeguard persons and property, and maintain educational activities.

The President may immediately impose an interim suspension in all cases in which there is reasonable cause to believe that such an immediate suspension is required in order to protect lives or property and to insure the maintenance of order. A student so placed on interim suspension shall be given prompt notice of charges and the opportunity for a hearing within 10 days of the imposition of interim suspension. During the period of interim suspension, the student shall not, without prior written permission of the President or designated representative, enter any campus of The California State University other than to attend the hearing. Violation of any condition of interim suspension shall be grounds for expulsion.

41303 Conduct by Applicants for Admission

Notwithstanding any provision in this Chapter 1 to the contrary, admission or readmission may be qualified or denied to any person who, while not enrolled as a student, commits acts which, were he enrolled as a student, would be the basis for disciplinary proceedings pursuant to Sections 41301 or 41302. Admission or readmission may be qualified or denied to any person who, while a student, commits acts which are subject to disciplinary action pursuant to Section 41301 or Section 41302. Qualified admission or denial of admission in such cases shall be determined under procedures adopted pursuant to Section 41304.

41304 Student Disciplinary Procedures for the
California State University

The Chancellor shall prescribe, and may from time to time revise, a code of student disciplinary procedures for the California State University. Subject to other applicable law, this code shall provide for determinations of fact and sanctions to be applied for conduct which is a ground for discipline under Sections 41301 or 41302, and for qualified admission or denial of admission under Section

41303; the authority of the campus President in such matters; conduct related determinations on financial aid eligibility and termination; alternative kinds of proceedings, including proceedings conducted by a Hearing Officer; time limitations; notice; conduct of hearings, including provisions governing evidence, a record, and review; and such other related matters as may be appropriate. The Chancellor shall report to the Board actions taken under this section.

Note: Pursuant to Section 41304 of Title 5 of the *California Code of Regulations*, the Chancellor has issued Executive Order #628, "Student Disciplinary Procedures for California State University, 1994." These procedures govern determinations under Article 2, Subchapter 4, Chapter 1, Division 5 of that *Code* and other state and federal laws which require institutional hearings.

As prescribed in Executive Order #628, Article VI, Subsection 6, sanctions of, "probation and suspension shall be made part of the student's academic record during the term of the probation or suspension. Expulsion shall be made part of the student's permanent academic record."

Student Freedoms, Rights, and Responsibilities

CSUH exists for the transmission of knowledge, the pursuit of truth, the development of students, and the general well-being of society. Free inquiry and free expression are indispensable to the attainment of these goals. As members of the academic community, students are encouraged and expected to develop the capacity for critical judgement, to accept appropriate responsibilities, and to engage in rational debate, in a sustained and independent search for truth.

Freedom to teach and freedom to learn are inseparable facts of academic freedom. The freedom to learn depends largely upon appropriate opportunities and conditions in the classroom, on the campus and in the larger community. The responsibility to secure and to respect general conditions conducive to the freedom to teach and learn is shared by all members of the academic community.

The following standards and regulations on students' freedoms, rights, and responsibilities are authorized by federal and state laws and by CSU policies.

Freedoms, Rights, and Responsibilities for Access and Retention

In all aspects of access to programs and services provided or sponsored by the institution, students have a right to be free from discrimination on the basis of individual attributes, including, but not limited to race, color, gender, age, disability, national origin, or sexual orientation. Admission to the university is limited by standards which are promulgated by the California legislature and the CSU Board of Trustees. Realities of the campus budget and facilities may impose additional constraints.

Beyond academic, fiscal, and physical limits to admission to the university, prospective and enrolled students have a right to unobstructed access to campus programs and services. In special cases, and with the CSU chancellor's concurrence, selected

degree programs may be given "impacted" status, which adds certain stipulations on access to those majors.

Issues regarding freedom of access should be referred to the supervisor(s) of the appropriate program or service first. If the matter is not resolved satisfactorily, the student has the right to refer the issue through administrative channels to the Vice Presidents, Student Affairs or Academic Affairs. Students have a right to be informed about the institution's policies for access and retention in order to take responsibility for making appropriate choices and to participate effectively in campus programs and services.

Fundamental Freedoms, Rights, and Responsibilities

A basic component of the university mission statement is the value of diversity in background, interests, experiences, beliefs, and cultures. Faculty, staff and students represent a variety of interests. Students come to campus with unique experiences, and while on campus, as a result of their interaction in the formal classroom and co-curricular programs and activities, they continue to develop and expand their knowledge and pursuits.

In the Classroom

The institution maintains minimum standards in order to preserve the following fundamental freedoms for students:

Freedom to teach and freedom to learn are inseparable facts of academic freedom. Student academic freedom is incorporated into the classroom setting where learning is concentrated and structured. Faculty and students share responsibility for student academic freedom in the classroom. The following minimum standards enhance student academic freedom in the classroom.

Freedom of Expression

Students are free to take reasonable exception to the data or views offered in any course of study and to reserve judgment about matters of opinion. Students are responsible for learning the content of any course of study for which they are enrolled.

Protection Against Improper Academic Evaluation

Orderly procedures protect students from prejudice or capricious academic evaluation. Students are responsible for maintaining standards of academic performance established for each course in which they are enrolled.

Protection against improper disclosure of information about students' views, beliefs, and political activities which professors acquire in the course of their work as instructors, advisers, and counselors shall be considered confidential. Judgments of academic ability and character may be provided under appropriate circumstances, normally with the knowledge or consent of the student.

The Fairness Committee (Instructional Services, Warren Hall, Room 757), which operates under the supervision of the Academic Senate, exists to resolve complaints concerning academic unfairness or discrimination. Students who are accused of academic dishonesty or other disciplinary matters have access to grievance procedures handled by the Student Judicial Affairs office (Warren Hall, Room 483).

Student Publications

Student publications and the student press are valuable aids in establishing and maintaining an atmosphere of free and responsible discussion and intellectual exploration on the campus.

While student publications and the student press operate with limited external control, the editorial freedom of student editors and managers entails corollary responsibilities to be governed by the concerns of responsible journalism, such as the evidence of libel, indecency, undocumented allegations, attacks on personal integrity, and the techniques of harassment and innuendo. Students and faculty who produce student publications have the responsibility to establish and adhere to standards of responsible journalism.

Freedom of Association

Students are free to organize and join associations to promote their common interests and to have these associations be considered for recognition by the university. "Institutional recognition" is understood to refer to the formal relationship between the student organization and the institution. Recognized student organizations are responsible for abiding by all institutional regulations for student organizations. These regulations are available in the office of Student Life Programs (Student Services Hub 1351).

Freedom of Inquiry and Expression

Students and student organizations are free to examine and discuss all questions of interest to them and to express opinions publicly and privately as long as others' rights are not violated in the process. Students are always free to support causes by orderly means which do not disrupt the regular and essential operation of the institution. However, such public expressions or demonstrations speak only for the student(s) involved, and not for the institution.

Student Participation in Institutional Government

Students are free to elect peers to serve and represent them in university government as members of the student body. Students who meet eligibility criteria are appointed to various standing committees by the administration and faculty upon the recommendation of the Associated Students Board of Directors. The role of student government is explicitly defined in the California Education Code and CSU policies. Copies of these regulations can be obtained in the office of the Vice President, Student Affairs (Warren Hall, Room 959).

Off-Campus Freedom of Students

The institution has the responsibility to protect students' citizenship rights on campus, and in approved activities which occur off campus. Off-campus activities of students may, upon occasion, result in violation of the law. In such cases, Student Judicial Affairs (Warren Hall, Room 483) is prepared to apprise students of legal counsel, and offer other assistance as required. Students who violate the law may incur penalties prescribed by civil authorities, but institutional authority will not be used merely to duplicate the functions of general laws.

The institution's Time, Manner, and Place Regulations provide

guidelines and procedures to support student freedoms and rights to individuals and to hear any person of their own choosing. The Time, Manner, and Place Regulations are available in Student Development Services (Warren Hall, Room 483).

Privacy Rights of Students in Education Records

The federal Family Educational Rights and Privacy Act of 1974 (20 U.S.C. 1232g) and regulations adopted thereunder (34 C.F.R. 99), set out requirements designed to protect the privacy of students concerning their records maintained by the campus. The statute and regulations govern access to student records maintained by the campus and the release of such records. The law provides that the campus must give students access to records directly related to the student. The campus must also provide an opportunity for a hearing to challenge the records if the student claims they are inaccurate, misleading, or otherwise inappropriate. The right to a hearing under this law does not include any right to challenge the appropriateness of a grade determined by the instructor. The law generally requires the institution to receive a student's written consent before releasing personally identifiable data about the student. The institution has adopted a set of policies and procedures governing implementation of the statutes and regulations. Copies of these policies and procedures may be obtained at Office of the Vice President, Student Affairs, WA 959. Among the types of information included in the campus statement of policies and procedures are: 1) the types of student records maintained and the information they contain; 2) the official responsible for maintaining each type of record; 3) the location of access lists indicating persons requesting or receiving information from the record; 4) policies for reviewing and expunging records; 5) student access rights to their records; 6) the procedures for challenging the content of student records; 7) the cost to be charged for reproducing copies of records; and 8) the right of the student to file a complaint with the Department of Education. The Department of Education has established an office and review board to investigate complaints and adjudicate violations. The designated office is: Family Policy Office, U.S. Department of Education, Washington, D.C. 20202-4605.

The campus is authorized under the Act to release "directory information" concerning students. "Directory information" may include the student's name, address, telephone listing, e-mail address, photograph, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, grade level, enrollment status, degrees, honors, and awards received, and the most recent previous educational agency or institution attended by the student. The above designated information is subject to release by the campus at any time unless the campus has received prior written objection from the student specifying information the student requests not be released. Written objections should be sent to the Vice President, Student Affairs, WA 959.

The campus is authorized to provide access to student records to campus officials and employees who have legitimate educational interests in such access. These persons have responsibilities in the campus' academic, administrative or service functions and have reason for using student records associated with their campus or other related academic responsibilities. Student records

may also be disclosed to other persons or organizations under certain conditions (e.g., as part of the accreditation or program evaluation; in response to a court order or subpoena; in connection with financial aid; to other institutions to which the student is transferring.)

Student Health Services Message on Alcohol, Tobacco and Other Drugs

Alcohol, Tobacco and Other Drugs Prevention Program
The California State University, Hayward Alcohol, Tobacco and Other Drugs (ATOD) Advisory Council was established fall 2001 in response to the Chancellor's directive that CSU campuses provide special attention to the development of alcohol, tobacco and other drugs policies and prevention programs. The ATOD Council includes representation from CSUH students, staff, faculty and the community and is divided into five subcommittees: Policy, Assessment, Education and Prevention, Community/Treatment and Funding.

The ATOD Education and Prevention subcommittee is responsible for: dissemination and communication of the CSUH AOD Policy to students, parents, staff and faculty; training CSUH staff on ATOD issues; providing educational programming; and initiating a social norms campaign on campus. The university also collaborates with local community agencies to further ATOD prevention and enforcement activities.

Cal State Hayward participates in the following campus alcohol education/awareness activities: Fall Welcome Week; Homecoming Week; Spring Break; "Soberfest," Alcohol Awareness Day; Alcohol Awareness Evening at the Residence Halls; "Alcohol Jeopardy" at the Residence Halls; Resident Advisor (RA) alcohol training; Date rape programming. Contact the Health Promotions Department in Student Health Services at (510) 885-3733 for additional information. •

Policies, Standards and Procedures for Use of Alcohol and Other Drugs

- The possession and/or consumption of alcoholic beverages by anyone under 21 years of age is prohibited at all times on campus, and is subject to the penalties imposed by state law and university policies.
- Alcoholic beverages may be served on special occasions with prior approval at functions sponsored by approved student, faculty, staff, or administrative organizations, or by campus-related or off-campus organizations contracting for the use of university facilities. Service will normally be permitted only in conjunction with food service. Service of alcohol on these occasions is not allowed before 4:00 p.m. on weekdays during academic quarters. Exceptions to this rule may be granted for events held in the University Union, or at the discretion of a vice president who is responsible for approval.
- Use of illicit drugs (including performance enhancing substances such as anabolic steroids) is forbidden.

Policy Violation and Sanctions

In the Workplace

Any faculty, staff, administrator or other employee who violates the policy on alcohol and other drugs shall be subject to corrective or disciplinary action up to, and including the possibility of dismissal, in accordance with appropriate collective bargaining agreements, CSU policies and state and federal law. At the discretion of the university, employees found to be in violation of university policy may be required to participate in a substance abuse program, employee assistance program, or other forms of counseling.

Students, Student Organizations and Off-Campus Organizations or Individuals

Any student who violates the policy on alcohol and other drugs shall be subject to corrective action, such as participation in a substance abuse program or other counseling, or disciplinary action up to, and including the possibility of dismissal from the institution. Sanctions will also be imposed for violations of this policy by student organizations, off-campus organizations or individuals as determined by the Vice President, Student Affairs and/or the Vice President, Administration and Business Affairs.

Other Sanctions

In addition to the foregoing, the following sanctions may be imposed for violation of the alcohol and drug policy by employees, students or student organizations in accordance with the objectives set forth in the university statement on student rights and responsibilities:

Sanctions for individuals: 1) Restitution for any damages that result from the conduct of the violator; 2) Violators will be required to go through an alcohol or other drugs education program.

Sanctions for student groups/organizations: 1) Social probation for a specified period of time; 2) Restitution for any damages that result from the conduct of the violator; 3) Freezing of funds, if any are available; 4) Report of violations to the national headquarters or offices of the organizations if such exist; 5) Removal of officers from office; 6) Loss of university recognition and access to campus support services. University departments may impose additional sanctions for conduct in violation of policies established by the department, as well as violations of the University Alcohol and Other Drugs Policy.

Alcohol and Other Drugs Risks and Resources

There are many documented risks associated with alcohol and other drug abuse affecting individuals, families and friends. Alcohol and other drug abuse can lead to serious health and social problems, including short and long-term effects on the body and mind. Additionally, alcohol and other drug abuse can affect academic, athletic, work performance, and can lead to violent or destructive behaviors. There is also a strong relationship between alcohol and other drug abuse and risk of inappropriate sexual behaviors. For a more complete list of the negative effects of alcohol and other drugs visit the Student Health Services website at: <http://wwwsa.csu Hayward.edu/~shsweb/alcoholrisks>.

CSUH Campus and Community Resources

For Students: Counseling and Psychological Services (CaPS):
510-885-3690; *Student Health Services (SHS):* 510-885-3735

*For Faculty and Staff: Employee Assistance Program (EAP):*1-
800-234-5465

Assessment and Referral: 1-800-486-1652

National Alcohol and Drug Treatment Referral: 1-800-454-8966

Alcoholics Anonymous Meetings: East Bay Central Office
Directory, 510-839-8900 (24 hrs/day)

For additional information, including the complete Alcohol,
Tobacco and Other Drugs Policy and list of community resources,
see the Student Health Services website at:
wwwsa.csuhayward.edu/~shsweb/



HOME



HELP

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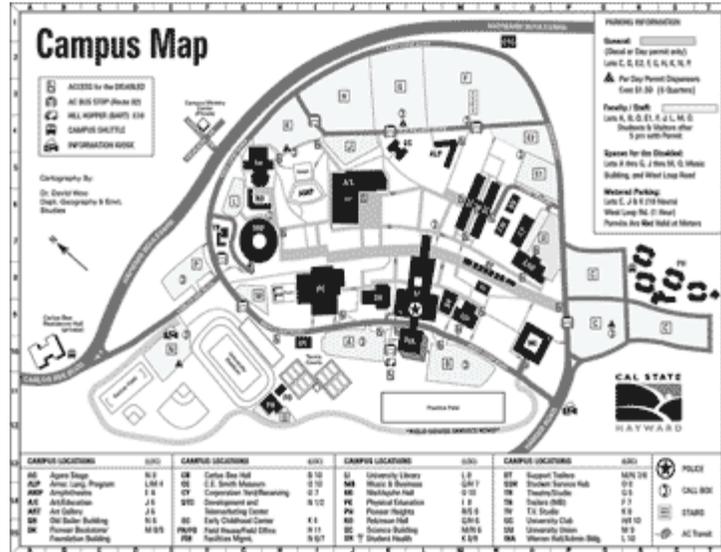
Maps

- ▶ [Campus Map](#)
- ▶ [Contra Costa Campus Map](#)
- ▶ [Bay Area Setting](#)

Click on an image to see a full-sized version.

America Online users, if you are having problems viewing these images, click [here](#).

Campus Map



To print the campus map, open the PDF (Portable Document Format) version of the map by clicking [here](#). Printing this PDF file (125 KB) will produce a clear, full-size version of the campus map. (Note: You must have Acrobat Reader 4.0 or higher installed on your computer to view or print the campus map pdf file.)

If you do not have Acrobat Reader 4.0 or higher and wish to download your free copy from the Adobe website, click [here](#).

Contra Costa Campus Map



[[Previous](#) | [Next](#)]

General Education Requirements

Area	Subarea		Minimum Courses	Minimum Units		General Requirements
				Subarea	Area	
A. Communication in English Language	A1 Oral Communication		1	4	12	<ol style="list-style-type: none"> 1. Minimum of 12 upper division units taken as upper division student (<i>italicized at left</i>) 2. Minimum of 12 units of G.E. in residence 3. One G.E. course (minimum of 3 units) about cultural minorities and/or women in the U.S.A. 4. No courses used for U.S. history/government at Cal State Hayward can be used for G.E. 5. No course can be used for G.E. if it has the prefix of the major department, except Areas A, B4, G4; one course in one thematic cluster
	A2 Written Communication		1	4		
	A3 Critical Thinking		1	4		
B. Natural Sciences and Mathematics	B1 Physical Science	One with lab	1	4	20	
	B2 Life Science		1	4		
	B3 Science Elective		1	4		
	B4 Quantitative Reasoning		1	4		
	B6 U.D. Science Elective		1	4		
C. Humanities: Fine Arts and Letters	C1 Fine Arts		1	4	16	
	C2 Letters		1	4		
	C3 Humanities Elective		1	4		
	C4 U.D. Humanities Elect.		<i>1</i>	4		
D. Social Sciences	Three Depts.	D1 Elective	1	4	16	
		D2 Elective	1	4		

	D3 Elective	1	4	
	<i>D4 U.D. Elective</i>	<i>1</i>	<i>4</i>	
F. Performing Arts and Activities		1	4	4
G. G.E. Electives	G1-2 Frosh Activities	2	2	4
	G4 Information Literacy	2	2	
TOTALS		21	72	

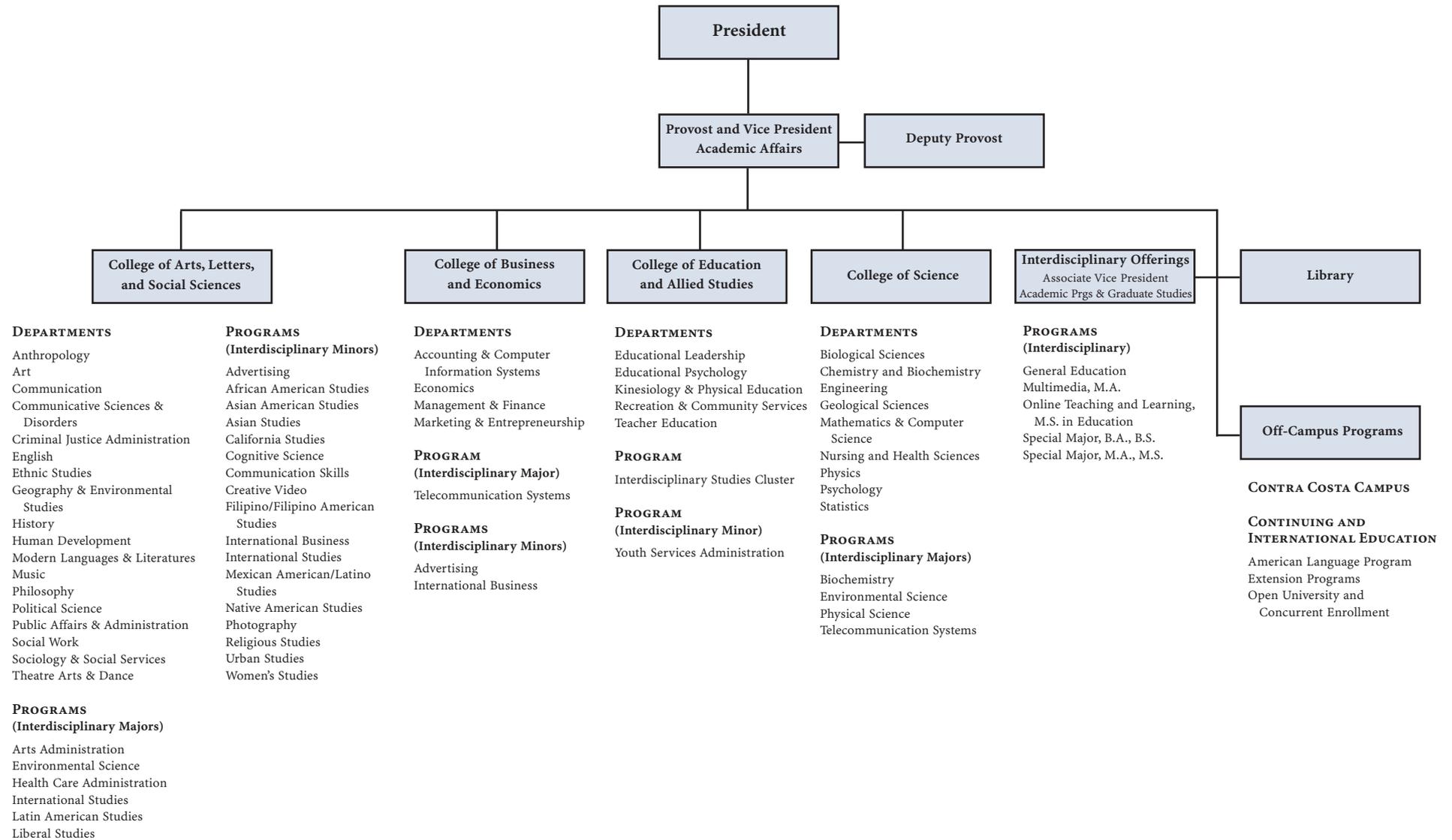
(B1-3, C1-3, D1-3);
and Area C for
MLL courses in a
language other than
the student's major

Note: Italicized areas (B6, C4, D4) comprise the minimum three-course, 12-unit upper division General Education requirement; course and student must be upper division.

Note: No single course may be applied to more than one Area or Subarea requirement.

CALIFORNIA STATE UNIVERSITY, HAYWARD

Academic Organization





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HELP

Using the America Online Browser

America Online User Help

- ▶ [Using the America Online Browser](#)
- ▶ [Solving the Problem](#)

If you are using the America Online built-in browser, you may experience problems viewing images. It depends on how you have your preferences set. Below is an example of how the wrong preferences can make the images look blurry or jagged.



The image on the top is rendered with compression turned on. The image underneath is how it should look. If both images look the same, or if the bottom image isn't crystal clear (it may still be a little clearer than the top image, since AOL even compresses the top image somewhat), then you have your preferences set wrong for viewing images on this site and many other sites out there. Instructions are shown below.



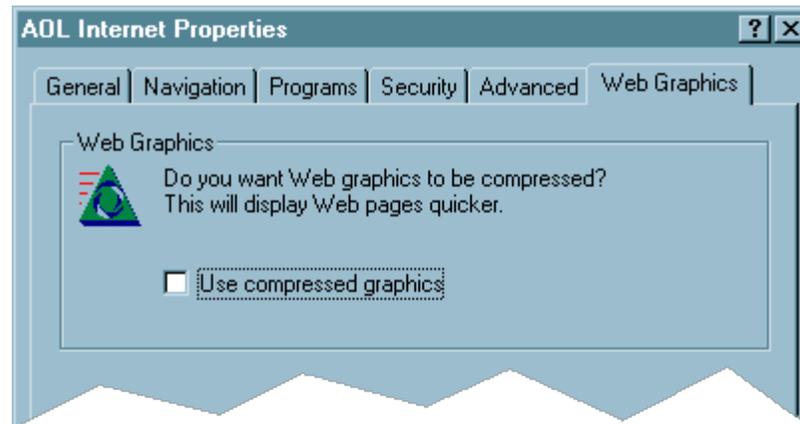
To increase download speed, AOL decided to add the option to

Solving the Problem

over-compress the graphics at AOL before they ship the images to you. This over-compression destroys a lot of images.

To remedy this, look at the top of your AOL browser and click on the [Prefs button](#).

In Windows, go to the Web Graphics tab and unclick the "Used compressed graphics" box, shown below. Click 'OK'.



See also [Windows 3.x](#) and [Macintosh](#) preference screen shots.

(screen captures are from AOL 3.0 -- other versions may differ)

One problem with the AOL browser is that it will not reload the graphics once you have visited them with compressed mode on. Once you have viewed an image in compressed mode, it remains on your disk until you clear the cache. To clear the cache, select Preferences -> Advanced -> Purge Cache.

This could also apply to some other online services now that offer "high speed" or "turbo" features, such as NetZero. To see graphics properly, disable these features following your provider's documentation.

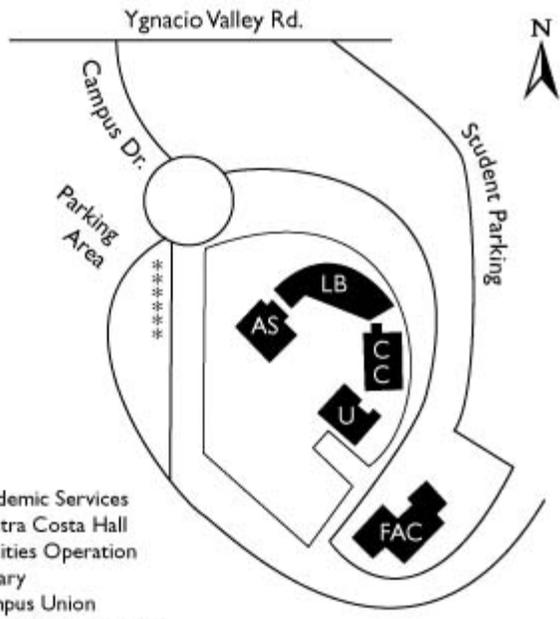
A better solution is to avoid using AOL's built-in browser and use a more standard browser such as [Netscape](#) or [Internet Explorer](#).



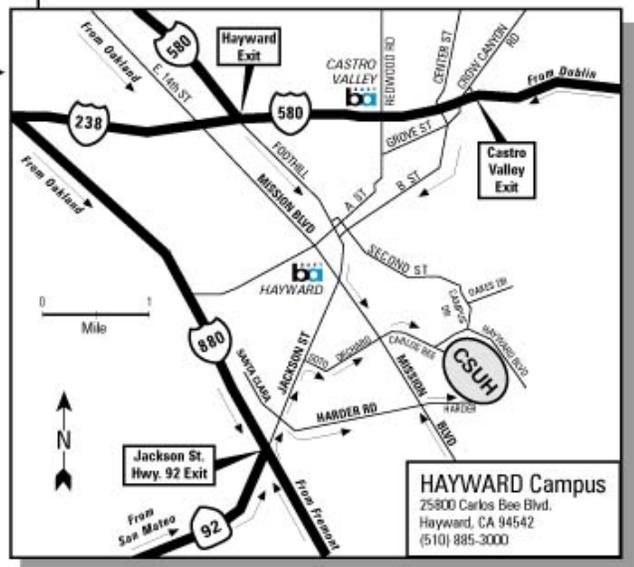
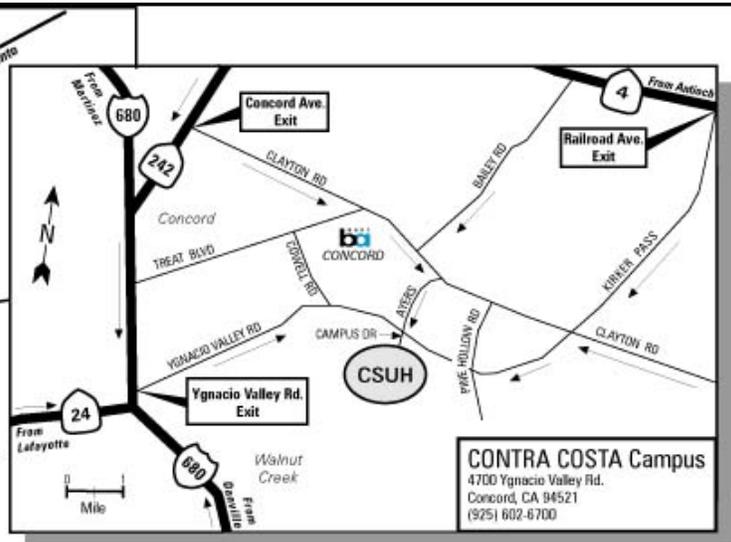
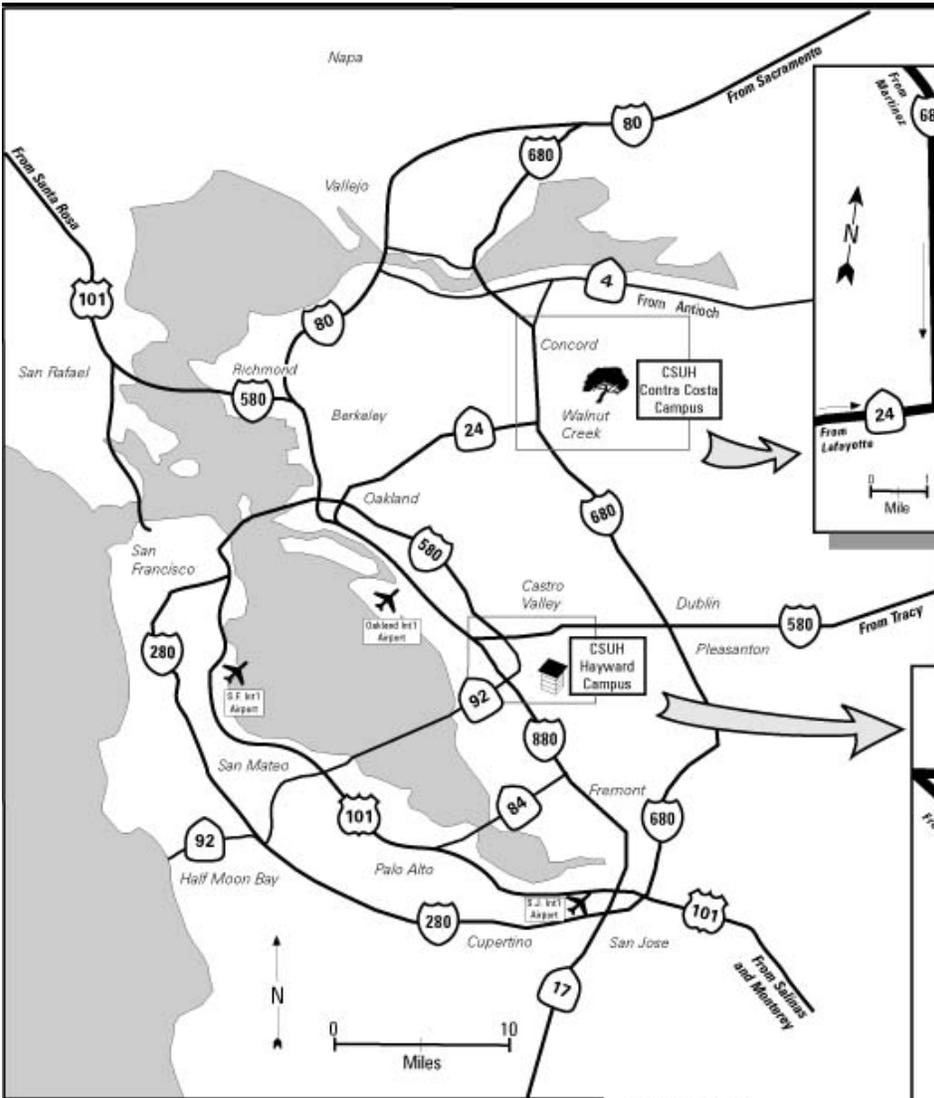
HOME



HELP



- AS Academic Services
- CC Contra Costa Hall
- FAC Facilities Operation
- LB Library
- U Campus Union
- * Parking for Individuals with Disabilities



CSUH Access Routes San Francisco Bay Region

Map Designed By:
 Dr. David Woo
 w/Robert Aldenhuisen
 Dept. Geography & Env't. Studies
 CSUH 1995

Updated by Curriculum and
 Academic Programs Office, CSUH 2000