

TABLE OF CONTENTS

CALIFORNIA STATE UNIVERSITY, LOS ANGELES	5
ACADEMIC CALENDAR	7
DIRECTORY	9
THE UNIVERSITY	16
STUDENT SERVICES AND ACTIVITIES	33
ADMISSION	49
PROCEDURES AND REGULATIONS	65
UNDERGRADUATE STUDY	83
SCHOOL OF ARTS AND LETTERS	114
ENGLISH	145
FOREIGN LANGUAGES AND LITERATURES	157
LIBERAL STUDIES	172
MUSIC	181
PHILOSOPHY	198
THEATRE ARTS AND DANCE	205
SCHOOL OF BUSINESS AND ECONOMICS	216
COURSES IN BUSINESS AND ECONOMICS	231
SCHOOL OF EDUCATION	247
ADMINISTRATION AND COUNSELING	249
CURRICULUM AND INSTRUCTION	251
EDUCATIONAL FOUNDATIONS & INTERDIVISIONAL STUDIES	260
SPECIAL EDUCATION	262
SCHOOL OF ENGINEERING AND TECHNOLOGY	277
CIVIL ENGINEERING	279
ELECTRICAL AND COMPUTER ENGINEERING	280
MECHANICAL ENGINEERING	282
TECHNOLOGY	285
COURSES IN ENGINEERING AND TECHNOLOGY	295
SCHOOL OF HEALTH AND HUMAN SERVICES	315
CHILD DEVELOPMENT	317
COMMUNICATION DISORDERS	324
CRIMINAL JUSTICE	329
FAMILY STUDIES AND CONSUMER SCIENCES	335
HEALTH AND NUTRITIONAL SCIENCE	344
NURSING	359
PHYSICAL EDUCATION	371
SOCIAL WORK	385
YOUTH AGENCY ADMINISTRATION	389

SCHOOL OF NATURAL AND SOCIAL SCIENCES	391
ANTHROPOLOGY	392
BIOLOGY AND MICROBIOLOGY	397
CHEMISTRY AND BIOCHEMISTRY	408
CHICANO STUDIES	415
GEOGRAPHY AND URBAN ANALYSIS	420
GEOLOGICAL SCIENCES	428
HISTORY	436
LATIN AMERICAN STUDIES	446
MATHEMATICS AND COMPUTER SCIENCE	450
PAN-AFRICAN STUDIES	462
PHYSICAL SCIENCE	468
PHYSICS AND ASTRONOMY	470
POLITICAL SCIENCE	477
PSYCHOLOGY	488
SOCIAL SCIENCE	495
SOCIOLOGY	497
INTERCOLLEGIATE ATHLETICS	504
UNIVERSITY COURSES	507
GRADUATE AND POSTBACCALAUREATE STUDY	509
GENERAL INFORMATION	513
UNIVERSITY PROGRAMS	533
SCHOOL OF ARTS AND LETTERS	534
COMMUNICATION STUDIES	538
ENGLISH	540
FOREIGN LANGUAGES AND LITERATURES	544
MUSIC	548
PHILOSOPHY	552
THEATRE ARTS AND DANCE	554
SCHOOL OF BUSINESS AND ECONOMICS	557
SCHOOL OF EDUCATION	577
INTERDISCIPLINARY PROGRAM	579
ADMINISTRATION AND COUNSELING	580
CURRICULUM AND INSTRUCTION	592
EDUCATIONAL FOUNDATIONS AND INTERDIVISIONAL STUDIES	598
SPECIAL EDUCATION	609
COURSES IN EDUCATION	619
SCHOOL OF ENGINEERING AND TECHNOLOGY	639
CIVIL ENGINEERING	639
ELECTRICAL AND COMPUTER ENGINEERING	640
MECHANICAL ENGINEERING	641
TECHNOLOGY	642
SCHOOL OF HEALTH AND HUMAN SERVICES	650
CHILD DEVELOPMENT	650
COMMUNICATION DISORDERS	651
CRIMINAL JUSTICE	658
FAMILY STUDIES AND CONSUMER SCIENCES	661
HEALTH AND NUTRITIONAL SCIENCES	663
NURSING	666
PHYSICAL EDUCATION	674

SCHOOL OF NATURAL AND SOCIAL SCIENCES	677
ANTHROPOLOGY	677
BIOLOGY AND MICROBIOLOGY	679
CHEMISTRY AND BIOCHEMISTRY	685
CHICANO STUDIES	689
GEOGRAPHY AND URBAN ANALYSIS	690
GEOLOGICAL SCIENCES	692
HISTORY	694
LATIN AMERICAN STUDIES	697
MATHEMATICS AND COMPUTER SCIENCE	699
PHYSICS AND ASTRONOMY	703
POLITICAL SCIENCE	705
PSYCHOLOGY	710
SOCIOLOGY	717
FACULTY	720
EMERITI	759
THE CALIFORNIA STATE UNIVERSITY	767
APPENDICES	770

CALIFORNIA STATE UNIVERSITY, LOS ANGELES

1993-95

The University's *General Catalog* is prepared in the Office of the Associate Vice President for Academic Affairs-Planning and Resources in collaboration with the Office of Public Affairs. Editing and production support is supplied by Raelene Allard. Special assistance was provided by Mai Tran and Edward Fisher. Special acknowledgments are due the following for their contributions: Creative Media Services, for cover artwork and photographs; and Lac Rios, Reprographics, for design and typesetting of title pages, calendars, tables, and grids. Information contained in this issue is revised to April 30, 1993.

The catalog may be purchased in person or ordered by mail from the University Square bookstore. The price, established under regulations of the Board of Trustees of the California State University, is stated on page 1. To order by mail, send check or money order with request to: California State University, Los Angeles, Attention: University Square Bookstore, 5153 State University Drive, Los Angeles, CA 90032-8734. Residents of California should include \$7 book rate or \$8.50 first class mail to cover the purchase price plus state sales tax and shipping and handling charges. Those in Alaska, Hawaii, Canada, and Mexico should include \$9.75, and in all other countries, \$18.

Familiarity with the institution's rules and regulations published in this catalog shall be the responsibility of each student and faculty member, and of those administrative offices concerned with academic matters.

Changes in Rules and Policies

Although every effort has been made to ensure the accuracy of the information in this catalog, students and others who use the 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 institution. Further, it is not possible in a publication of this size to include all of the rules, policies, and other information that pertain to the students, the institution, and The California State University. More current or complete information may be obtained from the appropriate department, division, school, or administrative office, or in the *Schedule of Classes*.

Nothing in this catalog shall be construed as, 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.

Nondiscrimination Policy

California State University, Los Angeles affirms its commitment to equality of opportunity for all individuals. This commitment requires that no discrimination shall occur in any program or activity of the University on the basis of race, color, religion, national origin, sex, sexual orientation, marital status, pregnancy, age, disability, disabled veteran's or Vietnam era veteran's status, or any other classification that precludes a person from consideration as an individual. This policy is in accord with Title IX of the Educational Amendments of 1972, as amended, Sections 503 and 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1992, and related administrative regulations and executive orders. Inquiries concerning the application of Title IX, Sections 503 and 504, and other nondiscrimination laws may be referred to Art Flores, Assistant Vice President for Operations, Human Resource Management (telephone [213] 343-3673), the campus officer

assigned the administrative responsibility of reviewing such matters. Title IX inquires may also be directed to the Regional Director of the Office for Civil Rights, Region IX, 50 United Nations Plaza, Room 239, San Francisco, CA 94102.

ACADEMIC CALENDAR**SUMMER QUARTER 1993**

June 21 (Monday) Summer quarter classes begin
 July 4, 5 Independence Day; *campus closed*
 August 30-September 4. Final examinations
 September 6. Labor Day; *campus closed*
 September 6-22. Student recess

FALL QUARTER 1993

September 23 (Thursday) Fall quarter classes begin
 October 12 Columbus Day; *campus open*
 November 11. Veterans' Day; *campus open*
 November 25-27 Thanksgiving holidays; *campus closed*
 December 6-11 Final examinations
 December 13-January 2 Student recess
 December 20-25. Winter holidays; *campus closed*

WINTER QUARTER 1994

January 1. New Year's Day; *campus closed*
 January 3 (Monday) Winter quarter classes begin
 January 17 Martin Luther King Jr.'s
 birthday observed; *campus closed*
 February 12 Lincoln's birthday; *campus open*
 February 18 Presidents' Day observed; *campus closed*
 February 22 Washington's birthday; *campus open*
 March 14-19. Final examinations
 March 21-26. Student recess

SPRING QUARTER 1994

March 28 (Monday) Spring quarter classes begin
 April 29 Honors Convocation; *all-University event*
 May 30. Memorial Day observed; *campus closed*
 June 6-11 Final examinations
 June 11. Commencement; *all-University event*
 June 13-18 Student recess

SUMMER QUARTER 1994

June 20 (Monday) Summer quarter classes begin
 July 4. Independence Day; *campus closed*
 August 29-September 3. Final examinations
 September 5. Labor Day; *campus closed*
 September 5-21. Student recess

FALL QUARTER 1994

September 22 (Thursday) Fall quarter classes begin
 October 12 Columbus Day; *campus open*
 November 11. Veterans' Day; *campus open*
 November 24-26 Thanksgiving holidays; *campus closed*
 December 5-10. Final examinations
 December 12-January 2. Student recess
 December 26-31 Winter holidays; *campus closed*

WINTER QUARTER 1995

January 1, 2 New Year's Day observed; *campus closed*
 January 3 (Tuesday) Winter quarter classes begin
 January 16 Martin Luther King, Jr.'s
 birthday observed; *campus closed*
 February 12 Lincoln's birthday; *campus open*
 February 17 Presidents' Day observed; *campus closed*

February 22	Washington's birthday; <i>campus open</i>
March 13-18.	Final examinations
March 20-25.	Student recess

SPRING QUARTER 1995

March 27 (Monday)	Spring quarter classes begin
April 28	Honors Convocation; <i>all-University event</i>
May 29	Memorial Day observed; <i>campus closed</i>
June 5-10	Final examinations
June 10	Commencement; <i>all-University event</i>
June 12-17	Student recess

SUMMER QUARTER 1995

June 19 (Monday)	Summer quarter classes begin
July 4.	Independence Day; <i>campus closed</i>
August 28-September 2.	Final examinations
September 4	Labor Day; <i>campus closed</i>
September 4-21	Student recess

FALL QUARTER 1995

September 21 (Thursday)	Fall quarter classes begin
October 12	Columbus Day; <i>campus open</i>
November 11.	Veterans' Day; <i>campus open</i>
November 23-25	Thanksgiving holidays; <i>campus closed</i>
December 4-9	Final examinations
December 11 -January 1.	Student recess
December 25-30	Winter holidays; <i>campus closed</i>

A more detailed academic calendar appears each quarter in the Schedule of Classes.

NOTE: This is not to be construed as an employee work week Calendar

DIRECTORY

Officers of Administration

President of the University
 Affirmative Action Program Director
 Director of Alumni Affairs
 Director of Intercollegiate Athletics
 Director of Public Affairs
 Director of University Development

James M. Rosser
 Charon D'Aiello
 Mary Kacmarcik-Baker
 Carol Dunn
 William R. Meredith
 Carol J. Numrich

Academic Affairs

Provost and Vice President for
 Academic Affairs
 Associate Vice President for Academic Affairs-
 Faculty and Administration
 Associate Vice President for Academic Affairs-
 Planning and Resources
 Registrar
 Dean of Graduate Studies and Research
 Associate Dean
 Director of Research and Sponsored Programs
 Dean of Undergraduate Studies
 Associate Dean
 Coordinator, Academic Advisement Center
 Director, General Education Honors Program
 Director, Learning Resource Center
 Director, Testing Office
 Director, University Writing Center
 Dean, School of Arts and Letters
 Dean, School of Business and Economics
 Dean, School of Education
 Dean, School of Engineering
 and Technology
 Dean, School of Health and
 Human Services
 Dean, School of Natural and
 Social Sciences
 Dean of Continuing Education
 Conferences and Professional Development
 Workshops Coordinator
 Director of Extension and Special Sessions
 Director of American Culture and
 Language Program (ACLPL)
 Director (*Acting*), Instructional Television Fixed
 Services (ITFS)
 University Librarian
 Information Resources Management
 Vice President for Information
 Resources Management
 Strategic Planning Administrator
 Director, Analytical Studies
 and Data Administration
 Assistant Director
 Director, Academic Technology Support
 Assistant Director
 Director, Creative Media Services
 Associate Vice President for
 Information Resources Management
 Director, Telecommunications
 Director, Administrative Support Services

Mary Elizabeth Shutler

Margaret J. Hartman

William A. Taylor
 Joan V. Woosley
 Theodore J. Crovello
 Costello L. Brown
 Susan G. Steiner
 Alfredo G. Gonzalez
 Virginia Hunter
 Kathleen Costantini
 Kathleen Costantini
 Janet Tricamo
 Frances A. Crawford
 John Edlund
 Bobby R. Patton
 Ronald S. Lemos
 Allen A. Mori

Raymond B. Landis

Ruth R. Wu

Donald O. Dewey
 Dawn M. Patterson

Cleda Givens
 Frances Chiles

Sally Gardner

Julio Guzman
 JoAn D. Kunselman

Desdemona Cardoza
 Michael Dolence

Lawrence Jordan
 Vivien Ko
 Donald Carder
 Nancy Kudo-Hombo
 David McNutt

Peter Quan
 Bev Mitchum
 Ronald A. Witte

Data Base Administrator	Thomas A. Huber
<i>Operations</i>	
Vice President for Operations	Alex J. Carter
Director of Facilities Operations	Richard Paoff
Assistant Director for Facilities Operations	
David Paschal Executive Director(<i>Acting</i>), University Auxiliary Services, Inc	Raquel Soriano
Grants Administrator	Ben Ikeda
University Dining Services Manager	Eric Shimabukuro
University Square Bookstore Manager	Grace Masuda
Director of Accounting and Financial Management	Jacqueline Avery
Director of Procurement and Support Services	Lillian Colores
Assistant Vice President for Operations, Division of Human Resource Management	Art Flores
Director of Public Safety	Gerald Lipson
<i>Student Affairs</i>	
Vice President for Student Affairs	George D. Taylor
Assistant to the Vice President	Patricia W. Brown
Director, University-Student Union	Debre Hammond
Associate Vice President for Student Advocacy/ Dean of Students	Tim T.L. Dong (<i>vacant</i>)
Student Advocacy	
Director (<i>Acting</i>), Center for Career Planning and Placement	Robert N. Brunner
Director, Center for Student Financial Services	Vincent DeAnda
Director, Center for Student Life	Patricia W. Brown
Coordinator, EPIC	George Umezawa
Coordinator, New Student Orientation/ Leadership Training	Vincent Lopez
Coordinator, Women's Resource Center	Virginia M. Cooper
Director, Housing Services and Residence Life	Denzil J. Suite
Assistant Director	Julie Jelks
Director, International Student Services	Michael D. Fels
Director, Student Health Center	Connie A. Diggs
Chief Staff Physician	Peter Wisselink
Assistant Vice President for Educational Equity Administration	David J. Godoy
Coordinator, Summer Bridge	David J. Godoy
Director, Admissions and University Outreach	Kevin M. Browne
Associate Director, Admissions and university Outreach	George O. Bachmann

Student Affairs (Continued)

Associate Director, Admissions and University Outreach	Tomas Vasquez
Director, Educational Opportunity Program	David Sandoval
Director (<i>Acting</i>), Office for Students with Disabilities	Tomas Vasquez

Student Government

The Associated Students, an incorporated organization in which all students hold membership, is managed by a board of directors composed of elected student officers. This body formulates policy and handles the business affairs of the student body.

Commissions plan and direct student activities, including rallies, elections, tutorial projects, cultural activities, and general convocations. Public performances feature noted musicians, films, and guest speakers.

Students serve with representatives of the faculty and administration on academic committees, governing boards, and commissions. Through such membership students engage in development of policy and in planning and implementation of activities such as publications and athletics programs.

The President's Advisory Board

The President's Advisory Board consists of distinguished community leaders interested in the development and enhancement of the university. The board serves in an advisory capacity, particularly in matters that affect university and community relations. Members are nominated by a committee of the board and appointed by the president.

John R. Attwood (*Chair*)
 Albert A. Thiess, Jr. (*Vice Chair*)
 Loncar W. Heard-Davis
 Edison R. Lara, Jr.
 Everett G. McDonough, Jr.
 M.W. Proudfoot
 Chase C. Rhee
 Tim Siu, M.D.
 Anna Bing Arnold, *Honorary Ex Officio*
 Francis H. Arnone, *Honorary Ex Officio*
 Laura Balvedere-Sanchez, *Ex Officio*
 Desdemona Cardoza, *Ex Officio*
 Alex J. Carter, *Ex Officio*
 James J. Lehr, *Ex Officio*
 Michael A. Lucki, *Ex Officio*
 Carol J. Numrich, *Ex Officio*
 James M. Rosser, *Ex Officio*
 Mary Elizabeth Shutler, *Ex Officio*
 George D. Taylor, *Ex Officio*

The Cal State L.A. Alumni Association

The Alumni Association was formed in 1954 to provide official representation of the alumni in matters that affect the general welfare of the university. The association serves as a vital link between the university, its alumni, and the greater Los Angeles community. Its primary purposes are to advance the university's interests, to enhance relationships among alumni, faculty, staff, and students, and to strengthen the contributions of alumni to the campus community. These goals are accomplished through many varied, ongoing activities and programs. Membership is open to all former Cal State L.A. students and those who wish to support the goals of the association.

Alumni Association Board of Directors Executive Board

Michael A. Lucki	<i>President</i>
Eva D. Grant	<i>Past President</i>
Michael A. Lucki '78	<i>President Elect</i>
Ona Jones '71	<i>Vice President for Scholarships</i>
Cynthia A. Joe '74	<i>Vice President for Programs</i>
Ernie C. Byrd '67 '74	<i>Vice President for Development</i>
Larry L. Adamson '74	<i>Vice President for Membership</i>
Philip S. Bartoil '76	<i>Secretary,</i>
Lucy M. Carter '78	<i>Treasurer</i>

Directors

Danna B. Campbell '76
 Phillip Castruita '68
 Art Flores '71
 Burt Golden '61 '75
 Patricia Hawkins '65 '75
 Virginia Hunter '71
 Mary Kacmarcik-Baker (Director), *Ex Officio*
 Dolores B. McDavid '67 '76
 Robert McMeekin '68 '71
 Louis R. Negrete '57
 Alice Petrossina '69 '80

Karen S. Shaw '85
 Claude D. Van Gorden '65

The Cal State LA. Foundation

The Cal State L.A. Foundation is the official fund-raising division of Cal State L.A. and was organized in 1985 as a 501 (c)3 tax exempt, nonprofit organization for the purpose of accepting charitable contributions to the University. The Foundation Board guides and advises the University administration and professional fund raisers in securing donations of private funds for use in four areas: capital campaigns, scholarships and fellowships, endowed chairs, and educational programming.

Foundation Board of Trustees

Roy L. Olofson	<i>President</i>
Frank Lynch	<i>Vice President</i>
Susan Wilstein	<i>Secretary</i>
Alex J. Carter	<i>Treasurer</i>
Gary A. Best	<i>Faculty Representative</i>
Laura Balveder-Sanchez	<i>Member</i>
Joel H. Bennett	<i>Member</i>
Willard T. Chamberlain	<i>Member</i>
Harold H. Chuang	<i>Member</i>
Roderick R. Essen	<i>Member</i>
Alfred F. Grove, Jr	<i>Member</i>
George E. Hill	<i>Member</i>
Paul C. Hudson	<i>Member</i>
Lillian Y. Kawasaki	<i>Member</i>
James P. Kelly	<i>Member</i>
Donald A. Murray	<i>Member'</i>
David Wilstein	<i>Member'</i>
James T. Hawekotte	<i>Ex Officio</i>
Carol J. Numrich	<i>Ex Officio</i>
James M. Rosser	<i>Ex Officio</i>

University, School, and Department/Division Offices

UNIVERSITY OFFICES AND SERVICES

Office/Department or Service	Location	*Phone
Admission and University Outreach <i>(includes preadmission advisement and campus tours)</i>	SA 101	3901
Academic Advisement Center <i>(undecided majors)</i>	Lib Palmer Wing 1040C	3150
Alumni Association	Union 430	4980
Associated Clinics	KH B119	4750
Associated Students	Union 422	4780
Athletics, Intercollegiate	PE 102	3080
Bookstore, University Square	Union	2500
Campus Operator		3000
Campus Tours/Preadmission Counseling	SA 101	3901
Career Planning and Placement	Career Center	3237
Cashiers' Office	Admin 128	3630
Continuing Education <i>(Extension, Open University)</i>	Lib No 1025	4900
Child Care Center	C.C. Center	2470
Cooperative Education	Lib No Lobby	2667
Counseling <i>(personal)</i>	Health Center	3330
Credential Information	KH D2078	4320
Dean of Students	SA 117	3101
Office for Students with Disabilities	SA 115	3140/(TDD) 3139
Educational Opportunity Program (EOP)	SA 210	4367
Educational Placement	Career Center	3290
Financial Services, Student <i>(Center for Student Financial Services)</i>	SA 124	3240
Graduate Studies and Research	Admin 714	3820

Health-Related Programs	Bio Sci 125	2035
Health Sciences Advisement Center (Premedical and other science fields).	Bio Sci 202	2070
Health Services	Health Center	3300
Honors Program, General Education	Lib No Lobby	4960
Housing and Residence Life	Housing Complex	4800
Instructional Computing Laboratories	Lib Palmer Wing 1080	4530
International Student Services	Admin 127	3170
Learning Resource Center	Lib Palmer Wing 1040A	3969
Library (Information)	Lib No first floor	3993
Orientation, New Student	SA 122	3195
Performing Arts Box Office, School of Arts and Letters	Theatre lobby	4118
Police, Campus	Bung C	3700
Records Office	Admin 409	3840
Registration Office	Admin 147	3901
Scholarships	SA 118	3266
Student Programs (Center for Student Life)	SA 123	3390
Student Services Center	SA 101	3901
Study Abroad	Admin 127	3170
Tutoring Services	Lib Palmer Wing 1040A	3350
Travel Agency (University Travel Services)	Union first floor	4999
Testing Office	Lib Palmer Wing 1040C	3160
Undergraduate Studies	Admin 725	3830
Veterans' Services	Admin 402	3942
Women's Resource Center	Union 455	3373

* When calling from off campus, dial area code 213, prefix 343, and the four-digit extension; from on campus, dial 3 and the four-digit extension

SCHOOL AND DEPARTMENT/DIVISION/PROGRAM OFFICES

SCHOOL OF ARTS AND LETTERS

<i>Dean</i>	Bobby R. Patton	Music 229	4001
<i>Associate Dean</i>	Robert D. Reeser	Music 232	4004

Departments/Programs	Chairs/Coordinators	Location	Phone
Art	Barbara A. Boyer	FA 326	4010
Communication Studies	Michael F. Kelley	Music 104	4200
English	Carl Selkin	E&T A605	4140
Foreign Languages and Literatures	E. Dale Carter	KH D1054	4230
Liberal Studies (interdisciplinary program)	Alfred Bendixen (Coordinator)	E&T A635	4100
Music	John J. Swain	Music 145	4060
Philosophy	Ann Garry	E&T A429	4180
Theatre Arts and Dance	Clifford D. Harper	Theatre 110	4110

SCHOOL OF BUSINESS AND ECONOMICS

<i>Dean</i>	Ronald S. Lemos	ST F124	2800
<i>Acting Associate Dean for Academic Affairs</i>	George N. Engler	ST F124	2800
<i>Associate Dean for Graduate Programs</i>	M. David Oh	SH C256	2808
Graduate Programs	Office	SH C256	2808
Undergraduate Programs	Office	SH C256B	2810

Departments/Programs	Chairs/Coordinators	Location	Phone
Accounting (Acting)	D. Lynn Rans	ST F517	2830
Economics and Statistics	Eduardo M. Ochoa	ST F917	2930
Finance and Law	Paul Schnltzel	ST F717	2870
Health Care Management (program)	Paul Washburn (Coordinator)	ST F717	2890
Information Systems	Nandakumar Ganesan	ST F603	2983
Management	John Steiner	ST F717	2890
Marketing	Richard Kao	ST F917	2960
Office Systems and Business Education	Darrell R. Clemmensen	ST F517	2860

SCHOOL OF EDUCATION

<i>Dean</i>	Allen A. Mori	KH D2069	4300
<i>Associate Dean for Instruction and Graduate Studies</i>	Evalyn T. Dearmin	KH D2070	4303
Graduate Studies	Office	KH D2070	4303
<i>Associate Dean for Student Services</i>	Alice V. Watkins	KH D2078	4322

Student Services	Office	KH D2078	4320
------------------	--------	----------	------

Divisions and Division Chairs

Administration and Counseling	R. Carol Sweeney	KH C1065	4250
Curriculum and Instruction	Andrea P. Maxie	KH C2097	4350
Educational Foundations and Interdivisional Studies	Simeon P. Slovacek	KH D2098	4330
Special Education	Phi/lip Chinn	KH C1064	4400

SCHOOL OF ENGINEERING AND TECHNOLOGY

<i>Dean</i>	Raymond B. Landis	E&T A221	4500
<i>Associate Dean</i>	Don Maurizio	E&T A237	4510
Technology Information		E&T A341	4550

Departments/Programs	Chairs/Coordinators	Location	Phone
Civil Engineering	Raymond I. Jeng	E&T A211	4450
Electrical and Computer Engineering	Martin S. Roden	E&T A317	4470
Mechanical Engineering	Majdedin Mirmirani	E&T A205	4490
Technology	Ethan Lipton	E&T A341	4550

SCHOOL OF HEALTH AND HUMAN SERVICES

<i>Dean</i>	Ruth R. Wu	FA 134	4600
<i>Associate Dean</i>	Karen M. Johnson	FA 132	4602

Departments/Programs	Chairs/Coordinators	Location	Phone
Applied Gerontology (<i>certificate program</i>)	Evelyn Calvillo	ST F311	4724
Child Development (<i>interdisciplinary program</i>)	Ann Bingham-Newman (<i>Coordinator</i>)	E&T A535	4590
Child Maltreatment and Family Violence (<i>certificate program</i>)	Pat Savich	KH A3044	4696
Communication Disorders	Betty L. McMicken	KH B106D	4690
Criminal Justice	Thell E. Glascock	KH D1045	4610
Family Studies and Consumer Sciences	Bruce Campbell	FA 238	4630
Health and Nutritional Sciences	Vicente Zapata	E&T A505	4740
Nursing	Jo Ann Johnson	ST F417	4700
Physical Education	Robert A. Miller (<i>Acting</i>)	PE 206	4650
Social Work	E. Frederick Anderson	KH C4069	4680
Voluntary Youth Agency Administration (<i>certificate program</i>)	Jan Mackay (<i>Coordinator</i>)	Lib No Lobby	4580

SCHOOL OF NATURAL AND SOCIAL SCIENCES

<i>Dean</i>	Donald O. Dewey	KH D1052	2000
<i>Associate Dean</i>	Joseph Bragin	KH D1050	2008

Departments/Programs	Chairs/Coordinators	Location	Phone
Anthropology	Norman Klein	KH C4068	2440
Biology and Microbiology	David Pearson	Bio Sci 142	2050
Chemistry and Biochemistry	Harold Goldwhite	Phys Sci 616	2300
Chicano Studies	(<i>vacant</i>)	KH C3095	2190
Geography and Urban Analysis	William G. Byron	KH C4067	2220
Geological Sciences	Robert J. Stull	Phys Sci 216	2400
History	John M. Allswang	KH C4066	2020
Latin American Studies (<i>interdisciplinary program</i>)	Marjorie Bray (<i>Coordinator</i>)	Lib No B552	2180
Mathematics and Computer Science	Marshall Cates	ST F206	2150
Pan-African Studies	Jonathan N. Nwomonoh	KH C3095	2290
Physical Science (<i>interdisciplinary program</i>)	Robert Carr (<i>Coordinator</i>)	Phys Sci 315	2100
Physics and Astronomy	Fleur Yano	Phys Sci 315	2100
Political Science	Edward S. Malecki, Jr	E&T A523	2230
Psychology	Michael L. Wapner	KH C3104	2250
Social Science (<i>interdisciplinary program</i>)	John M. Allswang (<i>Coordinator</i>)	E&T A523	2230
Sociology	Delos H. Kelly	KH C3093	2200

PREPROFESSIONAL ADVISEMENT

Program Coordinators	Location	Phone	
Health-Related Programs (<i>Dean's Office, Health & Human Services</i>)	Rosemarie Marshall	Bio Sci 125 FA 132	2035 4602
Health Science Programs (<i>Premedical, predental, preveterinary, prepharmacy, etc.</i>)	Coordinators	Bio Sci 202	2070

CALIFORNIA STATE UNIVERSITY LOS ANGELES

*

Librarianship Programs	School of Education	KH C2098	4330
Prelegal Programs			
Department of Finance and Law	Martha Cattell, Laurence Clark	ST F717	2870
Department of Political Science		E&T A523	2230

THE UNIVERSITY

California State University, Los Angeles, rounded in 1947 by action of the California State Legislature, is a comprehensive university that offers programs of higher education in more than 50 academic and professional fields. The University is organized into six schools that house nearly 50 academic departments and divisions. Cal State L.A.'s reputation as a center of learning attracts students from all areas of the United States and from many foreign countries. More than one quarter of the campus' 21,000 students are engaged in postbaccalaureate study in programs leading to master's and doctoral degrees; teaching, service, and specialist credentials; certificates; and other types of programs that prepare them for professional advancement.

Located at the eastern edge of Los Angeles and adjacent to western San Gabriel Valley cities of Alhambra and Monterey Park, Cal State L.A. occupies nearly 200 acres on a hilltop site that affords views of the mountains to the north, the San Gabriel Valley to the east, metropolitan Los Angeles to the west, and the Palos Verdes Peninsula and Catalina Island to the south. Ample parking facilities are available, and public transportation to and from campus is excellent. Buses, subways, and trains provide direct service to more than 35 communities in the San Gabriel Valley and to other nearby Los Angeles communities. The Los Angeles Civic Center, with numerous historical and cultural attractions, is five miles west of the campus. Industrial and business centers and several major shopping centers are located nearby. Popular mountain and desert resorts are within a two-hour drive, and beaches are less than an hour away by car.

The campus is nestled among rolling hills on a site that once housed one of California's 36 original adobes, built in 1776 by Franciscan missionaries and destroyed by fire in 1908. These lands once were part of a Spanish land grant known as the Rancho Rosa Castilia, created by the family of Juan Batista Batz, a Basque rancher from northern Spain who settled here in the 1850s. The inspiration for the name of the rancho, according to local historians, was the wild rose that once grew near the ranch home. The main drive through the campus is known as Paseo Rancho Castilia, in acknowledgment of our historic heritage.

The Campus Setting

The academic character of the University is reflected in the contemporary design of its physical facilities. The general campus is planned in such a way that it will permanently retain a spacious, open atmosphere, created by landscaped plazas and courts integrated with contemporary concrete, brick, and glass buildings. Surrounding hillsides and parking areas are extensively planted with a variety of trees, shrubs, and ground covers that further embellish the park-like environment of the campus.

From 1947 to 1955 Cal State L.A. was situated on the campus of Los Angeles City College and shared its facilities. In 1956 construction began on the present site, and in 1958 ten newly constructed permanent buildings were first occupied. In more recent years the University went through another major phase of master plan development that included a new administration building, major additions to several classroom buildings, construction of two new classroom buildings with underground parking structures, relocation and expansion of the Student Health Center, and the addition of a modern University-Student Union. Other recently completed projects include parking facilities for more than 2,700 cars; an excellent, attractively landscaped road access system; major remodeling of the south wing of the Fine Arts building; completion of the Anna Bing Arnold child care center and of garden style apartments that provide on-campus housing for more than 1,000 students. Now under construction is the Harriet and Charles Luckman Fine Arts Complex which, when completed in 1994, will house large and small theaters and a large visual arts gallery. Major remodeling of more than 12,000 square feet of interior space in Salazar Hall now provides a home for the federally funded Roybal Center of Applied Gerontology. A total of 18 permanent buildings, representing a financial investment by the state of California of more than \$100 million, stand on a plateau that serves as a refreshing oasis in the center of the Los Angeles region.

The Mission of the University

California State University, Los Angeles is an academic community offering a comprehensive range of liberal arts and professional programs that prepare students for success in advanced

study, in their careers, and throughout their lives. The University is committed to free scholarly inquiry and to academic excellence in undergraduate, graduate, and other postbaccalaureate and continuing education programs. This commitment underlies strong educational programs as well as research, scholarship, and creative and community service activities designed for the needs of a unique, diverse student body. The excellence of these programs derives from a highly qualified faculty and support staff. These individuals are the keystone of the institution.

The University's primary service area is greater Los Angeles, a metropolitan center with national and international significance that is further enhanced by its location on the Pacific Rim. The University's proximity to the civic, cultural, multicultural, and economic centers of the greater Los Angeles basin enables it to foster strong cooperative relationships with community, business, educational, cultural, and political institutions. Partnerships are continually being built on these opportunities for the enhancement of academic programs and the community.

The University's programs are designed to encourage student excellence and enhanced achievement. Therefore the University offers small classes at all levels, ensuring close interaction between faculty and students. The educational program is designed to foster habits of disciplined inquiry and to develop students' critical abilities to think, read, write, compute, listen, and communicate effectively. Recognizing its commitment to teaching, research, scholarship, and creative activities, the University supports an effective library. The University also supports the use of new technologies to enhance and enrich the educational process. The University strives to promote understanding of, and respect, for racial, ethnic, cultural and gender diversity and to serve the changing needs of a global society. Recognizing that true equity transcends equal access, the University provides support services which help a diverse student population to succeed in university study.

The University is committed to providing students a balanced educational experience that includes co-curricular activities which contribute to personal enrichment such as student organizations, campus residence life, artistic events, multicultural events, intercollegiate athletics, and intramural activities.

California State University, Los Angeles is committed to fostering ethical behavior among administrators, faculty, staff, and students. The campus collegial governance structure therefore adheres to the principles of academic freedom and professional ethics consistent with the responsibilities of an academic community.

The Faculty

The reputation Cal State L.A. enjoys as an institution of higher learning is creditable largely to the quality of the faculty and their commitment to teaching and scholarship. These men and women have earned their highest degrees from leading universities throughout the world. Their achievements in their academic fields of specialization make them eminently qualified to teach students who possess a variety of academic interests.

The faculty's high regard for scholarship is evidenced by its continuing participation in scholarly study and research and creative efforts in the arts, letters, and sciences. Proof of commitment to teaching is found in the fact that senior faculty members regularly teach introductory courses in their disciplines and assume responsibility for academic and career advisement of students majoring in their departmental and divisional programs. Close student-faculty ties develop further through campus organizations and in University committees, on which students may serve as voting members.

The Academic Year/Quarter System

Cal State L.A. operates year round on the quarter system. Four quarters, each 11 weeks in duration, comprise the academic year. The summer quarter is a regular academic quarter, equal in all respects to the other three quarters. Students may maintain normal academic progress by full-time attendance during any three quarters of each year. Classes are scheduled weekdays from 8 a.m. until 10 p.m. and on Saturday mornings to serve the needs of full-time, part-time, and working students.

ACCREDITATION

Since 1954, California State University, Los Angeles has been fully accredited by the Western Association of Schools and Colleges, the agency responsible for granting national accreditation to colleges and universities in California, Hawaii and the Trust Territories. The University's credential programs are approved by the California Commission on Teacher Credentialing. Professional degree programs offered and the national societies and associations that accredit these programs are as follows:

Art

National Association of Schools of Art and Design (NASAD)

Audiology (graduate)

American Speech-Language Pathology Association (ASIPA)

Business Administration

American Assembly of Collegiate Schools of Business (AACSB)

Chemistry

American Chemical Society (ACS)

Dietetics (*coordinated undergraduate program*)

American Dietetic Association (ADA)

Education

National Council for Accreditation of Teacher Education (NCATE-')

Engineering (undergraduate)

Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET)

Home Economics

American Home Economics Association (AHEA)

Music

National Association of Schools of Music (NASM)

Nursing

National league for Nursing (NIN)

Nursing (undergraduate)

California Board of Registered Nursing (CBRN)

Public Administration (graduate)

National Association of Schools of Public Affairs and Administration (NASPAA)

Rehabilitation Counseling

Council on Rehabilitation Education

School Counseling and Student Personnel Services

Council for Accreditation of Counseling and Related Educational Programs

Social Work (undergraduate)

Council on Social Work Education

Speech-Language Pathology

American Speech-Language Pathology Association (ASLPA)

Affiliations

Cal State L.A. holds membership in a number of national and regional organizations concerned with advancement of higher education. They include the American Council on Education (ACE), the American Association of State Colleges and Universities, the Association of American Colleges, Council of Graduate Schools, National Collegiate Honors Council, Western Association of Graduate Schools, and the Western Association of Schools and Colleges (WASC). Women graduates are qualified for membership in the American Association of University Women (AAUW).

The John F. Kennedy Memorial Library

As the primary bibliographic and information resource for the curriculum of the University, the library emphasizes rapid access to needed materials and information. The library actively promotes the immediate availability of textual, numeric, and visual resources. In its collections, information resources, instruction, and other services, the library's emphasis is on delivering support for the curriculum and programs of the schools and departments. Access to the library collections is enhanced by end-user and librarian-mediated access to a variety of electronic information resources. The library actively promotes the principle of equal access to intellectual resources regardless of format for all constituencies in the campus community. The library strives to provide access to information appropriate to each school's disciplines, along with needed user instruction and support.

As an essential teaching and research laboratory, the library emphasizes instruction, reference services, access to on-and off-site information in print and electronic formats, development of information literacy, and management of collections. The library provides resources and support for the University's major functions "teaching, research scholarship, creative activity, and community service. The library is located at the center of the campus in two interconnected buildings--Library North and Palmer Wing.

Collections: The library's collections of almost one million volumes include approximately 2,500 current subscriptions to periodicals, journals, and newspapers, as well as a comprehensive collection of CSLA masters theses from the University's inception. The library is an official depository for U.S. government and California state publications.

Services: The Reference center located on the first floor of Library North assists library patrons with directional, informational, reference, and research questions. This includes one-to-one instructional assistance for CSLA students and faculty during peak hours on the use of the library's wide range of computerized access systems available from terminals and workstations within the library. Special services available for students and faculty include access to remote databases and CD-ROM databases, mediated online searches, interlibrary borrowing of materials, photocopying, and group study rooms. Books specifically designated as course readings may be placed on limited loan by faculty members and may be checked out at the circulation counter on the first floor of Library North.

Access to the information resources and services of all libraries within the CSU system is provided through a mutual use arrangement. By this agreement, students, faculty, and staff may use their Cal State L.A. photo-ID cards as library cards at any CSU library, thus providing access to 20 campus collections totaling 13 million volumes.

In addition, Cal State L.A. and the University of Southern California offer reciprocal direct borrowing. Information about eligibility and how to apply for this privilege is available at the circulation counter. Another borrowing agreement permits our students and faculty to borrow directly from UCLA libraries. Students may use this service upon payment of \$25 for a six-month courtesy card or \$50 for a twelve-month card.

Library Instruction: Cal State L.A. students can learn more about the library through group orientation tours which often include basic instruction about effective use of library information resources. Developing an understanding of the organization and services of the library, along with fundamental research skills and information literacy, will help build a solid foundation for academic success. This instruction is available at the request of instructors of lower division courses and as part of orientation for new students and the Summer Bridge program. Library faculty may also provide advanced support for upper division and graduate students through course-specific research instruction when requested by a faculty member.

Information Resources Management (IRM)

Information Resources Management (IRM) facilitates the communication process of the university, provides planning and technical guidance in the integration of campus information technologies, and provides leadership in the efficient and effective use of a vital university resource-information. IRM's fundamental purpose is to provide high quality information service to the campus in support of instruction; research, scholarly, creative, and service activities; and administration.

IRM units provide campuswide support in academic computing, media services, analytical studies, networking, telecommunications, office automation, and administrative computing.

Computing Facilities

Cal State L.A. students have access to various computing facilities with microcomputers. These include self-instruction laboratories, computer classrooms, and experimental laboratories with digital equipment. Through use of the campuswide network, student workstations can be linked to the campus supercomputer and various network servers for file, print, and computing services, as well as to the regional and national networks and shared CSU computing resources.

Instructional Computing Labs

The campus operates instructional computing labs that are available to students during both daytime and evening hours. The self-instruction labs are staffed by qualified consultants who answer questions and provide assistance. Further information can be obtained by calling (213) 343-4530.

Creative Media Services

Creative Media Services provides a wide range of services and products that visually and electronically enhance the communication of information. Particular emphasis is placed on providing resources to support faculty/student communication in the classroom or laboratory environment. The functional units within Creative Media Services are Graphics and Photography and Television Production. Campus media facilities include the Instructional Television Fixed Services (ITFS) classroom, two television production studios, three video editing areas, and a campus cable television channel.

International Programs

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 abroad for a full academic year. Close to 11,000 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 36 recognized universities and institutions of higher education in 16 countries, the International Programs also offers a wide selection of study locales and learning environments.

The affiliated institutions are the University of Queensland [Brisbane](**Australia**), the Universidade de Sao Paulo(**Brazil**); the universities of the Province of Quebec [13 institutions, including Universite de Montreal, Concordia University, Universite Laval, McGill University, Universite du Quebec system, Bishops's University, i.a.](**Canada**); Denmark's International Study Program [the international education affiliate of the University of Copenhagen](**Denmark**); Institut des Etudes Francaises pour Etudiants Etrangers, Universite de Droit, d'Economie et des Sciences d'Aix-Marseille [Aix-en-Provence](**France**); Ruprecht-Karls-Universitat [Heidelberg] and Eberhard-Karls-Universitat [Tubingen](**Germany**); the Hebrew University of Jerusalem(**Israel**); CSU Study Center [Florence], Universita degli Studi di Firenze, and La Accademi di Belle Arti Firenze(**Italy**); Waseda University [Tokyo](**Japan**); Universidad Iberoamericana [Mexico City](**Mexico**); Massey University [Palmerston North] and Lincoln University [Christchurch](**New Zealand**); Universidad Complutense de Madrid and Universidad de Granada (Spain); Uppsala Universitet(**Sweden**); National Chengchi University [Taipei](**Taiwan**); Bradford University, Bristol University, Kingston University, Sheffield University, and University of Wales, Swansea(**United Kingdom**); and the University of Zimbabwe [Harare](**Zimbabwe**).

Information about academic course offerings available at these locations can be found in the CSU International Programs Bulletin which may be obtained from International Students Services, Admin. Bldg. 127, phone (213) 343-3170.

To be selected to participate, students must have upper division or graduate standing at a CSU campus by the time of departure, possess a cumulative grade point average of 2.75 or 3.0 (A= 4.0), depending on the program, for all college level work completed ~~at~~ the time of application, and have completed required language or other preparatory study when applicable. Selection is competitive and is based on home campus recommendations and the applicant's academic record. Final selection is made by the CSU Office of International Programs in consultation with a systemwide faculty selection committee.

California Community Colleges transfer students are eligible to apply directly from their community college if they can meet this requirement.

The CSU International Programs pays all tuition and administrative costs overseas for each of its participants to the same extent that such funds would be expended to support similar costs in California. Students assume responsibility for all personal costs such as transportation, room and board, and living expenses, as well as for home campus fees. Because they remain enrolled at their home CSU campus while studying overseas, International Programs students earn full residence credit for all academic work they complete while abroad and remain eligible to receive any form of financial aid (other than work study) for which they can individually qualify.

Information and application materials may be obtained from International Students Services, Admin. 127, phone (213) 343-3170, or by writing to The California State University International Programs, 400 Golden Shore, Long Beach, CA 90802-4275. Applications for 1994--95 academic year overseas must be submitted by February 1, 1994.

Continuing Education

Continuing Education administers the Extension Service, Special Sessions, Conferences and Professional Development, American Language and Culture Program (ACLCP), Instructional Television Fixed Service (ITFS), and External Degree programs.

Extension Service

Provides university-level courses and programs at various locations for the professional, academic, vocational, and cultural enrichment of persons who do not wish to take college work in residence. Students may take extension courses without matriculating at Cal State L.A., provided they meet course prerequisites. Offerings are equivalent in level and quality to on-campus courses, and many courses may be applied, within specified limits, toward degree and credential requirements. Classes taken in extension do not apply toward the residence requirement for graduation.

Extension courses may be offered in response to specific requests of groups or organizations or by the Extension Service without such sponsorship. Extension terms are flexible but generally parallel the University's quarter calendar. Information about extension courses and programs is available from the Director of Extension and Special Sessions at (213) 343-4908.

Special Sessions

Special sessions provide a means for CSU instructional programs to be furnished at times and places not supportable by the state general fund appropriate when the offering is consistent with the CSU mission and applicable laws and regulations. Academic standards associated with all aspects of such Special Sessions are identical to those of comparable instructional programs. Examples include summer sessions; interim sessions between regular terms; programs of a continuing nature offered at military bases, correctional facilities, and other distant or isolated locations; external degree programs; and instructional programs for a specific group for which state support would be inappropriate.

Special Sessions courses shall not be offered at times or places that are likely to supplant or limit offerings of state-supported programs. Degree credit earned through Special Sessions is applicable toward residence credit requirements at the campus offering the program. For further information, contact the Director of Extension and Special Sessions at (213) 343-4908.

Professional Development

To meet its mandated responsibility to work closely with community, business, and professional organizations in satisfying the educational needs of the metropolitan area it serves, the university operates a continuing program of special noncredit institutes, conferences, workshops, and courses. These special programs are offered in response to specific requests by such organizations as chambers of commerce, business and professional associations, or large industrial firms; or they may be offered by Cal State L.A. on its own initiative when a significant need is determined to exist.

Only university-level work is offered, and urgency and appropriateness are determining factors in decisions to offer these noncredit programs. Information concerning this educational service is available from the Professional Development office, (213) 343-4921.

External Degree Programs

Programs are designed to extend degree-oriented educational opportunities to persons who are unable to spend time in residence on a campus in existent educational programs. External degree programs are conducted in nontraditional time frames generally at off-campus locations. For information regarding external degree programs, contact Continuing Education, (213) 343-4908.

Open University

Continuing Education's *Open University* program permits nonmatriculated students to register concurrently with matriculated students in regular classes, for a per-unit fee which is currently \$77 per unit, on a space available basis. (*Fees are subject to change without advance notice.*) A maximum of 36 units taken through this program may be applied on a bachelor's degree, and no more than 13 units may be applied to a master's degree at Cal State L.A. provided the courses are eligible for inclusion on such a degree.

Registration takes place in the Office of Continuing Education. This registration procedure is entirely separate from registration for regular (matriculated) students; it begins the first week of each quarter and lasts approximately three weeks. There is no preregistration.

Students who register through Open University must obtain the signatures of both the instructor and department or division chair on their registration authorization form for each desired class. Additional restrictions exist in the School of Engineering and Technology. Matriculated students in continuing student status (i.e., those who have not failed to register for more than two consecutive quarters) *may not* enroll through Open University. Students may not enroll through Open University for directed study (independent study), directed teaching, research, or thesis courses.

American Culture and Language Program (ACLP)

The American Culture and Language Program offers noncredit language courses for students and professionals whose first language is not English. Intensive courses are offered five hours per day, and students may attend up to 25 hours per week of classes. Courses offered include all English skills (reading, writing, listening, speaking), college skills, TOEFL preparation, general business, and computers for non-native speakers.

For those who wish to have an F-1 visa and international student status, 1-20 forms are issued. This program also is open to those with business or tourist visas, to residents, and to regularly enrolled students with specific language skill needs. Applications may be obtained from the American Culture and Language Program office, Bungalow L, phone (213) 343-4840.

Instructional Television Fixed Service (ITFS)

Under the administration of Continuing Education, the campus televises academic courses from a studio in King Hall, via the Instructional Television Fixed Service (ITFS). As a studio classroom, the facility is designed to meet both the needs of on-campus students and the ITFS students at distant receive sites. Currently, receive sites are located in Alhambra, Azusa, Huntington Beach, Los Angeles, Santa Fe Springs, and several other communities in the greater Los Angeles area. For additional information, call the Special Projects and Services Director in Continuing Education at (213) 343-4916,

Reserve Officer Training Programs (ROTC) Air Force ROTC

Through arrangements with California State University, Long Beach, Loyola-Marymount University, the University of California, Los Angeles (UCLA), and the University of Southern California (USC), two-year and four-year Air Force Reserve Officer Training Corps (AFROTC) programs and two-, three-, and four-year scholarships are available to qualified men and women attending Cal State L.A. These programs lead to a commission as a second lieutenant in the U.S. Air Force.

Scholarships for students enrolled in AFROTC programs cover the costs of enrollment, books, and a monthly subsistence allowance during the school year. U.S. citizenship is required for scholarship acceptance. The subsistence allowance is paid also to nonscholarship cadets enrolled in the two-year program and in the last two years of the four-year program. Four-year scholarships are available to incoming students who apply by December 1 the year before they enter college.

Freshmen may enter the four-year program by enrolling in the first Aerospace Studies course (AS 100) at UCLA, USC, Loyola-Marymount, or CSU Long Beach. Students who desire the two-year program should apply early in the fall of their second year of college (students must have three years of college remaining). Other eligibility requirements include U.S. citizenship (before the last two years of the program), ability to pass an Air Force medical exam and physical fitness test, good moral character, and good academic standing in college. Entry into the last two years of the program is competitive.

The program consists of one Aerospace Studies (ROTC) class and a one-hour per week laboratory each quarter. Subject matter includes Air Force organization, history, leadership and management principles, and American defense policy. Courses at Loyola Marymount University include Saturday morning offerings.

Interested students should contact one of the following AFROTC offices for further information: Loyola-Marymount University, (310) 338-2770; USC, (213) 740-2670; Harvey Mudd/Claremont Colleges, (714) 621-8123; CSU Long Beach, (310) 985-5743; CSU Northridge, (310) 825-1742; or UCLA, (310) 825-1742. Dual registration procedures must be followed.

Army ROTC

The Army Reserve Officers Training Corps (AROTC) program is available to qualified Cal State L.A. students through the University of California, Los Angeles (UCLA) program. Students may cross enroll at UCLA or at CSU Long Beach.

Two-, three-, and four-year programs that may lead to a commission as a second lieutenant in the U.S. Army, Army Reserve, or Army National Guard are offered. Participants must be physically qualified, full-time undergraduate or graduate students. Academic credits earned in the program normally may be counted as electives within degree requirements. Students enrolled during the final two years of the program receive a \$100 monthly allowance during the school year. Veterans may qualify to enter the two-year program (Advanced Course) and are eligible to receive the monthly allowance as well as G.I. Bill benefits.

Scholarships for students enrolled in Army ROTC programs cover the costs of enrollment, books, and a monthly subsistence allowance during the school year. U.S. citizenship is required for scholarship acceptance. The subsistence allowance is paid also to nonscholarship cadets enrolled in the two-year program and in the last two years of the four-year program. Four-year scholarships are available to incoming students who apply by December 1 the year before they enter college.

For further information, contact the Department of Military Science at UCLA, (310) 825-7384 or 825-73810r at CSU Long Beach, (310) 985-5766. Dual registration procedures must be followed.

Los Angeles County High School for the Arts

A public high school for students within Los Angeles County has operated since September 1985 on the Cal State L.A. campus. Designed for students with special talent in the visual and performing arts and open by audition only, the arts high school offers a full curriculum of academic subjects as well as opportunities for specialization in dance, music, theatre, and visual arts. Selected students are permitted to enroll in a joint baccalaureate program through which they may earn high school and college credit concurrently. Operated by the Los Angeles County Office of Education, the school is tuition free and open to tenth, eleventh, and twelfth graders.

The Alumni Association

The more than 110,000 Cal State L.A. graduates remain a vital and active catalyst in the growth of the University. Through involvement in the Alumni Association, graduates keep in contact with each other and assist the University through a network of various affiliate groups. A unique new program seeks to utilize alumni in career networking and student mentor programs.

The Alumni Association is a self-supporting, nonprofit organization which, except for salaries, receives no state funding and thus relies on membership dues for support. The association has presented major gifts to the campus over the years. The Alumni Carillon was donated in 1970, and the John A. Greenlee Fountain and Grove, located on the plaza adjoining the Physical Sciences building, was presented in 1973. The association donated funds to refurbish the Alumni Lounge in the University-Student Union. In 1990, the Alumni Association Board of Directors made a pledge to raise \$100,000 for the Harriet and Charles Luckman Fine Arts Complex.

Alumni Association members are active in university affairs, serving on a wide range of committees and participating in special events such as the annual Honors Convocation and Commencement Exercises each spring. The Alumni Association awards certificates for outstanding achievement to graduate and undergraduate students at the Honors Convocation and participates in the annual Outstanding Professor Awards program. In addition, the association hosts an annual Alumni Awards banquet, an annual Board Recognition Barbecue, Alumni Night at the Hollywood Bowl, Alumni Night at the Theatre, and other social, career, and cultural activities and offers a unique benefits package to all dues-paying members.

The Associated Clinics

The Associated Clinics brings together and integrates segments of the instructional programs of several academic departments and divisions; provides training facilities; and offers diagnostic and remedial services in counseling, drama therapy, mathematics, psychology, speech, hearing, reading, adapted physical education, and special education.

The primary objective of the Associated Clinics is to serve the university's instructional programs by providing clinical training and research opportunities within each of the areas and across disciplines. This is accomplished by providing experiences for students ranging from observation of the varied clinical activities to providing direct services to clients, at the level of the students' clinical competence. Students learn under the supervision of experienced and appropriately credentialed faculty. The services are available to the public, both children and adults, and to members of the Cal State L.A. community.

Research, Scholarship, Applied Programs, Organizations, and Services

The faculty engage in research, scholarship training, and special projects as an integral part of their academic discipline and professional development. Both undergraduate and graduate students participate, as research assistants or as independent investigators under faculty guidance, in research that is basic to their learning experience. The Dean of Graduate Studies and Research and the Director of Research and Sponsored Programs provide stimulus, coordination, support, and direction to these research efforts. Additional services are provided by University Auxiliary Services, Inc., the Computing Center, and the John F. Kennedy Memorial Library.

The University Auxiliary Services, Inc.

The University Auxiliary Services, Inc. (UAS) is an auxiliary component of the university, incorporated as a nonprofit organization under the laws of the state of California. The primary purpose of the corporation is to provide services for the university that are either impractical or not possible under the fiscal regulations and procedures of the state of California and its agencies.

Major functional areas of UAS include overseeing the contracted food service and bookstore operations, accounting and human resources services for some university agencies and auxiliaries, coordination of campus conferences, and providing support services to university faculty and staff for contract and grant administration development in concert with the Office of Graduate Studies and Research. The contracts and grants are primarily agreements to conduct research, training, or

special projects for various agencies of the federal, state, county, and municipal governments, other private foundations, and private enterprises.

The policy-making responsibility for the corporation is vested in its board of directors whose members represent a cross-section of the campus community and local service area.

Matthew J. Guglielmo Endowed Chair in Mental Retardation

The Endowed Chair in Mental Retardation in the Division of Special Education, School of Education, was established to honor Matthew J. Guglielmo, former vice president of The Broadway Department Stores, and was made possible by contributions from The Broadway and friends of Mr. Guglielmo.

Mr. Guglielmo has dedicated a major part of his life to focusing public attention on problems of the developmentally disabled. The chair continues to support excellence in teaching, significant research in the study of mental retardation, and collaboration between Cal State L.A. and community agencies and institutions that serve mentally retarded persons and their families.

Edward R. Roybal Endowed Chair in Gerontology

The Endowed Chair in Gerontology and Public Service, housed in the School of Health and Human Services, was established to honor Edward R. Roybal, former Los Angeles city councilman, long-time member of the U.S. House of Representatives, and chair of the U.S. House Select Committee on Aging. Funding was made possible by private donations. Mr. Roybal began his career in public service as a health educator and has long been a leader in the area of health care and services for the elderly.

The chair is affiliated with the campus' Roybal Institute for Applied Gerontology. The individual who is selected to fill the chair will bring special emphases in the area of understanding the problems and needs of the aging, with particular attention to the multicultural and multiethnic communities in the greater Los Angeles area.

Special Study Centers

Several special centers, which are committed to various objectives, are a part of the campus community. These and other research oriented organizations engage in the acquisition and dissemination of information, issuance of publications, support of special programs aimed at bringing outstanding speakers to Cal State L.A. and seeking out sources of funds for expanding library holdings and other resources essential to research.

CENTERS, INSTITUTES, AND BUREAUS

Asian-American Resource Center (AARC)

The center serves Cal State L.A. and the community as a referral center, supporting on-and off-campus social, cultural, and educational programs and providing an environment in which students can organize joint programs. Major objectives of the center include efforts to increase communication between Cal State L.A. and the Asian-American community in cooperative activities of mutual interest and concern; to provide a resource facility for an Asian American Studies program where information about Asian culture, history, religion, economics, etc., can be found; to promote understanding and interaction among Asians and others; to assist in the orientation of foreign as well as native Asian students; and to develop exchanges with other academic institutions in Asia concerning student interests.

Bilingual Center

The School of Education operates a Bilingual Center that is housed in the Division of Educational Foundations and Interdivisional Studies. This center functions as the administrative unit for federal funds that support the following bilingual activities:

- * *B.C.C. Short Term Training.* Classes in bilingual methodologies and the history and culture of language minority children are provided for classroom teachers preparing for the Bilingual Certificate of Competence exam. Classes are offered on campus and at school sites in Los Angeles County.

- * *Distribution of Bilingual Materials.* Under the title of the Evaluation, Dissemination, and Assessment Center, curriculum materials and texts are produced and distributed for use in bilingual programs at every level from kindergarten to university.
- * *Educational Personnel Training Program.* Stipends are provided for nearly one hundred bilingual students to pursue course work leading to the doctorate in Special Education.

Edmund G. "Pat" Brown Institute of Public Affairs

The institute is a prestigious interdisciplinary center for applied public policy research and analysis of major issues that face California and its respective local regions. The institute addresses these challenging issues within a nonpartisan, independent approach, as a facilitator of long range policy discussion and resolution. The institute serves the state and community by fostering organizations and academic institutions for effective social policies and improving the governmental process; by offering technical assistance, consultation, seminars, and forums about vital policy issues; and by providing leadership development training and an intern program in public service.

Bureau of Business and Economic Research

The School of Business and Economics maintains a research bureau to encourage, facilitate, and communicate faculty and student research. The bureau's primary objective is to relay information concerning research opportunities and ongoing research efforts to faculty members and students. In addition, it assists in the preparation of research proposals, coordinates research efforts, and provides M.S. and M.B.A. degree candidates with research advisement services. The bureau provides an outlet for the publication of faculty research findings through its Working Papers and Monographs series, and periodically publishes proceedings of seminars and workshops.

Center for Counselor Renewal

The center is designed to meet a specialized function of the School of Education's Division of Administration and Counseling—that of continued professional and personal development of division alumni and other counseling practitioners. The center presents conferences, workshops, and symposia and provides professional materials to aid counselors' continuing efforts to renew skills, update technical information, address the needs caused by the rapidly changing demographic composition of communities, and maintain current knowledge of recent developments in the profession.

Center for Criminal Justice Studies

The center was established by the School of Health and Human Services to provide a vehicle to link the interdisciplinary fields concerned with criminal justice practitioners (government and private) and agencies. The center addresses the crosscultural needs and complexities of a modern urban society with shifting demands. Its goals and objectives include improving the quality of criminal justice education and research; developing effective strategies for recruitment, retention, and placement of undergraduate and graduate students; and providing for collaboration on interdisciplinary or discipline-specific activities directed at grant development and research-related criminal justice education and practice.

Center for Economic Education

The center is affiliated with the Economic Literacy Council of California and the national Joint Council on Economic Education and sponsors workshops about economics for high school teachers.

Center for Effective Teaching

The center was rounded to enhance the quality of instruction at Cal State L.A. To achieve this purpose, the center's goals—to highlight faculty instructional efforts and strengths, to provide workshops and individual consultation for faculty members, and to provide a depository of effective teaching materials and media—are accomplished in several ways. Faculty share their expertise by means of media productions as well as involvement in a wide variety of workshops. The center offers a confidential individual consultation service which may involve a single conference or a series of class observations or video tapes with collaborative instructional planning. Consultation also may include a problem-solving format in which departments or groups have identified specific instructional areas of concern. Solutions are then generated through a cooperative process. Individual self-paced instructional packets are available for faculty use.

Center for Excellence in Early Intervention

Housed in the Division of Special Education, the center was rounded to create a model program for training early intervention professionals. Its objectives include developing, demonstrating, and evaluating the best practices in early intervention service delivery to young children with special needs and their families; providing early intervention training to professionals, paraprofessionals, and parents; developing and evaluating early intervention training and service delivery materials for dissemination to special educators, child development specialists, speech clinicians, allied health professionals, social workers, psychologists, physicians, and parents; and developing and operating a media and material library about early intervention.

Center for Information Resource Management

Operated by the School of Business and Economics, the center provides assistance to students, faculty, industry, and government through research, training, and consulting programs. An internship program has been instituted with local governmental and private organizations to provide practical learning experiences for students pursuing degrees in computer-related disciplines. In addition, the center sponsors research in the implementation and use of information systems.

Center for Japanese Studies

The center serves Cal State L.A. and the community as a source to aid faculty, students, and the general public in broadening and deepening their knowledge of Japan, its people, and culture. The center promotes Japanese research and academic studies and supports educational and cultural programs, seminars, guest lectures, and conferences. The office maintains a collection of basic bibliographies and essential reference materials.

Center for Korean-American and Korean Studies

The center is a depository of historical and cultural materials about Korea and Korean-Americans. Major objectives of the center are to promote, coordinate, and conduct research activities about various aspects of Korean culture and tradition, including oral histories; to compile, document, and produce curriculum materials about Korean folklore, art, music, and social activities; to develop continuing education programs about the Korean community's activities and programs for students, teachers, and the general public; to develop and produce curriculum materials and courses about Korean-American and Korean culture, tradition, and life; and to sponsor seminars, symposia, and exhibits about Korean culture and tradition.

Center for Multicultural Education

The center's specific goals and objectives are to provide in-service training for faculty and staff about issues related to cultural pluralism, diversity, and multicultural education and to provide technical assistance in the incorporation and infusion of multiculturalism into the curriculum. The center also offers nationwide leadership for teacher educators about multicultural issues by sponsoring conferences, workshops, and seminars and provides services and technical assistance to school districts.

Center for Technology Education

Operated by the Department of Technology, School of Engineering and Technology, the center provides support and assistance for students, faculty, teachers, public agencies, business, and industry, including professional support and consulting, in-service activities, conferences and workshops, and disseminates professional information through an electronic bulletin communications network. Professional services offered in technology education and technical training include course, curriculum, and program development in advanced technologies such as robotics, computer-aided design (CAD), computer-aided manufacturing (CAM), desktop publishing, and fluid power. Assistance in problem solving for teachers of students with special needs also is provided.

Center for the Study of Armament and Disarmament

The center engages in research in the field of arms control under contract or grant from both government agencies and private foundations. Members serve as speakers and consultants to

other organizations that share this interest. Visits to the center by internationally established arms control specialists afford students the opportunity to discuss appropriate issues directly.

The center maintains a collection of published and unpublished research materials and cooperates with similarly interested organizations in other countries. Portions of this collection are made available to Cal State L.A. students, who are encouraged to pursue individual research projects under the guidance of the center's staff. The center also supports a program of publications that are used as course materials at other universities as well as at Cal State L.A. Works published by the center are distributed to university libraries, research collections, and interested scholars.

Center for the Study of Black-on-Black Crime

The center's purpose is to adopt a proactive, rather than reactive, approach to the task of reversing crime in the black community. In so doing, the center must first determine the cause of the high crime rate, then design solutions and corrective activities. The latter become more meaningful and finely focused when the former have been accomplished. In achieving its purpose, the center will promote development, analysis, publication, and dissemination of relevant data and information about black-on-black crime. The center will become a research center with a basic objective of analyzing data and proposing appropriate solutions. Coordination of the efforts of many extant organizations is an additional objective.

Center for the Study of Business in Society

The faculty of the School of Business and Economics, in a cooperative effort with the business community, operate this center which is dedicated to the study of corporate adaptation to a changing social environment.

The center's goals are to develop a continuing dialogue between the business and academic communities, to develop teaching materials, and to sponsor research about subjects related to the study of business in society. Video tapes and publications developed by the center are used in business and society and economic education classes across the country.

Center for the Study of Child Maltreatment and Family Violence

The center's major purpose is to promote effective prevention of, and intervention in, child abuse and domestic violence by providing interdisciplinary educational, training, and research programs and state-of-the-art resources for students, professionals, and the community. The center promotes interdisciplinary cooperation between the university and community agencies by identifying the university as a focal point and resource within the community, county, and state to provide professional education and research in child abuse and domestic violence. A broad scope of interdisciplinary educational, training, research, and field placement opportunities and programs is available to prepare individuals to provide effective multidisciplinary health and human services to maltreated children and their families.

Chinese Studies Center

The center endeavors to promote understanding of, and interest in, China by sponsoring conferences seminars, guest lectures, exhibits, concerts, and other Chinese cultural activities. It maintains a small library of basic reference materials about China. These materials are available to faculty, staff, and students. The center also serves the Chinese communities in Los Angeles and assists Cal State L.A. students of Chinese descent.

Engineering and Technology Center

The center was established to foster and encourage research and other professional activities. A primary purpose of the center is to administer the Design Clinic Program. Design Clinic participants solve "real world" research problems for industry sponsors. Clinics are conducted as a "capstone" design experience for engineering students under faculty supervision.

Health Care Management Institute

This institute, housed in the School of Business and Economics, was established to link executive officers, health regulators, health industry associations, representative health care facilities, insurance carriers, and other primary health care participants with Cal State L.A. faculty. Among those who profit from such relationships are researchers, students-particularly those in the M.S.

degree program in Health Care Management-and the health care industry. Special workshops, work study arrangements, advanced field placements, research in the field of health care management, certificate programs, role model experiences for students, and other related activities are provided.

Institute for Asian American and Pacific Asian Studies

The major purpose of the institute is to develop and support a major instructional and research center for Asian American and Pacific Asian studies in the nation. The institute will mobilize faculty and student current and potential resources to develop and present interdisciplinary programs that emphasize language and culture on the one hand and business and international relations on the other.

Institute for Retail Management

The goals of this School of Business and Economics institute are to enhance the field of retailing as a profession and to improve the quality of managerial expertise within the retail industry in California. To achieve these objectives, the institute participated in the development of an undergraduate degree option in retailing and a certificate program in retail professional development. The institute serves as a vehicle for publication of research findings in the area of retailing and assists qualified students in retail job placement.

Institute of Business Law

The institute was established by the School of Business and Economics to assist business persons, government policy makers and regulators, scholars, and students to better understand the legal regulation of business and, through better understanding, to promote fairness, efficiency, and competitiveness in business.

The institute conducts and sponsors research in the field of business law and business law compliance, publishes or sponsors the publication of books, pamphlets, monographs, and papers as a product of its research activities; provides current regulatory information that is essential in promoting the fairness, efficiency, and competitiveness of business to government policy makers, the public, scholars, students, and business; encourages students particularly ethnic minority and female students-to prepare themselves for career opportunities in business law and regulatory compliance; and sponsors seminars, conferences, and meetings designed to improve the understanding of business law and regulatory compliance.

Institute of Entrepreneurship

This institute, operated by the School of Business and Economics, provides programs and seminars and conducts research for small businesses in the product and service sectors. The programs, seminars, and courses are designed to provide the necessary training to enable individuals to succeed in small businesses. Research is conducted to provide insight into potential problems of small businesses and to suggest solutions. Publications for the entrepreneur are made available. The institute will function as a clearing-house for information relative to small businesses.

Institute of Nursing

The institute's primary purpose is to provide a vehicle for closer collaboration between the University and community agencies that provide health care. The institute emphasizes development of joint ventures and/or partnerships that lead to cost-benefit modes of health care delivery to a culturally diverse society.

The institute's primary goals are to improve the quality of nursing education, to develop effective strategies for recruitment and retention of nursing students, to help meet the staffing needs of nursing service, to improve the quality of nursing practice, and to facilitate collaboration in the areas of research, teaching, and grant writing.

Latin American Studies Center

The center brings together faculty members, administrators, and students from a number of academic disciplines to promote the study of Latin American civilization. The center's continuing

services include support for undergraduate and graduate programs in Latin American Studies, scholarly research, augmentation of library holdings, and sponsorship of guest lectures.

Pacific Contemporary Music Center (PCMC)

The purpose of the PCMC, which is administered by the School of Arts and Letters, is to encourage performance and exchange and promote awareness of contemporary musical compositions by composers of the Pacific Rim countries. It is a liaison that comprises composer members and prospective performers: conductors, orchestras, chamber music ensembles, instrumentalists, vocalists, and agents.

The center sponsors contemporary music festivals and encourages other countries, universities, and organizations to join in sponsoring such festivals to present the members' compositions, encourages the mass media in participating countries to broadcast the members' music by providing copies of sound recordings; maintains a library of members' published and unpublished scores, sound recordings, performance documentation, and biographies; sends scores anywhere in the world for a period no longer than one month; and publishes an annual catalog of the library holdings; sponsors and encourages contemporary seminars; and encourages research.

Pacific Rim Institute

A consortium created by Cal State L.A. and a group of Asian and U.S. firms to increase exchanges and improve communication and understanding between their corporate cultures, the institute seeks to provide managers in both U.S. and Pacific Asian business communities the knowledge and skills needed for managing the challenge of cultural differences. It also endeavors to increase their effectiveness in working together in each other's environment. These goals are accomplished through the presentation of seminars, forums, and briefings.

Productivity Center

The purpose the School of Business and Economics' Productivity Center is to conduct and coordinate research activities that deal with various issues of productivity improvement and measurement; to act as an information center and catalyst for local governmental organizations, and manufacturing and service firms, with an emphasis on helping those institutes become effective and efficient in producing products and/or providing services; and to promote the expansion of career opportunities for Cal State L.A. students in general and those studying operations management in particular.

Edward R. Roybal Institute for Applied Gerontology

The center's purpose is to improve the quality of care and delivery of services to older persons through the interdisciplinary education and training of professionals, paraprofessionals, family members, community agency personnel, and volunteers. Of special interest are services to poor and older ethnic minority persons such as Asians, African-Americans, and Latinos. The Institute emphasizes the development of partnerships between the University and the community that promote the well-being of older persons and improve service delivery. An additional goal is to seek financial support in the form of scholarships for students planning to enter health and human service careers with a specialization in aging.

Small Business Institute

The institute is funded by continuing contracts with the U.S. Small Business Administration and housed within the School of Business and Economics. Its program features participation of advanced business students in solving real-world small business problems. Students receive credit and applied experience under the supervision of faculty while resolving important business problems.

Roger Wagner Center for Choral Studies

The center was established to rekindle an interest in choral music and to reintegrate choirs into the world of entertainment. The center provides a structure within which teachers, scholars, and performing artists can teach choral music, explore and encourage composition of new repertoire, foster research and scholarly publication of emerging topics pertinent to choral study, establish a special collection of recordings, personal letters, publications, and photographs that span the career of its founder, the late Dr. Roger Wagner.

The center's activities include cosponsorship of an international conference on Gregorian chant, presentation of a collection of scholarly articles, and choral composition content courses.

World Trade Education Center

The School of Business and Economics center assists business people, government policy makers, and scholars in understanding new trends in world trade and in operating effectively in a rapidly changing and increasingly competitive international environment. The center provides assistance by promoting greater understanding of economic and political issues that affect world trade; by providing economic, political, cultural, and strategic analysis and assessments as a basis for policy decisions concerning world trade; and by assembling and disseminating information about international trade, foreign investment, foreign market conditions, and related statistics.

Writing Center

The center enlivens our contemporary social, cultural and intellectual life by sponsoring a number of distinguished poets, novelists, and literary critics for public lectures and classroom workshops. The center also provides consultative assistance for students and faculty relating to the craft of creative writing.

CONSORTIA

California Desert Studies Consortium

The California Desert Studies Consortium consists of several southern California campuses of The California State University which, together with the Bureau of Land Management, operate the Desert Studies Center in the Mojave Desert near Baker, California. Participating campuses include Dominguez Hills, Fullerton, Long Beach, Los Angeles, Northridge, Pomona, and San Bernardino. The purpose the center is to provide a field facility in the Mojave Desert to develop desert studies educational programs.

Established in 1976, the center serves students in the areas of anthropology, astronomy, biology, engineering, geography, and geology and provides a substantial support base for environmental and ecological studies that have immediate implications for effective management of desert resources. The central location allows accessibility to all parts of the desert region. Lodging and laboratory/storage space are offered in support of field-oriented courses. The center also provides a site for independent study courses and research of desert phenomena by individual students.

The administrative base for the Desert Studies Consortium is presently located on the CSU Fullerton campus. Cal State L.A.'s representatives to the consortium are Dr. David Pearson, Chair, Department of Biology, and Dr. Theodore J. Crovello, Dean of Graduate Studies and Research and Professor of Biology. Students who wish more information should contact Dr. Pearson at (213) 343-2050 or Dr. Crovello at (213) 343-3820.

Southern California Ocean Studies Institute (SCOSI)

Opportunities for undergraduate and graduate study in the coastal environment are provided by the Southern California Ocean Studies Institute (SCOSI) which comprises seven southern California State University campuses: Dominguez Hills, Fullerton, Long Beach, Los Angeles, Northridge, Pomona, and San Diego. The SCOSI is housed at the Long Beach campus.

The SCOSI participates in training managers and scientists and educating the general public by coordinating and facilitating marine educational and research activities. In addition, the institute serves as an educational and research liaison among regions, states, and nations.

The SCOSI participates in training managers and scientists and educating the general public by coordinating and facilitating marine educational and research activities. In addition, the institute serves as an educational and research liaison among regions, states, and nations. Seagoing research laboratory and instructional facilities are provided aboard the *R.V. Yellowfin*, an oceangoing research vessel. The *Yellowfin* is the property of the institute, and its use is scheduled through the office of the institute director.

Several courses within the departments of Biology and Microbiology, Geological Sciences, and Psychology and the School of Engineering and Technology, among others, utilize the *Yellowfin* and other Consortium facilities. These courses are announced in the *Schedule of Classes* each quarter.

Cal State L.A.'s representatives to the consortium are Dr. Donald O. Dewey, Dean, School of Natural and Social Sciences, and Dr. Ivan Colburn, Professor Emeritus of Geology. For additional information, contact Dr. Dewey at (2134) 343-2000.

Field Station in Mexico

A field station for study and research in regional history, anthropology, and geography is operated in Mexico during selected quarters by the departments of Anthropology, Geography and Urban Analysis, and History and the Latin American Studies program. Upper division and graduate students with appropriate background for the work proposed and with adequate competence in Spanish may participate. Students take a full course load for residence credit and pay residence fees plus their own expenses. Further information may be obtained from the Chair of the Department of Geography and Urban Analysis, (213) 343-2220.

STUDENT SERVICES AND ACTIVITIES

Educationally related services are provided for students by professional staff within several centers. Those that operate under the direction of the Provost and Vice President for Academic Affairs include the University Academic Advisement Center; the Learning Resource Center; the University Testing Center; and the University Writing Center. Others, administered by the Vice President for Student Affairs, include the Center for Career Planning and Placement; the Student Health Center; the Center for Student Financial Services; and the Center for Student Life. Additional services are provided by various areas of the campus. In addition, many departments, divisions, and schools offer opportunities for student involvement in campus life.

Academic Advisement Center

The University Academic Advisement Center, located, Library, Palmer Wing 1043, provides advisement for students whose major is undecided. Special attention is given to general education, electives, and selection of an academic major. Walk-in requests are honored, depending on staff availability; however, students are encouraged to make appointments by calling (213) 343-3150.

Center for Career Planning and Placement

Career Planning

Choosing an academic major and a career is an important decision necessary for a complete and rewarding university experience. The Center for Career Planning and Placement provides individual and group sessions to assist students in making these decisions. Through the use of inventories, computerized guidance, and other available resources, counselors assist students in setting career goals and plans for the future. An alternative in career planning is continuing education in a graduate program and/or professional school. Many resources are located in the center's library, and professional counselors are available to assist in making important and timely career-related decisions.

Computer Assisted Guidance

The center offers a variety of computer and audio-visual tools to assist with planning and placement development.

Career Assessment

The Strong-Campbell Interest inventory and the Myers-Briggs Type Indicator are offered. Both instruments are computer profiled in the center and are answered on an answer sheet. A nominal fee is charged for each test.

System of Interactive Guidance and Information PLUS (SIGIPLUS).

SIGI-PLUS is a computer program designed to guide students through career decision-making, from planning to placement. Interests, values, and skills exploration, along with current employment information (job descriptions, income, outlook) and resume instructions, are included.

Career Resource Library

The center maintains a comprehensive collection of the following career materials and information:

- * Numerous career books related to majors.
- * Brochures about and annual reports of firms that recruit on campus.
- * Information about interview techniques, resume writing, sample cover letters, and job search methodology.
- * Nationwide collection of college and university graduate program catalogs.
- * Career binders that describe a variety of occupations.
- * Study guides for admission tests for graduate and professional schools.

* **Civil service information.**

* Organization and personnel directories.

* Salary surveys and labor statistics.

* Videotaped presentations. Various topics include interviewing, SIGI-PLUS orientation, and employer information.

Internships

An internship offers students hands-on experience in their major discipline. Internship information is available in the Career Resource Library. Current internship openings are maintained in binders in the Career Center Lobby.

Student Employment

Student employment offers a great opportunity for students seeking part-time employment. There are two types of programs:

Student Assistants. Students who are enrolled half time or full time can apply for student assistant positions. Students are employed to assist faculty and staff by performing work on a part-time basis, maximum 20 hours per week, in many of the offices and departments on campus.

College Work-Study (CWS). This is a federal financial aid program intended to increase part-time employment opportunities and to assist financially eligible students. Determination of eligibility for the CWS award letter is made by the Center for Student Financial Services. Many CWS jobs are career related. These jobs may be located on campus or off campus. Job openings are listed by category on display boards in the Center for Career Planning and Placement.

Job Referral

Through the Job Referral program, a wide range of vacancies are made available to the campus community in business, industry, and civil service agencies. Job vacancies are listed in the Career Center and are updated daily.

Workshops

Various workshops assist students in their job search campaign; others assist freshmen and sophomores in making career decisions.

Educational Placement

This service assists students and alumni seeking career employment related to credential programs. Services include a placement file-forwarding service and a hotline listing vacant positions available to educational specialists. Information is available that describes the characteristics of school districts, current salaries, employment trends, and application procedures. A nominal **fee** may be charged for some of these services.

On-Campus Recruitment

The Career Center coordinates on-campus employment interviews for seniors and recent graduates with representatives of business, industry, government agencies, and school districts.

Alumni Services

The Alumni Services program allows Cal State L.A. alumni to avail themselves of career planning and employment services presently offered to enrolled students. An annual fee is charged to alumni.

Center for Student Financial Services

Financial Aid

The Center for Student Financial Services, which is located in Student Affairs 124, assists students in finding the resources to finance their education at Cal State L.A. To meet students financial needs, the center administers a variety of scholarships, grants, and work and loan programs. The center is open Monday-Friday for general questions. Financial aid advisers are available Monday through Thursday.

To apply for financial assistance, students must complete and submit a Free Application for Federal Student Aid (FAFSA) to be evaluated for financial aid programs. This form may be obtained in the Center for Student Financial Services, at any college financial aid office in California, or in high school guidance offices. All applicants are notified by mail about their eligibility for financial aid.

Financial Aid Programs

By submitting a completed a FAFSA, students are considered for:

Grants.

Federal or state government funds that do not have to be repaid.

Loans.

Federally funded student loans with low interest rates that students must repay starting six months after they graduate or drop below half-time status, depending on the contract.

Employment. On-campus student work opportunities offered by the College Work-Study Program. The Center for Career Planning and Placement assists in job placement.

Needs Analysis and Eligibility

Aid eligibility is determined from information submitted on the FAFSA. An analysis indicates how much the family is expected to contribute to a student's education for one academic year. A Congressionally-mandated formula used to determine financial need subtracts the expected family contribution from the estimated annual cost of education; the difference constitutes the student's financial need.

Scholarships

More than 300 scholarships are available to qualified students each academic year. Most are awarded to students already attending Cal State L.A., based on academic achievement, campus and/or community participation, and/or financial need. Some are for students enrolled in specific majors; others are open to qualified students in all majors.

Students should file a General Scholarship Application and submit two letters of recommendation to the Scholarship Office, Student Affairs 118, to automatically be considered for any scholarships for which they are qualified.

SCHOLARSHIPS AVAILABLE AT CAL STATE L.A.

School of Arts and Letters

Barnes and Noble

Art Department

Art Department Memorial
Joseph G. Uribe Memorial

Communication Studies Department

Hilton
Floyd J. Miller Memorial
Marcella Oberle
Brad Pye, Jr.

Paul T. Scott Award in Journalism

English Department

Wm. Leary and Irwin Swerdlow
Clayton and Patricia Matthews
Dorothy C. McKenzie Memorial
John A. Palmer Graduate
Potter-Raskin Fellowship
Frederick Shroyer Memorial Fellowship
Susan B. Wilstein Honor

Foreign Languages and Literatures Department

Florence Bonhard
Japanese Study

Music Department

Andreas-Jackson
Helen E. Culver
Carmen Dragon Memorial
Michael Feinstein Competition
Friends of Music/Asian
Friends of Music/Mary Levin Cutler
Friends of Music/Lu Elrod
Friends of Music/Woody Herman
Friends of Music/Stan Kenton
Friends of Music/Ellen and Hillard Kravitz, Founders
Friends of Music/Florence LaRue
Friends of Music/Richard McComb
Friends of Music/Susann McDonald
Friends of Music/Mona Paulee
Friends of Music/Leonard Pennario
Friends of Music/Dr. Robert Strassburg
Friends of Music/Harry Warren Memorial
George and Ira Gershwin Fellowship
Charles Hubbard Fellowship
Hugh E. Mullins Memorial Scholarship/Grant
Schubert Fellowship
Hayao Yoshimura Memorial
Zack Memorial

Philosophy Department

James Bright Wilson

Theatre Arts and Dance Department

Leighton K. Brill
Loretta Bunch
Friends of Dance
Boland Wilson

School of Business and Economics **

Accounting Department
American Institution of CPAs
Barnes and Noble
Donald J. Bohana
Warren Bray Fellowship
Edward L. Butterworth (Fedco)
E. Kennedy Cobb
William S. Davila (Vons Companies, Inc.)
Delta Nu Alpha Transportation Fellowship
Department of Economics and Statistics/Donald Moore
Farmers Insurance Group
Dorothy and Clyde Ford
Founders Savings and Loan Association

Jessie C. Gustarson
 Dave Holt-Anheuser Busch
 Raymond E. Klauer (May Co. of California)
 Louis A. Kwicker (Wherehouse Entertainment)
 Malcolm Leadership
 MBA Scholarships for Minority Candidates
 John Norby
 Mr. and Mrs. M.W. Proudfoot (The Broadway)
 Eve Rich (Contempo Casuals)
 Alfonso Schettini (Robinson's)
 Floyd R. Sigma Simpson Memorial
 Vance L., Stickell (Los Angeles Times)
 Wilfred C. Stroud (Strouds)
 Joseph T. Taylor Memorial
 Arnaldo Trujillo
 H. Jean Waldrop
 Julia Wilstein Memorial
 Howard and Frances Wood
 William Yingling III (Lucky Stores)

School of Education **

Georgia Mae Adams Memorial
 Mary Ann Alia Memorial
 Joyce Bourke Memorial
 California Retired Teachers Association, Los Angeles
 California Retired Teachers Association, Pasadena-Foothill
 California Retired Teachers Association, Laura E. Settle
 California State Association of Emblem Clubs
 David Chen
 Cleo Cook Memorial
 Friends of the School of Education
 Eduardo Gaytan
 Jason Daniel Graham
 Leroy and Marion Grant
 Mort Herz
 Andy and Phyllis Krinock
 Lena and Dominic Longo
 Longo Fellowship
 Fred Lull
 Susan Beyer Nichols Fellowship
 Numrich Family
 OBRA
 Nina Elloway Putnam Memorial
 James M. Rosser
 Trixie Ann and Delwyn G. Schubert
 Carol J. Smallenburg Fellowship
 Harry Smallenburg
 Margaret A. Thornton
 Mikio and Margaret Tochioka
 Marian E. Wagstaff
 Diane E. Watson

School of Engineering and Technology **

Alumni Association
 Barnes and Noble
 California Council of Civil Engineering and Land Surveyors
 Department of Water and Power
 Engineering Graduate Fellowship
 Fire Protection Administration
 Richard A. Griffin Memorial
 Richard J. Hoffman

Sean King Memorial
 Ralph Lockard
 Minority Engineering Program
 Dennis Monge
 National Action Council for Minorities in Engineering
 Parsons Brinckerhoff/DMJM
 Alex Radin/Electric Power
 Barbara and Clem Savant Sikand
 TRW/Coy
 David and Susan Wilstein
 Fred W. Zahrt Jr., Epsilon Pi Tau Memorial

** Scholarships in these schools may show a preference for students in a certain option or area of concentration within a particular major

School of Health and Human Services

Barnes and Noble
 Roybal Gerontology
 Child Development Program
 Association for Education of Young Children
 Friends of Child Development
 Marion and Louie Fiske Memorial

Communication Disorders Department

Robert L. Douglass
 Shirley Anne Fleming Memorial
 Elise Hahn
 Janet Jeffers
 Michael Rettinger Memorial Fellowship

Criminal Justice Department

Rosalyn Jung Memorial

Family Studies and Consumer Sciences Department

Edward L. Butterworth (Fedco)
 William S. Davila (Vons Companies, Inc.)
 Bertha Gregory Achievement Award
 Raymond E. Klauer (May Co. of California)
 Louis A. Kwicker (Wherehouse Entertainment)
 Mr. and Mrs. M.W. Proudfoot (The Broadway)
 Eve Rich (Contempo Casuals)
 Vance L. Stickell (Los Angeles Times)
 William Yingling III (Lucky Stores)

Health Science Department

Dominquez/Del Rey
 Saxon C. Elliot

Nursing Department

Alhambra Community Hospital
 Alpha Tau Delta
 American Association of Critical Care Nurses
 Associates for the Advancement of Nursing
 Auxiliary of Garfield Hospital
 California Nurses Association
 Council of Black Nurses
 Esther Walker Buccieri Fellowship
 Athalie Clark
 Dalby/Proudfoot Nursing
 Kaiser Permanente
 Los Angeles County Department of Health Services*

Minority Health Professions Education Foundation*
National Student Nurses Association
Louise Savage Memorial
Sigma Theta Tau
Frank and Helen Shepherd Memorial
Veterans Administration*

*Awards require commitment to work in designated facilities after graduation.

Physical Education Department

David "Deacon" Jones/Kellee Patterson
Dan Towler

School of Natural and Social Sciences

Barnes and Noble

Anthropology Department

David Miller

Biology Department

Ron and Nan Okum
Joseph Sacher Memorial

Chemistry and Biochemistry Department

Alpha Therapeutic Corp.

Lloyd N. Ferguson
Jack Spielman Memorial
TRW/Coy

Chicano Studies Department

Urban Pacific Development Corp.

Geography and Urban Analysis Department

Dennis Chong Memorial
Rosalva Garcia Memorial

Geological Sciences Department

Robert Bean
Chance and Dana
Robert Stone Fellowship
Martin L. Stout
Aaron Waters

History Department

Abd Al-Malik
Dr. and Mrs. David Miller
Howard Starret Memorial

Latin American Studies Program

David Miller

Mathematics and Computer Science Department

Charles Clark
Farmers Insurance Group
Lewis and Urner
Parsons Brinckerhoff/DMJM
TRW/Coy

Microbiology Department

Alpha Therapeutic Corp.

Lupe Elias-Exposito Memorial
Elizabeth Tamblyn Memorial

Physics and Astronomy Department

Larry Chu -Physics
John Munger
TRW/Coy

Political Science Department

Hector Elizalde

Psychology Department

Charles Wang

Sociology Department

David Miller
Professor Richard Otto Nahrendorf

General

Michael F. Abbadessa
Francesca Alexander
Alpha Gamma Sigma
Angel/Dodger Wives
Asian Support Group
Associated Students
Baseball, Men's
Basketball, Men's and Women's
Black Support Group
Helen Piral Brocklehurst
Cal State L.A. Outstanding Freshman Honors
Chinese-American Women
College Women's Club of Pasadena
Adolph Coors Company
CSU Scholarship Program for Hispanic Students
Emeriti Fellowship
Michael Estevez/Martin Sheen
Faculty Wives Special Fund
Farmers Insurance Group
Samuel Freeman Memorial
General Education Honors
General Motors
Golden State Minority
Graduate Equity Fellowship
John A. Greenlee
Hispanic Support Network
B.L. Hoyt Memorial
Martin Luther King - Associated Students
Rosemary Low
Yau-Kong Luk Memorial
Dr. Juanita Mantovani Memorial
Mattel
Maryann C. Moore Memorial
Belva Owens
Jacob M. Patlan
Phi Kappa Phi Honor Society
James R. Power and Mary Gardner Power
President's Scholarship Fund
Mabel Wilson Richards
Ruben Salazar - Associated Students

George P. Smith Memorial
 Soroptomist International of Alhambra - San Gabriel
 Derick and Yoko Tagawa/Lee Grant
 Elise Tashjian Memorial
 TELACU
 Trustees' Award for Outstanding Achievement

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 fees or tuition of any kind at any California State University campus, according to the Alan Pattee Scholarship Act, Education Code Section 68121. Students qualifying for these benefits are known as Alan Pattee scholars. For more information, contact the Cashiers Office, (213) 343-3630.

Center for Student Life

The Center for Student Life, with the main office in Student Affairs, Room 123, provides advisement to students interested in becoming involved in various campus organizations, programs, and activities. Services include advisement to clubs and organizations, new student orientation programs, coordination of special campuswide programming and events, student leadership training, campus and community service opportunities, and special support services for women.

Student involvement opportunities are provided in a variety of activities ranging from membership in small interest groups to service with faculty members and administrators on major policymaking committees. A wide variety of clubs, interest groups, commissions, councils, and committees gives all students a chance to participate in and contribute to day-to-day life on campus.

Students also are welcome to join in cocurricular activities sponsored by more than 100 student clubs and organizations. These groups function on campus under charter provisions established by the CSU Board of Trustees. The Center for Student Life administers these provisions to provide official university recognition of student organizations. These organizations represent every phase of student life-academic, social, cultural, religious, and political. Clubs related to academic programs are organized in such areas as education, engineering, foreign languages, social and political science, business, natural sciences, computer science, mathematics, psychology, and fine arts. Other clubs promote service to the campus and community and reflect the campus' culturally diverse student body.

Sororities and Fraternities

A traditional part of campus life for many Cal State L.A. students is membership in Greek organizations which offer the chance to meet new friends and participate in an extensive program of activities. In addition to social functions, these organizations are involved in various campus and community projects and provide housing for a limited number of their members.

Sororities

Alpha Sigma Tau
 Alpha Theta Pi
 Delta Zeta
 Kappa Zeta Phi
 Theta Gamma Chi
 Zeta Phi Beta
 Sigma Nu

Fraternities

Alpha Chi Phi
 Alpha Phi Omega
 Beta Omega Phi
 Phi Beta Sigma
 Phi Sigma Kappa
 Sigma Alpha Epsilon
 Zeta Beta Tau

New Student Orientation Programs

New student orientation programs are planned for new students of all class levels (including graduates) to introduce them to Cal State L.A. These programs are usually held shortly before registration; the dates appear in the *Schedule of Classes* each quarter. Participating students are welcomed by campus administrators and student leaders, given valuable information by faculty advisers, invited to participate in small group sessions with trained student leaders, and assisted in

registering for classes. Individual questions are answered and valuable contacts made. More information is available at the Center for Student Life, Orientation Office, phone (213) 343-3195.

Women's Programs

The Women's Resource Center provides a variety of useful information, referrals, and supportive services related to the needs of women. Programs include workshops, seminars, and discussion and support groups. In coordination with other on-campus and community agencies, the Women's Resource Center provides resources in such areas as career guidance, legal, referrals and health care. An important service of the Women's Resource Center is to provide a place where women can meet in an informal atmosphere of support and encouragement. All students are invited to participate in the activities of this center which is located in University-Student Union 455.

Educational Participation in Communities (EPIC)

EPIC is a student volunteer service that encourages Cal State L.A. student involvement in off-campus community service. EPIC volunteers gain valuable paraprofessional experience and personal development as tutors, hospital aides, teaching aides, counselors, probation officer aides, recreation leaders, etc. Several departments offer academic credit for student participation in community service activities. The EPIC office is located in the Career Center.

Learning Resource Center (LRC)

The Learning Resource Center (LRC), located in Library, Palmer Wing, 1040A, provides learning support services to help students succeed academically. The following services are included.

Learning Resources Program (LRP)

The Learning Resources Program (LRP) offers The Learning Resources Library and the Study Skills Workshops Program. The LRP is located in the LRC, phone (213) 343-3968.

Learning Resources Library

Self-paced learning materials are available in mathematics, writing, reading, study skills, vocabulary, and GRE and CBEST test preparation. Faculty place class-related support materials in the LRP library to supplement classroom instruction. High-speed cassette duplication facilities and audio cassette and video tape players are available for student use.

Study Skills Workshop Program

The LRC offers a schedule of study skills workshops each quarter about such topics as note taking, test taking, textbook reading, time management, term paper writing, motivation, and stress management. Schedules of current quarter workshop offerings are available at the LRC information window, Library, Palmer Wing 1040A.

Special Services Project

A federally funded program that operates under the auspices of the U.S. Department of Education, the Special Services Project (SSP) strives to assist participants in successfully pursuing a university degree by providing the necessary support services needed for success in college. Low income students, first generation college students, and students with disabilities are eligible for SSP services. The SSP assists participants in English as a second language, study groups, reading improvement, counseling and advisement. The SSP office is located in the LRC, phone (213) 343-3965.

Conversation Lab

Students whose first language is not English can practice English conversation skills in a friendly, informal setting from noon until 1 p.m. Monday through Thursday in the LRC Conversation Lab, Library, Palmer Wing 1051. Volunteer conversation lab assistants who are Cal State L.A. students, faculty, and staff members lead informal conversation groups with non-native speaking students to help them gain confidence and skill in English conversation.

Testing Center

The University Testing Center located in Library, Palmer Wing, 2097, phone (213) 343-3160, administers the American College Test (ACT), English Equivalency Examination (EEE), English Placement Test (EPT), Entry Level Math (ELM) exam, Graduate Management Admission Test (GMAT), Graduate Record Examination (GRE), Scholastic Aptitude Test (SAT), Test of English as a Foreign Language (TOEFL), the university's Writing Proficiency Examination (WPE) and placement examinations for chemistry, engineering, mathematics, and nursing courses. In addition, information bulletins for national and local testing programs such as the California Basic Educational Skills Test (CBEST), the Law School Admission Test (LSAT), etc., are available.

English Placement Test (EPT) and Entry Level Mathematics (ELM) Examinations.

The EPT and ELM are given once each quarter and are required before enrollment in English and Mathematics courses as described in the *Admission* chapter. The testing dates appear each quarter in the *Schedule of Classes* and are available in the Testing Center.

Writing Proficiency Examination (WPE)

Information about the Writing Proficiency Examination (WPE) is available in the University Writing Center, Located in Library, Palmer Wing, 2098. Students who receive a No Credit (NC) on the WPE must make an appointment to see a WPE consultant in the University Writing Center.

University Tutorial Program

Tutoring is provided free of charge to Cal State L.A. students in many general education and other undergraduate courses. Three types of tutoring are available:

- * One-to-one tutoring sessions in which students meet individually with a tutor on a scheduled weekly basis.
- * Group tutoring sessions in which two or more students meet as a group with a tutor on a scheduled weekly basis.
- * Drop-in tutoring sessions in which students can meet with tutors who are scheduled throughout the week to provide immediate tutoring in a variety of subjects.

Peer tutors assist students to become more confident, effective, independent learners. At the start of each quarter, a list of the courses for which tutoring is available is posted outside the Tutorial Program office in the LRC, Library, Palmer Wing 1062A, phone (213) 343-3971.

Student Health Services

Medical Services

The Student Health Center provides outpatient medical care, limited in scope and hours. Many services are available without charge such as examinations, diagnoses and treatment by licensed clinicians. At-cost fees are assessed for other services such as pharmaceuticals, laboratory tests, preventive dental care, and x-rays. Students may make appointments or receive further information regarding fees and the services offered by calling (213) 343-3300.

Upon entering the University, all new and returning students are required to present evidence of a negative tuberculin skin test or chest x-ray. Those who were born after January 1, 1957, must also present acceptable proof of measles and rubella immunizations. The tuberculin skin test and measles and rubella immunizations are available free of charge at the Student Health Center. There is an at-cost fee for the chest x-ray.

In the event of severe illness requiring hospitalization, students are referred to private or community facilities.

Because on-campus services may not meet year-round health needs of students, enrollment in a program of supplemental health insurance is recommended. Information about one such program is available at the Student Health Center.

Personal Counseling

The center is a place where you can receive individual short-term counseling for concerns such as personal adjustment, improving relationships, and clarifying alternatives. It is a place where individuals can explore their feelings, values, and concerns in an atmosphere of understanding and confidentiality. Students can make an appointment in person or by calling (213) 343-3300.

University Writing Center

The University Writing Center, located in Library, Palmer Wing 2098, provides individual and group tutoring, writing workshops, and other services to meet the writing needs of undergraduate and graduate students. Both one-time and standing appointments are available. Writing Center tutors have been trained to provide constructive feedback and to assist students in recognizing and overcoming their writing problems. Tutors help students to get started, generate ideas, organize materials, and revise and proof read papers. Learning to write well is an important intellectual skill and one that is essential to achieving academic and career goals. The Writing Center staff is available to all students who desire feedback on their writing skills and provides consultation to assist faculty in effectively integrating writing in their classes. More information and appointments are available by calling (213) 343-5350.

Other Services and Programs

Child Development Center

The Anna Bing Arnold Child Care Center provides part-time or full-time day care at a nominal cost for children between the ages of two and five years whose parents are students, staff, or faculty at Cal State L.A. The center is located at 2300 Levanda St. in Los Angeles, adjacent to the campus. The attractive, residential style building with a large, fully fenced yard was designed to serve as a learning environment for Cal State L.A. students as well as for children. Applications and information are available by calling (213) 343-2470.

International Student Services

Cal State L.A. is home to one of the largest populations of international (visa) students in the U.S. From more than 120 countries, students choose Cal State L.A. because of its excellent undergraduate and graduate programs, its ample on-campus housing (including the International House), its location in the heart of Los Angeles County, and the professional services provided by International Student Services. In addition, a growing number of visiting scholars select Cal State L.A. as a site to engage in specialized teaching or research assignments.

For the benefit of Cal State L.A. faculty and students, International Student Services, located in Administration 127, phone (213) 3433170, maintains a full-service study abroad office with the following five divisions:

Foreign Student and Scholar Advising Services .

Provides assistance to visa students and scholars in such areas as academic and cultural adjustment and social and recreational activities.

Immigration Counseling Services .

Provides assistance to visa students, foreign scholars, and foreign faculty with visa issuance (F, H, and J visas, etc.), maintaining student status, and matters involving the U.S. Immigration Service.

Study Abroad Advising Services. For Cal State L.A. students and faculty, International Student Services maintains a full-service study abroad office. Students, staff, and faculty may take advantage of the advising services for study abroad. Program and services include:

- * The CSU International Programs (IP)
- * Fulbright and Rotary fellowship programs
- * Independent overseas study options (e.g., language schools) * International Student Exchange Program (ISEP)
- * International student identification cards
- * Special travel/study and exchange programs

Practical Training Services . Students eligible for practical training may seek help from Practical Training Services to identify practical training employers and to help monitor their work experience. Employers may call upon Practical Training Services for assistance in locating eligible students and in establishing close ties between the visa student and business communities.

Special Programs and Services . Services include housing the Southern California/Argentina (Buenos Aires) chapter of the *Partners of the Americas*, sponsoring the Cal State L.A. chapter of *Phi Beta Delta*, the honor society for international scholars, and providing consulting services to education, government, business, and industry about international education matters.

Office for Students with Disabilities

The Office for Students with Disabilities (OSD) provides services designed to make the educational and social experiences of students with disabilities as similar as possible to those of students without disabilities.

All students with verified disabilities, both permanent and temporary, are provided appropriate disability-related services from the following list:

- * Assistance with application for admission
- * Orientation to services available through OSD
- * Priority registration for classes
- * Program change assistance
- * Handicapped parking privileges
- * Referrals to additional services on and off campus
- * Referrals to off-campus resources
- * Administers testing to verify students with learning disabilities
- * Referral to on-campus computer labs with adaptive equipment
- * Disability management counseling
- * Special test-taking accommodations
- * Note takers
- * Readers
- * Interpreters (sign language and oral)
- * Test proctors
- * Lab assistants

In addition the services provided by OSD, the following equipment is available for loan to students with disabilities:

- * Wheelchairs (electric and manual)
- * Special tape recorders for students who are blind or learning disabled
- * Visualek machines
- * Braille-printer for computer
- * Braille
- * Speech synthesizers for campus computers
- * Campus minibus with wheelchair lift
- * Optacon
- * Telecommunication Device for the Deaf (TDD)
- * FM amplification systems for the hearing impaired

The Office for Students with Disabilities is located in Student Affairs 115, phone (213)343-3140 (TDD 343-3139).

Student Housing-The Residential Community

The residential community at Cal State L.A. offers an excellent "home away from home" for more than 1,000 students. One hundred thirty-two two-bedroom and 64 four-bedroom suites are fully furnished (including carpeting and drapes throughout), air conditioned, and equipped with stoves, microwave ovens, and refrigerators.

Within the residential community are two community centers, each containing office space, a recreation/games room, lounge, mail and laundry facilities, and conference meeting rooms. In addition, specially designated, fenced, well-lit parking areas are available, as are separate basketball and volleyball courts, both lit for night use.

There are 27 live-in staff members (25 resident assistants and two resident life coordinators) whose primary function is to help students and their neighbors build and maintain a sense of community.

Students are encouraged to apply for on-campus housing. The staff welcomes phone calls, visits, and mail inquiries. For more information and application materials, contact the Office of Residence Life and Housing Services at 5300 Paseo Rancho Castilia, Los Angeles, CA 90032-8647, phone (213) 343-4800.

Assistance in locating off-campus housing is also provided by Residence Life and Housing Services. The office maintains files that contain names, addresses, telephone numbers, rental prices, and other pertinent information about privately owned living accommodations. Listings include rooms with or without board, work in exchange for room and board, furnished and unfurnished apartments and houses, and opportunities to share. Service is limited to maintenance of lists; no rating or inspection service is provided and Cal State L.A. does not arbitrate negotiations between householders and prospective tenants.

University-Student Union

The University-Student Union (U-SU), phone (213) 343-2450, is the focal point of extracurricular interaction for the university community. Students, staff, faculty, alumni, and invited guests participate in social, cultural, recreational, and educational activities. Facilities and services include the Rack 'n' Roll game room, Le Care (a specialty coffee-pastry bar), an information/ticket service, the Student-Alumni Lounge, and a variety of S.U*P.E.R-sponsored programs described below. The Union also offers a full range of meeting rooms, information services, lounge and study areas, employment opportunities, as well as student activities and special events.

Board of Directors. Policy and governance is established by the University-Student Union Board of Directors which is composed of thirteen voting members including seven students. The board develops administrative policies that affect the management of the building. Much of the board's work is conducted through a committee structure that includes fiscal, personnel, space allocation and building usage, S.U.P.E.R, and executive committees. Meetings are open to the public, and attendance is encouraged.

Central Reservations. This office coordinates all nonacademic scheduling of campus facilities for on- and off-campus groups. Meeting rooms, conference facilities, audio-visual equipment, and parking for conferences, retreats, receptions, and social events can be reserved through this office.

Student Union Programming, Entertainment, and Recreation Committee. S.U.P.E.R plans and implements a wide variety of student activity programs. Planned and coordinated by students, these programs include comedy nights, film series, social issues series, lectures, dramatic performances, concerts, coffee house entertainment, and special events such as an annual Haunted House and Mardi Gras.

A nine-member planning committee meets to review, select, plan, and evaluate programs for the campus community. Students who volunteer for S.U.P.E.R learn skills such as budgeting, contract negotiation, organization, evaluation, and planning and have a chance to represent Cal State L.A. at regional and national conferences. Detailed information is available at the S.U.P.E.R office, University-Student Union 234, phone (213) 343-5110.

Other offices and services located in the University-Student Union include the Cal State L.A. Alumni Association, the Annex (a campus convenience store), the Associated Students Incorporated (ASI) offices and computer lab, the Cal State L.A. Federal Credit Union, the Center for Student Life offices, the Pan-African Student Resource Center, Pumpernikles Deli, the Pub, the University Square Bookstore, and University Travel Services.

University Square Bookstore

The University Square bookstore, operated by University Auxiliary Services, Inc., is located on the street and lower levels of the student union. Textbooks, other books, software and hardware items,

study materials and supplies, gift items, a copy center, and the Annex (a convenience store with various food and sundry items) are available.

University Travel Services

The travel agency offers all types of air and land, cruises, charters, student fares, and other travel services and is located on the first floor of the union, phone (213) 343-4999. As part of the Association of California University Travel Agents, the agency provides numerous student discount travel programs.

Veterans' Services

Cal State L.A. is approved for the training of veterans of the military services and their dependents under educational assistance programs established by the state and federal governments. Authorization for training under all federal bills must be obtained from the Veterans Administration through its regional office at 11000 Wilshire Boulevard, Los Angeles, CA 90024. Veterans with no prior training under the G.I. bills are urged to request their letter of eligibility at least two months before enrolling. Those transferring from another school should submit their transfer request at least one month before enrolling.

The Veterans' Services Office, located in Administration 409, (213) 343-3948, provides enrollment certification for financial benefits and serves as a liaison between the university and the VA regional office about benefit payments and advisement about current benefits. Information about changes in legislative regulations and procedures also is available.

Children of Disabled Veterans

Students who qualify as children of certain disabled veterans of U.S. military services may be exempted from paying any student services portion of the registration fees, according to the *California Education Code*. Information about eligibility requirements and applications for waiver of these fees are available in the Office of Veterans' Services.

Student Activities

Special Interest Groups

Art Exhibitions

The Department of Art schedules exhibits in its gallery of works by established professional artists as well as by students and faculty. Graduate student exhibitions are held at the end of each quarter.

Communication Activities

Forensics teams participate in debate and individual events in prominent intercollegiate tournaments. Students interested in broadcast journalism produce a campus television news program. The Reader's Theatre group offers frequent public presentations. Students in the journalism program produce the *University Times*. Students may earn credit for participation in these programs by enrolling in appropriate activity courses in the Department of Communication Studies.

Dance

The *University Dance Ensemble* offers the student experiences in performing, choreographing, costume designing, lighting, and composing sound for dance. Performances vary in number each year and range from mini-concerts to full productions. Membership is open to anyone who has a strong interest in dance theatre and is able to fulfill the purposes and functions of the organization.

Students who participate must enroll in dance courses in the Department of Theatre Arts and Dance. In the fall and spring quarters, students interested in dance performance visit four local elementary and high schools, presenting lecture-demonstrations for children and youth.

Intramurals

The Department of Physical Education offers a variable selection of intramural sports and activities for all men and women at Cal State L.A. Opportunities range from varied recreational interests to highly competitive Intramural Leagues. Students may enroll for credit in an intramurals course, PE 110.

Musical Events and Organizations

The Associated Students cooperates with the Department of Music in offering an extensive program of musical events. Students enroll for academic credit in music activity courses as members of various performance organizations. Each organization has a regular performance schedule and performs several times each year both on and off-campus.

Some concerts are held during the noon hour; others are scheduled at night or on weekends. Membership is open to all students who wish to participate. The Chamber Singers, Concert Choir, Jazz Ensemble I, Vocal Jazz Ensemble, and Woodwind Ensemble require an audition. Music organizations include:

Musical Organization	Course Number
Brass Ensemble	MUS 422
Chamber Singers	MUS 425
Concert Choir	MUS 326
Jazz Ensemble	MUS 424
Jazz Ensemble (<i>small</i>)	MUS 429
New Music Ensemble	MUS 438
Opera Workshop	MUS 426
Percussion Ensemble	MUS 423
String Ensemble	MUS 420
Symphonic Band (includes a Wind Ensemble)	MUS 320
Symphony Orchestra	MUS 321
Vocal Jazz Ensemble	MUS 328
University Chorus	MUS 327
Woodwind Ensemble	MUS 421

Student Publications

A wide variety of student publications represents the myriad academic and professional interests of Cal State L.A.'s student body. A partial list of these publications appears below. For information about being involved in-or receiving-a particular publication, interested students should contact the appropriate department or office indicated below.

Publication	Department/Office
California Anthropologist	Anthropology
Cal State L.A. Engineer Statement	Engineering and Technology
The Looking Glass	English
The Literary Gazette	Psi Chi/Psychology
University Times	Foreign Languages and Literatures
Perspectives: A Journal of History	Communication Studies
	Department of History

Theatrical Productions

The Department of Theatre Arts and Dance offers comprehensive programs in play and dance production and children's theatre. The department presents ten or more major productions during the year, including musicals, dance concerts, and a series of student productions in the 7/11 - Brownbag Theatre and Theatre for the 21 st Century projects. All students are eligible to audition for plays or apply for backstage assignments. Students may earn credit by enrolling in TA 100 or 300 and, when cast in major productions, must enroll in TA 310.

ADMISSION

California State University, Los Angeles undergraduate admission requirements are set in accordance with Title 5, Chapter 1, Subchapter 3 of the *California Code of Regulations*. Prospective applicants who are unsure of the requirements are encouraged to consult a high school or community college counselor or to contact Cal State L.A.'s Office of Admissions and University Outreach, Student Affairs 101, phone (213) 343-CSLA.

Cal State L.A. admits students as first-time freshmen, those from community colleges and degree-granting colleges and universities as undergraduate transfer students, and those who hold an acceptable baccalaureate as postbaccalaureate or graduate students. Categories and requirements for admission to postbaccalaureate and graduate study are stated in the Graduate Programs section.

Importance of Filing Complete, Accurate, and Authentic Application for Admission Documents

Prospective students must supply complete and accurate information on the application for admission, residence questionnaire, and financial aid forms. Further, applicants 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, Title 5 *California Code of Regulations*).

Residence Determination

The determination of whether students qualify as legal residents of California for admission and tuition purposes is made by a review of information in the residence questionnaire submitted by all applicants with their application for admission. For a summary statement about the principal rules and exceptions regarding residence determination see Appendix B.

Health Screening

All new and readmitted students born after January 1, 1957, will be notified of the requirement to present proof of measles and rubella immunizations. This is ~~not~~ an admission requirement, but shall be required of students by the beginning of their second term of enrollment at Cal State L.A. or any other CSU campus. Proof of measles and rubella immunizations shall also be required for certain groups of enrolled students who have increased exposure to these diseases. Verification of a negative tuberculin test or chest x-ray within the past year shall also be required.

Undergraduate Admission Requirements

First-Time Freshman Applicants

Applicants who have completed no college work will be considered for admission as first-time freshmen under one of the provisions described on the next page.

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

- * are a high school graduate,
- * have a qualifiable eligibility index (see below), and
- * have completed with grades of C or better the courses in the comprehensive pattern of college preparatory subject requirements (see Subject Requirements). Courses must be completed prior to your first enrollment in The California State University.

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 Scholastic Aptitude Test (SAT). Your grade point average is based on grades earned during your final three years of high school (excluding physical education and military science) and bonus points for approved honors courses. (see)-Honors Courses).

Up to eight semesters of honors courses taken in the last two years of high school can be accepted. Each *unit* of A in an honors course will receive a total of 5 points, 4 points: C, 3 points.

You can calculate the index by multiplying your grade point average by 800 and adding your total score on the SAT. Or, if you took the ACT, multiply your grade point average by 200 and add ten times the composite ACT score. If you are a California high school graduate (or a legal resident of California for tuition purposes), you need a minimum index of 2800 using the SAT or 694 using the ACT. The table in Appendix A shows the combinations of test scores and averages required.

If you neither graduated from a California high school nor are a resident of California for tuition purposes, you need a minimum index of 3402 (SAT) or 822 (ACT).

Applicants with a grade point average higher than 3.0 (3.6 for nonresidents) are exempted from the test requirement. However, applicants are urged to take the SAT or ACT because all campuses use test results for advising and placement purposes.

You will qualify for regular admission when the university verifies that you have a qualifiable eligibility index and will have completed the comprehensive pattern of college preparatory subjects and, if applying to an impacted program, meet supplementary criteria.

Subject Requirements

The California State University requires that first-time freshman applicants complete, with grades of C or higher, a comprehensive pattern of college preparatory study totaling 15 units. *Unit* is one year of study in high school.

- * English, 4 years
- * *Mathematics, 3 years:* algebra, geometry, and intermediate algebra.
- * *U.S. History, or U.S. History and government, 1 year.*
- * *Science, 1 year with laboratory:* biology, chemistry, physics, or other acceptable laboratory science.
- * *Foreign language, 2 years* in the same language (or demonstration of equivalent competence).
- * Visual and performing arts, 1 year: art, dance, drama/theater, or music.
- * Electives, 3 years: courses selected from English, advanced mathematics, social science, history, laboratory science, foreign language, visual and performing arts, and agriculture.

If you have completed at least 15 college preparatory units, you may offset a one-unit shortage in one subject area by completing an extra unit in another subject area. This option is available from fall 1992 through summer quarter 1995. Although you will be granted regular admission under this option, you are strongly advised to complete all courses in the college preparatory pattern, especially mathematics and English so that you will be adequately prepared to begin your university studies. Please see your high school counselor for further information.

Foreign Language Subject Requirement. This subject requirement may be satisfied by applicants who demonstrate competence in a language other than English equivalent to or higher than expected of students who complete two years of foreign language study. Consult your school counselor or any CSU campus admissions or relations with schools office for further information.

Subject Requirement Substitution for Students with Disabilities. Student applicants with disabilities are strongly encouraged to complete college preparatory course requirements if at all possible. Applicants who are judged unable to fulfill a specific course requirement because of a disability may substitute alternative college preparatory courses for specific subject requirements. Students who are deaf and hearing impaired, are blind and visually impaired, or have Learning

disabilities may, in certain circumstances, qualify for substitutions for the foreign language, laboratory science, and mathematics subject requirements.

Substitutions may be authorized on an individual basis after review and recommendation by the applicant's academic adviser or guidance counselor in consultation with the director of a CSU program for students with disabilities. Although the distribution may be slightly different from the course pattern required of other students, students qualifying for substitutions will still be held for 15 units of college preparatory study. Students should be aware that course substitutions may limit later enrollment in certain majors, particularly those involving mathematics. For further information and substitution forms, please contact the Director of Services for Students with Disabilities at your nearest CSU campus.

Honors Courses

Grades in up to eight semester courses designated as honors courses in approved subjects and 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, for F grades, none.

College Preparatory Courses Recommended

Most academic advisers agree that preparation for university study includes preparation in subjects beyond English and mathematics. Bachelor's degree curricula build upon previous study in the natural sciences, social sciences, visual and performing arts, foreign languages, and the humanities. Students planning to major in mathematics, the sciences (including computer science), engineering, premedicine, other science-related fields, business, or economics should complete four years of college preparatory mathematics. Students in the social sciences and preprofessional fields of study should include at least three years of college preparatory mathematics in their studies. Further, all students should include English and mathematics in the final year of high school.

Provisional Admission

Cal State L.A. may provisionally admit first-time freshman applicants based on academic preparation through the junior year of high school and senior year planned courses. The campus will monitor the senior year work to ensure that those so admitted complete their senior year course work satisfactorily-including required college preparatory subjects-and graduate from high school.

Foreign High School Graduates

Applicants, except international (visa) students, who are graduates of secondary schools in foreign countries must be judged to have academic preparation and abilities equivalent to those of eligible California high school graduates. Cal State L.A. reviews the previous records of all such applicants; only those with promise of academic success equivalent to that of eligible California high school graduates are admitted. Such applicants are not required to take the ACT or the SAT except when specifically requested to do so.

Undergraduate Transfer Applicants

You will qualify for admission as a transfer student if you have a C (2.0) grade point average 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:

- * you meet the freshman admission requirements in effect for the term to which you are applying (see "Freshman Requirements" section).
- * you were eligible as a freshman at the time of high school graduation and have been in continuous attendance in an accredited college since high school graduation or,
- * you were eligible as a freshman at the time of high school graduation except for the subject requirements, have made up the missing subjects, and have been in continuous attendance in an accredited college since high school graduation.
- * you have completed at least 56 transferable semester (84 quarter) units and made up any

missing subject requirements (see "*Making Up Missing College Preparatory Subjects*"). Nonresidents must have a 2.4 grade point average (A= 4.0) or better.

For this requirement, transferable courses are those designated baccalaureate credit by the offering college or university.

Making Up Missing College Preparatory Subject Requirements

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

- * Complete appropriate courses, each with a C grade or higher, in adult school or high school summer sessions; or
- * Complete appropriate college courses each with a C grade or higher; one college course of at least three semester or four quarter units will be considered equivalent to one year of high school study; or
- * Earn acceptable scores on specified examinations.

Applicants with 56 or more transferable semester (84 quarter) units may complete, with a C grade or higher in each course, one of the following alternatives:

- * *1987 or earlier high school graduates*: the CSU general education requirements in communication in the English language (at least 9 semester units) and mathematics (usually 3 semester units);
- * *1988 or later high school graduates*: complete a minimum of 30 semester (45 quarter) units to be chosen from courses in English, arts and humanities, social science, science, and mathematics of at least equivalent level to courses that meet general education or transfer curriculum requirements. Each student must complete all CSU general education requirements in communication in the English language (at least 9 semester units) and mathematics (usually 3 semester units).

Please consult any CSU admissions office for further information about alternative ways to satisfy the subject requirement.

Test Requirements

Freshman and transfer applicants who have completed fewer than 56 semester or 84 quarter units of transferable college work must submit scores unless exempt (see Eligibility Index on previous page) from either the Scholastic Aptitude Test of the College Board (SAT) or the American College Test Program (ACT). If you are applying to an impacted program and are required to submit test scores, you should take the test no later than early December if applying for fall admission or no later than November if applying to San Luis Obispo. Test scores are also used for advising and placement purposes. Registration forms and the dates for either test are available from school or college counselors or from a campus testing office. Cal State L.A.'s Testing Office is located in the Learning Resource Center, Library, Palmer Wing 1040C, phone (213) 343-3160. Or, you may write to:

The College Board (SAT) Registration Unit,
Box 592 Princeton, New Jersey 08541
(609) 771-7888

American College Testing Program (ACT) Registration Unit,
P.O. Box 168
Iowa City, Iowa 52240
(319) 337-2370

TOEFL Requirement

All undergraduate applicants, regardless of citizenship, who 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 must present a score of 500 or above on the Test of English as a Foreign Language. Some campuses require a score higher than 500.

Systemwide Placement Tests Required of Most New Students

The CSU requires that new students be tested in English and mathematics after they are admitted. These are not admission tests, but a way to determine if you are prepared for college work and, if not, to counsel you how to strengthen your preparation. You might be exempted from one or both of the tests if you have scored well on other specified tests or completed appropriate courses. These tests are described later in this chapter in the section titled *Undergraduate Tests and Examinations*.

Credit for Nontraditional Learning Experiences

Credit for certain nontraditional learning experiences may be used in determining eligibility and credit allowances of undergraduate applicants. These nontraditional credit allowances are listed and described below. A more detailed analysis of each category appears later in this chapter under *Evaluation of Transfer Credit*.

CATEGORIES AND CREDIT ALLOWANCES

- * Baccalaureate-level course credit certified by the Defense Activities in Nontraditional Education Support (DANTES) yields a maximum of 36 quarter units.
- * Advanced Placement examinations of the CEEB with scores of 3, 4, or 5 yield 9 quarter units for each examination.
- * For credit allowance for standardized external examinations, including CLEP, Advanced Placement, the CSU English Equivalency Exam, the American Chemical Society Cooperative Examination, see the explanations later in this chapter.
- * For basic training in military service, 9 quarter units are awarded for 1 year or longer of active duty and 4 1/2 quarter units for 6 months to one year.
- * Civilian and military courses and schools recommended for credit by the American Council on Education's Commission on Educational Credit and Credentials yield a maximum of 12 quarter units.

International (Visa) Student Admission Requirements

The CSU must assess the academic preparation of foreign (visa) students. For this purpose, "foreign students" include those who hold U.S. visas as students, exchange visitors, or in other nonimmigrant classifications.

The California State University uses separate requirements **and** application filing dates in the admission of international (foreign) students. Verification of your English proficiency (see the section of TOEFL requirement for undergraduate applicants), financial resources, and academic performance are all important considerations in your admission. Academic records from foreign institutions must be on file at least eight weeks before registration for the first term and, if not in English, must be accompanied by certified English translations.

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

International (visa) applicants and all others who are **not permanent** U.S. residents will be admitted to Cal State L.A. only if they meet one of the following sets of requirements:

- * Completion of two years (84 quarter units or equivalent) of acceptable college work with a minimum 2.4 grade point **average** as evaluated by the university (A= 4.0) and a minimum 550 score on the Test of English as a Foreign Language (TOEFL); or
- * Graduation from a foreign high school where the language of instruction was not exclusively English, a minimum 2.4 grade point average in any college work attempted (as evaluated by the university), and a minimum 550 TOEFL score. The academic eligibility requirement for high school work is the same as for graduates of U.S. high schools outside California, although submission of ACT or SAT scores is not necessary.

- * Graduation from a foreign high school where the language of instruction was not exclusively English and a minimum 550 TOEFL score. The academic eligibility requirement is the same as for graduates of high schools outside California, although submission of ACT or SAT scores is not necessary. Foreign high school grade point average and course equivalencies will be determined by the university.

Applicants who have attended full time for at least three years either an accredited U.S. college or university or a foreign high school, college, or university where the exclusive language of instruction was English are exempted from the TOEFL requirement.

Variation from the TOEFL requirement will be considered by the Director of Admissions and University Outreach for applicants who have satisfied one of the following conditions:

- * Graduation from a California high school after completion of at least one full year of academic course work. The academic eligibility index requirement is the same as for other graduates of California high schools. Submission of a TOEFL score may be required; or
- * Graduation from another U.S. high school, an accredited international high school, or a U.S. dependents' high school overseas after completion of at least one full year of academic course work. The academic eligibility requirement is the same as for U.S. residents who are graduates of U.S. high schools outside California. Submission of a TOEFL score may be required; or
- * Graduation from a high school in a country where the exclusive language of instruction is English. The academic eligibility requirement is the same as for graduates of U.S. high schools outside California, although submission of ACT, SAT, or TOEFL scores is not necessary. Foreign high school grade point average and course equivalencies will be determined by the university.

In exceptional cases, the Director of Admissions and University Outreach may waive the TOEFL score requirement if recommended by the applicant's proposed major department or division. Variation from the minimum TOEFL score will be considered only for applicants with a B (3.0) grade point average as evaluated by the Admissions Office and whose TOEFL score is not more than ten points below 550.

The U.S. Immigration and Naturalization Service (INS) requires that F-1 visa undergraduate students carry a minimum study load of 12 quarter units. Visa students must have advance proof of adequate financial resources, be in good health, and comply with all Cal State L.A. and INS regulations. Consult International Student Services, (213) 343-3170, for information about visas, housing, and related matters. Application forms for international students, available at the Admissions Office, should be submitted during the initial filing period for the desired quarter of entry.

General Guidelines for Foreign Records

Applicants with foreign academic work are required to submit official copies of academic records, along with a certified English translation. Academic records should include: secondary school records; yearly records from each college or university attended, indicating the number of hours per semester or per year devoted to each course and the grades received; and official documents that confirm awarding of the degree, with the title and date.

All official documents submitted become the property of the university. The acceptability of any foreign work will be determined by the university.

Second Baccalaureate Applicants

Students who have earned a baccalaureate from an accredited institution may earn a second baccalaureate at Cal State L.A.; they are admitted as undergraduates when they specify such an objective on their application. Admission for all other postbaccalaureate objectives is described in the *Graduate Programs* section.

Special Admission Categories Adult Students

As an alternative to regular admission criteria, applicants **who are** twenty-five years of age or older may be considered for admission as adult students if they meet the following conditions:

- * Possess a high school diploma (or have established equivalence through either the Tests of General Educational Development or the California High School Proficiency Examination); *and*
- * Have not been enrolled in college as full-time students for more than one term during the past five years; *and*
- * If they have attended any college in the last five years, have earned a C (2.0) average or better.

Consideration is based on a judgment about whether the applicant is as likely to succeed as regularly admitted freshmen or undergraduate transfer students and will include an assessment of basic English language and mathematical computation skills. Questions should be directed in writing to the Director of Admissions.

Educational Opportunity Program (EOP)

The Educational Opportunity Program (EOP) provides assistance to undergraduate students who are disadvantaged because of their economic or educational background. EOP serves California residents who do not meet regular admission criteria, as well those who qualify for regular admission, if they have a history of low income and need academic and financial assistance.

In addition to special admission procedures, the program provides specialized orientation, financial assistance, advisement by professional and peer counselors (usually upper division students), tutoring, and access to specialized courses. Because not all EOP applicants can be guaranteed admission, alternative opportunities should be investigated. Applications and information may be obtained from the EOP Office, Student Affairs 215, (213) 343-4EOP

Early Entrance Program (EEP)

Cal State L.A.'s Early Entrance Program (EEP) serves highly gifted students who need the academic challenges of a university environment to develop intellectually, but who are chronologically younger than traditional undergraduates and who have not yet graduated from high school. Students who are less than 14 years old at the start of the fall quarter but who have at least started the seventh grade are candidates for the program. Participation is open by invitation, and admission is based on performance in an academic assessment inventory administered by the program director, personal interview of the applicants and their parents, and, when appropriate, interview of the gifted student program coordinator or principal of the applicants' home school.

EEP students begin by taking a limited number of units at Cal State L.A., while still enrolled at their home school. Those whose academic and personal performances are judged adequate may progress to full-time university enrollment on a gradual basis. Regular meetings with the program director are mandatory, and participation in scheduled activities is required. EEP students may apply for scholarship assistance and are eligible for the General Education Honors Program when they have become full-time students. For further information contact the EEP director at (213) 343-2250.

High School Students

Students still enrolled in high school are considered for enrollment in certain special programs if recommended by their principal and the appropriate campus department or division chair and if their preparation is equivalent to that required of eligible California high school graduates. Such admission is only for a given program and does not constitute the right to continued enrollment. Two such Cal State L.A. programs are described in the following paragraph.

Accelerated College Enrollment (ACE) and Pre-Accelerated College Enrollment (PACE)

The ACE program is designed for high school seniors and juniors and the PACE program is available for mentally gifted or talented ninth and tenth graders. Through the ACE and PACE programs, eligible students enroll in selected regular college courses and receive college credit for them. These programs are coordinated by the Associate Director of Admissions and University

Outreach Student Affairs 101, (213) 343-CSLA. Admission to these programs does not necessarily constitute the right to continued enrollment.

High School Nongraduates

Applicants over 18 years of age who have not graduated from high school are considered for admission only when their preparation in all other ways is such that Cal State L.A. believes their promise of academic success is equivalent to that of eligible California high school graduates. These applicants are required to submit General

Educational Development (GED) test scores in order to establish high school graduation equivalence, and an official high school transcript that shows all work completed to the last date of attendance. Scores on the ACT or SAT also are required.

Veterans

Veterans of U.S. military service who are California residents may be admitted as either first-time freshmen or undergraduate transfers, even though such applicants are not otherwise eligible. Veterans who wish to be admitted under this provision should contact the Admissions Office.

Applicants Not Regularly Eligible

Applicants not admissible under one of the above provisions should enroll in extension courses, a community college, or another appropriate institution in order to meet eligibility requirements. Only under the most unusual circumstances and by authorized action will such applicants be admitted to Cal State L.A. without additional academic preparation as described above.

Undergraduate Application Procedures

Prospective students, applying for part-time or full-time programs of study, in day or evening classes, including those seeking a second or subsequent bachelor's degree, must file a complete application as described in the CSU application booklet, within the appropriate filing period, at the campus of first choice. The \$55 nonrefundable application fee should be in the form of a check or money order payable to *The California State University* and may not be transferred or used to apply to another term.

An alternate choice campus and major may be indicated on the application, ~~but~~ *applicants should list, as alternate campus only, a CSU campus that offers the major they desire.* Generally, an alternate major will be considered at the first choice campus before an application is redirected to an alternate choice campus.

A request for change of campus after an application has been filed should be directed to the new choice of campus for approval and determination that space is available. If the request can be met, the new first choice campus will direct the request to the original first choice campus for a transfer of the application. Such a change cannot be guaranteed, but will be accomplished if possible, and only for the term for which the application was filed.

The CSU application booklets may be obtained at Cal State L.A. in Student Affairs 101, from the admissions office of any other CSU campus, or at any California high school or community college.

Use of Social Security Number

Applicants are required to include their Social Security account number on CSU applications for admission pursuant to the authority contained in Title 5 *California Code of Regulations*, Section 41201. The Social Security account number is used to identify records pertaining to the student and to identify the student for purposes of financial aid eligibility and disbursement and the repayment of financial aid and other debts payable to the institution. Cal State L.A. uses the student's Social Security number as the official means of student identification and refers to the number as the student's Student Identification Number (SID). On most student forms, the name is abbreviated as *SID*.

APPLICATION FILING PERIODS

Applications

Student

Terms in 1993-1994	First Accepted	Notification Begins
Summer Quarter 1993	Feb. 1, 1993	March 1993
Fall Quarter 1993	Nov. 1, 1992	Dec. 1992
Terms in 1993-1994	Applications First Accepted	Student Notification Begins
Winter Quarter 1994	June 1, 1993	July 1993
Spring Quarter 1994	Aug. 2, 1993	Sept. 1993
Terms in 1994-95	Applications First Accepted	Student Notification Begins
Summer Quarter 1994	Feb. 1, 1994	March 1994
Fall Quarter 1994	Nov. 1, 1993	Dec. 1993
Winter Quarter 1995	June 1, 1994	July 1994
Spring Quarter 1995	Aug. 1, 1994	Sept. 1994

Filing Period Duration

Each campus accepts applications until capacities are 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 Admissions Office for current information.

International (Visa) Applicants

Application filing periods for international (visa) applicants differ from those for domestic applicants because of additional time required in evaluating records and preparing necessary documents for the Immigration and Naturalization Service (INS). The filing periods are established as follows:

Quarter	Application Filing Period
Fall Quarter	November 1-30
Winter Quarter	June 1-30
Spring Quarter	August 1-31

The Director of Admissions and University Outreach may waive this advance application requirement if circumstances warrant. **In addition** to the academic requirements outlined earlier in this chapter, international students must have competence in the English language, financial resources adequate to provide for all expenses during their period of study at Cal State L.A., and must be in good health.

Application Acknowledgment

You may expect to receive an acknowledgment from your first choice campus within two to four weeks of filing the application. A notice that space has been reserved for you will also include a requires that you submit the records necessary for the campus to evaluate your qualifications. You may be assured of admission if the evaluation of your qualifications indicates that you meet admission requirements. Such a notice is not transferable to another term or to another campus.

Transcript and Admission Test Score Requirements

Undergraduate transfer students are required to comply with the following transcript and test score requirements as part of the application procedures for admission. Classifications of applicants apply as of the date of intended enrollment.

Applicants with fewer than 84 quarter units completed

Transcripts: One from high school of graduation; two from each college attended *Test Score:* ACT or SAT.

Applicants with 84 or more quarter units completed

(also graduate and second baccalaureate applicants) Transcripts: Two from each college attended

Returning Students

Transcripts: Two from each college attended since last enrollment at Cal State L.A. unless otherwise notified by the Admissions Office. Two from each college attended before Cal State L.A. if student last attended Cal State L.A. more than one year ago.

Engineering Majors

Transcripts: Two from high school of graduation; two from each college attended

Nursing Majors

Transcripts: One sent directly to Admissions Office; one to Department of Nursing

CAUTION: Transcripts must be sent directly from each college and school of nursing attended.

Transcripts must be sent directly from the institutions involved to Cal State L.A.'s Admissions Office. All transcripts become university property and will not be released or copied, except for students who request that their application be redirected to another CSU campus. Processing of applications cannot be guaranteed unless all required documents and test scores are received during the appropriate application period. Transcripts are retained one year for applicants who do not enroll in the quarter of application or who send transcripts but do not file an application.

Locally and Systemwide Impacted Programs

The CSU designates academic programs to be impacted when more applications are received in the first month of the filing period than the spaces available. Some programs are impacted at every campus where they are offered; others are impacted at some campuses but not all. You must meet supplementary admission criteria if applying to an impacted program.

The CSU announces before the opening of the fall filing period which programs are impacted and the supplementary criteria campuses will use. That announcement is published in the *CSU Review*, distributed to high school and college counselors. We will also give information about the supplementary criteria to program applicants.

You must file your application for admission to an impacted program during the first month of the filing period. If you wish to be considered for impacted programs at two or more campuses, you must file an application to each campus. Nonresident applicants foreign or domestic are rarely admitted to impacted programs.

Supplementary Admission Criteria

Each campus with impacted programs uses supplementary admission criteria in screening applicants. Campuses are authorized to use a freshman applicant's ranking on the eligibility index, a transfer applicant's overall grade point average, and a combination of campus-developed supplementary criteria. If you are a freshman applicant and plan to apply to an impacted program, you should take the ACT or SAT no later than December if applying for the following fall term.

The supplementary admission criteria used by individual campuses to screen applicants appear periodically in the *CSU Review* and are sent by the campuses to all applicants seeking admission to an impacted program.

Unlike unaccommodated applicants to locally impacted programs, who may be redirected to another campus in the same major, unaccommodated applicants to systemwide impacted programs may not be redirected in the same major but may choose an alternative major at the first choice campus or another campus.

Hardship Petitions

There are established procedures for consideration of qualified applicants who would be faced with extreme hardship if not admitted to a specified campus. Prospective hardship petitioners should write to the Admissions Office regarding specific policies governing hardship admission.

Reapplication After Failure to Enroll

Applicants who fail to register for the quarter for which they have been accepted will have their admission cancelled. Those who desire admission to any future quarter must file another application (with fee) within the stated application period and must meet admission requirements in effect at the time of the new application.

All transcripts on file for applicants who are admitted but do not attend are kept one year and may be used for admission during that period. However, transcripts of any additional work completed since the original transcripts were filed must be requested by the applicant from the college(s) attended, as part of the new application procedure.

Readmission

Students who are absent without prior approval for any three of the four consecutive quarters before the quarter they wish to return must apply for readmission. The \$55 application fee is charged except for students who were enrolled during any of the three quarters immediately preceding the quarter of desired readmission. An application with fee also must be filed by any student who enrolls at another institution during an absence, with the following exceptions: a summer session or extension program; dual registration, with prior approval; or concurrent or visitor enrollment at another CSU campus. Students who were disqualified from Cal State L.A. following the last quarter of attendance must file an application for admission as returning disqualified students. For details see *Readmission of Disqualified Students* below.

Returning Veterans (Military or Alternative Service)

Cal State L.A. students who enter active U.S. military service or approved alternative service are eligible for continuing student status following active service. Time served in active military or approved alternative service, including the entire quarter in which the student entered the service and the entire quarter during which the discharge occurred, will not be counted as a break in attendance in determining continuing student status.

Readmission of Disqualified Students

Readmission after disqualification is not automatic. Disqualified students will not be considered for readmission until at least two quarters have elapsed. Normally, students will be eligible for readmission when they have satisfied conditions and requirements established during the exit interview. Basic readmission regulations indicate the following: no upper division student (90 or more units completed) will be readmitted with a deficiency of 2 or more grade points for all college work attempted; no lower division student (fewer than 90 units completed) will be readmitted with any grade point deficiency for all college work attempted. Units earned elsewhere while under disqualification can be used to reduce the total grade point deficiency, but not the Cal State L.A. deficiency (which must be removed after readmission).

Before the appropriate deadline, disqualified students must file an application for readmission as *returning disqualified* students. In addition, they must seek readmission through a petition *to the department or division and school from which they were disqualified*. The University Academic Advisement Center will rule on petitions for readmission of disqualified students with undecided majors. *Petitions for Readmission from Disqualification* may be obtained from department or division offices and applications for readmission to the university are available at Enrollment Services, Administration 146. Official transcripts of all transfer work attempted since disqualification must be furnished.

Readmission Appeals Procedure

Students who have not met requirements established at the time of the exit interview will be ineligible for readmission and will be so notified by the Admissions Office. Students may appeal this decision by submitting a petition to the dean of their school or to the University Academic Advisement Center if they have not declared a major.

Postbaccalaureate Application Procedures

Application procedures for all postbaccalaureate and graduate programs are described under *Postbaccalaureate Application Procedures* in the *Graduate and Postbaccalaureate Study* section.

Transfer Within State University Campuses

Students enrolled at a California State University campus and eligible to continue are eligible for admission at any other institution in the CSU system, provided they are in good standing at their home campus. Students on probation at their home campus may apply for admission as transfer students to another campus in the system, subject to that institution's admission policy and space availability. A complete application is required, including fee, all official transcripts, and test score reports.

Evaluation of Transfer Credit

Undergraduate transfer students' previous college work is evaluated in terms of its relevance to Cal State L.A. course offerings and degree requirements. An evaluation is mailed to all new transfer and readmitted students during their first quarter of attendance. General education and graduation course requirements met by transfer courses and transfer credit accepted in satisfaction of unit requirements are identified in this evaluation. For readmitted students, it also identifies general education and major requirements met by Cal State L.A. courses. The policies of the transfer institution(s) are followed when grade point averages of transfer course work are computed. If such policies cannot be determined, Cal State L.A. policies are followed. Credit for selected vocational/technical courses not generally accepted for transfer credit may be recognized after admission if approved by the Cal State L.A. academic department or division responsible for the related degree program.

Quarter Units/Quarter System

Cal State L.A.'s credits are expressed in quarter units; one quarter unit normally represents no less than one hour of class work and two or more hours of outside study per week for one quarter. One and one-half (1 1/2) quarter units are equivalent to one (1) semester unit, and one quarter unit is equivalent to 2/3 semester unit of credit.

Credit for Community College Course Work

A maximum of 105 quarter units (70 semester units) may be allowed for baccalaureate level credit earned in a community college. Neither upper division credit nor credit for professional education courses is allowed for community college work.

California Articulation Number (CAN)

Cal State L.A. participates in the California Articulation Number System. CAN is a comprehensive system that uses a common number to equate some introductory, transferable, lower division courses commonly taught in the various academic disciplines at an increasing number of California community colleges and four-year campuses. The system ensures that students who complete CAN courses at a participating campus will receive credit "in lieu of" comparable CAN courses at other participating campuses.

For example, CAN ECON 2 (Cal State L.A.'s ECON 202) completed at one campus is acceptable for CAN ECON 2 at other participating campuses. The campuses retain their own numbering systems. CAN course designators are found at the end of each course description in the campuses' general catalogs. Cal State L.A.'s approved courses are so identified and, in addition, are listed below. For additional information, contact the Articulation Liaison/CAN Coordinator in the Office of Undergraduate Studies, Administration 725, (213) 343-3917.

California Articulation Number	Cal State L.A. Course
CAN AJ 2	CRIM 101
CAN AJ 4	CRIM 126
CAN AJ 6	CRIM 221
CAN AJ 8	CRIM 235
CAN ANTH 2	ANTH 260
CAN ANTH 4	ANTH 250

CAN ANTH 6	ANTH 270
CAN ART 8	ART 104 or 159
CAN ART 10	ART 155 or 234
CAN ART 14	ART 103 or 153
CAN ART 16	ART 203
CAN ART 18	ART 287
CAN ART SEQ A	ART 101ABC
CAN BIOL SEQ A	BIOL 101+102+103
CAN BUS 2	ACCT 200A
CAN BUS 8	FIN 205
CAN CHEM SEQ A	CHEM 101+102+103
CAN DRAM 6	TA 149
CAN DRAM 8	TA 141
CAN DRAM 12	TA 131
CAN ECON 2	ECON 202
CAN ECON 4	ECON 201
CAN ENGL 2	ENGL 190
CAN GEOG 2	GEOG 160
CAN GEOG 4	GEOG 150
CAN GEOL 2	GEOL 150+152
CAN GEOL 4	GEOL 252
CAN GOVT 2	POLS 150
CAN H EC 2	FSCS 250
CAN H EC 8	FSCS 210
CAN H EC 10	FSCS 101
CAN H EC 12	FSCS 120
CAN H EC 18	FSCS 260
CAN HIST 8	HIST 202A
CAN HIST 10	HIST 202B
CAN HIST SEQ A	HIST 110ABC
CAN JOUR 2	JOUR 201
CAN JOUR 4	JOUR 100 or MSCM 100
CAN MATH 10	MATH 102
CAN MATH 24	MATH 215
CAN MATH 26	MATH 255
CAN MATH SEQ B	MATH 206+207+208
CAN MATH SEQ C	MATH 206+207+208+209
CAN PHIL 2	PHIL 151
CAN PHIL 6	PHIL 250
CAN PHYS SEQ A	PHYS 101+102+103
CAN PSY 2	PSY 150
CAN SOC 2	SOC 201
CAN SPCH 4	SPCH 150
CAN SPCH 6	SPCH 176
CAN STAT 2	MATH 274

Credit for Extension and Correspondence Courses

The maximum amount of credit for correspondence and extension courses that may be applied toward the baccalaureate is 36 quarter (24 semester) units. Extension and correspondence course credit does not satisfy Cal State L.A. residence requirements. Students should consult their major department or division adviser before enrolling in extension or correspondence courses to ensure that courses elected will meet both unit and content requirements for the degree. *Matriculated Cal State L.A. students in continuing standing may not enroll in Continuing Education courses.*

No undergraduate degree credit will be allowed for University of California extension courses in the X300 or X400 series taken after spring quarter 1968, except as specifically approved by the individual department or division concerned.

Credit for Supplementary Transfer Work

To request evaluation of credit toward a bachelor's degree for work taken at other colleges or universities subsequent to matriculation at Cal State L.A., students must have official transcripts forwarded to the Admissions Office and must file a request form provided for that purpose, available in Administration 146 and 409.

Credit for Noncollegiate Instruction

Cal State L.A. grants undergraduate degree credit for successful completion of noncollegiate instruction, either military or civilian, appropriate to the baccalaureate if such credit has been recommended by the Commission on Educational Credit and Credentials of the American Council on Education. 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*.

Credit for Military Service

Students are granted nine quarter units of lower division elective credit, upon admission, for one year or more of regular active duty in a U.S. military service including completion of basic or recruit training. For six months to one full year of military service, including completion of a six-month reserve training program with basic recruit training, 4.5 quarter units of lower division elective credit are granted upon admission. Additional credit to a maximum of 12 quarter units may be granted for completion of certain service school certificate programs, based on recommendations of the Commission on Educational Credit and Credentials of the American Council on Education.

Forms for requesting evaluation of military service credit are available in Student Affairs 101. Students should submit a copy of their military separation, DD214 or equivalent record, with their application for admission. Military service credit is not applied toward the residence requirement.

Credit Certified by the Defense Activities in Nontraditional Education Support (DANTES)

A maximum of 36 quarter units of baccalaureate course credit may be earned for course work certified by the Defense Activities in Nontraditional Education Support (DANTES). Forms for requesting evaluation of such credit are available in Student Affairs 101.

Credit for Peace Corps Training

Peace Corps volunteers who completed their training at Cal State L.A. may earn a maximum of 1 1/2 quarter units for each week of the training program. The number of units and the area in which the units are given varies with each project. Grades are recorded as *Credit (CR)*.

Credit for work taken at another institution while in Peace Corps training will be granted by Cal State L.A., but only as it appears on an official transcript from another college or university. The college credit will be validated when the volunteer becomes a student at Cal State L.A. or another institution of higher education.

Undergraduate Tests and Examinations

Cal State L.A. grants undergraduate degree credit to students who pass examinations that have been approved for credit systemwide. These include Advanced Placement Examinations, the CSU English Equivalency Examination, and some CLEP, as outlined below. The total credit earned in external examinations that may be applied to a baccalaureate shall not exceed 45 quarter units, exclusive of credit for Advanced Placement examinations.

Advanced Placement Credit

Credit is granted toward undergraduate degrees for successful completion of examinations of the Advanced Placement Program of the College Board. Students who present scores of 3 or better are granted nine quarter units (six semester units) of elective credit for each examination. Acceptance of Advanced Placement units for purposes other than electives is determined by the appropriate academic department. Credit is not awarded for any examinations that overlap other examinations or equivalent college courses. Where partial overlap exists, the amount of credit awarded will be appropriately prorated.

Information about Advanced Placement examinations is available at the applicant's high school. Supporting test materials are sent to the college or university indicated by the student when the examinations are taken.

No credit for any examination will be forwarded to a student who has taken the examination previously within the past year; earned equivalent credit through regular course work, credit by another examination, or other instructional processes, such as correspondence study or military training; or earned credit previously in a course or by an examination more advanced than the level represented by the examination in question.

College Level Examination Program (CLEP)

Credit is awarded for successful performance in certain examinations of the College Level Examination Program. Four quarter units may be earned in any of the following examinations, with passing scores as indicated.

Name of Examination	Minimum Passing Score
Mathematics General Exam	**50 on 1975 edition
Mathematics General Exam	**500 on 1978 edition
College Algebra-Trigonometry	49
Calculus and Analytic Geometry including essay	48
Statistics, including essay	49
General Chemistry	48

** passing subscore required on each part of same edition

Credit for one examination in mathematics may be applied to the mathematics requirement of the general education program. Credit for additional examinations is allocated to electives; acceptance for major, minor, or prerequisite use is granted on approval of the appropriate academic department or division.

English Placement Test (EPT)

The CSU English Placement Test must be completed by all new non-exempt undergraduates** prior to placement in appropriate university English coursework. Exemptions from the test are given only to those who present proof of one of the following:

- * a score of 3, 4, or 5 on either the *Language and Composition* or the *Composition and Literature* examination of the College Board Advanced Placement program;
- * a score on the CSU English Equivalency Examination that qualifies a student for exemption from the EPT;
- * a score of 470 or higher on the Verbal section of the College Board Scholastic Aptitude Test (SAT-Verbal);
- * a score of 22 or higher on the ACT English Usage Test (taken prior to October 1989);
- * a score of 25 or higher on the enhanced ACT English Test (taken October 1989 or later);
- * a score of 600 or higher on the College Board Achievement Test in English Composition with essay;
- * for transfer students, completion and transfer to the CSU of an acceptable English composition college course of four quarter (or three semester) units *with a grade of C or higher*.

The results of the EPT will not affect admission eligibility but will be used to identify students who need special help in reading and writing in order to do college-level work. Information bulletins and registration materials for the EPT will be mailed to all students subject to this requirement or may be obtained at Cal State L.A. in the Testing Office, Learning Resource Center, (213) 343-3160.

** Undergraduates admitted with 56 or more transferable semester (84 quarter) units completed and who are subject to a campus catalog earlier than 1986-1987 are not required to complete the EPT.

Entry Level Mathematics (ELM) Exam

Entry Level Mathematics (ELM) Exam - The ELM examination tests for entry level mathematics skills acquired through three years of rigorous college preparatory mathematics coursework (normally Algebra I, Algebra II, and Geometry). All new undergraduate students must take the test or be exempted from it prior to placement in appropriate University mathematics coursework. Specific policies regarding retesting and placement will be determined by the campus. Exemptions from the test are given only to those students who can present proof of one of the following:

- * a score of 3 or higher on the College Board Advanced Placement Mathematics examination (AB or BC);
- * a score of 560 or higher on the Mathematics section of the Scholastic Aptitude Test (SAT-Math);
- * a score of 24 or higher on the American College Test (ACT) Mathematics Test (taken prior to October 1989);
- * a score of 25 or higher on the ACTE (enhanced) Mathematics Test (taken October 1989 or later);
- * a score of 560 or higher on the College Board Mathematics Achievement Test, Level 10r Level 2; or
- * for transfer students, completion and transfer to the CSU of a college course that satisfies the General Education Breadth requirement or the Intersegmental General Education Transfer Curriculum requirement in Quantitative Reasoning *provided that such course was completed with a grade of C or higher.*

Students required to take this examination should do so as soon as possible after admission. The results of this examination *do not* affect admission, but will be used to identify students who need special help in mathematics in order to do college-level work.

Students who cannot demonstrate basic competence on the examination are required to take steps to overcome deficiencies early in their enrollment. Any course work undertaken primarily to acquire the required competence shall not be applicable to the baccalaureate.

Failure to take either of these tests, as required, before the end of the second quarter of enrollment may lead to administrative probation, which, according to Section 41300. 10f Title 5, California Code of Regulations, and CSU Executive Order 393, may lead to disqualification from future attendance.

Information bulletins and registration materials for the EPT and ELM examinations will be mailed to all students subject to the requirements. The materials may also be obtained from the Testing Office, Learning Resource Center, (213) 343-3160.

American Chemical Society Examination

Students may earn 4 quarter units of credit by achieving a score at or above the 50th percentile on the General Chemistry examination offered as part of the American Chemical Society Cooperative Examination Program.

Transfer of Credit Earned by Examination

Credit earned by examination at another accredited institution is accepted upon transfer, provided the units have been accepted by the previous institution as equivalent to specific courses and are not in violation of any other regulation.

PROCEDURES AND REGULATIONS

Information concerning university procedures and regulations contained in this section is applicable to all undergraduate students. Some general information also applies to post baccalaureate and graduate students. Additional procedures and regulations applicable only to postbaccalaureate and graduate students are included in the *Graduate and Postbaccalaureate Study* section.

Undergraduate Class Levels

Undergraduate students are classified according to the number of quarter units of baccalaureate level course work they have completed, calculated as follows:

Class Level	Quarter Units Completed
Lower Division	
Freshman	0-44
Sophomore	45-89
Upper Division	
Junior	90-134
Senior	135+

Quarter Units/Quarter System

Cal State L.A. credits are expressed in quarter units; one quarter unit normally represents no less than one hour of class work and two or more hours of outside study per week for one quarter. One and one-half (1 1/2) quarter units are equal to one (1) semester unit. Conversely, one quarter unit is equal to 2/3 semester unit of credit.

Study Load

Undergraduate students must carry a study load of 12 units for full-time enrollment certification by the university. The recommended full-time study load for undergraduates is 16 units. Students on scholastic probation must limit their study load to 12 units unless an exception has been approved by an academic adviser in their major department or division.

Student Identification Number (SID)

Cal State L.A. uses all students' Social Security numbers as their official Student Identification Number (SID) pursuant to the authority contained in Title 5 *California Code of Regulations*, Section 41201. This number is used as a means of identifying records pertaining to students as well as for identifying students for purposes of financial aid eligibility and other debts payable to the institution. On most student forms, the name is abbreviated as SID.

Registration

Continuing students at California State University, Los Angeles receive a registration notification form in the mail before the scheduled registration dates for each quarter. Complete information concerning registration procedures is provided in the *Schedule of Classes*, issued each quarter before the registration period and available for purchase at the University Square book store. Student Telephone Assisted Registration (STAR) is available to all eligible continuing students.

Students may be absent any two quarters during the year and maintain continuing student status for registration purposes. However, absence for more than two of any four consecutive quarters without an approved leave of absence will cancel continuing registration eligibility. See *Leaves of Absence* later in this chapter.

Attendance in University Extension courses does not constitute continuous attendance.

Students who attended another college or university during an absence from Cal State L.A., except for a summer session or extension program or approved visitor enrollment at another CSU campus, are required to file an application for admission as a returning student and have official transcripts of work taken sent to the Admissions Office. The \$55 non refundable application fee is charged. Such students will, if eligible, receive forms to register as returning students.

Students who are graduated with a bachelor's degree from Cal State L.A. and wish to continue in graduate standing are required to file a new application for graduate admission and will, if eligible, receive forms to register as new students.

Academic Advisement

Academic advisement is required for all new students prior to or during their first quarter in attendance. Before registering for their first quarter at Cal State L.A., students must consult an adviser in their major department or division to plan a program of study. After the first advisement session, students must consult an academic adviser at least annually or more often as necessary to enhance academic success. Undergraduate students who, upon admission to the University, are unable to select a specific major shall consult an adviser in the University Academic Advisement Center.

Every undergraduate who has completed the equivalent of 90 or more quarter units is expected to declare an academic major. Students admitted in upper division standing shall be required to designate an area of interest if they remain otherwise undecided.

Students admitted in lower division standing who register as "Undecided" will be assisted in the University Academic Advisement Center with appropriate information and services, including selection of courses for a program in their first quarter of attendance. In succeeding quarters, students' developing interests will become the basis for their being referred by their undergraduate adviser, as soon as practicable, to an academic area for further program development.

Forms used for change or declaration of major are available in Administration 146. Students may change their major by consulting an adviser in the appropriate academic department or division or by application through the University Academic Advisement Center. They should be aware, however, that a change in major may defer graduation if there are significant shifts in course requirements.

Because the approved degree program becomes the basis for determining eligibility for the degree, any change in the student's planned program must have an academic adviser's approval. Annual, or more often as needed, consultation with an academic adviser *in the major department or division* is therefore required. Newly admitted students should bring a copy of all high school and/or college transcripts and their Cal State L.A. credit summary when seeking advisement. They should consult the *Schedule of Classes* for a list of academic advisers.

Schedule of Fees: 1993-1995

CAUTION: All student fees are subject to change without I advance notice.

Legal residents of California are not charged tuition. The following reflects applicable fees and nonresident tuition for the quarter system.

All Students

Application Fee (*non refundable*), payable by check or money order

at time application is made: \$55

Registration Fees:

State University Fee:

Units	Quarter	++Academic Year
0 to 6.0	\$252	\$756
6.10r more	\$436	\$1,308

Miscellaneous Fees:

	Quarter	++Year
Health Facilities	\$2.00	\$6.00
Instructionally Related Activities	\$7.00	\$21.00
**Associated Students	\$ 16.50	\$49.50

University-Student Union \$ 16.00 \$48.00

* Refer to Appendix G
 1'1' Does not include summer quarter

The following is the fee schedule which has been adopted by the CSU Board of Trustees and will be effective Fall 1993 pending approval by the Governor and the Legislature. These fees cannot take effect without appropriate amendment to State statute.

Units	Quarter	++Academic Year
6.10r more		
Undergraduate	\$596	\$1,788
Education Credential	\$596	\$1,788
Graduate and other		
Postbaccalaureate	\$716	\$2,148
0 to 6.0		
Undergraduate	\$344	\$1,032
Education Credential	\$344	\$1,032
Graduate and Other		
Postbaccalaureate	\$414	\$1,242

++ Does not include summer quarter
 Nonresident Tuition--U.S. and Foreign:
 (in addition to other fees charged all students for all campuses)

Charge per quarter unit: \$164

The total fee paid per quarter will be determined by the number of units taken, including those in excess of fifteen.

Other Fees

(refer to Schedule of Classes for more detailed list)

Fee for	Amount
Comprehensive examination(<i>course #596 in major</i>)	\$10.00
Credential application	40.00
Credential (<i>transcript</i>) evaluation/processing	25.00
Degree check application(<i>graduation</i>)	20.00
Diploma	10.00
Dishonored check/credit card	10.00
Foreign Language Reading Examination(<i>FL 901</i>)	10.00
Late Registration (<i>non refundable</i>)	25.00
Parking decals (<i>per quarter</i>)	
Automobiles	42.00
Meters (per hour)	30.50
Motorcycles, Mopeds	10.50
Photo-ID (non refundable)	5.00
Thesis binding (not a State fee) (per copy)	15.00
Transcript of academic record(<i>single copy</i>)	4.00
Each additional transcript (2-10) requested at the same time	2.00
Each additional transcript (in excess of 10) requested at the same time	1.00
Writing Proficiency Examination (WPE - UNIV 400)	15.00

No fees of any kind shall be required of or collected from those individuals who qualify for such exemption under the provisions of the Alan Pattee Scholarship Act.

Materials/Breakage Fee

Some art, chemistry, and technology courses have additional fees for special materials and/or breakage. These courses are identified in this catalog and in *Schedule of Classes* notes. Items

lost or broken will be charged at cost. Failure to satisfy charges billed will result in the withholding of transcripts and registration privileges.

Library "Excessive Use" Fees

"Excessive Use" fees are computed from the time the material was due until the time the material is returned or declared lost.

Fee Per Transaction

Hourly or overnight loans	
Per hour	\$ 0.25
Maximum per transaction	10.00

Day-based loans

Per day	1.00
Maximum per transaction	10.00
Quarter- or semester-based loans	
First billing	10.00
Second billing	10.00

Once billed, fees are not negotiable and may be rescinded only in cases of library error or other extenuating circumstances which may be administratively defined as excusing an untimely return of borrowed materials. Failure to satisfy charges billed will result in the withholding of transcripts and registration privileges.

Credit Cards

VISA and MasterCard bank credit cards may be used for payment of student fees.

Waiver of Fees

Nonresident fees may be waived for persons who hold a valid California credential and are employed by a public school district in this state in a full-time position requiring certification. Eligible persons must meet at least one of the following conditions:

- * hold a provisional credential and enroll in courses necessary to obtain another type of credential authorizing service in the public schools;
- * hold a partial credential and enroll in courses necessary to fulfill postponed credential requirements; or
- * enroll in courses necessary to fulfill requirements for a fifth year of study as prescribed at Cal State L.A.

Refund of Fees

Details about fees that may be refunded, the circumstances under which fees may be refunded, and the appropriate procedure to follow in seeking refunds are available in Section 42201y (parking fees), 41913 (nonresident tuition), 42019 (housing charges), and 41802 (all other fees) of Title 5, California Code of Regulations. These regulations are published in the Schedule of Classes. In all cases, it is important to act quickly in applying for a refund. Information about any aspect of fee refunds may be obtained from the Accounting Office, Administration 513, (213) 343-3550. Application forms, available at Administration 146, must be filed within deadlines published in the *Schedule of Classes*.

Disenrollment

After the quarter begins, students who have a fee obligation to the University will be billed. Payment must be made within 10 days of invoice date. Failure to pay by the established deadlines is cause for disenrollment of the student for the quarter involved.

State University Installment Plan

The CSU is now authorized to collect State University Fee and Nonresident Tuition in installment payments. The administrative fee for the State University Installment Plan is \$22 per academic quarter. The administrative fee for nonresident tuition is fifteen percent (15%) of each installment payment. For additional information regarding this plan, please refer to the *Schedule of Classes*.

Debts Owed to the Institution

If a student or former student fails to pay a debt owed to the institution, Cal State L.A. may "withhold permission to register, to use facilities for which a fee is authorized to be charged, to receive services, materials, food, or other 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). For example, the institution may withhold permission to receive official transcripts of grades from any person owing a debt. Students who believe they do not owe all or part of an unpaid obligation should contact the campus business office. The business office, or another office on campus to which students may be referred by the business office, will review the pertinent information, including information students may wish to present, and will advise students of its conclusions with respect to the debt.

Categories of Enrollment

Credit By Examination

Undergraduate students in good standing and officially enrolled in one or more residence courses may challenge courses by taking examinations developed at the campus. Examinations are interpreted broadly to include whatever activity, test, or demonstration an instructor deems appropriate to evaluate comprehension, skills, or knowledge required by the course objectives. Credit shall be awarded to students who pass the examinations successfully.

Approval of the chair of the department or division offering the course and an instructor for the course is required. Forms for approval are available at Administration 409. Additional fees must be paid if the added units alter the total fees due for the quarter.

Credit by examination is restricted to undergraduate and graduate courses listed in this catalog. It is without unit limit, but does not count as residence credit. Such credit is not treated as part of the student's work load during a regular quarter and therefore does not require approval for excess study load. Total units earned for courses and examinations taken in summer session, however, cannot exceed the limit established for summer session study. Grades received by examination are recorded as final grades on the permanent academic record and are designated as earned through credit by examination.

Credit earned by examination at another accredited institution is accepted upon transfer, provided the units have been accepted by the previous institution as equivalent to specific courses and are **not** in violation of any other regulations.

Visitors Within California State University (CSU)

Students enrolled at any CSU campus may transfer temporarily to another CSU campus in visitor status if they have completed 12 units with a minimum C (2.0) grade point average at the home campus, are in good standing, and are eligible to register in continuing status. Visitors are approved for one term only, subject to space availability and registration priority policies at the host campus. Enrollment as a visitor may be repeated after re-enrollment at the home campus. This opportunity may be particularly valuable to students whose educational progress can be enhanced or expedited by attending a summer quarter at Cal State L.A. Concurrent enrollment (see below) is not permitted during visitor status. Visitor applications may be obtained at Student Affairs 1 01.

Concurrent Enrollment Within California State University

Students enrolled at any CSU campus may enroll concurrently at another CSU campus if they have completed 12 units at the home campus with a C (2.0) grade point average and are in good standing. Concurrent enrollment is approved for a specific term, subject to space availability and registration priority policies at the host campus. Because of overlap in academic terms of campuses on semester and quarter calendars, concurrent enrollment is subject to combinations and conditions described in the concurrent enrollment application forms available at Student Affairs 101.

Open University

Enrollment through the Open University program, administered by Continuing Education, permits nonmatriculated students to enroll in certain regular classes on a space available basis; however, matriculated students who are in continuing student status (i.e., have not failed to register for more than two consecutive quarters) may not enroll through the program.

Audit Registration

Regularly enrolled students may register for classes in audit status through add/drop (program change) procedures only as indicated in the *Schedule of Classes* for audit registration. Such registrations are subject to the same fee regulations as registration for credit and fees must be paid at the time of registration. Registration for a course in audit status is subject to approval of the instructor and is permitted only after students who desire to enroll on a credit basis have had an opportunity to do so.

Regular class attendance is expected but audit registrants are **not** required to complete assignments or take examinations. An audit registration may not be changed to a credit registration after the last day to add classes. No entry concerning audit registration is made on student grade reports or transcripts.

Dual Registration

Undergraduate students who wish to take classes at another accredited college or university, not within The California State University, while enrolled at Cal State L.A. must file *Notification of Dual Registration* at Student Affairs 101 by the end of the third week of the quarter involved. This notification must be endorsed by the student's Cal State L.A. major department or division academic adviser and the department/division chair for the course(s) involved. Students are advised, also, to consult official evaluators and advisers at the non-CSU campuses where the work is taken to ensure the transferability of course work. Courses so taken are subject to all regulations and limitations governing transfer credit. To receive bachelor's degree credit for such course work, students must have official transcripts forwarded to the Admissions office upon completion of the course work.

Change of Program

Students are strongly advised to select classes carefully and to avoid the undesirable necessity of changing their program of study. Adding and dropping classes, including changing sections in the same course, may be done only in accordance with policies, procedures, and time limits stated in the *Schedule of Classes*. Students who fail to follow these procedures incur the risk of a grade of F or U.

Withdrawal from Courses

Students withdraw from courses by filing a complete *program change* form at Administration 146. Early in the quarter, students may withdraw from any course with no record of the individual course withdrawal on their permanent academic record. After the *"no-record drop" deadline*, students may withdraw with a W grade from any course but only for serious and compelling reasons. These requests are granted only with the approval of the instructor and the department or division chair on *program change* forms available at Administration 146. Complete information about withdrawals, as well as a sample *program change* form and withdrawal deadlines for each academic quarter, appears in the *Schedule of Classes*.

Withdrawals during the final three weeks of instruction are permitted only when the cause of withdrawal (such as accident or serious illness) is clearly beyond the student's control and assignment of an *IN* (incomplete) is not practicable. Ordinarily, such withdrawals also involve total withdrawal from the university, except that *CR* (credit) or *IN* (incomplete) may be assigned for courses in which the student has completed sufficient work to permit an evaluation. Requests to withdraw under these circumstances are handled as described above, except that such requests must also be endorsed by the dean of the school.

Withdrawal From the University

To withdraw completely from Cal State L.A., students must follow withdrawal procedures outlined in the *Schedule of Classes*. Complete official withdrawal may be accomplished by using the withdrawal form available at Administration 146 or by writing a personal request to the Registration Office. After the "no-record drop" deadline, students may submit a complete withdrawal by certified mail only for a valid reason (i.e., doctor-certified health problem, death in the family, or emergency military service). All requests should be submitted with appropriate documentation.

Leaves of Absence

Students may petition for a leave of absence for such reasons as professional or academic opportunities, like travel or study abroad; employment related to educational goals and major fields of study or participation in field study or research projects; medical reasons, including pregnancy, major surgery, or other health-related circumstances; and financial reasons, such as the necessity to work for a specified period in order to resume study with adequate resources. Petition forms are available at Administration 146.

Evaluation of petitions for leaves of absence takes into account the student's stated plans and the extent to which a leave would contribute to educational objectives. Students are expected to plan their time of return and their activities during the leave. They must also state why it is critical to remain in continuous residence. In the case of medical or financial leaves, they must state how they plan to remain current with or advance in their academic field.

Undergraduate students may request a leave for no fewer than 3 and no more than 8 quarters. Graduate students are granted a maximum of 4 quarters, subject to renewal. Continuing students' allowed absence of 2 quarters is included in these maximums.

Petitions must be filed at Administration 146 after action by the department or division chair (also the school graduate dean in the case of graduate students) no later than 3 weeks before the end of the quarter preceding the proposed leave. Approval entitles students to continuing status for registration purposes provided they return no later than the quarter specified in their petitions. Continuing students returning from leaves are entitled to priority registration privileges and are not required to file an application for readmission.

Undergraduate students retain current catalog requirements for graduation; classified postbaccalaureate and graduate students retain classified standing. Unclassified postbaccalaureate and conditionally classified graduate students who have approved programs on file in their school graduate studies office are subject to the conditions of those programs. All others are subject to the requirements in effect when they return,

Transcript of Academic Record

A transcript of Cal State L.A. course work is issued upon written request by the student. Transcript request forms are available at Administration 146 and 128. The cost of a single transcript is \$4. When more than one transcript is ordered at the same time, the first copy costs \$4, the second through tenth copies cost \$2 each, and any copies in excess of ten cost \$1 each. The form requires the name used by the student while in attendance, the birth date, and the Social Security account number which is referred to on campus as the Student Identification (SID) number.

Copies normally are mailed one week after receipt of request. However, requests that specify inclusion of grades just earned or verification of a degree just awarded cannot be filled until two to three weeks after the end of the quarter.

Course Numbering System

Subcollegiate, undergraduate, graduate, and non-credit courses are numbered as shown below.

- 000-099 Subcollegiate level (no credit allowed toward requirements for academic degrees)
- 100-299 Lower division courses (freshman and sophomore level)
- 300-399 Upper division courses (junior and senior level) that do not earn graduate credit

400-499	Upper division courses (junior and senior level) that may earn graduate credit for graduate students
500-599	Graduate courses for graduate students only
600-699	Specialized graduate courses for postgraduate students matriculated in the joint Ph.D. program in Special Education
700-749	Courses intended primarily for lower division students. Not acceptable toward degree or credential programs at Cal State L.A., but acceptable for professional advancement credit. Unit value credit listed directly following course title on academic record is acceptable for professional advancement credit only when accompanied by <i>CR</i> (Credit) grade
750-799	Courses intended primarily for upper division students. Not acceptable toward degree or credential programs at Cal State L.A., but acceptable for professional advancement credit. Unit value credit listed directly following course title on academic record is acceptable for professional advancement credit only when accompanied by <i>CR</i> (Credit) grade
800-899	Highly specialized courses intended primarily for graduate students. Not acceptable toward degree or credential programs at Cal State L.A., but acceptable for professional advancement credit. Unit value credit listed directly following course title on academic record is acceptable for professional advancement credit only when accompanied by <i>CR</i> (Credit) grade
900	Non-credit courses open to graduate students only

Courses in the 700 and 800 series are not listed in this catalog; their descriptions are carried in Extension Service announcements when they are offered.

Course Suffixes

Many course numbers have letter suffixes. Although many indicate special uses of the course within a particular department, some suffixes are standard throughout the University.

A, B, C, D, E	A sequence of courses in which A must be taken before B, B before C, etc., unless description indicates otherwise. C, K, S Sections of regular courses taught primarily in Cantonese (Chinese), Korean, or Spanish, usually as part of bilingual/crosscultural teacher training program. These suffixes appear in course listings in the <i>Schedule of Classes</i> and on transcripts, but not generally in the catalog
H	Open to students enrolled in the General Education Honors Program only
IP	Class taught in independently self-paced mode; hours arranged between student and instructor
L	Lecture
M	Open to students in Master of Fine Arts degree program in Art only
N	Upper division course intended for students not majoring in the department offering it; usually has different kinds of prerequisites; student in major may not count course in major program, but may include it as an elective outside the major
P	Practicum, laboratory, or activity
R	Open to conditionally classified graduate students only

Course Prerequisites and Corequisites

Students are responsible for fulfilling prerequisites and corequisites. The instructor and department or division have the authority to waive specific prerequisites and/or corequisites for students who have completed equivalent courses at another institution, who have had equivalent experience (such as work experience), or who possess the needed skills to proceed with the work of the course. Students should consult the instructor before registering to determine whether the course(s) or experience they present will justify waiver of the stated prerequisite(s) and/or corequisite(s).

Course Abbreviations

Each academic discipline has an official course abbreviation that is used to identify the discipline in this catalog; on grade reports, transcripts, major program sheets, and many other documents; and in the *Schedule of Classes*. These course abbreviations, which are listed below, must be used on all program change forms.

Accounting	ACCT
Adult and Continuing Education	EDAC
American Studies	AMER
Anthropology	ANTH
Art	ART
Asian American Pacific Study	AAPS
Astronomy	ASTR
Athletics	ATHL
Biology	BIOL
Broadcasting	BCST
Business Administration (interdepartmental)	BUS
Chemistry	CHEM
Chicano Studies	CHS
Child Development	CHDV
Chinese	CHIN
Civil Engineering	CE
Classics	CLAS
Communication Disorders	COMD
Computer Information Systems	CIS
Computer Science	CS
Counseling	COUN
Criminal Justice	CRIM
Curriculum and Instruction	EDCI
Dance	DANC
Economics	ECON
Education (Interdivisional)	EDUC
Educational Administration	EDAD
Educational Foundations	EDFN
Electrical Engineering	EE
Elementary Education	EDEL
Engineering (interdepartmental)	ENGR
English	ENGL
Family Studies and Consumer Sciences	FSCS
Finance	FIN
Foreign Language Cooperative Program	FLCP
Foreign Languages	FL
French	FREN
Geography	GEOG
Geology	GEOL
German	GERM
Health and Human Services	HHS
Health Science	HS
Higher Education	EDHI
History	HIST

Instructional Technology	EDIT
Italian	ITAL
Japanese	JAPN
Journalism	JOUR
Latin	LATN
Latin American Studies	LAS
Liberal Studies	LBS
Library Science	LIBR
Management	MGMT
Marketing	MKT
Mass Communication	MSCM
Mathematics	MATH
Mechanical Engineering	ME
Microbiology	MICR
Music	MUS
Nursing	NURS
Nutritional Science	NTRS
Office Systems and Business Education	OSBE
Pan-African Studies	PAS
Philosophy	PHIL
Physical Education	PE
Physical Science	PSCI
Physics	PHYS
Political Science	POLS
Portuguese	PORT
Psychology	PSY
Recreation	RECR
Religious Studies	RELS
Russian	RUSS
Secondary Education	EDSE
Social Science	SOCS
Social Work	SW
Sociology	SOC
Spanish	SPAN
Special Education	EDSP
Speech Communication	SPCH
Technology	TECH
Theatre Arts	TA
Traffic and Safety Engineering	TSE
University	UNIV
Urban Analysis	URBA
Women's Studies	WOMN
Youth Agency Administration	YAA

Grading System**Undergraduate****TRADITIONAL.****A,B,C,D,F.**

Letters *A,B,C*, and *D* indicate passing grades; *F* indicates failure.

NONTRADITIONAL.**CR/NC or A, B, C/NC.**

A,B,C, and *CR* indicate passing grades. *CR*, indicating passed with credit, is given for work equivalent to *C* or better for undergraduate students. *NC* indicating no credit, is given for work equivalent to *D* or *F* for undergraduate students.

Graduate**TRADITIONAL.****A,B,C,D,F.**

Letters *A*, *B*, and *C* indicate passing grades; letters *D* and *F* indicate failure.

NONTRADITIONAL. CR/NC.

CR, indicating passed with credit, is given for work taken by graduate and postbaccalaureate students, including 400-level courses, that is equivalent to B or better. *NC*, indicating no credit, is given for work equivalent to C, D, or F, for postbaccalaureate and graduate students. A course in which a postbaccalaureate or graduate student earns a grade below C must be repeated; grades from both the original course and the repeated course are used in computing the grade point average.

Explanation of Grades

Grade Symbol	Explanation	Grade Points
A	Outstanding	4 per unit value of course
B	Very Good	3
C	Average	2
D	Barely Passing	1
F	Failure	0
CR	Credit	not applicable
NC	No credit	not applicable
I, IN	Incomplete	not applicable
U	Unauthorized Incomplete	0
SP	Satisfactory Progress	not applicable
W	Withdrawal	not applicable
RD	Report delayed	not applicable

Definitions of Administrative Grading Symbols

Marks other than letter grades used to indicate status in courses undertaken have the following meanings:

CR used to denote "passed with credit" when no traditional letter grade is given, is assigned to undergraduate grades of C or better and to graduate grades of B or better. *CR* grades are not included in the calculation of the grade point average.

NC is used to denote "no credit" when no traditional letter grade is given. *NC* grades are not included in the calculation of the grade point average.

SP (*Satisfactory Progress*) is used for thesis, project, dissertation, and similar approved courses in which assigned work frequently extends beyond one academic quarter and may include enrollment in more than one quarter. The *SP* indicates that the student's performance has been evaluated and found to be satisfactory but that further work must be completed before a final grade (or grades) can properly be assigned for any part of the course. Enrollment for more units of credit than the total number of units that can be applied toward the fulfillment of the student's educational objective is prohibited. The *SP* symbol shall be replaced with the appropriate final grade within one year of its assignment except for courses associated with the master's degree thesis (courses numbered 597, 598, 599, and 900) and with the doctoral dissertation (courses numbered 698 and 699) in which case the time limit shall be five years. An *SP* does not add earned units and does not affect grade point average calculations.

An *SP* that has not been replaced by a final grade within the prescribed time limit for the course shall be changed to *NC*. Extensions of time to remove *SP* grades may be granted by the Undergraduate Studies Subcommittee (for undergraduate courses) or the appropriate school graduate dean (for graduate courses) for contingencies such as—but not limited to—military service and health problems of an incapacitating nature verified by a physician's statement.

W (*Withdrawal*) indicates that a student was permitted to drop a course after the "no-record drop" deadline with the approval of the instructor and the department or division chair. The *W* carries no connotation of quality of student performance and is not used in calculating grade point averages.

RD (*Report Delayed*) may be used when a delay in the reporting of a grade is caused by circumstances that are beyond the student's control. The symbol will be replaced by a more

appropriate grading symbol as soon as possible. An RD is not included in calculations of grade point average.

IN, I (Incomplete) an Incomplete (*IN*) grade is inappropriate for failing students. It is an interim grade designed for students who are passing but who through extenuating circumstances have not been able to complete all or part of the work of the last four weeks of the course. An Incomplete (*IN*) grade may be removed by completing the outstanding work within one calendar year following the end of the quarter in which it was assigned unless the time has been extended by the Undergraduate Studies Subcommittee or the Graduate Studies Subcommittee, as appropriate, for contingencies such as military service or health problems of an incapacitating nature verified by a physician's statement. Any petition for extension of time to remove an incomplete must be filed within one calendar year immediately following the end of the quarter in which it was assigned. When the outstanding work has been completed during the time period allowed, the final grade will be reported to the Records Office. The time limitation prevails whether or not the student maintains continuous attendance.

An Incomplete that is made up within the time period allowed will be replaced on the permanent academic record by the letter grade earned followed by an explanation that the original grade was an Incomplete and the date that the Incomplete was removed.

An Incomplete that is not removed during the time period allowed will remain on the student's permanent academic record as an I and will be charged as an F in grade point average computations.

U (Unauthorized incomplete) indicates that an enrolled student did not withdraw from the course but 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. For purposes of grade point average this symbol is equivalent to an F.

Nontraditional Grading Options

Undergraduates may choose to receive grades on a nontraditional basis, either *A, B, C, NC, or CR/NC*, under specified conditions. Some courses are graded only nontraditionally, as shown in course descriptions. In addition, students in good standing who have completed at least 12 units at Cal State L.A. and students admitted with upper division standing may elect to have some courses graded on either the traditional or the nontraditional basis. *CR* and *NC* grades are not included in grade point average computations.

CR/NC Option. Courses for which a student may not elect to be graded on a *CR/NC* basis are those courses required in the student's major, minor, or credential program and other courses selected to meet general education requirements. A maximum of 45 quarter units may be graded *CR/NC*, whether elected or designated. A maximum of 8 quarter units elected *CR/NC* may be taken in any single quarter.

A, B, C/NC Option. Courses for which a student may not elect to be graded *A, B, C/NC* are those required in the student's major, minor, or credential program; however, any general education or elective course may be taken with *A, B, C/NC* grading. Use of this grading may not exceed a total of 45 quarter units within the total degree program, whether elected or designated.

Students may elect to register for a course with a nontraditional grading option up to the last date in the quarter to add classes. The decision to elect an option is irrevocable. Academic standards are identical for all students enrolled in a course, irrespective of the grading option. Instructors are not notified that students have elected nontraditional grading options in their courses; traditional grades are reported and are converted as needed to *CR* or *NC* by the registrar.

Final Examinations

Final examinations or final class meetings are required in all courses at the time and place shown in the final examination schedule in the *Schedule of Classes*. Any exception in time or place must have written approval of the instructor, department or division chair, and school dean. Students

who find it impossible to take a final examination at the scheduled time may, with the written approval of the instructor, department or division chair, and school dean, have a special final examination administered.

Repeating Courses

Unless otherwise indicated in the description of a particular course in this catalog, students may not repeat for credit any course they have already completed with a grade of C or higher.

Academic Renewal

Removal of Work from Degree Consideration

Under certain circumstances, up to two semesters or three quarters of previous undergraduate course work taken at any college may be disregarded from all considerations associated with requirements for the baccalaureate. Detailed eligibility and procedural information is provided in the *Schedule of Classes*. The basic criteria are listed below:

- * Five years must have elapsed since completion of the most recent work to be disregarded;
- * Any previous removal of work from degree consideration must be included in applying the limits on work that may be disregarded;
- * Since completion of the work to be disregarded, students must have maintained the following grade point averages at Cal State L.A. at the time of petition: 3.0 for students with 2244 quarter units completed; 2.5 with 45-66 units completed; and 2.0 with 67 or more units completed; *and*
- * There must be evidence that the student would find it necessary to complete additional units and enroll for one or more additional quarters in order to qualify for the baccalaureate if the request was not approved.

Students are advised that they may file an academic renewal petition if their grade point average is lower than C (2.0) either in general education, the major or overall college units attempted (a condition is preventing them from qualifying for the degree) **and** meet all above criteria and conditions.

Repeating Courses for Academic Renewal

Effective summer 1983, students pursuing a baccalaureate may repeat a course one time for purposes of academic renewal if the grade of record is D, F, or U. This procedure is limited to a maximum of 20 quarter units and to courses taken at Cal State L.A. within the previous five years. All repetitions must be done at Cal State L.A.

Students pursuing a second or subsequent bachelor's degree may repeat only courses leading to the present degree objective (not courses used for prior bachelor's degrees) for purposes of academic renewal. In computing grade point averages for graduation with a baccalaureate from Cal State L.A. units attempted, units earned (if any), and grade points (if any) for previous attempts of the same or equivalent courses shall be excluded when specified conditions are met.

Students are advised that repeating a course under this policy does not result in removal of the original record and grade from the transcript. However, the earlier grade is disregarded in calculating the grade point average. Individual schools, departments, and divisions may have additional restrictions about acceptance of repetitions. Students should therefore consult department/division advisers before attempting repetitions and should consult the *Schedule of Classes* for details about filing instructions. The repeated course form, available at Administration 146, must be on file when a student enrolls in the course to be repeated and no later than the add deadline.

Scholastic Status

Passing Grades Required for Credit

Students are advised that they receive no credit for any course in which they do not earn a passing (i.e., D or higher) grade.

Grade Point Requirements

Undergraduate students are expected to maintain a C (2.0) average in all courses attempted at Cal State L.A. and any other college or university attended and to make satisfactory progress toward their academic objectives. Students who receive financial aid should inform themselves of additional criteria defining satisfactory progress by consulting the Center for Student Financial Services.

Grade Point Average

The grade point average (GPA) is computed by dividing the total number of grade points earned by the total number of units attempted. Grade points are assigned for each unit of course work undertaken, as follows:

Grade Symbol	Explanation	Grade Points Earned
A	Excellent	4 per unit value of course
B	Above average	3 per unit value of course
C	Average	2 per unit value of course
D	Barely passing	1 per unit value of course
F	Failure	0 per unit value of course

Thus, students who earn a grade of D in a 3-unit course have 3 grade points fewer than the number they would have earned with a grade of C, and are therefore deficient 3 grade points from a C average (-3 grade points). Students who earn a B grade in a 3-unit course have three grade points more than they would have earned with a C grade (+3 grade points); an A, +6 grade points; or an F, --6 grade points. The overall grade point deficiency or surplus can be computed by assigning the number of plus or minus grade points for each unit attempted and adding algebraically. *CR* and *NC* grades are not included in grade point average computations.

Probation for Undergraduate Students

Probation is determined separately for grade point deficiency and administrative- academic deficiency. Students' probation status is indicated on their grade report.

Grade Point Deficiency

Students are placed on academic probation if either their grade point average at Cal State L.A. or their cumulative grade point average in all college work attempted falls below C (2.0). They are continued on probation for grade point deficiency until their entire deficiency is removed or until they are disqualified in accordance with the regulations stated below.

Administrative-Academic Deficiency

Provision has been made by the Office of the Chancellor whereby students may be placed on administrative-academic probation for any of the following reasons:

- * Withdrawal from all or a substantial portion of courses for which they registered in two successive quarters or in any three quarters.
- * Repeated failure to progress toward a stated degree or program objective when such failure is within their control.
- * Failure to comply, after due notice, with a routine academic requirement or regulation.

Written notice is given of the conditions required for removal from administrative- academic probation, as well as circumstances that would lead to disqualification if probation is not rectified.

Disqualification of Undergraduate Students

Disqualification is determined separately for grade point deficiency and for administrative-academic deficiency.

Grade Point Deficiency

Students who accumulate a deficiency of 22 or more grade points at Cal State L.A. or in all college work attempted are disqualified, regardless of whether they were on probation during the prior quarters. Students on probation whose cumulative grade point deficiency reaches the following levels are disqualified:

Class Level	Deficiency
Lower Division (0-89 units completed)	22 grade points
Juniors (90-134 units completed)	13 grade points
Seniors (135+ units completed)	9 grade points

Administrative-Academic Deficiency

Provision has been made by the Office of the Chancellor whereby students placed on administrative-academic probation may be disqualified for any of the following reasons:

- * The conditions for removal of administrative-academic probation are not met within the period specified.
- * Students become subject to academic probation while on administrative-academic probation.
- * Students become subject to a new administrative-academic probation period for the same or similar reasons of a previous probationary period, although not currently in such status.

Notification of Disqualification

Students' notices of disqualification appear on their grade reports. Students who wish to appeal their disqualification should refer to Immediate Reinstatement below. Disqualified students are required to arrange an exit interview with their academic adviser in order to establish readmission requirements. Undecided majors will hold this exit interview with their assigned adviser in the University Academic Advisement Center.

Immediate Reinstatement

Disqualified students may submit a petition for immediate reinstatement to their school dean or designee (department chair in the schools of Engineering and Technology and Natural and Social Sciences) after the exit interview has taken place. The University Academic Advisement Center will rule on petitions for immediate reinstatement for undecided majors after their exit interview has taken place. Students' approved petitions must be received in the Records Office, Administration 409, by the end of the fifth week of the quarter following disqualification.

Immediate reinstatement may be granted for not more than two successive quarters to students pursuing the program in which disqualification was incurred, including an undecided major. Students who are admitted with a grade point deficiency on transfer work and whose grades at Cal State L.A. alone are not the basis for disqualification may qualify for immediate reinstatement in additional quarters.

Students enrolled but not officially reinstated for the quarter after disqualification should file a request for complete withdrawal and full refund of fees by the end of the fifth week of the quarter. Official withdrawal and refund application forms are available at Administration 146. Complete withdrawal also may be accomplished by writing to the Assistant Registrar for Registration. Registration will be cancelled for disqualified students who are enrolled and do not file a withdrawal request; fees are not returned in these cases.

Special Probation

All disqualified students who are reinstated or readmitted are placed on special probation because their grade point deficiency is greater than the maximum allowed for their class level as outlined above. These students are required to earn better than a C (2.0) grade point average each quarter until their deficiency is removed or is reduced to the maximum allowed for their class level. Students who withdraw completely from any quarter while on special probation will again be disqualified.

Readmission of Disqualified Students

Readmission after disqualification is not automatic. Disqualified students will not be considered for readmission until at least two quarters have elapsed. Procedures and regulations governing readmission of disqualified students are found in the *Admission* chapter of this catalog.

Student Conduct: Rights and Responsibilities

Cal State L.A. assumes that all students will conduct themselves as mature citizens of the campus community and that they will comply with university policies and regulations. Inappropriate conduct by students or applicants for admission is subject to discipline as provided in Sections 41301-41304 of Title 5, *California Code of Regulations*. (See Appendix E in this catalog.) Copies of the CSU Student Disciplinary Procedures, which govern enforcement of these regulations, are available from the Coordinator of Student Discipline, Student Affairs 123, or the Office of the Dean of Students, Student Affairs 117.

Student Grievances

An official Statement of Student Rights and Responsibilities enumerates the rights guaranteed to, and the responsibilities of, all Cal State L.A. students and contains the procedures to be followed for the redress of grievances. Copies of this document are available at the Office of the Dean of Students, (SA 117) and the office of each school dean and each department or division chair.

Adequate safeguards have been instituted to protect the rights of students and the university and to ensure that grievances are handled fairly. The grievance procedure is but one channel for solving problems and should not take the place of negotiating in good faith or open, honest communication.

Grievances are formal complaints by students arising out of alleged actions of the university or its faculty, administrators, or officers, such actions being alleged by students to be unauthorized or unjustified and adversely to affect students' status, rights, or privileges, including actions based on race, color, religion, sex, sexual orientation, national origin, age, handicap, or veteran status.

Coordinator of Student Discipline

Incidents of violation of Section 41301 A-M, Title 5 *California Code of Regulations*, detailed in Appendix D, may be reported to the Coordinator of Student Discipline, Student Affairs 123.

Cheating

Instructors have the responsibility of planning and supervising all academic work, in order to encourage honest individual effort, and taking appropriate action if instances of academic dishonesty are discovered. However, honesty is primarily the responsibility of each student. The university considers cheating to be a voluntary act for which there may be reasons, but no acceptable excuse. The term "cheating" includes, but is not limited to:

- * Plagiarism;
- * Receiving or knowingly supplying unauthorized information during an examination;
- * Using unauthorized material/sources during an examination;
- * Changing an answer after work has been graded, and presenting it as improperly graded;
- * Taking an examination for another student or having another student take an examination for you; and
- * Forging or altering registration or grade documents.

Students who are caught cheating may be subject to a punitive grade for the assignment or for the course. If issuing a punitive grade, the instructor shall report it to the Coordinator of Student Discipline and may recommend that appropriate action be taken through the Student Discipline Procedures of The California State University.

Sexual Harassment Policy

California State University, Los Angeles will take action to eliminate sexual harassment, as mandated by Chancellor's Executive Order 345.

Sexual harassment is conduct subject to disciplinary action.

Sexual harassment includes such behavior as sexual advances, request for sexual favors, and other verbal or physical conduct of a sexual nature directed towards an employee, student, or applicant when one or more of the following circumstances are present:

- * Submission to or toleration of the conduct is an explicit or implicit term or condition of appointment, employment, admission, or academic evaluation.
- * Submission to or rejection of such conduct is used as a basis for a personnel decision or an academic evaluation affecting an individual.
- * The conduct has the purpose or effect of interfering with an employee's work performance, or creating an intimidating, hostile, offensive or otherwise adverse working 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.

Although this policy focuses on the treatment of persons lacking or holding lesser authority by persons possessing greater authority, it does not imply that sexual harassment may not likewise be perpetrated by persons lacking or holding lesser authority (e.g., "employee, students, or applicant").

In determining whether conduct constitutes sexual harassment, the circumstances surrounding the conduct are considered.

Procedures for Reporting Sexual Harassment

Specific rules and procedures for reporting charges of sexual harassment and for pursuing available remedies are available in the following locations: Human Resource Management, Administration 605; Office for Affirmative Action, Administration 702; Office of the Associate Vice President for Student Affairs/Dean of Students, Student Affairs 117.

Writing and Plagiarism

Plagiarism is a direct violation of intellectual and academic honesty. Although it exists in many forms, all plagiarisms refer to the same act: representing somebody else's words or ideas as one's own. The most extreme forms of plagiarism are the use of a paper written by another person or obtained from a commercial source, or the use of a paper made up of passages copied word for word without acknowledgment. Paraphrasing an author's idea or quoting even limited portions of his or her text without proper citation is also an act of plagiarism. Even putting someone else's ideas into one's own words without acknowledgment may be plagiarism.

In none of its forms can plagiarism be tolerated in an academic community. It may constitute grounds for a failing grade, probation, suspension, or expulsion.

One distinctive mark of an educated person is the ability to use language correctly and effectively to express ideas. Faculty assign written work for the purpose of helping students achieve that mark. Each professor will outline specific desiderata, but all expect students to present work that represents the student's understanding of the subject in the student's own words.

It is seldom expected that student papers will be based entirely or even primarily on original ideas or original research. Therefore, incorporating the concepts of others may be appropriate with proper acknowledgment of sources, and quoting others directly by

using quotation marks and acknowledgments is proper. However, papers that consist entirely of quotations and citations should be rewritten to show the student's own understanding and expressive ability. The purpose of a written assignment (i.e., development of communication and

analytic skills) should be kept in mind as each paper is prepared and should not be evaded through plagiarism.

Honorable Dismissal

Honorable dismissal is granted to all students who are not under financial obligation to the university and who are not under disciplinary probation, suspension, or expulsion. Academic disqualification does not constitute dishonorable dismissal.

Petitions for Waiver of Regulations

Rules and regulations in this catalog have been adopted by the faculty and administration to maintain appropriate academic standards and facilitate the administration of the university's programs. Students who believe that extenuating circumstances might justify the waiver of a particular regulation or requirement may file a petition at their major department/division office, according to established procedures, for consideration by a faculty committee. However, provisions of Title 5, *California Code of Regulations*, or other state or federal laws and regulations, are not subject to waiver by petition. Detailed information about procedures and regulations governing petitions are found in the *Schedule of Classes*.

UNDERGRADUATE STUDY

Bachelor's Degrees and Majors Bachelor of Arts Degrees

Afro-American Studies
Anthropology
Art
Chemistry
Child Development
Communicative Disorders
Earth Sciences
Economics
English
French
Geography
History
Home Economics
Industrial Arts
Special Major
Japanese
Journalism
Latin-American Studies
Liberal Studies
Mathematics
Mexican-American Studies
Microbiology
Music
Philosophy
Physics
Political Science
Psychology
Radio and Television Broadcasting
Social Science
Social Work
Sociology
Spanish
Speech Communication
Theatre Arts

Bachelor of Science Degrees

Biochemistry
Biology
Business Administration
Business Education
Chemistry
Computer Information Systems
Computer Science
Criminal Justice
Engineering
Fire Protection Administration and Technology Geology
Health Science
Industrial Technology
Special Major
Medical Technology
Nursing
Nutritional Science
Physical Education
Physical Science
Physics
Rehabilitation Services

Bachelor of Music Degree

Music

Bachelor of Vocational Education Degree

Vocational Arts

Minors

Anthropology

Art

Asian Studies

Basic Business

Biology

Business Education

Chicano Studies

Child Development

Chinese

Classics

Computer Science

Creative Writing

Criminal Justice

Economics

English

French

General Physical Education

General Political Science

Geography

Geology

Health Science

History

Home Economics

Industrial Studies

Japanese

Journalism

Latin-American Studies

Mathematics

Microbiology

Music

Pan-African Studies

Philosophy

Physics

Prelaw

Psychology

Public Administration

Religious Studies

Social Gerontology

Sociology

Spanish

Speech Communication

Theatre Arts

World Politics

Women's Studies

Credentials

Basic Teaching Credentials

For students interested in obtaining either the Single Subject or Multiple Subject credential, appropriate degree programs are listed below. Each program (or a specific option within it) has been approved by the Commission on Teacher Credentialing for waiver of the subject area examination for the credential indicated. Interested students should consult advisers in both the appropriate academic department and the School of Education.

MULTIPLE SUBJECT CREDENTIAL

All Cal State L.A. students who enter a Multiple Subject teaching credential program must complete a 106-111 unit common core as well as general education, major, and other graduation and credential requirements. A grid that contains the common core appears on the next page. Some core courses also meet lower division general education requirements. (Refer to Lower Division General Education grid elsewhere in this chapter.) Consult a faculty adviser in your major department for further information. The Multiple Subject teaching credential is offered with the following undergraduate degrees:

Afro-American Studies, BA

Child Development, BA,
 Option II Earth Sciences, BA
 English, BA
 Geography, BA
 History, BA
 Latin-American Studies, BA
 Liberal Studies, BA
 Mexican-American Studies, BA
 Philosophy, BA
 Physical Education, BS

The Multiple Subject credential is also available with a bilingual emphasis in Spanish. Internship credential options are available for the Multiple Subject and Multiple Subject/Bilingual Emphasis credentials.

SINGLE SUBJECT CREDENTIAL

Authorized Area	Degree Program
Art	Art, BA
Business	Business Education, BS
English	English, BA
English	Speech Communication, BA
Foreign Language	French, BA
Foreign Language	Japanese, BA
Foreign Language	Spanish, BA
Health Science	Health Science, BS
Home Economics	Home Economics: BA
Industrial Arts	Industrial Arts, BA
Life Science	Biology, BS
Mathematics	Mathematics, BA, BS
Music	Music, BA
Physical Education	Physical Education, BS
Physical Science	Earth Sciences, BA
Physical Science	Physical Science, BS
Social Science	Social Science, BA

An internship credential option is available for the Single Subject credential

SUPPLEMENTARY AUTHORIZATIONS

Holders of a Single Subject or Multiple Subject credential issued by the state of California may add a supplemental authorization to teach in another discipline by completing additional course work. A partial listing of supplementary authorizations and the credentials to which they apply are listed below. Course content of these supplementary authorizations is included in the academic department listings later in this catalog. Interested students should consult the appropriate academic departments and the School of Education for further information.

Authorized Area	Type of Credential Required
Basic Mathematics	Multiple or Single Subject
Biology	Single Subject

Chemistry	Single Subject
Comparative Political Systems and International Relations	Single Subject
Earth Sciences	Single Subject
Geography	Single Subject
Physics	Single Subject
U.S. Government and Civics	Single Subject

Information about other supplementary authorizations is available in the School of Education. Information about additional credential programs appears in the Graduate and Postbaccalaureate Study chapter.

Credit Certificate Programs

- Accounting
- Adult Nurse Practitioner
- Advanced Information Systems
- Alcohol and Drug Problems Specialist
- Applied Gerontology Career Counseling
- Cartography, Geographic Information Systems and Remote Sensing
- Child Maltreatment and Family Violence
- Computer Programming
- Early Childhood Special Education: Infancy Emphasis
- Early Childhood Special Education: Preschool Emphasis
- Electronics Technology
- Entrepreneurship
- Fashion Design
- Fashion Merchandising
- Fire Protection Risk Analysis and Reduction
- Fire Service Administration
- Graphic Design
- Interior Design
- International Business
- International Criminal Justice Administration
- Marketing
- Nurse Midwifery Education
- Obstetrics-Gynecology Nurse Practitioner
- Occupational Safety and Health
- Office Systems
- Retail Professional Development
- Teaching Microcomputer Business Applications
- Transportation (Commercial)
- Urban Land Use and Property Analysis
- Voluntary Youth Agency Administration

Rules and regulations governing certificate programs and brief descriptions of these programs appear at the end of this chapter. Specific requirements and course listings appear in the individual academic department and division listings following this chapter.

Multiple Subject Waiver Program Requirements

Effective: Fall Quarter 1991

Core Requirements (106-111 units)

AREA: 1 Languages UNITS: 16 *ENGL 101 ENGL 308 or 410 *SPCH 150 * Four units in a foreign language UNIV 400 (WPE)	AREA: 2 Literature UNITS: 8 *ENGL 250 <i>One of the following:</i> EDEL 473 ENGL 430 SPCH 490	AREA: 3 Visual and Performing Arts UNITS: 16 ART 400 DANC 400 MUS 400 <i>One of the following:</i> *ART IOIA, 101B, 101C *DANC 157 *MUS 150, 160,264 *TA 152	AREA: 4 Mathematics UNITS: 11 CS 160 MATH *100, 120	AREA: 5 Natural Sciences UNITS: 12 or 13 <i>Block 1 Life Sciences (with lab)</i> *BIOL 155 <i>Block 2 Physical Sciences (with lab)</i> *ASTR 151 with 152 or *CHEM 158 with 159 or *GEOL 150 with 151 or 152 or	AREA: 6 Human Development UNITS: 8 or 12 *PSY 150 <i>+One or two of following:</i> CHDV/IFSCS 420 **PSY 412AB SOC 322A
--	---	--	--	---	---

*GEOL 155 with 156 or 157or
*PHYS 150

Block 3 Interactions (no lab)
*GEOG/GEOL 1010r
*PSCI 180

Students subject to a previous catalog satisfy this requirement with ENGL 1010r ENGL190
* this course also fulfills a lower division GE requirement
**Students who take PSY 412AB may reduce the electives requirement from 28 to 24 units
+must include both child and adolescent psychology

AREA: 7
Physical Education
UNITS: 7
*PE 150
PE 420

AREA: 8
History
UNITS: 8
*HIST 110A
*HIST 202A

AREA: 9
Humanities
UNITS: 4
* PHIL 160or250or
*POLS 155 or
*SPCH 176

AREA:10
Social Sciences
UNITS: 8
*GEOG 150
*POLS 150

AREA: 11
Ethnic, Culture and Gender Studies
UNITS: 8
Any two of the following:
*ANTH 250
CHDV/FSCS 425
CHS 444, 470
DANC 477
HIST 480, 486
*LAS 150
MUS 458
PAS 251A, 251B, 400
SOC '263, 435, 441
SPCH 479, 489
TA 160

** this course also fulfills a lower division GE requirement*

Other Program Requirements (80 units)

*** Major (20 units)**

Approved Multiple Subject Credential majors are listed below.

- | | |
|--------------------------------|-----------------------------------|
| * Afro-American Studies | * Latin American Studies |
| * Child Development | * Liberal Studies |
| * Earth Sciences | * Mexican-American Studies |
| * English | * Philosophy |
| * Geography | * Physical Education |

*** History**

NOTE: All students who enter a major approved for the Multiple Subject teaching credential beginning Fall Quarter 1991 must complete the core courses listed above, in addition to other requirements in their major.

*** Depth (20 units)**

All students must consult a major adviser to select an appropriate depth area of study.

*** Electives (28 units)**

Professional education courses recommended.
See a credential adviser in the School of Education.

*** Upper Division GE Theme (12 units)**

Select one upper division theme and complete a course in each of the three required areas.

UNDERGRADUATE STUDY

California State University, Los Angeles offers the Bachelor of Arts, Bachelor of Music, Bachelor of Science, and Bachelor of Vocational Education degrees. The specific bachelor's degrees and academic majors are listed on the preceding pages. Minors and certificate programs are also available in many fields. These are described in the appropriate academic departments.

Specific information about admission requirements, curriculum, and graduation requirements for these programs is listed alphabetically by school and department in the academic department and division descriptions that follow this chapter. Characteristics of the individual degrees are described below.

Characteristics of Bachelor's Degrees

The Bachelor of Arts (B.A.) degree is designed to provide a balanced liberal arts education and general knowledge in a recognized discipline, interdisciplinary field, or areas of professional study.

The Bachelor of Science (B.S.) degree is designed to provide a balanced liberal arts education and a scientific, technical, or professional entry level of competence.

The Bachelor of Music (B.M.) degree provides a balanced liberal arts education with additional preparation in musical performance with emphasis on high performance standards.

The Bachelor of Vocational Education (B.V.E.) degree, created through state legislation, is designed specifically for vocational/occupational teachers who are required to have both work and teaching experience.

Summary of Bachelor's Degree Requirements

+Total units required for degrees:

Bachelor of Arts (B.A.)	186 units
Bachelor of Music (B.M.)	198 units
Bachelor of Science (B.S.)	186-204 units depending on major
Bachelor of Vocational Education (B.V.E.)	186 units

General education: 72 units, including:

- * 12 in residence
- * 12 in an upper division theme

Grade point average: Minimum C (2.0) average in:

- * all college work attempted
- * all courses attempted at Cal State L.A.
- * all general education courses
- * all courses required for major**

Major units required: varies depending on major

Residence: 45 units at Cal State L.A. including:

- * 36 upper division units
- * 18 units in a major
- * 12 units in general education

Upper division units: 60 units minimum

Writing skills requirement:

- * minimum C grade in ENGL 101 and 102
- * passing score on Writing Proficiency Examination (WPE)

+ Students receive no credit for any course in which they do not earn a passing (i.e., D or higher) grade.

Some majors require a minimum C grade in each course that is used to fulfill major requirements.

- * passing score on Writing Proficiency Examination (WPE) or
- * minimum C grade in UNIV 401
- * minimum C grade in upper division writing course designated by the major

General Requirements for the Bachelor's Degree

The Bachelor of Arts and Bachelor of Vocational Education degrees each require the satisfactory completion of 186 quarter units. The Bachelor of Music degree requires 198 quarter units and the Bachelor of Science degree unit requirement varies from 186 to 205 units, as specified individually for each degree program. Included in the total unit requirement for each of these degrees is a minimum of 72 units of general education courses, including the units necessary to complete mandatory requirements for the U.S. Constitution and American History and Ideals, 12 units in an upper division theme, and 12 units in residence at Cal State L.A. For each degree a minimum of 60 quarter units must carry upper division credit (courses numbered 300-499). Courses numbered above 499 are intended for graduate students only and are not applicable toward bachelor's degrees.

Preliminary Evaluation

College work completed elsewhere is evaluated in terms of its relevance to Cal State LA. course offerings and degree requirements. Preliminary evaluation information is sent to all new transfer and readmitted students at the time of notification of eligibility for admission to the University. A complete evaluation of transfer work is mailed to all new transfer and readmitted students during their first quarter of attendance. The evaluation identifies general education and graduation requirements met by transfer courses and transfer unit credit accepted. For readmitted students, it also identifies general education and graduation requirements met by Cal State L.A. courses. Students should review their evaluation carefully, consult their academic department promptly if

they do not agree with or fully understand all information on the evaluation, and keep it in a safe place for easy reference. Determination of the catalog governing graduation requirements is explained below.

Degree programs, courses of instruction, and specific regulations and requirements appropriate to individual areas of study are fully described in this catalog. The baccalaureate programs and the subject matter portions of the teaching credential programs in the academic departments and divisions and interdisciplinary programs are arranged in alphabetical order within each school. Professional education requirements for the basic credential programs are listed in the School of Education chapter in the Undergraduate Programs section; specialist and administrative credential requirements are included in the graduate School of Education section. Students are expected to familiarize themselves with all degree requirements and to consult an academic adviser on a regular basis.

Special Major for the Bachelor's Degree

The Bachelor of Arts or Bachelor of Science degree with a Special Major allows students an opportunity to pursue individualized programs of study if their academic and professional goals cannot be met by existing degree majors. Programs for the Special Major consist of integrated studies in two or more fields. The Special Major does not bypass normal graduation requirements or provide an alternative means of graduating for students who have failed to complete requirements in a previously designated major.

Students must apply for the Special Major when they have at least one full year (45 units) of academic work remaining to complete minimum requirements for a bachelor's degree. Neither lower nor upper division courses applied to general education requirements

may be counted toward fulfillment of minimum requirements for the major.

Approval of the Special Major is based upon individual justification. Further information is available from the school associate deans and from the Dean of Undergraduate Studies, Administration 725.

Multiple Majors

Students who wish to have multiple majors for one baccalaureate listed on their diploma and transcript must:

- * Fulfill department/division requirements in the several majors;
- * File a request endorsed by the several departments and divisions to the dean(s) of the appropriate school(s); and
- * Be approved and recommended for graduation by the faculty of each major department or division.

Second Baccalaureate

With faculty recommendation and approval, students may qualify for a second baccalaureate upon completion of the first degree if they fulfill general education requirements in effect at the time of admission for the second degree and meet scholarship requirements for seniors.

Students who earned their first baccalaureate from another institution must complete requirements for general education and a new major as specified by the major department or division and must earn a minimum of 45 quarter units in residence at Cal State L.A. following the date of the first degree.

Students who completed their first baccalaureate at Cal State L.A. may qualify for a second bachelors degree in a quarter subsequent to the first if they complete requirements for a major in a different academic field as specified by the department or division and earn a minimum of 45 quarter units in residence after the date of the first degree. Students may not have two degrees awarded in the same quarter.

The 45 quarter units in residence must include 36 units in upper division courses, 12 units in general education, and at least 18 units in the second academic major whether the first baccalaureate was earned at Cal State L.A. or elsewhere.

Units included in a second baccalaureate program may not be applied to a graduate degree. Candidates for second baccalaureates are eligible for the Dean's List and other academic honors based on the same criteria as candidates for first degrees. A second baccalaureate candidate may graduate with honors according to the same criteria as candidates for first degrees, with the grade point average computed on all units attempted in residence at Cal State L.A.

Minors

Although a minor is not required for a baccalaureate, minors are available in many fields for the purpose of strengthening students' preparation in areas related to the major field or to career choices. A minor may not be taken in the same subject as the major.

A minor consists of a formal aggregate of courses totaling 18 or more quarter units, of which at least 12 units must be upper division and taken in residence at Cal State L.A. A minimum C (2.0) grade point average is required on all course work taken to complete the minor program. The minor will be noted on the student's transcript if the individual program has been approved by the offering department or division and is completed at the same time as the work for the degree itself. Requirements for the minor must be completed either prior to or simultaneously with requirements for the degree. Minors will not be granted if any requirement of the minor is completed after requirements for the degree. Interested students should consult an adviser in the department or division offering the minor of their choice. A list of the approved minors appears at the beginning of this chapter.

Credit for Prior Experiential learning (CPEL)

Through the CPEL program, Cal State L.A. grants undergraduate academic credit for prior learning, knowledge, or skills-based experience that has been documented and evaluated according to campus policy. Students should be aware, however, that policies for earning credit for prior learning vary among CSU campuses.

Cal State L.A. grants up to 4 units of resident credit for UNIV 295, a course in which the student enrolls and, in collaboration with a faculty sponsor, prepares a portfolio documenting the prior Learning. In addition, a student may earn up to 8 units of nonresident credit, applicable to a bachelor's degree, for Learning, knowledge, or skills-based experience that has been documented and evaluated according to campus policy. To qualify, students must have completed 45 quarter units in residence at Cal State L.A. and not more than 165 quarter units overall, and must demonstrate how the prior learning articulates with their present educational objectives. Credit is awarded for UNIV 295 and for the prior learning based on faculty evaluation of the Learning experience in terms of academic standards both within the discipline and university wide. Applications for CPEL are available in the office of the Dean of Undergraduate Studies, Administration 725.

Cooperative Education

The Cooperative Education program provides educational enhancement by integrating classroom studies with related on-the-job experiences. With department approval, students may earn a maximum of 12 quarter units of elective credit toward an academic major or minor, including a maximum of 9 transferred quarter units. A maximum of 21 quarter units earned in cooperative education may apply toward a baccalaureate. With department approval, from 1 to 4 units of credit can be earned per quarter, based upon a minimum 10 hours per week of approved work experience for each unit of credit. Cooperative education may be offered in any department or division.

Cooperative Education Courses

The following courses are offered through the Cooperative Education program.

- 298 Preparation for Cooperative Education (2 units)
- 398 Cooperative Education (1-4 units)

- 399 Cooperative Education Honors (1-4 units)
 498 Advanced Cooperative Education (1-4 units)

UNIV 298 is open to all students without restriction. Admission to UNIV 398, 399, and 498 is arranged through the coordinator for the Student's major department or division. Admission to UNIV 399 requires UNIV 298 as prerequisite, as well as eligibility for a university or academic department or division honors program.

A minimum 2.35 overall grade point average is required and students must have completed 45 quarter units of course work before requesting permission of their major department or division to enroll. Approved employment, periodic conferences, and written reports are required.

Full descriptions of cooperative education courses (UNIV 298, 398, 399, and 498) are found later in this catalog in the chapter entitled University Programs.

Internship in Public Service

The Internship in Public Service program combines individual instruction with practical experience in government agencies and quasi-public enterprises. Although enrollment usually is restricted to Political Science majors, non majors with appropriate back-

ground and preparation may apply. The program operates similarly to the Cooperative Education program, except that the maximum 6 units earned may apply only to upper division free elective credit rather than toward the major. A qualifying civil service examination is required for admission to some internship programs. Information about opportunities and qualifications may be obtained from the coordinator in the Political Science Department.

ACADEMIC SUPPORT PROGRAMS

Health Science Advisement Office (HSAO)

In general, students planning to enter a school of dentistry, medicine, optometry, pharmacy, podiatry, or veterinary medicine should elect a major related to their own interests and include appropriate science courses as part of their major, general education, or electives. Medical schools expect students to show proficiency in English, mathematical reasoning, and fundamentals of physical and biological sciences. Some medical schools also require work in the social sciences, humanities, and a foreign language. Most expect completion of a baccalaureate program.

The advisory staff serving preprofessional students in medical and related health fields includes two appointed health science advisers and a supporting group of faculty members in the departments of Biology and Microbiology, Chemistry and Biochemistry, Physics and Astronomy, and Psychology. Medical sciences advisement and recommendations are coordinated through the Health Science Advisement Office (HSAO) in Biological Sciences 202, (213) 3432070. Students planning careers in these areas should visit the office for guidance about programs and application procedures, irrespective of their declared major. The staff has prepared a number of brochures that answer most of the students' initial questions about the various health science careers. The center also contains current catalogs for every health science professional school in the United States as well as information about foreign schools, financial aid, and alternative careers.

Health Careers Opportunity Program (HCOP)

Since 1984, the HSAO has also administered a federally-funded Health Careers Opportunity Program (HCOP). This program is designed to increase the number of minority and disadvantaged Cal State L.A. students accepted into health professional schools. Under the direction of two campus health science advisers and a full-time administrator, the program offers students a variety of enrichment courses, video mock interviews, MCAT/DAT preparation, seminar series, and application counseling, among other benefits. This assistance has enhanced their success in gaining admission to their chosen health professional programs as judged by the most recent national admission statistics.

Minority Access to Energy Research Careers (MAERC)

MAERC is designed to increase the number of under represented minority scientists and engineers in energy research. Funded by the U.S. Department of Energy, the program provides monthly stipends for six junior and six senior level student fellows to do research under the direction of a

Cal State L.A. faculty member. In the summers, the student fellows receive full funding while working in one of the following U.S. Department of Energy laboratories: Idaho Falls National Energy Laboratory, Lawrence Berkeley National Laboratory, Los Alamos National Laboratory, Solar Energy Research Institute. For further information, call the Dean of the School of Natural and Social Sciences at (213) 343-2000.

Minority Access to Research Careers (MARC)

The MARC Honors Undergraduate Research Training Program trains up to 10 academically accomplished (B or higher grade point average) natural and behavioral science juniors and seniors who can compete successfully for entry into graduate programs leading to the Ph.D. in the biomedical sciences or an M.D.-Ph.D. degree.

Student fellows perform research under the direction of faculty who are engaged in biomedical research. A stipend is provided for each student fellow. In addition, the program provides payment of student registration fees, funds for research supplies and a travel allowance for fellows to attend scientific meetings to present research papers. A participant's tenure in the program is two years for freshmen entering as juniors and one year for those entering as seniors.

For further information about the MARC program and applications forms, write or phone Dr. Carlos G. Gutierrez, Director, MARC Program, Department of Chemistry and Biochemistry, (213) 3432300.

Minority Biomedical Research Support Program (MBRS)

Designed to increase the pool of under represented minority biomedical scientists, the MBRS provides annual salaries for undergraduate and graduate students to participate in original research projects in collaboration with experienced faculty mentors.

Students are also given excellent opportunities to obtain experience in contemporary and sophisticated biomedical research, a seminar series presented by distinguished scientists, and travel to national and regional scientific meetings. For further information, contact the MBRS office at (213) 343-2395.

Minority Engineering Program (MEP)

MEP's goal is to increase the number of engineering majors and graduates from under represented minority groups while improving these students' professional preparation. MEP services include scholarships, counseling, advising, registration assistance, a study center, study and academic support groups, preprofessional internships, career and professional development seminars, and opportunities for involvement in student organizations. MEP students learn to work cooperatively in a supportive environment. The program provides services to all African-American, Hispanic and American Indian engineering majors. For further information, contact the MEP office, E&T A136, or call (213) 343-4527.

Minority Science Program (MSP)

The MSP aims to improve the chances for success of high-potential minority students by helping them improve their study habits and self-esteem and by providing a strong student-faculty support group. Students who register for introductory science and mathematics classes and are identified in the registration process as African-American, Mexican-American or other Hispanic, or Filipino or other Pacific Islander are notified about the program, but all eligible students are invited to apply.

MSP students enroll in a science orientation course designed to help them develop a sense of community. Those who are enrolled in the same courses are assigned a student mentor who works with them as a tutor and counselor. Faculty who teach freshman mathematics and science courses present information to MSP students about their expectations of students enrolled in their courses. Faculty who direct research projects are invited to talk with MSP students about their research. Students also learn about required tests and prerequisites, study and communicative skills, science and math careers, and computer usage in the sciences.

The Science and Math Study Center in Biological Sciences 220 is a gathering place for MSP students for individual or group study. Student mentors are available to help students with assigned problems. For further information, contact the program directors, Dr. Margaret Jefferson

(Biology and Microbiology Department) or Dr. Raymond Garcia (Chemistry and Biochemistry Department), either department office, or the study center.

Partnership for Academic learning and Success (PALS)

PALS is a faculty/student mentoring program designed to enhance the retention of first-time freshman students from under represented populations. Freshmen are paired with peer mentors who are advanced students with similar majors and career interests and are responsible for assisting freshmen in meeting the challenges of the first year of college. PALS is a school-based retention program, and faculty coordinators from each of the schools and the Academic Advisement Center (for students with undecided majors) are actively involved in the program. Exciting academic programs and cultural and social activities are key elements of the PALS program. For further information, contact the PALS Office, Library, Palmer Wing 1040B, (213) 343-3184.

PREPROFESSIONAL STUDY

Students who wish to prepare for professional study in engineering and the natural sciences, as well as the fields of law, librarianship, or medicine and health sciences will find specialized counseling and advisement at Cal State L.A. Such preprofessional advisement is separate from and in addition to major program advisement. Students are urged to consult current catalogs of professional schools available in the Reference Room of the Library for specific requirements, or to contact the advisement offices named below.

American Humanics, Inc.

Cal State L.A.'s American Humanics program, housed in the School of Health and Human Services, provides opportunities for students interested in human service organization careers to receive a specific, practical, educational experience related to their desired career goals. American Humanics, Inc. is a national program available at selected college and university campuses in the continental U.S. The intent of the program is to recruit, educate, and place qualified professional staff in nonprofit agencies. Cal State L.A.'s American Humanics program office is located at the entrance to Library North, phone (213) 343-4580. Students interested in the program are advised to contact the program director. A certificate program in Voluntary Youth Agency Administration and Youth Agency Administration (YAA) courses are described in the undergraduate School of Health and Human Services chapter.

Health-Related Programs

Cal State L.A. offers a wide range of programs in health and health-related fields. These programs have a strong clinical and field placement component at several leading health care facilities and clinics in the metropolitan area to prepare graduates to enter the health field as professionals. Additional information is available from the Coordinator of Health-Related Programs, Biological Sciences 125, (213) 343-2895. Programs and the departments and divisions that offer them include:

Program/Department/Division	Phone (Area Code 213)
Art Therapy	
Art	343-4010
Audiology	
Communication Disorders	343-4690
Dietetics	
Family Studies and Consumer Sciences	343-4630
Exercise Science	
Physical Education	343-4650
*Health Care Management Coordinator	343-2903
Health Science	
Health Science	343-4740
Medical Technology	
Microbiology	343-2030
Nursing	
Nursing	343-4700

Nutrition and Food	
Family Studies and Consumer Sciences	343-4630
Physical Education for Exceptional Individuals	
Physical Education	343-4650
Preprofessional Program for Medicine, Dentistry, Optometry, Pharmacy, Podiatry, and Veterinary Medicine	
Health Science Advisement Office	343-2070
Rehabilitation Counseling	
Administration and Counseling	343-4250
Social Work	
Social Work	343-4680
*Special Education	
Special Education	343-4400
Speech-Language Pathology	
Communication Disorders	343-4690

* graduate program only

Law

Students who wish to study law are expected in most instances to earn a baccalaureate in a relevant academic field and to acquire a good foundation in English, history, economics, logic, political science, psychology, and sociology.

The Prelegal option for the Bachelor of Arts degree in Political Science and the Business Arts-Prelegal option for the Bachelor of Science degree in Business Administration are recommended as acceptable interdisciplinary programs. The Department of Political Science also offers a Prelaw minor. Preprofessional advisement is available in the Department of Political Science and the Department of Finance and Law concerning other programs acceptable for admission to schools of law.

Prelaw students are expected to take the Law School Aptitude Test (LSAT) in the fall quarter of the year preceding their anticipated admission to law school. Application forms may be obtained during the spring quarter in the Political Science department office.

Librarianship

The field of librarianship provides careers with diverse opportunities and room for personal and professional growth. The information field is growing, and the work of librarians is expanding to keep pace. Every day librarians sift through clues, uncover facts, and help people weave knowledge from threads of information. School library media specialists do some of the most important teaching in schools today.

School library media specialists in California are required to hold a California teaching credential and a Library Media Teacher credential. The Library Services credential program is described in the graduate School of Education chapter of this catalog. For more information, consult the School of Education, King Hall D2071 B.

Many libraries also have support and paraprofessional positions that do not require a library science degree but offer valuable experience for someone interested in pursuing work in libraries. For information about the Library Technician nondegree credit certificate program, consult Continuing Education, (213) 343-4900.

For more information, write to Library Careers, ALA/OLPR, 50 East Huron Street, Chicago, Illinois 60611.

THE GENERAL EDUCATION PROGRAM

The California State University (CSU) requires that each baccalaureate graduate have completed a program of general education breadth requirements in addition to a major program of study. The general education program is designed to ensure that graduates "have made noteworthy progress toward becoming truly educated persons." Although the general areas of study and minimum unit requirements within them are prescribed by the CSU Board of Trustees, the individual campuses

are given the authority to set course requirements within those areas, to add other requirements, and to enact other regulations. California State University, Los Angeles has designed its general education program within these guidelines.

Each baccalaureate student who enters Cal State L.A. fall 1982 or later and who is subject to requirements in the 1982-1983 or any later catalog shall complete the general education program described below.

Students who enter Cal State L.A. summer 1987 or after must complete the program with a minimum C (2.0) average and a minimum C grade in all basic subjects courses.

It is essential that students plan their general education programs with the help of an academic adviser. Please consult the current Schedule of Classes for specific information about distribution requirements, unit requirements, and current general education courses. General requirements include a minimum of 72 quarter units to be selected in accordance with the specified distributions among the designated categories. At least 12 units of upper division course work must be included, taken subsequent to the attainment of upper division standing (completion of 90 quarter units) and selected from the list of approved upper division theme courses. A student may not use an upper division theme course to satisfy both general education and major requirements; a course may be used to meet a major or general education requirement, but not both. All students must complete a minimum of 12 quarter units of general education courses in residence at Cal State L.A.

Departments and divisions that require of their majors specific courses that are certified by the offering department or division as at least equivalent to the general education courses in a given subject may permit approved substitutions for general education courses. All such substitutions must be arranged by the student in consultation with the major department/division academic adviser.

Certification of General Education

Under the provisions that govern general education within the CSU, regionally accredited, participating colleges and universities may certify the completion of a portion of the 48 semester (72 quarter) units required in general education. Cal State L.A. will accept up to 39 semester (60 quarter) units of course work certified by another authorized institution. However, such acceptance is limited to the number of units required in each area and to a maximum of 30 semester (45 quarter) units in Areas B through D. Course work completed by students whose general education requirements are not certified by the transfer institution is evaluated in terms of Cal State L.A.'s current general education requirements.

Students are cautioned that certification is not automatic; each student must request it. In addition, all participating college and universities have their own policies governing certification. Students are strongly advised to read their college or university catalog carefully and to consult a counselor for details about individual regulations and restrictions.

Students who transfer to Cal State L.A. who were certified as having completed the lower division general education requirements under previous requirements but who have not maintained continuous attendance must complete Cal State L.A.'s upper division requirements as described below.

Philosophy and Goals of the Program

The General Education program enriches the lives of students as they acquire knowledge, learn to think critically, and use methodologies of the various disciplines. Students also learn to prepare for participation in a democracy, to appreciate a sense of shared cultural heritage, and to understand the environment. Students experience self discovery and personal growth and recognize then as lifelong processes.

Mission Statement

General Education is a critical component of students' academic and personal development. The General Education program endeavors to develop the following three separate, but related and equally important, qualities in our students:

1. A knowledge and understanding of themselves, their social and natural environment and a

wide range of cultural achievements.

General Education courses provide students with an opportunity to acquire knowledge about their own bodies and minds and about humankind's common heritage and cultural achievements. The General Education program also enables students to develop global perspectives; to develop common commitments and mutual respect among diverse social, cultural and ethnic groups; to establish an understanding of the biological and physical aspects of the world and the universe; and to nurture an understanding of environmental responsibilities.

2. A firm command of communication and analytical skills.

The General Education program develops the ability of students to think clearly and logically, to find and examine information, to communicate effectively in oral and written form, and to perform quantitative analysis. The General Education program also cultivates the students' ability to reason critically, to solve problems creatively and to understand the major methods of intellectual inquiry.

3. A moral commitment to their fellow human beings and an awareness of ethical and social concerns.

The General Education program emphasizes the interdependence of individuals with the human community and the natural world by focusing on the knowledge, experiences, relationships and ethical concerns common to all people. In affirming the community's claim on its individual members, General Education courses explore shared and diverse cultural heritages and an agenda of common and pressing contemporary problems, cultivate mutual responsibilities to the commonwealth, and stimulate commitments to moral values and ethical behavior. Consistent with the mission of the university, the purposes of General Education are to provide a knowledge and understanding of common problems, experiences and traditions that will enhance students' participation in a culturally diverse global society, and to provide an assessment of finite resources, mutual human needs and values.

Goals

General Education at Cal State L.A. is devoted to a number of basic goals, these include:

1. Developing awareness of the sense of community and global interdependence of human experience and of the concomitant ethical responsibilities to fellow human beings.

The General Education program is designed to help students achieve a sense of the essential relationship of self to the community and environment with emphasis on their responsibilities to human society. Group and individualized experiences that encourage ethical behavior should be a part of the General Education program.

2. Fostering intellectual curiosity and an appreciation of the major discoveries and achievements in the arts, letters, natural and social sciences, technology and other major academic disciplines.

The General Education program is designed to stimulate curiosity for knowledge and excitement for lifelong learning. The nature of the courses and experiences in the program are planned to encourage students' interest in diverse aspects of education. The faculty is committed to offering students unique classroom opportunities and to challenging them to continue to study and learn long after course requirements are met. The General Education program includes an historical awareness of the major developments in the human experience as well as a contemporary awareness of the applications of new technologies which will play an increasingly important role in life.

3. Achieving competence in basic skills.

The General Education program is designed to ensure that students master basic communication, critical thinking and quantitative skills so that they may achieve academic

excellence. In meeting this goal, the General Education program pays special attention to the multicultural nature of the Cal State L.A. campus community and to the needs of students who are limited in English language proficiency. Language development instruction is an integral part of General Education at Cal State L.A. The General Education program at Cal State L.A. places an emphasis on developing competence in the English language through its curriculum.

4. Recognizing and appreciating the multicultural nature of human existence in general and of American society in particular.

The General Education program is designed to encourage students to develop appreciation for the multicultural dimensions of life in California, the nation, and the world. Uniquely on this campus, faculty draw upon the special expertise and the abundance of multicultural experiences of the student population in cultivating this cultural awareness. The General Education program offers students the opportunity to recognize the rich heritage and socially diverse environment of California and of the nation. The program also enables students to become aware of universal experiences that are part of all cultures as well as the varieties of value systems that are in operation in today's global society.

5. Developing an appreciation of a shared and diverse cultural heritage and cultivating an awareness of contemporary world and its problems.

The General Education program provides for its diverse student body a familiarity with and a critical appraisal of American culture and its historical roots and antecedents. Students assess critically the impact and influence of American tradition, which includes the political, economic, social and communication systems, as well as the artistic and literary heritage, on the contemporary world.

Structure of the Program

The General Education Breadth Requirements are structured so that introductory courses are taken prior to participation in integrative experiences. Students are expected to complete the general education requirements in written and oral communication, critical thinking, and mathematics, and general education prerequisite courses, if any, before enrolling in any upper division general education theme course. All courses approved for general education credit, including those lower division courses that also earn credit toward a major, are mandated to require the practice of writing in English including, where appropriate, library assignments. Evaluation of writing is included in all courses.

THE GENERAL EDUCATION PROGRAM

All baccalaureate students who enter Cal State L.A. fall 1982 or later and who are subject to requirements in the 1982-1983 or later general catalog shall complete the general education program described below in consultation with a faculty adviser. The requirements include a minimum of 60 units selected from the course lists on the next page. In addition, at least 12 of the total 72 units must be earned at Cal State L.A. All students who are subject to requirements of the 1987-1989 or later catalog must earn a C average in their general education program and minimum C grades in all Block A (basic subjects) courses.

CONFIGURATION OF BLOCKS

- A. BASIC SUBJECTS (16 units) (one course from each area)
 1. Written Communication* (4 units)
 2. Oral Communication (4 units)
 3. Critical Thinking (4 units)
 4. Mathematics (4 units)

A minimum C grade in all basic subjects courses is required of all students who are subject to requirements of the 1987-89 catalog or later. AMERICAN INSTITUTIONS (minimum of 8 units)

U.S. History

U.S. Constitution

State/Local Government

All three areas must be met. POLS 150 meets both U.S. Constitution and State/Local Government

- B. NATURAL SCIENCES (8 or 12 units) (2 or 3 areas)
Based on the classification of the student's major as listed below. A biological and a physical science, each with lab, are required of all students.
 1. Biological Science with lab (4 units)
 2. Physical Science with lab (4 units)
 3. Interactions-Nonlab science (4 units)

- C. HUMANITIES (8 or 12 units) (2 or 3 areas)
Based on the classification of the student's major as listed below. Students must take either 8 units from 2 fields or 12 units from 3 fields.
 1. Literature
 2. Arts
 3. Philosophy
 4. Foreign Language

- D. SOCIAL SCIENCES (8 or 12 units) (2 or 3 areas)
Based on the classification of the student's major as listed below. Students must take either 8 units from 2 fields or 12 units from 3 fields

- E. LIFELONG UNDERSTANDING AND SELF-DEVELOPMENT (4 units)

- F. UPPER DIVISION THEME (12 units)

Select one theme and complete 3 courses as required in that theme.

CONFIGURATION OF UNITS

- A. Basic Subjects -- 16
American Institutions -- 8
- B. Natural Sciences -- 8 or 12
- C. Humanities -- 8 or 12
- D. Social Sciences -- 8 or 12
- E. Lifelong Understanding and Self-Dev. -- 4
Lower Division Total -- 60
- F. Upper Division Theme -- 12
General Education Total -- 72

CLASSIFICATION OF MAJORS

Natural Science-based Majors. Students majoring in the following programs should take 8 units of natural science (physical and biological, each with lab) 12 units of humanities, and 12 units of social science:

Biochemistry (BS)	Earth Sciences (BA)	Nutritional Science (BS)	Nursing (BS)
Biology (BS)	Engineering (BS)**	Mathematics (BA, BS)	Physical Education (BS)
Chemistry (BA, BS)	Geology (BS)	Medical Technology (BS)	Physical Science (BS)
Computer Science (BS)	Health Science (BS)	Microbiology (BA)	Physics (BS, BA)

Humanities-based Majors. Students majoring in the following programs should take 12 units of natural science; including Interactions, 8 units of humanities, and 12 units of social science:

Art (BA)	Japanese (BA)	Music (BMus, BA)	Spanish (BA)
English (BA)	Journalism (BA)	Philosophy (BA)	Speech Communication (BA)
French (BA)	Liberal Studies (BA)	Radio/TV Broadcasting (BA)	Theatre Arts (BA)
Industrial Arts (BA)			

Social Science-based Majors. Students majoring in the following programs should take 12 units of natural science, including Interactions, 12 units of humanities, and 8 units of social science:

Afro-American Studies (BA)	Computer Information Systems (BS)	History (BA)	Psychology (BA)
Anthropology (BA)	Criminal Justice (BS)	Home Economics (BA)	Rehabilitation Services (BS)
Business Administration (BS)	Economics (BA)	Industrial Technology (BS)	Social Science (BA)
Business Education (BS)	Fire Protection Administration	Latin American Studies (BA)	Social Work (BA)

Child Development (BA) and Technology (BS)
 Communicative Disorders(BA)
 Vocational Arts (BVE)

Mexican-American Studies (BA) Sociology (BA)
 Geography (BA) Political Science (BA)

Students should choose general education courses in consultation with an academic adviser in their major department or division. This is particularly important for science majors whose general education Natural Science requirements will differ from the courses listed in the general education program.

*All students who enter Cal State, L.A. Summer 1993 or later and who are subject to requirements in the 1993-95 **or any later catalog are** required to **have two courses** (8 units) of Written Communication; however only the first of the two courses (4 units) is applied to general education
 **GE program for Engineering majors is available in the School of Engineering and Technology. See a faculty adviser.

General Education Lower Division Courses

Catalog: 1982-1983 or later

<p>A Basic Subjects 16 §A1 WRTN COMM +ENGL 101</p> <p>§A2 ORAL COMM SPCH 150</p> <p>§A3 CRIT THINK PHIL 160, 250 POLS 155 SPCH 176</p> <p>§A4 MATH MATH 100, 102, #153</p>	<p>American Institutions UNITS: 8 U S HISTORY HIST 202A or 202B</p> <p>U S CONSTITUTION +POLS 150</p> <p>ST/LOCAL GOV'T + POL 150 or 200 + POLS 150 meets both areas</p>	<p>B Natural Sciences UNITS: 8 or 12 B1 BIOLOGICAL (w/lab) BIOL 155,156 MICR 151</p> <p>B2 PHYSICAL (w/lab) ASTR 151 with 152 CHEM 158 with 159 GEOL 150 with 151 or 152 GEOL 155 with 156 or 157 PHYS 150</p> <p>B3 INTERACTIONS (no lab) ANTH 260 BIOL 165 GEOG 160 GEOL 158 PHYS 155 PSY 270</p>	<p>C Humanities UNITS: 8 or 12 C1 LITERATURE ENGL 250, 258</p> <p>C2 ARTS ART101ABC,151-159 +DANC 157 ENGL 225 MUS 150, 160, 264 PAS 260 TA 152 +formerly PE 157</p> <p>C3 PHILOSOPHY PHIL 151, 152,238 RELS 200</p> <p>C4 FOREIGN LANGUAGE #ARAB 100ABC CHIN 100ABC, 101ABC 200ABC, 201ABC FREN 100ABC, 200AB GERM 100ABC ITAL 100ABC JAPN 100ABC, 130, 200ABC, 230 LATN 100ABC, 222 PAS 125 RUSS 101AB SPAN 100ABC, 105, 130. 200ABC, 205AB, 230</p>	<p>D Social Sciences UNITS: 8 or 12 ANTH 250 ECON 150 ENGR 250 GEOG 150 HIST 110ABC POLS 250 PSY 150 SOC 201 URBA 101</p> <p>No more than 4 units from group below:</p> <p>AAPS 200 CHS 111 LAS 150 PAS 101</p> <p>SOC 263 *formerly L&S 180</p>	<p>E Lifelong Understanding and Self Development UNITS: 4 ANTH 265 CHEM 160 *FSCS 120 HS 150 **NTRS 250 PE 150 PSY 160 SOC 202 *formerly HE 120</p> <p>** formerly FSCS 250 and HE 250</p> <p>* SOCS 180</p>
---	---	--	--	--	---

NOTE: A minimum C average in general education is required of all students following the 1987-1989 or any later catalog

NOTE: Other courses may be substituted in some categories in conjunction with a student's major. Consult a department or division adviser for a list of double counted courses

NOTE: 'Engineering majors' GE program differs. See an academic adviser in your major department.

- + Students subject to a previous catalog satisfy this requirement with ENGL 101 or ENGL 190 # changed to MATH 100
- ##not offered after the 1986- '87 academic year
- § Minimum C grades in these classes required of students following 1987-1989 or any later catalog

UPPER DIVISION THEMES

Students are required to complete a 12-unit upper division theme as part of the general education program after they have achieved upper division standing (i.e., after they have completed 90 units). The themes consist of integrated courses designed to help students acquire knowledge of the major achievements and concerns of enduring significance in the human experience.

Courses in each theme are distributed among three areas including natural sciences and mathematics, social sciences, and humanities. Students must select one course from each area

for the theme selected. Completion of the lower division Basic Subjects requirement is prerequisite to all upper division theme courses, and additional lower division general education courses may be required as prerequisites to individual courses contained in the themes. Some courses included within the themes are "crosslisted"; that is, they are offered under two or more course abbreviations (e.g., BIOL/CHEM 350N). Students may register under any of the available course abbreviations; departments offering these courses will change from quarter to quarter. Students may not use an upper division theme course to satisfy both general education and major requirements. A course may be used for a general education or a major requirement, but not both.

Students may choose from the following themes, in consultation with an adviser. A student who elects to change themes before completing the sequence must take 12 units of work in the three areas of the new theme to meet this requirement.

1. SCIENCE, ENVIRONMENT, AND PUBLIC POLICY

"Science, Environment, and Public Policy" explores the scientific considerations that have an impact on the natural environment. It discusses the moral obligation of humanity toward the environment and societal attitude toward nature as revealed by the arts. The student also can explore the historical development of current attitudes toward the environment and the way in which the political process is brought to bear on environmental concerns. Courses included are:

Natural Sciences and Mathematics

BIOL/CHEM/CS/PHYS 358N, Science and Controversy (4)
ENGR/GEOG 358, Technology and Environment (4)

Social Sciences

HIST 458, History of the American Environment (4)
POLS 458, Environmental Policy and Politics (4)

Humanities

ART/MUS 456, Nature, Environment, and the Arts (4)
ENGL 358, Technology in Literature (4)

2. ANCIENTS AND MODERNS

"Ancients and Moderns" is an integrated approach to antiquity, its history, achievements, and legacy to modern Western and Islamic culture. Its purpose is to develop an understanding of our civilization, its achievements and problems. Courses included are:

Natural Sciences and Mathematics

CHEM 380N/HIST 380, Ancient and Modern Science (4)

Social Sciences

HIST 311, Classical Civilization and the Modern World (4)

Humanities

ART/ENGL 381, Legacy of Ancient Literature and Art (4)
PHIL 321, Ancient Thought and its Modern Legacy (4)

3. THE CREATIVE EXPERIENCE IN HUMAN DEVELOPMENT

"The Creative Experience in Human Development" explores all aspects of the creativity of human beings. Students examine the thought processes employed in human inquiry through a study of the culture, history, and physical nature of the world in which they live. Courses included are:

Natural Sciences and Mathematics

MICR 363, Microbiological Detectives (4)
PHYS 363, The Creative Process in Physics (4)

Social Sciences

ANTH 450, Culture and Innovation (4)

SOC 442, Social Change (4)

Humanities

ART/MUS 455, The Creative Genius in Art and Music (4)

MUS 355, The Creative Aspects of Music (4)

4. THE NUCLEAR AGE

This theme has been deleted from the curriculum. Students may no longer enroll.

5. PERSPECTIVES ON EVOLUTION

"Perspectives on Evolution" is intended to provide a foundation for understanding the theory of evolution as applied to the origins of the universe, the earth, raw materials for life, and life forms. The history of the idea of evolution from antiquity to the present and its impact on the culture of the 20th century will be explored. Courses included are:

Natural Sciences and Mathematics BIOL/CHEM 350N, Evolution of Life (4)

GEOL/PHYS 350N, Evolution of Universe and Earth (4)

Social Sciences

ANTH 350, Evolution of Culture (4)

Humanities

ART/ENGL/HITS/PHIL 350, Evolution and the Modern World (4)

6. WORLD URBAN ENVIRONMENT: ECOLOGY AND MAJOR URBAN ISSUES

"World Urban Environment: Ecology and Major Urban Issues" contributes to an understanding of urbanization, its causes and consequences, and focuses on the city as a special kind of human habitat, with emphasis on the relationship of urban issues to the ecology of the city. Courses included are:

Natural Sciences and Mathematics

BIOL 361 N, Ecology of the Urban Environment (4)

ENGR 352, Technological Aspects of Urban Environment (4)

Social Sciences

GEOG 476, Urban Areas (4)

SOC 430, Urban Sociology (4)

Humanities

ART 485, Ecology and Environment (4)

SPCH 489, Intercultural Communication (4)

7. THE AMERICAN LANDSCAPE

This theme provides a basis for viewing the American landscape as an evolving aggregate of natural human resources in interaction with the awareness that natural science, social science, and the humanities all contribute to an understanding of that landscape. Emphasis includes evaluation of America's natural environments and settlement features as seen by geologists, geographers, authors, and artists.

Natural Sciences and Mathematics

GEOL 420N, Geology of the National Parks (4)

Social Sciences

GEOG 421, United States (4)

Humanities

ART 341, The American Landscape in Art (4)
ENGL 387, The American Landscape in Literature (4)

8. INSTITUTIONAL RACISM

Institutional racism is a set of beliefs, attitudes, policies, and practices that permeate the major social, political, and economic institutions of the Western world. This theme helps students identify and explore the origins and present systems of institutional racism and develop new strategies designed to lessen the impact of institutional racism in modern society.

Natural Sciences and Mathematics BIOL 319N, Human Genetics (4)
BIOL 321 N, Institutional Racism: The Social Darwinian Rationale (4)

Social Sciences

EDAD 480, Institutional Racism and Schools (4)
SW 462, Institutional Racism and Poverty (4)

Humanities

LAS 435, Race and Culture in Latin America (4)
PAS 427, Institutional Racism: Black Response in Literature (4)

9. DEVELOPMENT PROCESS IN THE THIRD WORLD

The Third World is characterized by severe social tension and staggering challenges. Immigration pressures are a continuing source of conflict and the competition for resources will become more acute. The natural science courses consider the physical limits and possibilities of Third World development; the social sciences develop an appreciation of human and economic processes affecting social and economic change in the Third World; and the humanities component examines the dynamic interplay among the arts, religion, and cultural values.

Natural Sciences and Mathematics

GEOG 433, Third World Environments and Their Technological Development (4)

Social Sciences

ECON 460, Economic Growth of Underdeveloped Areas (4)
LAS/PAS 460, Dynamics of Social Change in the Third World (4)

Humanities

LAS/PAS 442, Cultural Impact of Third World Development (4)
PHIL 418, Religion, Traditional Values, and Modernization (4)

10. GENDER IN HUMAN EXPERIENCE

The theme provides an integrated and disciplined inquiry into the status and implications of gender differences, exploring the meaning and significance of these basic factors in human experience. The natural sciences introduce students to the biological bases of sex differences; the social sciences treat gender in relation to cultural and social institutions; and the humanities explore the meaning of sex and gender, their cultural expressions, and prospects for rational evaluation of gender organization.

Natural Sciences and Mathematics

BIOL 488N/PSY 488, Gender Differences (4)

Social Sciences

ANTH 438, Sex Roles in Cross-cultural Perspective (4)
SOC 441, Sociology of Sex Roles (4)

Humanities

ENGL/SPCH 385, Sex and Gender in Language and Literature (4)

PHIL 412, Philosophy and Sex Roles (4)

11. HUMAN MATURITY AND AGING: PROCESSES AND PROBLEMS

The theme addresses major life issues that confront individuals in maturity and adulthood, and provides an integrated academic approach to the study of human aging through examination of the biological bases of aging, the social and psychological implications of maturity and aging, and the literary and philosophical concepts of age and aging.

Natural Sciences and Mathematics

BIOL 484N, Biology of Human Aging (4)

NTRS 451, Nutrition and Aging (4)

Social Sciences

PSY 462, Psychology of Human Development: Maturity and Aging (4)

SOC 450, Sociology of Aging (4)

Humanities

ENGL/FL/PHIL 383, Themes of Adult Life in Philosophy and Literature (4)

RELS 425, Themes of Adult Life in Religion (4)

12. HEALTH AND WELL-BEING

The theme provides a basis for understanding the physical, emotional, cultural, and philosophical aspects of self as these relate to personal well-being. The focus is on concerns of enduring importance to the human experience of all individuals as members of the national and world communities. Nursing majors may not enroll in this theme.

Natural Sciences and Mathematics

FSCS/PE 300, Physiological and Nutritional Bases of Fitness (4)

FSCS 450, Nutrition and Well-Being (4)

Social Sciences

ANTH 444, Medical Anthropology (4)

SOC 425, Medical Sociology (4) Humanities

PHIL 491, Medical Ethics (4)

ART/DANC/MUS/TA 357, Creative Experiences for Well-Being (4)

13. ROMANCE VS. REASON

This theme consists of an integrated sequence of courses that focus on a complex historical period, 1789-1914, in which scientific, humanistic, and social perspectives are transformed by human action and historical events to create the environment for the intellectual revolution of the period and lay the groundwork for the social, political, intellectual, and cultural changes in twentieth century societies. The dramatic tensions between romanticism and rationalism in the sciences, humanities, and social sciences are explored in the reactions to the Enlightenment and Revolution (1789-1848); during the period of institutionalized change after the revolutions of 1848, in which theories of evolutionary change provided debate over the place of human beings in nature (1848-1871); and through the crisis of Victorian culture in which psychic, intellectual, and political tensions reached a climactic synthesis in the cataclysm of 1914 (1871-1914). The courses that comprise this theme are Liberal Studies 300A, 300B, and 300C. They are offered according to the schedule below.

Romance vs. Reason I

LBS 300A, Romance, Reason, and Revolution, 1789-1848

Romance vs. Reason II

LBS 300B, The Debate over Man's and Woman's Place in Nature, 1848-1871

Romance vs. Reason III

LBS 300C, Crisis of Victorian Culture, 1871-1914

14. HUMAN EMOTIONS

"Human Emotions" is an interdisciplinary exploration of the integration within humans of biology, society, and culture, drawing on fundamental knowledge about human nature and evolution, social institutions and values, and creative and aesthetic elements of institutions and values, and aesthetic elements of culture. Students learn to reflect upon and evaluate their own emotional feelings and expressions within physiological, social, and cultural frameworks relating their private experiences to education and connecting the personal with the abstract.

Natural Sciences and Mathematics

ANTH 400, Evolution of Human Emotions (4)

PSY 323, Psychology of Emotions (4)

Social Sciences

HIST 456, History of Emotions (4)

SOC 400, Emotions in Society (4)

Humanities

ENGL/FL 389, Human Emotions in Literary Expression (4)

TA 457, Emotions in the Theatre and Film (4)

15. VIOLENCE AND VICTIMS

"Violence and Victims" utilizes a multidisciplinary approach that provides comprehensive investigations, discussions, and debate involving theories, research, and intervention methodologies relevant to the causes and effects of violent behavior. The theme, which is structured to increase students' understanding of the nature, causes, and complexities of violence in its myriad forms, includes the study of how, when, and why it occurs.

Natural Sciences and Mathematics

NURS/PSY 307, The Physiological and Behavioral Aspects of Victims and Aggression (4)

Social Sciences

NURS/SW 455, Family Violence and Abuse: Strategies for Prevention and Intervention (4)

SOC 483, Violence in American Society (4)

Humanities

BCST 466, The Visualization of Violence in the Media (4)

ENGL 382, Violence in Literature (4)

DEGREE REQUIREMENTS**Catalog Requirements Under Which An Undergraduate Student Graduates**

Unless exception is requested under one of the provisions below, students enrolling at Cal State L.A. for the first time must meet degree requirements specified in the catalog in effect at the time of entrance. The catalog date is specified on each student's credit summary.

Baccalaureate students who remain in attendance in regular sessions at any California State University campus, any California community college, or any combination of California community colleges and CSU campuses and thereafter at Cal State L.A. may elect to meet Cal State L.A. graduation requirements in effect at the time they began such attendance, at the time they entered Cal State L.A. or at the time of graduation from Cal State L.A. In this context, attendance means attendance in at least one semester or two quarters each calendar year, excluding summer session, extension, and concurrent enrollment in Cal State L.A. courses. Absence due to an approved educational leave or for attendance at another accredited institution of higher learning shall not be considered an interruption in attendance if the interruption does not exceed two years. Disqualified students retain their existing catalog privileges under the conditions outlined above.

All other transfer students and students who have not remained in attendance as described above will be held to Cal State L.A. graduation requirements in effect at the beginning of their most recent period of attendance at Cal State L.A. or, alternatively, at the time of graduation. Students who change to a new degree and/or major objective must meet requirements for the new degree and/or major in the catalog in effect at the time of change. If courses described under earlier requirements are no longer available, the major department or division may authorize or require appropriate substitutes.

General education is an integral component of the requirements for the bachelors degree. Students who remain in attendance as defined above normally will meet general education requirements listed in the catalog in effect at time of entrance. However, they may elect to meet general education requirements in the catalog in effect either at the time of entrance or graduation, and need not meet major requirements from the same catalog. If courses described under earlier requirements are no longer available, appropriate substitutes must be selected from the current list of courses approved for the area involved.

Time Limits on Major Requirements for Bachelor's Degrees

A department or division may specify that no subject, unit, or grade credit be granted for specific upper division courses offered by that department or division to students who completed such courses more than ten years prior to the date of their bachelor's degree. Courses with time limits are designated in the course descriptions in this catalog and on the major program advisement sheets submitted by each student's major department or division to the Graduation Office. When a Cal State L.A. course is so designated, the restriction also applies to equivalent courses transferred from other institutions. Students may petition for and, in extraordinary circumstances, the major departments and divisions may grant, permission to validate by examination such an expired course with the concurrence of the department or division that offers the course or its equivalent.

For all requirements, election of any catalog will not extend beyond ten years after its designated academic year.

Residence Requirement

Students must complete a minimum of 45 quarter units, including at least 36 upper division units, 18 units in the major, and 12 units in general education courses, in residence at Cal State L.A. for the baccalaureate. Credit earned in Special Sessions may be applied toward this residence requirement to a maximum of 8 units in the major and 18 units overall. Credit earned in extension courses or by examination may not apply toward the residence requirement.

Scholarship Requirements

In addition to meeting total unit requirements for graduation, students must also satisfy specific scholarship requirements. These include achievement of a minimum 2.0 grade point average (C on a scale in which A = 4.0) in all units attempted, including those accepted by transfer from another institution, all courses required for the major, all courses used to meet general education requirements, and all units attempted at Cal State L.A.

Writing Skills Requirements

All CSU students must demonstrate competence in writing skills as a requirement for graduation. Students must satisfy lower and upper division writing skills requirements.

Lower Division Writing Requirement

The English Placement Test (EPT), described in the Admissions chapter of this catalog, is prerequisite to all lower division English writing courses.

All baccalaureate students who enter Cal State, L.A. Summer 1990 or later and who are subject to requirements in the 1993-95 or any later catalog are required to take two quarters of English composition (ENGL 101 and 102), which must be taken in sequence. Students entering Cal State L.A. as freshmen must complete these **courses** before they reach upper division standing (90

quarter units). Transfer students entering above the freshman level who are required to take one or both of these composition courses must do so before they complete 45 quarter units at Cal State L.A.. Only the first of the two courses (ENGL 101) is applied to general education. The second course (ENGL 102) is prerequisite to UNIV 400 (WPE).

Upper Division Writing Requirements

All Cal State L.A. students who entered Summer 1984 or later and are pursuing a degree or credential are required to pass the Writing Proficiency Examination (WPE) prior to completion of 135 quarter units. ENGL 101 and 102 are prerequisites to the examination. Transfer students who have completed 135 units upon entrance must pass the WPE during their first quarter of residence at Cal State, L.A. Students who have passed the upper division writing proficiency examination at another institution with an implied level of achievement at least equivalent to that at this campus shall be considered to have met the Cal State, L.A. requirement.

Students who fail to take and pass the WPE within the required time limit of 135 units will have a hold placed on their records which will preclude them from enrolling in any courses until the WPE requirement is satisfied. Students who receive a No Credit (NC) grade on the WPE must meet with a WPE consultant in the University Writing Center to discuss deficiencies identified by the exam and receive recommendations of activities to correct these deficiencies. Based on the recommendations from the WPE consultant, students may re-take the WPE or enroll in UNIV 401, the upper division writing proficiency course.

To take the WPE, students must register for UNIV 400 by the add deadline of each quarter. Additional information about the WPE is available in the Schedule of Classes and at the University Writing Center.

The postbaccalaureate writing skills requirement-for students pursuing graduate degrees and credentials-is described in the Graduate and Postbaccalaureate Study section.

Undergraduate Credit for Graduate Courses

Under extraordinary academic circumstances as specified below, the University Undergraduate Studies Subcommittee (USS) may approve the granting of baccalaureate credit for 500-level course work to a maximum of two courses not to exceed a total of 8 quarter units. The following conditions must be met:

- * Senior standing at the time of petition (completion of 135 quarter units);
- * grade point average of 3.5 in the major;
- * submission of a petition to the Undergraduate Studies Subcommittee (USS) at least one full quarter in advance of the quarter in which the courses are to be taken; and
- * submission of a letter of recommendation from the instructor of the 500-level course(s), endorsed by the chair of the student's major department or division and by the chair of the host department or division if the proposed course is not in the student's major department or division.

Graduate Credit for Undergraduate Students

Except for provisions for outstanding seniors described above and for vocational teachers enrolled for the community college credential and the BVE degree, graduate course credit may not be applied toward a baccalaureate. In their final quarter of undergraduate study, students may apply toward graduate credit a maximum of eight units in courses beyond the minimum requirements for the baccalaureate, provided they have maintained a minimum 2.5 grade point average in all upper division work. Students with a 3.0 average or higher may include in this allowance one 500-level course. Any course for which graduate credit is requested must be approved in advance by the graduate adviser in the department or division in which the master's degree is to be taken.

The approved application must be delivered to the Office of Admissions, Graduation Section, Administration 409, during the quarter prior to that in which courses are to be taken. Graduate credit is allowed for courses numbered in the 400- and 500-series only.

Application for Graduation (Degree Check)

Application for graduation (degree check) is made on a form available in the Graduation and Record Services Office located in Administration 409. Permission to apply for graduation should be granted by the candidate's major department or division before the completed application form is submitted to the Cashier's Office for payment of the fee.

Students who have earned a minimum of 145 quarter units are required to file a paid application form and a "Bachelor's Degree Worksheet" to their major department/division office by the deadline announced in the quarterly Schedule of Classes. If approved, the department will attach the Major Program and forward all documentation to the Graduation Office for processing. The Graduation Office notifies students of the receipt of their graduation application and supporting documents. All incomplete applications are returned to the appropriate major department/division office for completion and submission during the next available filing period.

Results of graduation checks are sent to students in the mail before their scheduled registration date for their anticipated final quarter. All questions regarding the graduation check procedure or final results are to be directed to the student's major department or division. Students who are enrolled in the quarter they expect to graduate but who do not complete all degree requirements will have their graduation application "automatically" transferred to the next quarter for processing. If the student is still ineligible to graduate at the end of the second quarter, another graduation application, with the required fee and all supporting documents must be resubmitted for the next available filing period.

Degrees are granted at the end of the quarter in which all requirements are met, not when the graduation application is submitted for processing.

Commencement Exercises

Commencement is held annually at the end of the spring quarter. Students who have completed degree requirements the previous summer, fall, or winter quarter are eligible to participate in the ceremony along with those who complete their work in the spring quarter. Information bulletins about commencement activities are mailed to the home address of those eligible to participate early in the spring, and are available on campus at school and department and division offices and Administration 146 and 409.

During Commencement Exercises, degrees are conferred on the candidates by the President of the University. Although each candidate receives a diploma cover during the program, the actual diploma is sent several months later. A few weeks after graduation, eligible candidates receive a Letter of Congratulations in the mail and degrees are posted on their permanent academic records.

Career Placement Information

The campus may furnish, upon request, information about subsequent employment of students who receive academic degrees in programs or courses of study that prepare them for a particular career field. This information includes data concerning 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 California State University campuses. Copies of the published information are available in the Cal State L.A. Office of Admission and University Outreach, Student Affairs 101.

Recognition of Academic Excellence

Cal State L.A. recognizes superior academic achievement by conferring honors upon students with outstanding records at an annual spring Honors Convocation and at the annual Commencement Exercises in June.

Recognition is accorded at the annual Honors Convocation to undergraduate students placed on the Dean's List, those who were awarded Honors at Entrance, members of the General Education Honors Program, and both undergraduate and graduate students selected by their major departments and divisions to receive the Alumni Association Certificate of Honor. Also recognized at the Honors Convocation are recipients of academic scholarship awards and juniors and seniors elected to membership in national honor societies. The requirements for Honors at Entrance, Dean's List, and Certificate of Honor awards are as follows:

Honors at Entrance

First-time freshmen who enter with a grade point average of 3.5 or higher on their high school record.

Dean's List

Undergraduate students who earn a 3.4 grade point average or higher for a quarter in which they complete 12 or more units of traditionally graded course work and who rank in the upper five percent of students in academic achievement within their school. The preceding eligibility criteria also apply to graduate students seeking a second or subsequent baccalaureate. Students will not be added retroactively to the Dean's List on the basis of completion of work in which the original grade was I (Incomplete).

Alumni Association Certificates of Honor

Awarded to undergraduate and graduate students who are selected by their academic department or division for outstanding achievement in their field of study with a B (3.0) grade point average or higher and at least three quarters completed at Cal State L.A.

Graduation with Honors

Baccalaureate graduates of Cal State L.A. who maintain an outstanding scholarship record while earning the degree receive special recognition upon graduation. These honors, designated on the diploma and the permanent academic record, are granted to the top 5% of students graduating in each school, calculated from grade point averages achieved at Cal State L.A. These percentages are calculated once for each academic year (the academic year is defined as summer, fall, winter, and spring quarters). Eligibility is limited to students who have earned at least 72 quarter units in residence at Cal State L.A. Second baccalaureate candidates who are eligible for University honors may receive those honors for which they qualify. Students pursuing an advanced degree or a teaching credential are not eligible for such honors.

Honors at graduation are determined according to the criteria listed below.

Honors Category	Percentage
Cum laude (honor)	Top 5%
Magna cum laude (high honor)	Top 3%
Summa cum laude (highest honor)	Top 1%

For these calculations, Rehabilitation Services majors (School of Education) will be included with the competition pool for the School of Natural and Social Sciences. Students with a Special Major will be included with the school in which they have earned the majority of the units in their major.

General Education Honors Program

Cal State L.A.'s General Education Honors Program provides highly qualified students with diverse, enriched intellectual activities through a separate curriculum which includes Honors classes, seminars, and research. Honors courses promote intellectual curiosity, critical reading, and logical thought and writing. **These** courses have a lower student enrollment than other general education courses and are taught by the University's finest professors, many of whom are nationally recognized authorities in their field of study. Honors students not only have the opportunity to accelerate their academic program; they also encounter challenging and rewarding educational experiences.

The General Education Honors Program:

- * Provides high potential students an opportunity to participate in intellectually demanding and academically challenging general education courses
- * Offers opportunities for greater interaction with peers and involvement in interdisciplinary learning
- * Identifies Cal State L.A. resources through which high potential students can receive

academic, personal, and career counseling to help them better define and reach their goals

- * Creates opportunities for high potential students and faculty members to establish closer educational relationships
- * Prepares students for participation in upper division departmental honors programs

Students are offered the following special opportunities:

- * Special sections of general education courses. Participation in courses appropriately modified in content, methodology, and level of enrichment for the high potential student.
- * Honor societies. Coordination of membership with other honors organizations.
- * Priority registration privileges. Students are allowed priority registration privileges.
- * Waiver of prerequisites. With department or division approval, students with appropriate background may be allowed to enroll in upper division courses without having met the usual lower division prerequisites.
- * Student Association. All students in the program hold membership in the Student Association which promotes non-academic and social interests and serves as a source of enrichment to the University by sponsoring and arranging activities beneficial and open to the entire campus. The group is represented on the Honors Council and aids the director and the council in the developing and implementing the program.

Classes that meet general education requirements are available each quarter except summer. These classes are designated as General Education Honors Program courses and enrollment is restricted to honors program students. All courses seek to explore more advanced and sophisticated areas of knowledge than regular general education offerings, although they meet general education requirements. A higher level of achievement is expected. Honors Program students are required to complete at least 24 units of these courses with a minimum B (3.0) grade point average to earn a General Education Honors Program certificate.

For further information, contact the Program Director, Honors Program office, Library North Lobby, phone (213) 343-4960.

Departmental Honors Programs

Further recognition of academic excellence is accorded through Cal State L.A.'s departmental honors programs, offered presently in anthropology, biology, chemistry, child development, and physics. Students who maintain a superior grade point average and have faculty recommendation are permitted to enroll in an honors program in their elected major. Considerable freedom is provided students and their advisers in designing enriched programs of study. This may include deviation from traditional course patterns to permit additional work in subjects related to the major, more intensive study in subject areas of special interest, and participation in special colloquia, independent study, individual research, and honors theses.

Students who complete these honors programs receive citations of departmental honors on their transcripts and diplomas.

National Honor Societies

Chapters of more than twenty national honor societies have been chartered at Cal State L.A. to accord recognition to students who demonstrate superior scholarship and leadership in academic areas. A specific minimum grade point average, ranging from 3.0 to 3.85, is required for initiation into each of these honor societies.

National Honor Society

Alpha Kappa Delta, Iota Chapter
Beta Alpha Psi, Beta Lambda Chapter

Discipline(s)

Sociology
Accounting

Beta Gamma Sigma, Eta Chapter	Business
Chi Epsilon, Cal State L.A. Chapter	Civil Engineering
Delta Pi Epsilon, Beta Pi Chapter	Business Education
Epsilon Pi Tau, Alpha Psi Chapter	Technology
Eta Kappa Nu, Epsilon Nu Chapter	Electrical Engineering
Golden Key, Cal State L.A. Chapter.	all academic disciplines
Kappa Delta Pi, Iota Phi Chapter	Education
Kappa Pi, Gamma Tau Chapter	Art
Omicron Delta Epsilon, Eta of California Chapter	Economics
Phi Alpha Theta, Eta Xi Chapter	History
Phi Beta Delta, Zeta Chapter	international scholars
Phi Delta Kappa, Campus Chapter No. 121	Education
Phi Kappa Phi, Cal State L.A. Chapter	all academic disciplines
Pi Delta Phi, Epsilon Nu Chapter	French
Pi Lambda Theta, Alpha Psi Chapter	Education
Pi Sigma Alpha, Gamma Omega Chapter	Political Science
Pi Tau Sigma, Sigma Kappa Chapter	Mechanical Engineering
Psi Chi, Cal State L.A. Chapter	Psychology
Sigma Delta Pi, Gamma Psi Chapter	Spanish
Sigma Theta Tau	Nursing
Tau Beta Pi, California Iota Chapter	Engineering

Credit Certificate Programs

certificate programs are designed to augment university curricula by providing specialized instruction and training within a field. These programs usually require significantly fewer units than a degree major. An undergraduate credit certificate program must contain a minimum of 24 quarter units and a graduate level program, 16 units. Normally, courses in certificate programs will be upper division or graduate level, except for prerequisites. Students may transfer from another institution no more than one quarter of the total units required for a certificate (75% of the course work must be completed at Cal State L.A.). A maximum of one quarter (25%) of the total units required for a certificate may be devoted to internships or independent study, or a combination of both. The minimum grade point average required for completion of an undergraduate credit certificate program is C (2.0), and for postbaccalaureate certificates, B (3.0). These grade point average requirements do not pertain to noncredit certificate programs. A Certificate of Completion is awarded upon successful completion of the program requirements. Some certificates are offered within degree majors and can be applied toward a baccalaureate or a master's degree; others are offered through Continuing Education with the certificate being the main goal.

Cal State L.A. offers the following credit certificate programs that are open to qualified undergraduate students. Additional postbaccalaureate and graduate level programs are listed in the Graduate and Postbaccalaureate Study chapter. Individual certificate program requirements and required courses appear in the program listings of the academic departments, divisions, and schools that offer them.

Accounting

Offered by the Department of Accounting, (213) 343-2830, the program is designed to provide an organized series of courses in accounting for students in other majors who wish to qualify to take a professional accounting examination, to meet civil service educational requirements for employment as a professional accountant or auditor, or to acquire the skills needed for employment as a professional accountant in private industry.

Adult Nurse Practitioner

Offered by the Department of Nursing, (213) 343-4700, this program is designed for nurses who desire to expand their area of expertise by becoming adult nurse practitioners. The nurse practitioner can effectively lower or eliminate certain deficits in the health care delivery system and make a positive impact in the areas of distribution and utilization of direct providers of care, cost and efficiency of primary health care delivery, and access and quality in meeting health care needs.

Advanced Information Systems

Offered by the Department of Information Systems, (213) 3432983, the program is designed to give individuals who are pursuing or have earned a degree in business administration (or have equivalent experience) an introduction to the techniques of information systems design, planning, and management. Applicable toward degrees in business administration.

Alcohol and Drug Problems Specialist

Offered by the Department of Health Science (213) 343-4740, the program prepares students to work in community agencies involved with alcohol and/or drug related problems. Applicable toward degree programs in health science.

Applied Gerontology

Offered by the School of Health and Human Services, (213) 3434724, this program is designed to enhance the preparation of individuals enrolled in courses or working in health-related disciplines to exercise their effectiveness as practitioners with older populations, particularly ethnic minorities. The program includes instruction about aging in several domains: biological, social/psychological, and policy-social services.

Cartography, Geographic Information Systems and Remote Sensing

Offered by the Department of Geography and Urban Analysis (213) 343-2220, the program provides a practical approach to the design, layout, and graphics needed in cartographic production.

Child Maltreatment and Family Violence

Offered by the School of Health and Human Services, (213) 3434600, the program provides individuals from various disciplines with expanded knowledge and formalized education in the area of child abuse and domestic violence, training and field experience in serving this population, and opportunities to qualify for career positions in which multidisciplinary training is required or essential.

Computer Programming

Offered by the Department of Information Systems (213) 343-2983, the program is designed to prepare individuals for entry level computer programmer positions. Courses in COBOL programming are required and other programming languages may be studied as electives. Applicable toward the baccalaureate in Business Administration. Also available through Continuing Education, (213) 343-4900, for non matriculated students.

Electronics Technology

Offered by the Department of Technology, (213) 343-4550, the program is designed to provide technical knowledge and hands-on skills necessary for employment in electronic manufacturing, electronic field servicing, or electronic design-assisted environment. Applicable toward baccalaureate programs in technology.

Entrepreneurship

Offered by the Department of Marketing, (213) 343-2960, the program is designed to prepare students and business people for careers in small companies: starting companies, managing small businesses, and working in small businesses. The program includes instruction about how to take a product or service from the idea stage through the introduction and growth stages and/or how to successfully manage the business. A focus may be taken in Retailing, Marketing of Services and Products, Consulting, Accounting, Finance, or Entrepreneurship.

Fashion Design

Offered by the Department of Family Studies and Consumer Sciences, (213) 343-4630, the program provides opportunities for individuals to expand their knowledge and formalized education in the field of fashion design.

Fashion Merchandising

Offered by the Department of Family Studies and Consumer Sciences, (213) 343-4630, the program provides opportunities for individuals to expand their knowledge and formalized education in the field of fashion merchandising.

Fire Protection Risk Analysis and Reduction

Offered by the Department of Technology, (213) 343-4550, the program offers students and individuals in the insurance industry and in private sector fire protection positions a series of professionally related courses in fire protection and fire safety. The program prepares individuals to serve as fire protection and safety specialists, inspectors, evaluators, and managers. Applicable toward the baccalaureate in Fire Protection Administration and Technology.

Fire Service Administration

Offered by the Department of Technology, (213) 343-4550, the program offers fire department personnel who hold an associate degree an opportunity to continue their knowledge and formalized education in the elements of effective modern fire department functioning. Course work covers planning, prevention and disaster administration, public administration, and personnel and budgeting administration. Applicable toward the baccalaureate in Fire Protection Administration and Technology.

Graphic Design

Offered by the Department of Art, (213) 343-4010, the program is designed to prepare individuals for career positions in graphics, advertising, illustration, and related media industries. The program includes theory, technical methods, creative concepts, and portfolio development. Applicable toward the baccalaureate in art.

Interior Design

Offered by the Department of Art, (213) 343-4010, the program is designed to prepare individuals for careers in all phases of interior design. Course work includes theoretical, technical, and conceptual experiences leading to portfolio development and career placement. Applicable toward the baccalaureate in art.

International Business

Offered by the Department of Marketing, (213) 343-2960, the program prepares students for careers in firms operating on a multinational basis; for careers in import-export, international finance and banking, and international agencies; and for the Commerce Option of the Foreign Service Officer Examination with the federal government, and to provide training for managers of internationally oriented companies in the Los Angeles area. Applicable toward the baccalaureate in Business Administration. This certificate program is also available through Continuing Education, (213) 343-4900, for nonmatriculated students.

International Criminal Justice Administration

Offered by the Department of Criminal Justice, (213) 343-4610, the program is designed to prepare criminal justice practitioners from foreign nations for management and supervisory positions within criminal justice agencies in their own countries. Course work includes theoretical, technical, and conceptual experiences leading to a balanced view of contemporary thinking in the field. Applicable toward the baccalaureate in criminal justice.

Marketing

Offered by the Department of Marketing, (213) 343-2960, the program is designed to prepare students in majors other than business for professional careers in marketing in profit or nonprofit organizations. Students may select a focus in marketing management, advertising, public relations, marketing research, retailing, direct response marketing, international marketing, transportation, or financial service marketing. Applicable toward degree programs in business administration. Also available through Continuing Education, (213) 343-4900, for nonmatriculated students.

Nurse Midwifery Education

Offered by the Department of Nursing, (213) 343-4700, the program is designed to prepare registered nurses to expand their practice roles by becoming Certified Nurse Midwives (C.N.M.). to

reduce the existing severe obstetrical care provider shortages that exist in the greater Los Angeles area. Applicable toward the baccalaureate in Nursing.

Obstetrics-Gynecology Nurse Practitioner

Offered by the Department of Nursing, (213) 343-4700, this program is designed for nurses who desire to expand their role by becoming nurse practitioners.

Occupational Safety and Health

Offered by the Department of Health Science, (213) 343-4740, the program prepares occupational safety and health professionals to function as generalists in implementing safety and loss control programs in industry or medical institutions. This program was developed in accordance with federal and state legal occupational safety and health acts. Applicable toward the baccalaureate or the master's degree in health science.

Office Systems

Offered by the Department of Office Systems and Business Education, (213) 343-2983, the program is designed to provide academic preparation for supervisory positions over the technology, people, and procedures within the organizational and environmental contents of an organization. Includes study of integrated and stand-alone software, electronic spreadsheets, data base management systems, telecommunications, and graphics. Applicable toward the baccalaureate in business education.

Retail Professional Development

Offered by the Department of Marketing, (213) 343-2960, in conjunction with the Institute of Retail Management, the program is designed to provide the skills required for executive positions in the retail industry and to prepare individuals to become successful entrepreneurs in their own retail business. Available through Continuing Education, (213) 343-4900, for nonmatriculated students.

Teaching Microcomputer Business Applications

Offered by the Department of Office Systems and Business Education, (213) 343-2860, the program is designed for teachers and trainers in education and industry who are responsible for teaching students and employees widely used microcomputer business applications. Includes study of integrated and stand-alone software, electronic spreadsheets, data base management systems, telecommunications, and graphics. Applicable toward the baccalaureate in business education.

Transportation (Commercial)

Offered by the Department of Marketing, (213) 343-2960, the program is designed for individuals intending to pursue a career or enhance their advancement potential in the field of industrial traffic and transportation or carrier operation. Applicable toward the baccalaureate in business administration. Also available through Continuing Education, (213) 343-4900, for nonmatriculated students.

Urban Land Use and Property Analysis

Offered by the Department of Geography and Urban Analysis (343-2220), in cooperation with the Department of Finance and Law, the program provides students and professionals with technical and analytical training for evaluating current problems confronting the urban community.

Voluntary Youth Agency Administration

Offered by the School of Health and Human Services in conjunction with American Humanics, Inc., (213) 343-2220, the program is designed to prepare professionals for careers in youth agency administration. Applicable toward baccalaureate programs.

SCHOOL OF ARTS AND LETTERS**SCHOOL OFFICE****Music 229****Phone: (213) 343-4000**

The minor listed below is interdisciplinary in nature and is open to interested students in all majors throughout the campus. The program is administered by the School of Arts and Letters.

Minor in Asian Studies**Requirements for the Minor****Required course (4 units):**

AAPS 200 Pacific Asian Culture, People, and Society (4) Electives (28 units):

With adviser guidance and approval, select a total of 28 units of electives from the following three areas, with no more than 12 units from one area. Students are strongly encouraged to take courses that represent at least two different countries.

Area I: Language and Literature

CHIN 200ABC, 201ABC, 300, 408, 410

JAPN 200ABC, 230, 300ABC, 307, 408, 410

Other intermediate or advanced Asian language courses

Area II. Art, Music, Philosophy, History, and Religious Studies

ART 431

MUS 457

CHIN 310

PHIL 435

HIST 490AB, 494ABC, 495AB, 496

RELS 410 JAPN 310, 311,460

Area III. Anthropology, Geography, Politics Science, and Sociology

ANTH 414

POLS 452

GEOG 424, 425, 430, 434

SOC 435

Courses in Asian American and Pacific Studies (AAPS)**Lower Division Course****200 Pacific Asian Culture, People, and Society (4)**

Introductory survey of people, history, society, culture, government, and economy in Pacific Asia.

Upper Division Course**499 Undergraduate Directed Study (1-4)**

Prerequisites: Consent of faculty sponsor, approval of proposed project before registration, ability to assume responsibility for independent research and analysis. Regular discussion of progress with sponsor before presentation of final written report. May be requested to maximum of 8 units.

ART**School of Arts and Letters****DEPARTMENT OFFICE**

Fine Arts 326

Phone (213) 343-4010 FAX (213) 343-4045

Art is the aesthetic study of humankind's aspirations and accomplishments. The programs of the Department of Art offer students the opportunity to acquire a background of understanding and skills, and to develop their talents in the visual arts. They prepare students for advanced

professional study in art as well as for many positions in teaching and in business and industry. Students who intend to pursue careers in advertising, costume, photography, or environmental design; illustration; computer graphics; painting; printmaking; sculpture; jewelry and metal crafting; textiles; art history; and/or teaching art will find appropriate programs or courses of study in the department.

Students pursuing careers in computer science, education, the humanities, industrial studies, home economics, recreation, public relations, and the social sciences may benefit from combining the study of art with their professional preparation.

The Bachelor of Arts degree program is described below. The Master of Arts and Master of Fine Arts degree programs are described in the Graduate Programs section.

The Faculty

Emeriti: Walter Askin, Charles Borman, Amy G. Brainard, John P. Cornish, Peter Marc Damien, Geraldine Dimondstein, Wachtang Djobadze, Leonard Edmondson, Leonard F. Heath, Virginia Hoffman, Malcolm A. McClain, Jay M. Metcalf, Gray Phillips, Hudson Roysner, Ronald Silverman, Lydia M. Takeshita, Roy Walden Lee Wexler, Kenneth Wynsma.

Professors: Barbara Ann Boyer (Chair), Marilyn Buccellati, Abbas Daneshvari, Daniel Douke, Robert R. Fiedler, Edward C. Forde, Carolyn R. Radakovich, Robert D. Reese, Beverly Jeanne Schnitzler, Joseph E. Soldate, Vance Studley.

Associate Professors: John Butler, John Funakura, Tony Longson.

Assistant Professors: Elizabeth R. Bryant, Susan B. Cash, Mikyung Mika Cho, Carol Jeffers, Connie Utterback.

Gallery Director: Daniel Douke.

Exhibitions of Work

The Department of Art schedules exhibits in its galleries of works by established professional artists, as well as by students and faculty. The department reserves the right to retain student work for this purpose.

Bachelor of Arts Degree

The program for the Bachelor of Arts degree in Art is structured so that students have the opportunity to acquire an understanding of the variety of subjects encompassed within the visual arts as well as to develop excellence in a specific area.

Requirements for the Major (90-99 units)

All students majoring in Art, except those following the art history option, participate in an exploratory and fundamental core program of 30-33 quarter units of lower division and 21 units of upper division courses.

Completion of lower division core courses or their equivalent and achievement of upper division standing are prerequisite to admission to upper division art courses. Students not majoring or minoring in Art must have consent of the instructor.

To complete the remaining 33 of the 90-95 units required for the major in Art, students select one of three option programs (the fourth option, art history, has a separate core), in consultation with an adviser.

Credit for ART 499, if taken, is limited to 9 units, with no more than 3 units in any one quarter. Nine units may be used for electives.

Required Core (57-62 units):

Lower Division Required Courses (30--33 units):

ART 101ABC World Art

(4, 4, 4)

ART	103	Design I	(3) or
ART	153	Survey and Studio: Introduction to Design	(4)
ART	104	Introduction to Drawing	(3) or
ART	159	Survey and Studio: Drawing	(4)
ART	203	Design II	(3)
ART	155	Survey and Studio: Painting	(4) or
ART	234	Introduction to Painting	(3)
ART	244	Introduction to Life Drawing	(3)
TECH	280	Tools for the Artist	(3)

Electives (6-8 units)-select two from following:

** ART	102	Introduction to Clay and Ceramic Processes	(3) or
ART	152	Survey and Studio: Introduction to Ceramics	(4)
ART	158	Survey and Studio: Weaving/Fibers Arts	(4) or
ART	202	Introduction to Weaving: Loom Techniques	(3) or
ART	212	Introduction to Weaving: Knotting Techniques	(3)
ART	157	Survey and Studio: Metals, Jewelry, Enamels	(4) or
ART	207	Introduction to Metals and Enamels	(3) or
ART	272	Introduction to Jewelry	(3)
ART	287	Introduction to Photographic Processes	(4)

**ART 102 or 152 required for students in credential option

Upper Division Required Courses (21 units):

ART	303	Theories of Three-Dimensional Applied Design	(3)
ART	309	Sculpture: Basic Approaches	(3)
ART	356	Written Expression in Visual Arts	(4)
ART	401	Proseminar: Critical Theories in Visual Arts	(3)
ART	415	Foundations of Art	(4)
ART	426	Modern Art	(4)

Options

Students elect one of the following options to complete their major. Prerequisites to admission to an option are upper division standing and completion of the core. Students within 6 units of completing core requirements may take courses within their option with departmental permission.

*** Design Option (33 units)**

The *Design* option is planned to develop an understanding of design theory necessary for production of ideas in the following career interest areas: computer graphics; fashion design, textile and fiber arts; graphic design and advertising; illustration; interior and architectural design; metals and jewelry; and photography.

Required Courses (9 units):

ART	312	Rendering: An Introduction	(3)
ART	323	Perspective Drawing	(3)
ART	333	Color	(3)

Select 18 units of upper division art courses, excluding ART 499, with adviser approval, from those listed below. Recommended career interest areas are:

Computer Graphics

ART 380, 403, 418, 433, 454L, P, 463, 468, 480, 494

Fashion Design, Textiles, and Fiber Arts

ART 338, 373, 378, 380, 407, 418, 433, 437, 438, 447, 453, 454L, P, 463, 467, 468, 471, 473, 478, 486

Graphic Design and Advertising

ART 308, 313, 332,380, 408, 413, 418, 423, 448, 453, 454L, P, 463, 468, 480, 493, 494

Illustration

ART 388, 418, 433, 453, 454L, P, 463, 468, 488

Interior and Architectural Design

ART 322,328, 343, 380, 403, 418, 428, 433, 443, 454L,P, 463, 468, 480

Metals and Jewelry

ART 327, 418, 427,454L, P, 463, 468, 472

Photography

ART 377, 387, 392,402,454L,P, 463, 468, 477,482,483,487,497

Electives (6 units):

Select upper division art courses, excluding ART 499, with adviser approval.

*** Single Subject Teaching Option (37 units)**

The *Single Subject Teaching Option* is planned for art majors who are also candidates for the Single Subject teaching credential. It is designed to acquaint students with concepts and processes associated with the visual arts as identified by the California Commission on Teacher Credentialing. Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs. Students electing this option should seek advisement from both the department and the School of Education.

Required Courses (16 units):

ART	400	Development of Literacy in Visual Arts	(4)
ART	405	Exploring Art Concepts and Media	(4)
ART	460	Multicultural Approaches to Visual Arts	(4)
PHIL	475	Aesthetics	(4)

Electives (21 units):

Select art courses from one of the other three options.

*** Studio Arts Option (33 units)**

The *Studio Arts* option is planned for the development of perceptual and conceptual abilities needed for engaging in creative visual expression. A minimum of 33 units is required, distributed in the following pattern:

Required Courses (minimum 27 units)-select from following:

ART	307	Intermediate Ceramics	(3)
ART	314	Sculpture: Plaster and Stone	(3)
ART	319	Sculpture: Wood	(3)
ART	364	Intermediate Drawing	(3)
ART	374	Intermediate Painting	(3)
ART	377	Intermediate Photography	(4)
ART	380	Computer Graphics I	(4)
ART	387	Color Negative Photography	(4)
ART	392	Color Transparency Photography	(4)
ART	402	Advanced Color Photography	(4)
ART	404	Studio Seminar	(4)
ART	409	Sculpture: Clay Modeling	(3)
ART	412	Advanced Ceramics	(3)
ART	414	Advanced Painting and Drawing	(3)
ART	417	Advanced Ceramic Processes	(3)
ART	419	Sculpture: Metal	(3)
ART	424	Printmaking: Lithography	(3)

ART	429	Sculpture: Plastics	(3)
ART	434	Watercolor Painting	(3)
ART	439	Sculpture: Exhibition	(3)
ART	453	Airbrush Techniques	(3)
ART	454L, P	Special Topics in Art	(1-4)
ART	464	Life Composition	(3)
ART	474	Printmaking: Etching	(3)
ART	477	History of Photography	(4)
ART	479	Silkscreen/Serigraphy	(3)
ART	480	Computer Graphics II	(4)
ART	482	Photographic Manipulations and Extensions	(4)
ART	483	Photographic Studio Techniques	(4)
ART	484	Advanced Sculpture	(3)
ART	487	Advanced Photography	(4)
ART	494	Computer Graphics Animation	(4)
ART	497	Large Format Photography	(4)

Electives (6 units):

Select upper division art courses, excluding AR499, with approval of adviser.

*** Art History Option (91-95 units)**

Students who select this option complete a separate core described below, incorporating foundations courses within a total of 27-31 units in lower division and 8 units in upper division courses.

In addition to the core, 56 units are required in the option.

The *Art History* option covers historical and developmental studies of art in most of the world's civilizations. It is intended to develop the student's ability to evaluate and comprehend concepts and issues within this cultural heritage.

Art History Core**Lower Division Required Courses (21-23 units):**

ART	101ABC	World Art	(4,4,4)
ART	103	Design I	(3) or
ART	153	Survey and Studio: Introduction to Design	(4)
ART	104	Introduction to Drawing	(3) or
ART	159	Survey and Studio: Drawing	(4)
ART	244	Introduction to Life Drawing	(3)

Select two from following (6-8 units):

ART	102	Introduction to Clay and Ceramic Processes	(3) or
ART	152	Survey and Studio: Introduction to Ceramics	(4)
ART	155	Survey and Studio: Painting	(4) or
ART	234	Introduction to Painting	(3)
ART	203	Design II	(3)
CIS/SOCS	280	The Computer World	(4)
CIS	294	Business Computer Systems	(4)

Upper Division Required Courses (8 units):

ART	356	Written Expression in Visual Arts	(4)
ART	426	Modern Art	(4)

Area of Specialization**Required Courses (56 units)-select from following:**

ART	406	Ancient Near Eastern Art and Archeology	(4)
ART	411	Greek and Roman Art	(4)
ART	416	Medieval Art	(4)
ART	421	Baroque Art	(4)
ART	431	Oriental Art	(4)
ART	436	Renaissance Art	(4)
ART	441	American Art	(4)

ART	446	Art of Latin America	(4)
ART	451	Mannerism: High Renaissance to Baroque	(4)
ART	454L, P	Special Topics in Art	(1-4)
ART	461	Oceanic and North American Indian Art	(4)
ART	466	Nineteenth Century Art	(4)
ART	471	History of Costume I	(4)
ART	476	Early Christian and Byzantine Art	(4)
ART	477	History of Photography	(4)
ART	481	African Art	(4)
ART	486	History of Costume II	(4)
ART	491	Art Since 1945	(4)
*FREN	100ABC	Elementary French	(4, 4, 4) or
*GERM	100ABC	Elementary German	(4, 4, 4)

*required of students planning graduate study

Minor in Art

A minor in Art is available for students majoring in other fields and requires 42-46 units in art courses.

Requirements for the Minor (42-46 units)**Lower Division Required Courses (12-16 units):**

ART 102 or 152
 ART 103 or 153
 ART 104 or 159
 ART 234 or 155

Elective (4 units):

ART 101A or 101B or 101C (4)

Upper Division Required Courses (11 units):

ART 309 (3)
 ART 415 (4)
 ART 426 (4)

Electives (15 units):

Select art courses from two of the Art major options.

Certificate Program in Graphic Design

The Department of Art offers a credit certificate program in Graphic Design, intended to prepare individuals for career positions in graphics, advertising, illustration, and related media industries. The program includes theory, technical methods, creative concepts, and portfolio development. A minimum of 37 units is required for completion of the certificate program, as outlined below. Refer to the Undergraduate Study chapter of this catalog for general regulations governing all certificate programs.

Prerequisites (15 units):

ART 103, 155, 159, 426

Requirements for the Certificate (minimum 37 units)**Required courses (37 units):**

ART 203, 303, 308, 312, 313, 333, 380, 388, 408, 413, 463
 TECH 231

Optional electives:

ART 244, 424, 448, 453, 464, 479
 TECH 438

Certificate Program in Interior Design

The Department of Art offers a credit certificate program in Interior Design, intended to prepare individuals for careers in all phases of interior design. Course work includes theoretical, technical,

and conceptual experiences leading to portfolio development and career placement. A total of 49 units is required for completion of the certificate program, as outlined below. Refer to the *Undergraduate Study* chapter of this catalog for general regulations governing all certificate programs.

Prerequisites (9-11 units):

ART 103 or 153; 104 or 159; 203

Requirements for the Certificate (total 49 units)**Required courses (49 units):**

ART 303, 312, 313, 322, 323, 328, 333, 343, 428, 463

FIN 205 FSCS 460, 463, 467

TECH 110

Optional electives

ART 244, 424, 448, 453, 464, 479

TECH 438

The Credential Program

The Bachelor of Arts degree in Art with the credential option has been approved by the Commission on Teacher Credentialing for examination waiver for the Single Subject credential in Art. Interested students should consult advisers in the department and in the School of Education.

Courses in Art (ART)

†There is a special fee associated with registering for classes that carry this designation. Details appear in the Schedule of Classes.

Lower Division Courses**101ABC World Art (4, 4, 4)**

Survey of historical development of painting, sculpture, and architecture throughout the world. CAN ART SEQ A

101A: from Paleolithic period to approximately 1000 A.D.;

101B: from approximately 1000 A.D. to end of Renaissance in Europe;

101 C: from end of Renaissance in Europe to the present

†102 Introduction to Clay and Ceramic Processes (3)

Orientation to ceramic processes; hand-building techniques for pottery and sculpture; historical examples from different periods and cultures related to form and surface treatment and glaze application. Activity 6 hours.

103 Design I (3)

Introductory studies of elements and principles of art in two-dimensional design theory. Activity 6 hours. *CANART 14*

104 Introduction to Drawing (3)

Drawing experiences involving development of form, structure, light and dark, and relationships of visual structural elements. Activity 6 hours. *CANART8*

151 Introduction to Art Appreciation (4)

Appreciation and understanding of visual arts. Sociology, psychology, communication, and aesthetics of drawing, painting, sculpture, crafts, industrial design, architecture, photography, and motion pictures.

†152 Survey and Studio: Introduction to Ceramics (4)

Human development and the arts as experienced through ceramics/sculpture; history, forms, functions, interrelationships, and symbolism correlated with personal exploration. Lecture 2 hours, activity 4 hours.

153 Survey and Studio: Introduction to Design (4)

The role of design and its influences on human development; history, functions, cultural survey, and symbolism correlated with personal exploration. Lecture 2 hours, activity 4 hours. CAN ART 14

155 Survey and Studio: Painting (4)

Human development and the arts as experienced through painting; history, forms, functions, interrelationships, and symbolism correlated with personal exploration. Lecture 2 hours, activity 4 hours. CAN ART 10

†157 Survey and Studio: Metals, Jewelry, Enamels (4)

Human development and the arts as experienced through metals, jewelry, enamels; history, forms, functions, symbolism integrated with personal exploration. Lecture 2 hours, activity 4 hours.

158 Survey and Studio: Weaving/Fiber Arts (4)

The role of weaving and fiber arts in art and human development; history, techniques, forms, and iconology correlated with personal exploration. Lecture 2 hours, activity 4 hours.

159 Survey and Studio: Drawing (4)

Human development and the arts as experienced through drawing; history, forms, functions, interrelationships, and symbolism correlated with personal exploration. Lecture 2 hours, activity 4 hours. CAN ART 8

202 Introduction to Weaving: Loom Techniques (3)

Techniques of weaving on a multiple harness loom. Warping, dressing loom, basic weaves, pattern drafts, and other necessary knowledge and skill. Activity 6 hours.

203 Design II (3)

Prerequisite: ART 103. Two- and three- dimensional studies of elements and principles of art with emphasis on color theory. Meets 6 hours weekly. CAN ART 16

†207 Introduction to Metals and Enamels (3)

Exploration of characteristics of metals and enamels; introduction to basic tools, techniques, and processes; emphasis on design possibilities inherent in nonsolder joining, texturing, forging, and application of enamels. Activity 6 hours.

†210 Art for the Young Child (4)

Exploring visual arts in relation to aesthetic, emotional, intellectual, and social growth of young children. Lecture 2 hours, activity 4 hours.

212 Introduction to Weaving: Knotting Techniques (3)

Methods of structuring with fiber including knotting, macrame, loom-free and primitive weaving; fabric constructions involving collage, applique, stitchery, and three-dimensional forms. May include field trips. Activity 6 hours.

234 Introduction to Painting (3)

Creative use of color based on an understanding of visual structural elements; study and manipulation of various media including watercolor and oil. Activity 6 hours. CAN ART 10

244 Introduction to Life Drawing (3)

Basic concepts of figure drawing; experimentation leading toward understanding of form, structure, and proportions of human figure as applied to visual expression. Activity 6 hours.

254L,P Special Topics in Art (1-4)

Prerequisite: As needed for specific topic. Current topics of special interest, as announced in *Schedule of Classes*. May be repeated to maximum of 9 units.

†272 Introduction to Jewelry (3)

Design and fabrication of basic jewelry techniques; lost wax casting; texturing; forming; linking; soldering; bezel stone setting; use of bronze, silver, and other nonferrous metals. Activity 6 hours.

†287 Introduction to Photographic Processes (4)

Basic principles of photography: tools, materials, philosophies, and techniques of photography as an expressive medium. Students furnish their own cameras. Lecture 2 hours, laboratory 4 hours. CAN ART 18

Upper Division Courses

Upper division standing is prerequisite to enrollment in all upper division art courses. Students majoring or minoring in Art must have completed applicable lower division core courses or equivalents; students in other fields must have instructor consent.

303 Theories of Three-Dimensional Applied Design (3)

Prerequisite: ART 203. Theoretical studies in the design of three-dimensional form utilizing a variety of materials and processes. Meets 6 hours weekly.

†307 Intermediate Ceramics (3)

Prerequisite: ART 152 or instructor consent. Intermediate level study of ceramic concepts and processes. Activity 6 hours. May be repeated to maximum of 6 units.

308 Graphic Design I (3)

Prerequisites: ART 313, 332. Layout skills; use of artists' media and tools in graphic design and knowledge of various graphic processes. Activity 6 hours.

†309 Sculpture: Basic Approaches (3)

Introductory experiences in three principal sculptural approaches of modeling, carving, and construction; physical characteristics of various materials used in sculpture and aesthetic concepts involved in basic approaches. Activity 6 hours.

312 Rendering: An Introduction (3)

Rendering techniques for all phases of design; control of value to distinguish objects, show distance and space, describe form, organize composition, and achieve atmosphere; various media employed. Activity 6 hours. May include field trips. May be repeated to maximum of 6 units.

313 Lettering I (3)

Theoretical and historical background of lettering. Development of basic skills in beginning lettering and calligraphic techniques. Activity 6 hours.

†314 Sculpture: Plaster and Stone (3)

Basic sculptural experiences and use of sculpture tools; work in stone, plaster, and cement; direct carving and modeling; armature construction. Activity 6 hours. May be repeated to maximum of 6 units.

†319 Sculpture: Wood (3)

Basic sculpture concepts and techniques of direct wood carving and construction. Other materials used to supplement use of wood in exploration of contemporary concepts of sculpture. Activity 6 hours. May be repeated to maximum of 6 units.

322 Rendering: Architectural and Interiors (3)

Prerequisite: ART 312. Intermediate course in rendering of architectural projects both exterior and interior; descriptive techniques using markers and pencils on various papers/surfaces. May be repeated to maximum of 6 units.

323 Perspective Drawing (3)

Laboratory course designed to develop skills in perspective drawing including orthographic projection, isometric drawing, and rendering. Activity 6 hours.

†327 Intermediate Enameling (3)

Prerequisite: ART 207. Intermediate exploration of techniques and processes with emphasis on design and craftsmanship.

328 Interior Design (3)

Prerequisites: ART 322, 323. Interior design spaces, interior appointments, color usage, space-object relationships of interior traffic patterns. Activity 6 hours. May include field trips.

332 Rendering: Graphics and Product (3)

Prerequisite: ART 312. Rendering techniques and studies for the product and graphic designer, emphasizing methods of formal presentation techniques. May be repeated to maximum of 6 units.

333 Color (3)

Prerequisite: ART 203. Study and interaction of color; laboratorywork in subtractive color and defined problems in theory of color design. Activity 6 hours.

†338 Textile Design (3)

Prerequisite: ART 203. Fundamental theories, concepts, and processes used for printed textile ornamentation. Activity 6 hours. May include field trips.

341 The American Landscape in Art (4)

Historical survey and analysis of the landscape and visions of the U.S. in art and architecture from 1700 to the present. Theories and principles of art, especially landscape painting.

343 Architectural Design (3)

Prerequisites: ART 313, 322. Historical and contemporary architectural ideas and solutions; simple layout skills, media, and tools as they relate to architectural designer. Activity 6 hours. May include field trips.

350 Evolution and the Modern World (4)

(also listed as ENGL 350, HIST 350, and PHIL 350) Prerequisite: GE humanities requirement. History of the idea of evolution from antiquity to the present and its impact on the culture of the 20th century.

351 Art Appreciation (4)

Development of an understanding of world art through the study of its structure, history, and significant works. Attendance at selected galleries required.

356 Written Expression in Visual Arts (4)

Prerequisite: ENGL 102*. Study of and practice in forms of writing pertaining to art. *Students subject to earlier catalogs satisfy the prerequisite with ENGL 1010r 190.

357 Creative Experiences for Well-Being (4)

(also listed as DANC 357, MUS 357, and TA 357) Prerequisites: HS 150, one GE humanities (Arts--C2) course. Exploration of creative experiences in the arts for promotion of mental, emotional, and physical well-being.

364 Intermediate Drawing (3)

Prerequisite: ART 104. Composition with diversified subjects other than life model; comprehensive drawings in line, value, and shape. May include field trips. Activity 6 hours.

373 Creative Fashion Design (3)

Prerequisites: ART 203, 244. Basic studies in creative fashion design and body ornamentation formulated through the application of elements and principles of art.

374 Intermediate Painting (3)

Prerequisite: ART 234. Intensive study in style and subject matter in painting. May include field trips. Activity 6 hours.

377 Intermediate Photography (4)

Prerequisite: ART 287. Development of individual creative approaches and philosophies in photography as well as strengthening of controls and techniques of black and white processes. Camera required.

378 Fashion Illustration (3)

Prerequisite: ART 244. Fashion design, its relation to high style and commercial development of fashion; rendering and production methods. May include field trips. Activity 6 hours.

380 Computer Graphics I (4)

Computers in art and design; descriptions, functions, visual problem solving, programming, computer graphics, applications in visual imagery and design. May be repeated to maximum of 8 units. Lecture 2 hours, laboratory 4 hours.

381 Legacy of Ancient Literature and Art (4)

(also listed as ENGL 381) Prerequisite: ENGL 250. Legacy of ancient literature and art in modern literature and art through focus on three themes: the self and self-consciousness, society, and nature.

†387 Color Negative Photography (4)

Prerequisite: ART 377. Introduction to color negative films and paper; work with properties of color negative film and producing prints from color negative materials. Lecture 2 hours, activity 4 hours.

388 Illustration (3)

Prerequisite: ART 203. Problems in illustration emphasizing composition techniques using various media. May include field trips. Activity 6 hours.

†392 Color Transparency Photography (4)

Prerequisite: ART 377. Introduction to color transparency films and printing materials; work with properties of slide films and producing prints from slide materials. Lecture 2 hours, laboratory 4 hours.

†400 Development of Literacy in Visual Arts (4)

Investigation of perceptual, expressive, historical, and cultural components associated with visual-aesthetic phenomena. Lectures, studio experience, and visits to art exhibits.

401 Proseminar: Critical Theories in Visual Arts (3)

Prerequisites: ART 101A or 101C; 426; senior standing as Art major or recommendation of department. Systematic approach to art theory, criticism, and evaluation within the visual arts; development of independent critical and artistic viewpoints with regard to creation of art forms.

402 Advanced Color Photography (4)

Prerequisite: ART 392. Advanced techniques, theories, history of color photography; student production of comprehensive body of work utilizing color processes. Lecture 2 hours, activity 4 hours. May be repeated to maximum of 8 units.

403 Advanced Three-Dimensional Design (3)

Prerequisite: ART 203. Studies in design of space modulation and motion; innovative three-dimensional forms. Activity 6 hours. May be repeated to maximum of 6 units.

†404 Studio Seminar (4)

Prerequisite: ART 401. On-site examination of contemporary art in artists' studios in Los Angeles; practical application of theory and interaction with artists in their work place. May be repeated to maximum of 12 units.

+405 Exploring Art Concepts and Media (4)

Prerequisite: Lower division Art major or minor core. Exploration and analysis of ideas and processes suited to development of expressive and appreciative skills. Lecture 2 hours, activity 4 hours.

406 Ancient Near Eastern Art and Archeology (4)

Art and archeology of ancient Mesopotamia, Egypt, Crete, and Greece. Principal monuments of architecture, sculpture, and the applied arts.

407 Fiber Arts (3)

Prerequisite: ART 103 or 153. Creative and expressive potential of fibers including techniques using loom weaving, papermaking, and 3-D fiber construction. May be repeated to maximum of 9 units.

408 Graphic Design II (3)

Prerequisite: ART 308. Studies developing layout skills, use of artists' media and tools in graphic design, and knowledge of graphic processes. Activity 6 hours. May be repeated to maximum of six units.

†409 Sculpture: Clay Modeling (3)

Prerequisite: ART 309. Advanced clay modeling and construction; anatomical studies from model, physical, and aesthetic properties of clay as a medium of personal expression. Activity 6 hours.

†410 Art Experiences for Exceptional Children (3)

Art education concepts relative to requirements of retarded or handicapped children; work in two-dimensional and three-dimensional materials and skills appropriate to individual abilities. Activity 6 hours.

411 Greek and Roman Art (4)

Art of Greece, its development in Hellenistic and Roman times, and the Etruscan influences.

+412 Advanced Ceramics (3)

Prerequisite: ART 307. Formation of ceramic art forms by means of wheel-thrown and hand-construction methods. Activity 6 hours. May be repeated to maximum of 9 units.

413 Lettering II and Typography (3)

Prerequisite: ART 313. Advanced studies and development of skills in use of lettering, calligraphy, and typography. Lecture and activity 6 hours. May be repeated to maximum of 6 units.

414 Advanced Painting and Drawing (3)

Prerequisites: ART 234, 244. Studio approaches to painting techniques and pictorial organization. May be repeated to maximum of 24 units, and to maximum of 9 units with any one instructor. Activity 6 hours.

415 Foundations of Art (4)

Philosophical, historical, cultural, and psychological factors in creation of a response to visual-aesthetic form.

416 Medieval Art (4)

Principal monuments of Medieval architecture, sculpture, and painting covering the Celtic, Carolingian, Ottonian, Romanesque, and Gothic periods.

+417 Advanced Ceramic Processes (3)

Prerequisite: ART 412. Advanced ceramic technology, clay, glazes; practical applications to all clay forms. May be repeated to maximum of 9 units.

418 Business Principles and Practices for Artists and Designers (4)

Business management for small design or studio offices; training in freelance procedures, billing, contracts, portfolios, licenses, and artist representation; survival strategies.

+419 Sculpture: Metal (3)

Prerequisite: ART 314 or 319. Lost-wax method of casting non-ferrous metals, welding, and braced sculpture. Activity 6 hours. May be repeated to maximum of 9 units.

421 Baroque Art (4)

Art of western Europe from 16th through late 17th century.

423 Product Design (3)

Prerequisites: ART 332, 403. Manipulation of three-dimensional form relative to functional and merchandising requirements of industrial assignments. Activity 6 hours. May be repeated to maximum of 6 units.

+424 Printmaking: Lithography (3)

Prerequisite: Lower division art major core. Graphic processes of lithography: work in black and white and color. Activity 6 hours. May be repeated to maximum of 12 units.

+425 Art as a Recreational Activity (3)

Prerequisite: ART 400. Theory and practice of arts and crafts for varied recreational settings based on relationship of creative arts to leisure. Lecture 1 hour, activity 4 hours.

426 Modern Art (4)

Evolution of modern painting, sculpture, and architecture since Impressionism; surrealism, Russian constructivism, and abstract expressionism.

+427 Advanced Jewelry and Metalsmithing (3)

Prerequisite: ART 272. Lost-wax casting of precious and nonprecious metals, traditional and contemporary stone setting, and advanced fabrication of jewelry-like forms including commercial production methods, electrofabrication, raising, and hot and cold forging techniques. Activity 6 hours. May be repeated to maximum of 15 units.

428 Advanced Interior Design (3)

Prerequisite: ART 328. Elements of visual expression and design related to historical and contemporary concepts of interior work and living space needs. Activity 6 hours. May be repeated to maximum of 6 units.

+429 Sculpture: Plastics (3)

Prerequisite: ART 309. Basic study in sculptural techniques and concepts through exploration of plastics. Activity 6 hours. May include field trips. May be repeated to maximum of 6 units.

431 Oriental Art (4)

Ancient graphic and plastic arts of China, Japan, India, and Persia. Evaluation of their contribution to art expressions of present day. Offered in two sections: China and Japan considered in one, and India and Persia in the other. May be repeated to maximum of 8 units.

432 Advanced Rendering (3)

Prerequisite: ART 322 or 332. Advanced rapid visualization and rendering techniques necessary for the development of creative design and visual communication. May be repeated to maximum of 6 units.

433 Advanced Color (3)

Prerequisite: ART 333. Phenomena of color, color perception, and color control for heightened visual experience. Work with defined problems in hue, value, and chroma. Activity 6 hours. May be repeated to maximum of 6 units.

434 Watercolor Painting (3)

Prerequisite: ART 155 or 234. Techniques of watercolor painting; advanced studies in pictorial composition through landscape, figure, still life, and abstract painting. May be repeated to maximum of 9 units.

+435 Exploring the Arts in Early Childhood (4)

Prerequisite: ART 210 or 410. A conceptual and experimental approach to the interrelationship of visual arts and dance in the education of young children. Studio experiences included. Lecture 2 hours, activity 4 hours.

436 Renaissance Art (4)

Art of Europe from 15th and 16th centuries.

437 Creative Fabric Art (3)

Prerequisite: ART 103 or 153. Manipulation of fabric as an art form: color, design, patterning through pigmentation, multimedia; historical background and contemporary focus. May be repeated to maximum of 6 units.

+438 Advanced Textile Design (3)

Prerequisite: ART 338. Advanced theories, concepts, and procedures in dyeing and printing techniques for textile ornamentation. May be repeated to maximum of 6 units.

439 Sculpture: Exhibition (3)

Prerequisite: Senior standing. Student project demonstrating mastery of selected aspects of sculpture, culminating in student display of work. Activity 6 hours. May include field trips. May be repeated to maximum of 6 units.

+440 Basic Craft Materials and Processes (3)

Exploration of meanings and techniques associated with basic handcraft forms. Activity 6 hours.

441 American Art (4)

History of painting, sculpture, architecture, and minor arts of America from colonial times to present.

443 Advanced Architectural Design (3)

Prerequisites: ART 323, 343. Study in external development of space, scale, human measurement, and space planning. Activity six hours. May be repeated to maximum of 6 units.

t445 Art as Therapy (4)

Prerequisites: Lower division Art major core, PSY 410AB. Fundamental concepts and activities appropriate for therapeutic uses of art with the emotionally and socially disoriented. May be repeated to maximum of 8 units.

446 Art of Latin America (4)

Art of Latin America from ancient civilizations to contemporary painting, crafts, and architecture.

447 Advanced Weaving (3)

Prerequisite: ART 202. Advanced techniques using multiple harness loom; production of two- and three-dimensional woven forms; traditional pattern weaving and tubular weaving with creative adaptations for art forms and utilitarian design. Activity 6 hours. May be repeated to maximum of 12 units.

448 Exhibition Design (3)

Prerequisites: ART 303, 328. Theory and techniques of exhibition and display design; evaluation and analysis of its communicative, aesthetic, and technical factors through practical application. Activity 6 hours. May be repeated to maximum of 9 units.

450 Art, Religion, and Technology (4)

(also listed as RELS 450) Prerequisite: RELS 200 or PHIL238 or ART 101A, 101B, or 101C. Relations among art, religion, and technology in selected periods of history in major cultures of the world.

451 Mannerism: High Renaissance to Baroque (4)

Sixteenth century architecture, painting, sculpture, and minor arts from High Renaissance to Baroque.

453 Airbrush Techniques (3)

Intensive study in airbrush painting techniques; spray-coloring, stenciling, product illustration, and rendering. Emphasizes graphic illustration and photo realism. May be repeated to maximum of 6 units.

454L, P Special Topics in Art (1-4)

Prerequisite: Upper division standing; courses as needed for specific topic. Current topics of special interest, as announced in *Schedule of Classes*. May be repeated to maximum of 9 units.

455 The Creative Genius in Art and Music (4)

(also listed as MUS 455) Great artists and musicians throughout history; their philosophy, innovations, accomplishments, and effects on culture and history.

456 Nature, Environment, and the Arts (4)

(also listed as MUS 456) Human attitudes toward the natural environment as revealed in the visual arts and music. Analysis and interpretation of examples from various periods and cultures.

457 Art and Civilization (4)

Development of world civilization as manifested through art and architecture from ancient Middle East through modern era; history, forms, symbolism, and relationships with other cultural and technological phenomena.

458 Advanced Airbrush Techniques (3)

Prerequisite: ART 453. Advanced studies in airbrush painting techniques; utilization of varied stenciling techniques with emphasis on graphic illustration of subject matter. May be repeated to maximum of 6 units.

460 Multicultural Approaches to Visual Arts (4)

Prerequisites: ART 351; ANTH 250 (may be taken concurrently). Analysis of art experience as human behavior responsive to sociological, ecological, political and historical conditions in American and other cultures. Specially recommended for students preparing for bilingual/crosscultural specialist credential.

461 Oceanic and North American Indian Art (4)

Historic and traditional art of Pacific areas of Micronesia, Melanesia, Polynesia, and of American Northwest Coast and Southwest Indian art.

463 Portfolio Presentation (3)

Portfolio development techniques for art students including bookbinding and photography techniques; collecting, matting, and evaluating art work. Preparatory to starting professional art career. Activity 6 hours. May be repeated to maximum of 6 units.

464 Life Composition (3)

Use of human figure in composition, utilizing various media and techniques. Activity 6 hours. May be repeated to maximum of 12 units.

+465 Theory and Practice of Art Therapy (4)

History, theoretical approaches to, and practical applications of art therapy.

466 Nineteenth Century Art (4)

Art of western Europe from David to end of nineteenth century.

467 Loom-Free Fiber Structures (3)

Prerequisite: Lower division Art major core; ART 212 for other majors. Exploration of loom-free fiber techniques; knotless netting, crochet, coiling, twining, bobbin lace, and macrame. Activity 6 hours.

468 Problems in Advanced Design (3)

Prerequisite: Senior standing in design option. Advanced investigations and concepts in aesthetics; materials and techniques relevant to professional practice requirements. Activity 6 hours. May include field trips. May be repeated to maximum of 9 units.

470 Directed Field Work in Art/Art Therapy (1-4)

Prerequisites: Art major core, ART 425 or 445. Supervised art observation and participation in nonschool recreation, therapy or nontraditional situations. Lecture 1 hour, field work 9 hours weekly. May be repeated to maximum of 8 units.

471 History of Costume I (4)

Major periods in Western costume from primitive times through 17th century. Evaluation of aesthetic, technical, sociological, psychological, and economic factors related to art of dress.

+472 Advanced Enameling (3)

Prerequisite: ART 327. Advanced experience in transparent and opaque enameling techniques, emphasizing professional approaches to design development. May be repeated to maximum of 12 units.

473 Advanced Creative Fashion Design (3)

Prerequisite: ART 373. Advanced design theories and concepts of creative fashion and body ornamentation. Activity 6 hours. May be repeated to maximum of 6 units.

+474 Printmaking: Etching (3)

Graphic processes of etching; work in black and white and color. Activity 6 hours. May be repeated to maximum of 12 units.

475 The Arts and Human Development (4)

Prerequisite: ART 400 or 435. Analysis of relationship between human behaviors and forms of artistic expression.

476 Early Christian and Byzantine Art (4)

Prerequisite: ART 101A. Art history from 250 to 1453 A.D. in Eastern empire, to 476 A.D. in western Roman empire; covers key monuments of architecture, sculpture, painting, and applied arts.

477 History of Photography (4)

Prerequisite: ART 101 A. History of photography from 19th century to present; relationship with history, culture, technology, art, social values, and other concerns.

478 Advanced Fashion Illustration (3:)

Prerequisite: ART 378. Clothed and fashion figures; their relation to commercial promotion and development of rendering and production methods. Activity 6 hours. May be repeated to maximum of 6 units.

+479 Silkscreen/Serigraphy (3)

History, processes, production of fine prints using silk screens; color, and black and white printing. May be repeated to maximum of 6 units.

480 Computer Graphics II (4)

Prerequisite: ART 380. Continued studies in computers for artists and designers; use of C language; graphics procedures; framebuffer technology and applications. Lecture 2 hours, laboratory 4 hours. May be repeated to maximum of 12 units.

481 African Art (4)

Art of sub-Saharan Africa. Includes historic art of Benin, Ghana, and Kongo kingdoms and traditional art of Western Sudan, Guinea Coast, and the Kongo.

+482 Photographic Manipulations and Extensions (4)

Prerequisite: ART 377. Use of photographs as part of broad vocabulary of processes; exploration of techniques and methods outside mainstream of photography. Lecture 2 hours, activity 4 hours. May be repeated to maximum of 12 units.

483 Photographic Studio Techniques (4)

Prerequisite: ART 377. Introduction to techniques in studio lighting and related activities through lecture and practical demonstrations. Lecture 2 hours, laboratory 4 hours. May be repeated to maximum of 8 units.

+484 Advanced Sculpture (3)

Prerequisite: ART 309, 314, or 319. Realization of sculptural form in permanent materials; techniques of stone and wood carving; sculpture with metal and plastic materials. Activity 6 hours. May be repeated to maximum of 12 units.

485 Ecology and Environment (4)

Relationships between aesthetics and ecosystems, social structures and environments.

486 History of Costume II (4)

Western costume of 18th, 19th, and 20th centuries. Evaluation of aesthetic, technical, sociological, psychological, and economic factors related to art of dress.

+487 Advanced Photography (4)

Prerequisite: ART 377. Advanced experimental photographic techniques including examination of critical, creative problems.; emphasis on individual development and growth. Lecture 2 hours, activity 4 hours. May be repeated to maximum of 8 units.

488 Advanced Illustration (3)

Prerequisite: ART 388. Practical and theoretical problems in illustration, utilizing human figure as principal motivational device for dramatization, story line, and composition. Activity 6 hours. May be repeated to maximum of 6 units.

490 The Arts and Society: Continuity and Change (4) Examination of the arts throughout history in terms of their effects upon and reflection of values. An interdisciplinary approach drawing from philosophy, the arts, and related fields.

491 Art Since 1945 (4)

Prerequisite: ART 426. Beginning with surrealism and abstract expressionism, this course delineates the many styles of the 1960s and focuses upon postmodern art of the 1970s and 1980s.

493 Advanced Graphic Design (3)

Prerequisite: ART 408. Studies utilizing a wide variety of media in professional design; emphasis on rendering and illustrative methods. Activity 6 hours. May be repeated to maximum of 6 units.

+494 Computer Graphics Animation (4)

Prerequisite: ART 480. Computer graphics animation for artists and designers: storyboard, object design, animation, and production. Lecture 2 hours, laboratory 4 hours. May be repeated to maximum of 12 units.

+497 Large Format Photography (4)

Prerequisite: ART 377. Photographic imaging with large format cameras: view camera techniques, contact prints, zone system, studio, aesthetic issues, theory. Lecture 2 hours, activity 4 hours.

499 Undergraduate Directed Study (1-3)

Prerequisites: Senior standing, completion of all upper division course work in area of study, consent of an instructor to act as sponsor. Project selected in conference with sponsor before registration; progress meetings held regularly and a final report submitted. Limited to 3 units per quarter. May be repeated to maximum of 9 units.

COMMUNICATION STUDIES**School of Arts and Letters****DEPARTMENT OFFICE****Music 104**

Phone: (213) 343-4200

The Department of Communication Studies offers undergraduate programs leading to Bachelor of Arts degrees in Journalism, Radio and Television Broadcasting, and Speech Communication; and minors in Journalism and Speech Communication. The graduate program leading to the Master of Arts degree in Speech Communication is described in the Graduate Programs section.

The Faculty

Emeriti: Robert E. Blackmon, Irvin Borders, Jack B. Cullen, Anthony Hillbrunet, Howard P. Holladay, Robert D. Kully.

Professors: Alan J. Bloom, W. Keith Henning, Michael P. Kelley (*Chair*), Bobby R. Patton.

Associate Professors: Beryl L. Bellman, Judith Hamera, Suzanne E Regan, Charles Simmons, Robert Vianello.

Assistant Professors: Laura Chey Acuna, Kevin Baaske, Ivan M. Cury, Timothy Downs, John Joseph Ramirez, Gust A. Yep.

Bachelor of Arts Degree in Journalism

Students who complete the preprofessional major in Journalism are prepared for careers in (1) editorial and advertising departments of newspapers, press associations, magazines, and industrial organs, (2) public relations programs in business, government, colleges, and city school systems, (3) editorial and business staff work with radio and television stations. Career objectives can be met by specialization in advertising, news-editorial, or public relations, each offered as a sequence in the Journalism major.

Requirements for the Major (minimum 78- 79 units)

A minimum of 78-79 units is required, including a core of 23 units in journalism taken by all students, a specialization sequence of 23-24 units in Journalism courses, and 32-34 units of interdisciplinary course work. Ability to type or concurrent enrollment in typing is a prerequisite for all students majoring in Journalism.

Required Core (23 units):

Lower Division Required Courses (8 units):

JOUR 201	News Writing	(4)
JOUR 202	Reporting	(4)

Upper Division Required Courses (15 units):

JOUR 330	News Editing I	(4)
JOUR 391	University Times	(3)
JOUR 400	History and Philosophy of Mass Media	(4)
JOUR 441	Social Responsibility of Press	(4)

Specialization Sequence (23 or 24 units)

Students complete this required concentration by electing one of the following three sequences.

*** Advertising Sequence (23 units) Required Courses (11 units):**

JOUR 130	Introduction to Graphic Arts	(3)
JOUR 471	Newspaper Advertising	(4)
JOUR 475	Advertising Copy and Layout	(4)

Electives (select 12 units in journalism from following): (must include 493 or 494):

JOUR 331	News Editing II	(4)
JOUR 460	Industrial Magazine Publishing	(4)
JOUR 491	Law of Mass Media of Communication	(4)
JOUR 492	Radio and Television News Writing	(4)
JOUR 493	Editorial and Interpretive Writing	(4)
JOUR 494	Reporting of Public Affairs	(4)
JOUR 496	Publicity and Public Relations	(4)

News-Editorial Sequence (23-24 units):

Required Courses (12 units):

JOUR 491	Law of Mass Media of Communication	(4)
JOUR 493	Editorial and Interpretive Writing	(4)
JOUR 494	Reporting of Public Affairs	(4)

Electives (select 11-12 units from following):

JOUR 130	Introduction to Graphic Arts	(3)
JOUR 331	News Editing II	(4)

JOUR 345	Magazine Article Writing	(4)
JOUR 471	Newspaper Advertising	(4)
JOUR 492	Radio and Television News Writing	(4)
JOUR 496	Publicity and Public Relations	(4)

*** Public Relations Sequence (23-24 units)**

Required Courses (12 units):

JOUR 460	Industrial Magazine Publishing	(4)
JOUR 496	Publicity and Public Relations	(4)
JOUR 497	Public Relations Problems	(4)

Electives (11-12 units):

Select three from following (must include JOUR493 or 494):

JOUR 130	Introduction to Graphic Arts	(3)
JOUR 331	News Editing II	(4)
JOUR 471	Newspaper Advertising	(4)
JOUR 491	Law of Mass Media of Communication	(4)
JOUR 492	Radio and Television News Writing	(4)
JOUR 493	Editorial and Interpretive Writing	(4)
JOUR 494	Reporting of Public Affairs	(4)

Courses in Related Fields (32 units):

In addition to the 46-47 units required in journalism, students select at least 32 units from courses listed below to complete a major of at least 78-79 units.

- (1) Select a concentration of 16-18 units from one of the following subject fields. All courses are 4 quarter units unless otherwise indicated.

ECON 201,202, 303, 390, 402, 412, 460, 471,480

ENGL: any 400-level course up to 490

HIST 110ABC, 150, or any 400-level course

POLS 202, 203, 403, 494, or any other 400-level course up to 477

SOC 201,202, 390, 414, 415, 424, 430, 480, 482

- (2) Select additional courses from any of fields listed above and below which are not part of concentration, to bring total units in related fields to 32-34.

AMER 401,402, 403

CHS 110, 111,150, 410, 430, 444

MKT 304

PAS 251AB, 400, 403

PHIL 250, 304, 410

SPCH 176, 371,485

PSY 308, 410AB, 418AB, 420, 422

Minor in Journalism

Careers in journalism are not limited to those who major in the field. An appropriate alternative is to major in another subject and take the minor in Journalism, which consists of 15 units of lower division and 19 units of upper division courses. A Journalism minor will introduce students to an interesting career field and provide them with the fundamentals of professional preparation.

Requirements for the Minor (34 units)

Lower Division Required Courses (15 units):

JOUR 100	Survey of American Mass Media	(4)
JOUR 130	Introduction to Graphic Arts	(3)
JOUR 201	News Writing	(4)
JOUR 202	Reporting	(4)

Upper Division Required Courses (19 units):

JOUR 330	News Editing I	(4)
JOUR 391	University Times	(3)

JOUR 400	History and Philosophy of Mass Media	(4)
JOUR 441	Social Responsibility of Press	(4)
JOUR 493	Editorial and Interpretive Writing (4) or	
JOUR 494	Reporting of Public Affairs	(4)

Bachelor of Arts Degree in Radio and Television Broadcasting

The program leading to the Bachelor of Arts degree with a major in Radio and Television Broadcasting emphasizes both theoretical understanding and practical application of these mass media of communication in contemporary society. This major offers four interdisciplinary options: Advertising; Broadcast Journalism; Mass Communication; and Telecommunications and Film. It is the primary objective of our curriculum to help develop a knowledgeable and artistically skilled graduate who will be able to pursue an advanced degree and/or a professional career in broadcasting, cinema, and mass communication research. The program emphasizes the importance of the communication media's awareness of the multiethnic composition of society and media's impact on all aspects of human interaction.

Requirements for the Major (80-95 units)

Core Requirements (40 units):

Lower Division Required Courses (12 units):

BCST 201	Introduction to Television Studio Production	(4)
BCST 220	Introduction to Broadcasting	(4)
BCST 224	Survey of Film	(4)

Upper Division Required Courses (28 units):

BCST 301	Intermediate Television Studio Production	(4)
BCST 328	History of Broadcasting and Film	(4)
BCST 420	Responsibility and Regulation in Broadcasting and Film	(4)
BCST 429	Broadcast and Film Writing	(4)
BCST 462	Criticism of Broadcasting and Film	(4)
MSCM 460	Theories of Mass Communication	(4)

Select one from following:

JOUR 493, 494
SPCH 300

Options

*** Advertising Option (51 units)**

Lower Division (4 units):

JOUR 201	News Writing	(4)
----------	--------------	-----

Upper Division (36 units):

BCST 362	Broadcast and Film Aesthetics	(4)
BCST 370	Broadcasting and Film as Shapers of the Public Mind	(4)
JOUR 330	News Editing I	(4)
JOUR 441	Social Responsibility of Press	(4)
JOUR 471	Newspaper Advertising	(4)
JOUR 474	Media Sales	(4)
JOUR 475	Advertising Copy and Layout	(4)
MKT 304	Principles of Marketing	(4)
MKT 340	Principles of Advertising	(4)

Advertising Practicum

*** Select one from following:**

UNIV 398	Cooperative Education	(3) or
JOUR 391	University Times	(3)

* minimum of 3 units required Electives (8 units):

Select upper division courses in BCST, JOUR, SPCH, and/or related fields with adviser consent.

* **Broadcast Journalism Option (55 units)****Lower Division (15 units):**

COMD 160	Voice and Diction	(3)
JOUR 201	News Writing	(4)
JOUR 202	Reporting	(4)
SPCH 267	Introduction to Oral Interpretation	(4)

Upper Division (32 units):

BCST 320	Radio Production	(4)
BCST 330	The Documentary in Broadcasting and Film	(4)
BCST 430	Factual Film for Television	(4)
BCST 475	Radio/Cable News Production	(4, 4)
BCST 480	New Media Technologies	(4)
JOUR 441	Social Responsibility of Press	(4)
JOUR 492	Radio and Television News Writing	(4)

Electives (8 units):

Select upper division courses in BCST, JOUR, MSCM, SPCH, and/or related fields with adviser consent.

* **Mass Communication Option (40 units)****Upper Division (32 units):**

BCST 480	New Media Technologies	(4)
JOUR 400	History and Philosophy of Mass Media	(4)
JOUR 491	Law of Mass Media of Communication	(4)
MSCM 390	Mass Media and Human Interaction	(4)
MSCM 453	International Communication Media	(4)
SOC 424	Mass Communications and Public Opinion	(4)
SPCH 450	Communication Theory	(4)
SPCH 487	Proseminar: Experimental Research in Speech	(4)

Electives (8 units):

Select upper division courses in BCST, JOUR, or SPCH and/or related fields with adviser approval.

* **Telecommunications and Film Option (40 units)****Advanced Television Studio Production (16 units)****Required Course (4 units):**

BCST 401	Advanced Television Studio Production	(4)
----------	---------------------------------------	-----

Select three from following (12 units):

BCST 320	Radio Production	(4)
BCST 340	Educational and instructional Uses of	

Broadcast and Film Media (4)

BCST 424	Crosscultural Broadcasting and Film	(4)
BCST 430	Factual Film for Television	(4)
BCST 454L	Selected Studies in Broadcast Production	(4, 4)
BCST 475	Radio/Cable News Production	(4)

Advanced Analysis Classes in Broadcasting (16 units)**Select from following:**

BCST 330	The Documentary in Broadcasting and Film	(4)
BCST 362	Broadcast and Film Aesthetics	(4)
BCST 370	Broadcasting and Film as Shapers of the Public Mind	(4)
BCST 410	Contemporary Radio Broadcasting	(4)
BCST 440	Noncommercial Broadcasting and Film	(4)
BCST 454	Selected Studies in Broadcasting	(4)
BCST 470	Administration and Studio Operations in Broadcasting and Film	(4)

BCST 480 New Media Technologies (4)

Electives (8 units):

Select upper division courses in broadcasting, which may include BSCT 499 and UNIV 398, or upper division courses in related fields, with adviser consent.

Bachelor of Arts Degree in Speech Communication

The Speech Communication major is available in three options: the General option, the Professional Communication option, and the Single Subject Teaching option. The general option is intended for students seeking a broad education in all phases of speech communication. The professional communication option is designed for those students seeking communication related careers. The credential option is designed to qualify students who wish to teach in public secondary schools for examination waiver for the Single Subject credential in English.

All options provide an understanding of the nature and functions of human symbolic communication. The scope of the program includes theories of communication in terms of historical, philosophical, critical, cultural, and scientific constructs; dimensions of public discourse, interpersonal, small group, and intercultural communication, persuasion and social influence, language and symbolic processes, the aesthetic dimensions of speech, and instructional development; and methodologies necessary for communication research (historical, critical, and empirical).

The degree adds to the student's perception and skill in dealing with people and is structured to provide a foundation for careers in business, law, government service, health, the ministry, teaching, public relations, media communication, and other professions in which an understanding and utilization of the process of communication is essential.

Requirements for the Major [72-80 units]

The General and Professional Communication options include a common core of 24 upper division units. An additional 48 units of required and elective courses comprise the total 72 units required by these options. The Option for Single Subject Credential in English has a separate 60-unit core and 20-unit breadth requirement.

*** General Option (72 units)**

Lower Division Required Courses (4 units):

SPCH 176 Argumentation (4)

Elective (4 units):

SPCH 267 Introduction to Oral Interpretation (4) or

SPCH 278 Problem Solving through Group Discussion (4)

Additional Elective (0 or 4 units):

Select from lower division SPCH courses with adviser approval.

Upper Division Required Courses (24 units):

SPCH 300 Applied Writing in Speech Communication (4)

SPCH 367 Oral Interpretation of Prose and Poetry (4) or

SPCH 371 Persuasive Communication (4)

SPCH 450 Communication Theory (4)

SPCH 470 Theories of Rhetoric: Survey and Analysis (4)

SPCH 485 Rhetorical Criticism (4)

SPCH 487 Proseminar: Experimental Research in Speech (4)

Electives (20 units):

Select one course from each of following five dimensions:

A. Public Discourse Dimension

SPCH 371 Persuasive Communication (4)

(if not taken in the core)

SPCH 472 Studies in Literature of International Public Discourse (4)

SPCH 473A Studies in Literature of U.S. Public Discourse to 1860 (4)

SPCH 473B	Studies in Literature of U.S. Public Discourse: 1860--Present	(4)
SPCH 482	Rhetorical Theory: Contemporary Developments	(4)

B. Interpersonal and Organizational Communication

SPCH 350	Interpersonal Communication	(4)
SPCH 430	Organizational and Professional Communication	(4)
SPCH 462	Nonverbal Communication	(4)
SPCH 478	Group Communication: Dynamics of Leadership and Participation	(4)

C. Aesthetic Dimension

SPCH 367	Oral Interpretation of Prose and Poetry <i>(if not taken in the core or under Performance Dimension)</i>	(4)
SPCH 467	Studies in Aesthetic Bases of Speech	(4)
SPCH 490	Studies in Children's Speech Arts	(4)

D. Performance Dimension

SPCH 340	Interviewing	(4)
SPCH 367	Oral Interpretation of Prose and Poetry <i>(if not taken in the core or under Aesthetic Dimension)</i>	(4)
SPCH 370	Business and Professional Speaking	(4)
SPCH 491	Instructional Theories in Speech Communication	(4)

E. Social Dimension

SPCH 479	Sex Roles in Communication	(4)
SPCH 489	Intercultural Communication	(4)

Additional Electives (16-20 units):

Select from upper division courses in SPCH or related fields, with adviser approval.

*** Professional Communication Option (72 units)****Lower Division Required Courses (4 units):**

SPCH 176	Argumentation	(4)
----------	---------------	-----

Elective (4 units):

SPCH 267	Introduction to Oral Interpretation	(4) or
SPCH 278	Problem Solving through Group Discussion	(4)

Additional Elective (0 or 4 units):

Select from lower division SPCH courses with adviser approval.

Upper Division Required Courses (24 units):

SPCH 300	Applied Writing in Speech Communication	(4)
SPCH 367	Oral Interpretation of Prose and Poetry	(4) or
SPCH 371	Persuasive Communication	(4)
SPCH 450	Communication Theory	(4)
SPCH 470	Theories of Rhetoric: Survey and Analysis	(4)
SPCH 485	Rhetorical Criticism	(4)
SPCH 487	Proseminar: Experimental Research in Speech	(4)

Electives (select 20 units from following):

SPCH 340	Interviewing	(4)
SPCH 350	Interpersonal Communication	(4)
SPCH 371	Persuasive Communication	(4)
<i>(if not taken in core)</i>		
SPCH 430	Organizational and Professional Communication	(4)
SPCH 431	Internship in Organizational Communication	(4)
SPCH 398	Cooperative Education	(4)
SPCH 462	Nonverbal Communication	(4)
SPCH 478	Group Communication: Dynamics of Leadership and Participation	(4)

SPCH 479	Sex Roles in Communication	(4)
SPCH 489	Intercultural Communication	(4)

Professional Sequence (12-16 units):

Plan a 12-16 unit interdisciplinary professional theme with a career focus, and obtain adviser approval. Suggestions for possible themes are listed below.

- A. Communication Supervision
- B. Technical Communication
- C. Corporate Communication
- D. Communication in Health Care
- E. Communication in the Family
- F. Communication in Multicultural Environments

Additional electives (0-8 units):

Select from upper division SPCH courses with adviser approval.

* **Single Subject Teaching Option (80 units)**

Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs.

REQUIRED CORE (60 units):

Composition (12 units)

ENGL 410	Writing in the Schools	(4)
SPCH 300	Applied Writing in Speech Communication	(4)
SPCH 485	Rhetorical Criticism	(4)

Language/Linguistics

Required Courses (12 units):

ENGL 405	Modern English Grammar	(4)
SPCH 463	Language and Communication Behavior	(4)
SPCH 467	Spoken Language and Literature	(4)

Literature (36 units)

ENGL 318-319-320	British Literature	(4, 4, 4)
ENGL 417 or 418	Shakespeare I or II	(4)
ENGL 471-472	American Literature	(4, 4)
SPCH 267	Introduction to Oral Interpretation (4) or	
SPCH 367	Oral Interpretation of Prose and Poetry	(4)
SPCH 473A or 473B	Studies in Literature of American Public Discourse: 1860-Present	(4)

Select 4 units in ethnic literature with adviser approval. Possible choices include:

- CHS 201
- ENGL 477
- JAPN 307
- PAS 422

BREADTH REQUIREMENTS (20 units):

BCST 224	Survey of Film	(4) or
ENGL 451	Film and Literature	(4)
JOUR 493	Editorial and Interpretive Writing	(4) or
MSCM/SPCH 390	Mass Media and Human Interaction	(4)
BCST 201	Introduction to Television Studio Production	(4) or
SPCH 268	Readers' Theatre	(2, 2) or
SPCH 277 or 377	Forensics	(2, 2)
SPCH 489	Intercultural Communication	(4)
SPCH 491	Instructional Theories in Speech Communication	(4)

Minor in Speech Communication

The Speech Communication minor is designed for students interested in expanding their knowledge of the communication process, especially as it relates to their professional careers or

related fields in the liberal arts. The Speech Communication curriculum provides a variety of courses for students preparing for careers in community development, social services, health, safety, and recreation services, business and industry, criminal justice, law, education, industrial studies, mass media, and many others in which an understanding of the process and practice of speech communication is vital. A total of 32 units in SPCH is required.

Requirements for the Minor (32 units)

Required Courses (8 units):

SPCH 150	Oral Communication	(4)
SPCH 176	Argumentation	(4)

Electives (24 units):

Select a program, in consultation with a departmental adviser, to meet the goals for which the minor is chosen. A minimum of 16 units must be taken in upper division courses.

The Credential Program

The Bachelor of Arts degree in Speech Communication with the credential option has been approved by the Commission on Teacher Credentialing for examination waiver for the Single Subject credential in English. Interested students should consult advisers in the department and the School of Education.

Courses in Broadcasting (BCST)

Lower Division Courses

201 Introduction to Television Studio Production (4)

Introduction to radio and television production facilities and techniques. Principles of directing, picture composition, camera movement, lighting, basic sound patterns, and control room operation. Lecture 3 hours, laboratory 2 hours.

220 Introduction to Broadcasting (4)

Survey of principles and practices in American broadcasting with emphasis on techniques of radio and television programming through lectures, reports, and selected viewing.

224 Survey of Film (4)

Cinema as a creative communication medium, emphasizing certain perceptual, conceptual, and technical considerations.

Upper Division Courses

301 Intermediate Television Studio Production (4)

Prerequisite: BCST 201. Intermediate study of directing principles and production techniques as applied to educational, informational, and cultural program production. Lecture 3 hours, laboratory 2 hours.

320 Radio Production (4)

Prerequisite: BCST 220. Experience in radio production techniques and the creative production of audio programming.

328 History of Broadcasting and Film (4)

Prerequisites: BCST 220, 224. Major events, names, and movements in contemporary society that influenced development of radio, television, and motion pictures as mass communication media of twentieth century.

330 The Documentary in Broadcasting and Film (4)

Prerequisites: BCST 220, 224. Historical and critical study of documentary form in broadcasting and film using classic examples in radio, television, and motion pictures to assess influence of media as persuasive powers in society.

340 Educational and Instructional Uses of Broadcast and Film Media (4)

Prerequisites: BCST 220, 224. Utilizing radio, television, and film in education, business, and industry; experience in researching, writing, producing, and evaluating such specialized uses of electronic and film media. Lecture 3 hours, laboratory 2 hours.

362 Broadcast and Film Aesthetics (4)

Prerequisites: BCST 220, 224. Radio, television, and film aesthetics, analyzing component elements of light, space, time, sound, music, and motion in synthesized image.

370 Broadcasting and Film as Shapers of the Public Mind (4)

Prerequisites: BCST 220, 224. Broadcast and film media as persuasive and motivational forces in society, techniques of audience-market research, advertising process, and effects of advertising environment on public opinion and buying power.

+397 Motion Picture Photography (3)

Prerequisite: ART 287. Principles and practices of motion picture photography; background of general film production. Lecture 1 1/2 hours, laboratory 4 1/2 hours. May be repeated to maximum of 6 units.

401 Advanced Television Studio Production (4)

Prerequisite: BCST 301. Advanced television studio practicum stressing aesthetic techniques as applied to video production.

410 Contemporary Radio Broadcasting (4)

Prerequisite: BCST 220. Description and analysis of the structure and practice of contemporary radio.

420 Responsibility and Regulation in Broadcasting and Film (4)

Prerequisites: BCST 220, 224. Professional responsibilities of broadcasters and film makers to their audiences; regulatory issues, problems, and systems that influence broadcast and film production in the U.S.

424 Crosscultural Broadcasting and Film (4)

Prerequisites: BCST 220, 224. Broadcast media and film as means of crosscultural communication and intercultural understanding from both national and international perspective; moral, social, and psychological implications.

429 Broadcast and Film Writing (4)

Content and techniques of radio, television, and script writing; development of story idea through outline, treatment, and dialog script. May be repeated to total of 8 units with instructor consent.

430 Factual Film for Television (4)

Prerequisites: BCST 220, 224. Film and portapak and their use in specialized broadcast programming and news services. Lecture 3 hours, laboratory 2 hours.

434 Latin American Radio Documentary Production (4)

(also listed as LAS 434) Recommended prerequisites: BCST 320 or 2 upper division Latin American content courses in history, political science, or Latin American studies. Analysis of political, economic, and cultural issues in Latin America, utilizing primary sources; production of research in the form of broadcasting tapes.

440 Noncommercial Broadcasting and Film (4)

Prerequisites: BCST 220, 224. Analysis of noncommercial broadcasting and film systems; special focus on the Public Broadcasting System and key film distribution companies.

454 Selected Studies in Broadcasting (1-4)

Selected topics in broadcasting media, as announced in *Schedule of Classes*. May be repeated for credit as subject matter changes.

454L Selected Studies in Broadcast Production (4)

Prerequisite: BCST 301. Special application of audio and video production techniques in the creation of entertainment, educational, documentary, and public affairs programming. Variable topics. May be repeated as subject matter changes.

462 Criticism of Broadcasting and Film (4)

Prerequisites: BCST 220, 224. Purposes and styles of criticism as applied to broadcast and film media; development of standards of evaluation as determined by analysis of selected radio and television programming and motion pictures.

466 Visualization of Violence in the Media (4)

Semiological and structural analysis of the depiction of violence in the media; special emphasis on portrayal of violence against women, children, and minorities in their historic and contemporary manifestations.

470 Administration and Studio Operations in Broadcasting and Film (4)

Prerequisites: BCST 220, 224. Administrative techniques, operational procedures, and organizational structures within contemporary radio and television broadcast stations and film studios.

475 Radio/Cable News Production (4)

Prerequisites: BCST 301, JOUR 202. Advanced news practicum for radio/cable news production; investigating, producing, and reporting local/community news for campus radio station and cable channels. May be repeated to maximum of 12 units.

480 New Media Technologies (4)

Prerequisites: BCST 201; 220 or JOUR 100 and 201. Description and analysis of new and evolving communication media, their growth, development, and effect on social and political systems.

+492A Motion Picture Preproduction (3)

Prerequisite: BCST 397. Preparation for making a motion picture; emphasis on 16mm short film, applicable to longer films. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

+492B Motion Picture Production (3)

Prerequisite: BCST 492A. Shooting and editing motion pictures; emphasis on 16mm short film, applicable to longer films. May be repeated to maximum of 6 units. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

+492C Motion Picture Postproduction (3)

Prerequisite: BCST 492B. Negative cutting, sound track preparation, and printing of films; emphasis on 16mm short film, applicable to longer films. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

499 Undergraduate Directed Study (2-4)

Prerequisites: Consent of adviser and of an instructor to act as sponsor. Individual projects designed to reflect ability of student and to be a contribution to field of educational, informational, or cultural broadcasting. May be repeated to maximum of 8 units.

Courses in Journalism (JOUR)

Ability to type or concurrent enrollment in typing is a prerequisite for all students majoring in Journalism.

Lower Division Courses

100 Survey of American Mass Media (4)

Survey of mass media of communication: special emphasis on newspapers, magazines, motion pictures, radio, television, advertising, and public relations *CAN JOUR 4*

130 Introduction to Graphic Arts (3)

(also listed as *TECH 130*) General industrial education course emphasizing the importance of graphic communications in our culture. History, theory, and laboratory-shop practice of varied printing processes, including letterpress, lithography, silk screen, and bookbinding. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

201 News Writing (4)

Prerequisite: ENGL 102*. Introduction to news writing and reporting. News sources, collection of news, acceptable forms for news stories, and newspaper style *CAN JOUR 2*

*Students subject to earlier catalogs satisfy the prerequisite with ENGL 1010r 190.

202 Reporting (4)

Prerequisite: JOUR 201. Specialized reporting, feature writing, and staff work on the newspaper. Provides base for advanced journalism courses.

254 Selected Topics in Journalism (1-4)

Current topics of special interest in journalism, as announced in *Schedule of Classes*. May be repeated as subject matter changes.

Upper Division Courses

330 News Editing I (4)

Prerequisite: JOUR 202. Study and practice in basic editing skills and headline fundamentals with progression to advanced editing skills and writing of polished headlines.

331 News Editing II (4)

Prerequisites: JOUR 330, instructor consent. Editor and print shop; practice in picture editing, page makeup, news flow management, and news judgment.

345 Magazine Article Writing (4)

Writing and selling nonfiction articles. Magazine markets studied, queries written, and manuscripts submitted directly to general interest magazines, specialized magazines, trade publications, and Sunday feature sections of newspapers. May be repeated to maximum of 8 units.

391 University Times (3)

Prerequisite: JOUR 330. Two one-hour class meetings plus additional supervised activity weekly. Lecture 2 hours, laboratory 2 hours. May be repeated for credit. Maximum of 12 units allowed for JOUR 391,393, or 495, separately or in any combination.

393 News Bureau (3)

Supervised work experience in University Public Affairs Office. Two one-hour meetings plus 3 hours additional supervised activity weekly. May be repeated for credit. Maximum of 12 units allowed for JOUR 391,393, or 495, separately or in any combination.

400 History and Philosophy of Mass Media (4)

Prerequisite: Upper division standing. Development of journalism, with an introduction to important papers and personalities. Journalism majors must take this course prior to or concurrently with any 400-level journalism course.

441 Social Responsibility of Press (4)

Prerequisite: JOUR 400 for Journalism majors. Goals, ideals, responsibilities, and major criticisms and defenses of the newspress. Bases for objective and interpretive reporting. Examination of threats to a free flow of news.

454 Selected Topics in Mass Communication (1-4)

Prerequisite: Varies with topic; see *Schedule of Classes* for specific prerequisite. Selected topics of current importance in mass communications field. Subject matter varies with new developments. May be repeated to maximum of 12 units.

460 Industrial Magazine Publishing (4)

Prerequisite: JOUR 330. Planning, layout, editing, and business management of company or small magazine, stressing format, writing and producing articles, makeup, and illustration. Includes laboratory work in various techniques and outside assignments.

471 Newspaper Advertising (4)

Principles of advertising; emphasis on the newspaper as advertising medium. Instruction in preparing pictures, layouts, and copy for newspaper use, mat services, and available syndicated materials.

474 Media Sales (4)

Prerequisite: JOUR 471. Techniques of selling advertising for magazines, newspapers, radio, and television.

475 Advertising Copy and Layout (4)

Prerequisite: JOUR 471. Practice in planning and writing copy for advertisements. Construction of practical layouts, studies of advertising rates and costs, publication and advertising agency practices, and mechanical production for printed media.

491 Law of Mass Media of Communication (4)

Prerequisite: Junior standing. Study of libel law, right of privacy, contempt of court, freedom of the press, copyright, statutory limitations, postal regulations, and the right to print news of public affairs.

492 Radio and Television News Writing (4)

Prerequisites: JOUR 201, senior standing for Journalism majors.

Analysis and preparation of local news and commercials, introductions and special news features for radio and television.

493 Editorial and Interpretive Writing (4)

Prerequisites: JOUR 201, senior standing. Interpretation of news events and their background.

Study of editorial pages policy and the forming of public opinion. Writing of informative and argumentative editorials, columns, background-to-the-news features.

494 Reporting of Public Affairs (4)

Prerequisites: JOUR 202; POLS 403 or 404; senior standing. Advanced theory and practice in reporting courts, units of local, state, and federal government, and private agencies peripheral to government that figure in decisions about public questions.

495 Special Projects in Magazine Production (3)

Prerequisite: Upper division standing. Supervised work on University feature magazine staff. Two one-hour class meetings plus 4 additional hours activity arranged weekly. May be repeated for credit. Maximum of 12 units allowed for JOUR 391,393, or 495, separately or in any combination.

496 Publicity and Public Relations (4)

Prerequisites: JOUR 330, upper division standing. Methods, tools, and media used in planning and developing company, community, and institutional public relations programs. Publicity and promotional techniques; copy preparation, news releases, publications, relations with the press.

497 Public Relations Problems (4)

Prerequisite: JOUR 496. Advanced study of public relations as a way of winning recognition and understanding of the public, with analysis of contemporary problems faced by business organizations or other institutions. Laboratory work in writing and problem solving techniques and outside assignments.

499 Undergraduate Directed Study (2--3)

Prerequisite: Consent of an instructor to act as sponsor. Project selected in conference with sponsor before registration, progress meetings held regularly, and a final report submitted. May be repeated for credit.

Courses in Mass Communication (MSCM)

Lower Division Course

100 Introduction to Mass Media (4)

Introduction to book, newspaper and magazine publishing, motion pictures, broadcasting, and new information technologies examined in terms of communication theory and as economic, political, and social institutions. *CAN JOUR 4*

Upper Division Courses

390 Mass Media and Human Interaction (4)

(also listed as SPCH 390) Prerequisite: BCST 220 or JOUR 2010r SPCH 150. Comparison of the mass media with other forms of human interaction with attention given to the interactive role and effect of these human communication processes.

453 International Communication Media (4)

Prerequisites: BCST 220, 224 or JOUR 100 and 2010r SPCH 150. Description and analysis of media systems (print, audio, and video) as they exist in various countries around the world, and the means by which information is exchanged internationally.

460 Theories in Mass Communication (4)

Prerequisite: BCST 220 or JOUR 100 or SPCH 150. Synthesis of theories by which mass communication processes may be viewed and investigated; variables involved in these theories.

Courses in Speech Communication (SPCH) Subcollegiate Course

094 Mainstream American Dialect (4)

Sounds, intonation, and rhythm of mainstream American dialect to modify student's own accent and pronunciation. (Limited to students whose dialects are not standard American English.) Graded *CR/NC*. No credit toward baccalaureate.

Lower Division Courses

150 Oral Communication (4)

Introduction to problems of effective oral communication through study and experience in analysis, synthesis, and presentation of informative and persuasive discourse in a public speaking forum. *CAN SPCH 4* SPCH 150 is prerequisite to all Speech Communication courses with higher numbers.

176 Argumentation (4)

Principles of argumentation: reasoned discourse, methods of logical analysis and reflective thinking, practical application through adaptation of materials to audience situations, argumentative speech, kinds and forms of debate about current issues. CAN SPCH 6

267 Introduction to Oral Interpretation (4)

Study of communicative dimensions of literature through analysis and performance.

268 Reader's Theatre: Practicum and Performance (2)

Lecture-workshop in reader's theatre, story theatre, and chamber theatre production; emphasis on group presentation of poetry, fiction, and ethnic programs. May be repeated to maximum of 8 units.

277 Forensics (2)

Workshop in intercollegiate forensic activities. May be repeated to maximum of 8 units. Graded *CR/NC*.

278 Problem Solving through Group Discussion (4)

Principles of decision making and interaction in group communication situations, development of discussion, participation, and leadership skills for business, school, and community. Upper Division Courses

300 Applied Writing in Speech Communication (4)

Prerequisites: ENGL 102', upper division standing; for Radio-TV Broadcasting majors, BCST 224. Writing practicum in historical, critical, and empirical approaches to speech communication, emphasizing language usage in description, exposition, narration, and persuasion; techniques include observation, editing, and criticism.

*Students subject to earlier catalogs satisfy the prerequisite with ENGL 1010r 190.

340 Interviewing (4)

Dyadic communication in formal and informal settings. Understanding of informative, persuasive, medical, journalistic, legal, and employment interviews.

350 Interpersonal Communication (4)

Introductory study of interpersonal communication; verbal and nonverbal communication in face-to-face interaction; how individuals assume roles as message senders, receivers; interpersonal perception and adaptation; barriers to interpersonal communication.

367 Oral Interpretation of Prose and Poetry (4)

Recommended prerequisite: SPCH 267. Theory of oral interpretation. Emphasizes content, structure, and style as determinants of the oral presentation of poetry and prose.

370 Business and Professional Speaking (4)

Study and application of theories of business and professional communication; emphasis on business and professional contexts; use of multiple media for business presentations.

371 Persuasive Communication (4)

Study and application of rhetorical and social-psychological principles of persuasion. Consideration of attitude change models and behavioral studies of variables affecting persuasion. Opportunity for preparation and criticism of persuasive discourse.

377 Forensics (2)

Faculty supervised workshop preparing for University-sponsored speech activities, including forensics tournament events and/or performance for community groups. May be repeated to maximum of 6 units. GradedCR/NC.

385 Sex and Gender in Language and Literature (4)

(also listed as ENGL 385) Prerequisites: For English majors, ENGL 2210r 222; for others, ENGL 250. Analysis of the comparative language behavior of women and men as revealed in research on communication and in representative literary works, both classic and modern.

390 Mass Media and Human Interaction (4)

(also listed as MSCM 390) Prerequisite: BCST 220 or JOUR 2010r SPCH 150. Comparison of the mass media with other forms of human interaction with attention given to the interactive role and effect of these human communication processes.

430 Organizational and Professional Communication (4)

Investigation of organizational communication theories, principles, concepts, and techniques, including dyadic, small group, and public organizational communication and implementation of planned change in an organization.

431 Internship in Organizational Communication (4)

Prerequisite: SPCH 430. Opportunity to study and participate in communication processes of selected local organizations under academic supervision; emphasis on student intern's ability to diagnose and solve organizational communication problems. May be repeated once for credit.

450 Communication Theory (4)

Survey and analysis of behaviorally oriented theories and their variables in the communication process.

454 Selected Studies in Speech Communication (1-4)

Prerequisite: Varies with topic; see *Schedule of Classes* for specific prerequisites. Intensive study of selected topics in speech communication. May be repeated for credit as subject matter changes.

461 Descriptive Phonetics (4)

(also listed as COMD 461) Phonetic-phonemic analysis of language; study of physical and physiological bases of speech.

462 Nonverbal Communication (4)

Body motion, eye and facial behavior, paralanguage, touch, proxemics, physical characteristics, artifacts and environmental factors as they affect communicative exchanges.

463 Language and Communication Behavior (4)

Nature, origin, and use of speech and language in social, cultural, symbolic, and functional contexts; investigation and analysis of discourse and behavioral effects; significance of communication competence.

467 Spoken Language and Literature (4)

Prerequisite: One SPCH course. Verbal and nonverbal behavior; application of aesthetic and sociolinguistic theories to speech acts.

470 Theories of Rhetoric: Survey and Analysis (4)

Prerequisite: Upper division standing. Principal theories of rhetoric from classical Greece to the modern period; historical perspectives on communication and social influence; impact of changing political, psychological, sociological, and technological contexts.

472 Studies in Literature of International Public Discourse (4)

Prerequisite: One SPCH course. Analysis and evaluation of international rhetoric and speech communication; some attention to great international speakers and speeches; emphasizes communication in contemporary social, political, and cultural movements and campaigns.

473A Studies in Literature of American Public Discourse to 1860 (4)

Prerequisite: One SPCH course. Analysis and evaluation of American rhetoric and speech communication; some attention to great speakers and speeches; emphasizes communication in social, political, and cultural movements and campaigns, colonial times to 1860.

473B Studies in Literature of American Public Discourse: 1860-Present (4)

Prerequisite: One SPCH course. Analysis and evaluation of American rhetoric and speech communication; some attention to great speakers and speeches; emphasizes communication in social, political, and cultural movements and campaigns, 1860 to present.

478 Group Communication: Dynamics of Leadership and Participation (4)

Prerequisite: A course in group discussion. Advanced study of communication processes in small groups and effects of leadership and participation; development of communication sensitivity.

479 Sex Roles in Communication (4)

Sex as a variable influencing human communication in dyads, small groups, organizations, families; speaker-audience interaction; male-female differences in use of language, and nonverbal behavior.

482 Rhetorical Theory: Contemporary Developments (4)

Prerequisite: SPCH 470. Survey of contemporary theories of rhetoric and communication.

485 Rhetorical Criticism (4)

Prerequisite: One SPCH course. Nature and function of rhetorical criticism; survey of approaches, theories, and systems of rhetorical analysis from classical to contemporary. Practice in critical appraisal of various types of speech communication.

487 Proseminar: Experimental Research in Speech (4)

Prerequisite: Upper division standing. Introduction to methodology of experimental research and critical analysis of representative studies in speech.

489 Intercultural Communication (4)

Description and analysis of cultural influences on human communication acts; codes and paralinguistic elements; focus on communication between cultures in an urban setting.

490 Studies in Children's Speech Arts (4)

Theory and criticism of creative dramatics, choric interpretation and storytelling.

491 Instructional Theories in Speech Communication (4)

Prerequisites: Senior standing, 20 units of upper division SPCH courses. Philosophy of speech communication in educational settings; survey of contemporary trends in speech communication as revealed in professional literature.

494 Communication Behavior in Childhood (4)

Oral language and communicative behavior in children; studies in speech and language experiences basic to development of communication skills competence.

499 Undergraduate Directed Study (1-4)

Prerequisite: Consent of an instructor to act as sponsor. Project selected in conference with sponsor before registration; progress meetings held regularly, and final report submitted. May be repeated for credit.

ENGLISH**School of Arts and Letters****DEPARTMENT OFFICE****Engineering and Technology A605****Phone: (213) 343-4140**

The Department of English offers both Bachelor of Arts and Master of Arts degrees in English, minors in English and Creative Writing, and programs leading to teaching credentials. The Master of Arts degree program is described in the Graduate Programs section.

The Faculty

Emeriti: Edward Abood, Daniel A. Amneus, Charles E. Beckwith, Donald A. Bird, John C. Bushman, Morton J. Cronin, Saralyn R. Daly, Otto W. Fick, Norman Fruman, Byron Guyer, David Laird, H. Landar, Jean Maloney, Marie Ohlsen, John W. Rathbun, Clarence K. Sandelin, Gaby Stuart, Leon Surmelian, Paul M. Zall.

Professors: Sharon Bassett, Peter A. Brier, David B. Carroll, John L. Cleman, Rosemary Hake, Steven S. Jones, Barry Munitz, Elaine Osio, Thomas H. Peterson, Carl M. Selkin (*Chair*), Timothy Steele, James T. Sullivan.

Associate Professors: Alfred Bendixen, Fidel Fajardo-Acosta, Ruben Quintero, Alice M. Roy, Susan Belasco Smith.

Assistant Professors: Hema Chari, Marilyn R. Elkins, Jun Liu, Douglas Sun, Allson Taufer.

Bachelor of Arts Degree

Students pursuing the Bachelor of Arts degree in English select one of two program options. The General Option is intended for those pursuing a liberal arts education with special emphasis on literature and composition; the Multiple Subject Teaching Option and the Single Subject Teaching Option are designed for students interested in a career in education. The Multiple Subject Teaching Option has its own separate core; it does not share the common core with the other two options.

All students electing to major in English must request advisement in the Department of English upon beginning course work in their major. Those majoring in English are urged to acquire command of at least one foreign language as part of their program.

Requirements for the Major (76 or 80 units)

The General Option requires a total of 76 units and the Single Subject Teaching Option requires a total of 80 units.

*** General Option (76 units)****Lower Division Required Courses (8 units).'**

ENGL 221	Interpreting and Writing About Fiction	(4)
ENGL 222	Interpreting and Writing About Poetry and Drama	(4)

Upper Division Required Courses (16 units):

ENGL 340	Writing the Critical Essay	(4)
ENGL 401	English Language in America	(4)
ENGL 417	Shakespeare I	(4)
ENGL 441	Major Critics	(4)

Required in British, American, and World Literature (36 units)**British Literature (16 units)**

Select four 400-level courses in British literature, with at least two in pre-1800 literature.

American Literature (12 units)

ENGL 471	American Literature: Beginnings to 1860	(4)
ENGL 472	American Literature: 1860-1914	(4)
ENGL 473	American Literature 1914-Present	(4)

World Literature (8 units)

Select two from:

ENGL 424, 425, 427, 428, 484, 485, 486

Undergraduate Seminars (4 units)

Select one from following:

ENGL 495 Seminar: British Literature	(4)
ENGL 496 Seminar: American Literature	(4)
ENGL 497 Seminar: World Literature	(4)

Electives (12 units)

Select *three* 300- or 400-level ENGL courses excluding GE theme courses. With adviser approval, one 200-level course may be included.

ENGL 402-416, 418-428, 446, 447, 451, 453, 461, 475ABC-486, 492, 495, 496

* **Multiple Subject Teaching Option (146-151 units)**

Students who select this option complete a separate core which is common to all Multiple Subject teaching options. That common core contains 106-111 units and is described in the *Undergraduate Study chapter*. In addition to the core, the 68 units listed below are required in the option. Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs.

Required Courses (106-111 units):

Refer to *Undergraduate Study* chapter of this catalog.

Major Courses (20 units)

ENGL 340	Writing the Critical Essay	(4)
ENGL 401	English Language in America	(4)
ENGL 417	Shakespeare	(4)
ENGL 454	Selected Topics in Literature (Children's Literature)	(4)

A British literature course selected from following (4 units)

ENGL 318, 319, 320, 446, 447, 460, 461, 463, 464, 467, 468

Literature (Traditional) Depth Area (20 units)

ENGL 471	American Literature: Beginnings to 1860	(4)
ENGL 472	American Literature: 1860-1914	(4)
ENGL 476	Ethnic Literature in the U.S	(4)

Select one from following (4 units)

ENGL 424	Greek and Roman Drama in Translation	(4)
ENGL 425	Epic and Legend	(4)
ENGL 482	The Bible as Literature: Old and New Testaments	(4)
ENGL 483	Folklore and Literature	(4)

Electives (4 units)

Select one 300- or 400-level literature-based ENGL course or SPCH 367.

Electives (28 units):

Professional education courses are recommended. See a credential adviser in the School of Education.

* **Single Subject Teaching Option (80 units)**

Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs.

Lower Division Required Courses (8 units):

ENGL 221	Interpreting and Writing About Fiction	(4)
ENGL 222	Interpreting and Writing About Poetry and Drama	(4)

Upper Division Required Courses (72 units):**Composition (8 units)**

ENGL 340	Writing the Critical Essay	(4)
ENGL 410	Writing in the Schools	(4)

Critical Theory (4 units)

ENGL 441	Major Critics	(4)
----------	---------------	-----

Language (8 units)**Required Course (4 units)**

ENGL 401	English Language in America	(4)
----------	-----------------------------	-----

Select one from following (4 units):

ENGL402, 403, 405
SPCH 367, 371,450, 467, 478, 489

Literature (40 units)**British Literature (20 units)**

Select four 400-level British literature courses, with at least two in pre-1800 literature.

American Literature (16 units)

ENGL 471,472, 473, 476

World Literature (4 units)**Select one from following:**

ENGL 424, 425, 427, 428, 484, 485, 486

Undergraduate Seminar (4 units):**Select one from following:**

ENGL 495, 496, 497

Electives in Language, Composition, Literature (8 units):

Select two 300- or 400-level ENGL courses excluding GE theme courses. With adviser approval, one 200-level course may be included.

NOTE: Students seeking the credential are also advised to include at least one ethnic studies course among their general education or elective courses.

*** Multiple Subject Teaching Option**

Students who select this option complete a separate core which is common to all Multiple Subject Teaching Options. That common core contains 106-111 units and is described in the *Undergraduate Study chapter*. In addition to the core, 40 units are required in the option. Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs.

Required Courses (106-111 units)

Refer to Undergraduate Study chapter of this catalog.

Major Courses (20)

ENGL 340	Writing the Critical Essay	(4)
ENGL 401	English Language in American	(4)
ENGL 417	Shakespeare I	(4)
ENGL 454	Selected Topics in Literature (Children's Literature)	(4)

A British literature course selected from the following (4)

ENGL 318, 319, 320, 446, 447,460, 461,463, 464, 467, 468

Literature (Traditional) Depth Area (20 units)

ENGL 471	American Literature: Beginnings to 1860	(4)
ENGL 472	American Literature: 1860-1914	(4)

ENGL 476 Ethnic Literature in the U.S (4)

Select on from following (4units)

ENGL 434 Greek and Roman Drama in Translation (4)
 ENGL 425 Epic and Legend (4)
 ENGL 482 The Bible as Literature:Old and New Testaments (4)
 ENGL 483 Folklore and Literature (4)

Elective (4 units):

Select one 300- or 400-level literature-based ENGL course of SPCH 367.

Electives (28 units)

Professional education courses are recommended. See a credential adviser in the School of Education.

Minor in Creative Writing

The minor in creative writing is designed for students majoring in other fields who are interested in the writing of imaginative literature, which may include such forms as poetry, fiction, and drama. A total of 24 units is required, of which 8-12 units must be in lower division and 12-16 units in 400-level courses.

Requirements for the Minor (24 units)

Lower Division Required Courses (8 or 12 units):

ENGL 207 Beginning Creative Writing (4)

(Prerequisite to ENGL 207 for students in the creative writing minor is at least 4 units from the lower division requirement listed above.)

Select one from following (4 units):

ENGL 221,222, 225

Electives (select 12-16 units with adviser approval):

ENGL 406 Writing Nonfiction (4)
 *ENGL 407 Writing Fiction (4)
 *ENGL 408 Writing Poetry (4)

*May be repeated once for credit in the minor

BCST 429 Broadcast and Film Writing (4)

TA 476 Play Writing (4)

Minor in English

The minor in English provides a varied and flexible literary program, individually planned, for majors in other fields. Students who plan to write or edit or who are interested in business, the professions, or government service may find this minor significant in their career development. The minor is also useful to students who wish to add a supplementary authorization to their Single Subject credential. A total of 28 units is required.

Requirements for the Minor (28 units)

Lower Division Required Courses (8-12 units):

Select at least two from following:

ENGL 221,222,250, 258

Upper Division Required Courses (16-20):

Select from following:

Composition: ENGL 308,340, 406, 410

Language: ENGL 401,402, 405

Literature: ENGL 318-320, 416-447, 460-497

The Credential Program

Students who complete the Bachelor of Arts degree in English, Single Subject Teaching Option, with a minimum 2.75 grade point average for course work in the option will receive certification of

subject area competency in English for the Single Subject credential. Students should consult advisers in the department and in the School of Education.

English as a Second Language Programs

Students in need of a course in English as a second language may wish to consult the Office of Continuing Education.

Courses in American Studies (AMER) Lower Division Courses

250 The Child in American Culture (4)

Concepts of the nature and cultural role of the child from colonial days to present.

254 Special Topics in American Studies (4)

Prerequisites: As needed for specific topic. Current topics of special interest in American Studies as announced in *Schedule of Classes*. May be repeated for credit.

Upper Division Courses

350 America in Great Books (4)

Prerequisite: Lower division GE requirements in social sciences, humanities, and communication. Selected books in humanities and social sciences which, besides being outstanding in their respective fields, have influenced the character of American society.

354 Mini-Topics in American Studies (1-6)

Short-term variable-content course on topics of special interest. Unit credit will vary according to subject. May be repeated to maximum of 8 units.

401 Study of American Culture (4)

Interdisciplinary study of American culture; materials, methods, and problems in study of a civilization in comprehensive terms.

402 Ideas in America (4)

Significant social, political, economic, religious, and philosophic concepts reflected in representative statements, ranging from historical documents to imaginative literature.

403 American Popular Culture (4)

Philosophical, psychological, esthetic, and social implications in mode and meaning of representative American mass media.

404 Avant-Garde in American Life (4)

Examination of a number of movements on frontiers of American intellectual life.

405 Folklore in American Culture (4)

Prerequisite: Lower division GE requirements. Types and forms of American folklore and their significance for American society.

490 Selected Topics in American Studies (4)

Prerequisites: AMER 401, one other AMER course. Intensive study of selected topics in American culture; subjects vary. May be repeated to maximum of 8 units.

499 Undergraduate Directed Study (1-4)

Prerequisites: Consent of an instructor to act as sponsor, approval of coordinator. Project selected in conference with sponsor before registration; progress meetings held regularly and final report submitted. May be repeated for credit. Courses in English (ENGL) Eligibility for ENGL 095, 096, and 101 will be determined by results of the English Placement Test (EPT) which students must take before they may register for any of these courses.

Subcollegiate Courses

095 Basic Writing I (4)

Prerequisite: English Placement Test (placement determined by student's score). Instruction in invention, revision, sentence construction, paragraph development, and English usage in personal

experience essays. GradedCR/NC. Not open to students with credit for this course, an equivalent, or a higher level English composition course. Students with two NC grades may not enroll again. No credit toward baccalaureate.

096 Basic Writing II (4)

Prerequisite: English Placement Test (placement determined by student's score) or passing grade in ENGL 095. Frequent essays based on reading and responding to expository prose; instruction in expository writing conventions. GradedCR/NC. Not open to students with credit for this course, an equivalent, or a higher level English composition course. Students with two NC grades may not enroll again. No credit toward baccalaureate.

Lower Division Courses**101 Composition 1(4)**

Composition I: Reflective and Expository Writing. Prerequisite: English Placement Test or completion of ENGL 096. Reading and writing to develop and communicate ideas. Instruction in basic strategies for planning, composing, and revising college writing. Use of authorities, examples, arguments and facts. GradedA,B,C/NC.

102 Composition II (4)

Composition II: Analytic and Persuasive Writing. Prerequisite: ENGL 1010r equivalent. Reading and writing to develop interpretive and persuasive strategies. Instruction in writing for specific audiences. Use and analysis of technical, logical, and emotional arguments. GradedA,B,C/NC.

190 Freshman Composition (4)

Prerequisite: English Placement Test (placement determined by student's score) or passing grade in ENGL 096. Frequent essays employing a synthesis of ideas from multiple sources to support an argument; instruction in inferring and documenting a thesis. GradedA,B,C/NC. Not open to students with credit for this course, an equivalent, or a higher level English composition course. CAN ENGL 2. ENGL 102 or its equivalent is prerequisite to all English courses with higher numbers.

195 The Research Essay (4)

Prerequisite: Passing grade in ENGL 102*. Instruction in the preparation, mechanics, and style of a research essay. GradedA, B, C/NC.

*Students subject to earlier catalogs satisfy the prerequisite with ENGL 1010r 190.

207 Beginning Creative Writing (4)

Beginning creative writing workshop in which students are introduced to techniques of imaginative writing: short fiction, poetry, drama.

221 Interpreting and Writing About Fiction (4)

Techniques of organizing and developing critical essays about fiction; critical compositions and reports. Recommended as background for all upper division fiction courses.

222 Interpreting and Writing About Poetry and Drama (4)

Techniques of organizing and developing critical essays about poetry and drama; critical compositions and reports.

225 Interpreting Film (4)

Critical study of film as an art form. Emphasis on short films, including variety of genres, such as animation, documentary, and story films.

228 English Grammar Review (4)

Prerequisite: ENGL 102*. Review of traditional grammar; practice in identifying sentence parts, phrases, clauses, and parts of speech, as well as grammatical categories such as tense, number, and agreement.

*Students subject to earlier catalogs satisfy, the prerequisite with ENGL 1010r 190.

229 Writing Proficiency (4)

Prerequisite: ENGL 102*. Strategies for improving writing proficiency in descriptive, illustrative, explanatory, and persuasive essays. GradedA,B,C/NC.

*Students subject to earlier catalogs satisfy the prerequisite with ENGL 1010r 190.

250 Understanding Literature (4)

Forms and techniques of fiction and/or drama, and poetry; analysis of representative works of various periods and cultures; critical compositions and reports. Not open to English majors.

258 Mythology in Literature (4)

Analysis and interpretation of dominant myths in representative works of world fiction, drama, and poetry; critical compositions.

260 Women and Literature (4)

Fiction, poetry, and drama by women authors; close analysis of representative works; critical compositions.

270 Contemporary American Literature (4)

Recent fiction, autobiography, poetry, and drama by American authors; close analysis of representative works; critical compositions.

276 Introduction to Play Writing (3)

(also listed as TA 276) Prerequisite: ENGL 222 or TA 152. Collaborative approach to writing for the stage; emphasizes writing theory and techniques; introduction to dramaturgy, directing, literary management, and staged reading.

280 Contemporary World Literature (4)

Recent fiction, poetry, and drama written by authors outside the U.S.; close analysis of representative works; critical compositions.

Upper Division Courses

Upper division standing is prerequisite to enrollment in 400-level courses. ENGL 102 or its equivalent is prerequisite to all upper; division English courses. Prerequisite for all literature courses: ENGL 250, or 221 and 222, unless otherwise stated.

306 Technical Writing (4)

Prerequisite: Passing WPE score. Fundamentals of technical writing; development and writing of mechanism descriptions, proposals, feasibility studies, progress reports, and long technical reports.

308 Expository Writing (4)

Prerequisite: Passing WPE score. Methods of and practice in writing analytical essays that present persuasive arguments; emphasis on coherent organization, clear style, rigorous argumentation.

318-319-320 British Literature (4, 4, 4)

Prerequisite: ENGL 221,222, or 250. Study of representative works within the contexts of literary tradition and significant historical, social, and intellectual developments. Supervised practice in writing. 318: British Literature to 1640 319: British Literature 1640-1832 320: British Literature 1832-1920

340 Writing the Critical Essay (4)

English 340 satisfies the upper division writing requirement for English majors. Prerequisite: Satisfactory completion of GEAR. Intensive, supervised practice in advanced composition; emphasis on critical response to a literary work and its effective statement in essay form.

350 Evolution and the Modern World (4)

(also listed as ART 350, HIST 350, PHIL 350) Prerequisite: GE humanities requirement. History of the idea of evolution from antiquity to the present and its impact on the culture of the 20th century.

354 Selected Topics in Literature (4)

Representative works in literature of various thematic or stylistic types. Specific topics announced in *Schedule of Classes*. May be repeated for credit.

358 Technology in Literature (4)

Prerequisite: ENGL 221,222, or 250. The literary response to the impact of technology on society, nature, individual life, and art from the 18th century to the present. Supervised practice in writing.

360 Adjunct Writing (2 or 4)

Corequisite: Upper division course in student's major department may be required. Supervised practice in advanced composition, emphasis on styles germane to student's major field. May be taken in two 2-unit segments as required by student's major department.

381 Legacy of Ancient Literature and Art (4)

(also listed as ART 381) Prerequisite: ENGL 250. Legacy of ancient literature and art in modern literature and art through focus on three themes: the self and self-consciousness, society, and nature.

382 Violence in Literature (4)

Depiction of and attitude toward the theme of violence in selected literary works.

383 Themes of Adult Life in Philosophy and Literature (4)

(also listed as FL 383 and PHIL 383) Prerequisite: GE humanities requirement. Meaning of selected experiences of adult life, for example, initiation and coming of age; self-actualization and responsibility; love and intimacy; parenthood; change in middle years; death and dying.

385 Sex and Gender in Language and Literature (4)

(also listed as SPCH 385) Prerequisites: For English Majors, ENGL 2210r 222; for others, ENGL 250. Analysis of the comparative language behavior of women and men as revealed in research on communication and in representative literary works, both classic and modern.

387 The American Landscape in Literature (4)

Prerequisite: ENGL 221,222, or 250. The literary response to the American landscape from the time of the early explorers to the present.

389 Human Emotions in Literary Expression (4)

(also listed as FL 389) Prerequisite: GE humanities requirement. Emotions such as love, anger, laughter, joy, sorrow, guilt, pain or oppression, etc., as represented in prose and poetic forms of various cultures.

392 "Statement" and Literary Magazine Editing (1-4)

Prerequisite: Consent of faculty member advising the course. Techniques of editing and producing literary magazines. May be repeated to maximum of 6 units. Grade CR/NC.

400 Introduction to Linguistics (4)

(also listed as ANTH 471) Descriptive and historical study of language; problems of data collection and techniques of analysis, linguistic structure, language classification, language families of the world, language in its sociocultural setting.

401 English Language in America (4)

Introduction to linguistic theory; elementary structural analysis of phonology, morphology, and syntax; discussion of levels and functional varieties of usage.

402 History of the English Language (4)

Prerequisite: ENGL 401. External history; structural history; history of vocabulary; principles of historical linguistics.

403 Language and Culture (4)

(also listed as ANTH 470) Prerequisite: ANTH 250. Nature, origin, and evolution of language. Survey of approaches and studies illustrating variations in the relation of habitual thought and behavior to language.

405 Modern English Grammar (4)

Prerequisite: ENGL 401. Transformational generative analysis of contemporary morphology and syntax; its relationship to alternate grammars of English.

406 Writing Nonfiction (4)

Prerequisite: Passing WPE score. Methods of and practice in writing documentary, biographical, and other nonfiction prose; emphasis on style, detail, effective development.

407 Writing Fiction (4)

Prerequisite: Instructor consent. Instruction in the technique and art of writing fiction. May be repeated to maximum of 16 units.

408 Writing Poetry (4)

Prerequisite: Instructor consent. Instruction in the technique and art of writing poetry. May be repeated to maximum of 16 units.

409 Scientific Writing (4)

Prerequisite: Passing WPE score. Fundamentals of scientific writing: developing and writing lab reports, abstracts, reviews of secondary literature, and primary research papers.

410 Writing in the Schools (4)

Prerequisite: One upper division ENGL linguistics course. Discussion of composing and theories of discourse; review of research in written expression; practice in applying and evaluating theories.

416 Chaucer (4)

Troilus and Criseyde, Canterbury Tales, and selected minor poems as works of art and as reflections of culture and literary conventions of the time.

417 Shakespeare I (4)

Shakespearean drama. Intensive study of five or six plays chosen from following: Julius Caesar, Romeo and Juliet, Macbeth, Twelfth Night, The Merchant of Venice, Henry IV--Part One, Richard III, and Hamlet; elements of Shakespearean drama.

418 Shakespeare II (4)

Intensive study of four or five plays (and poems) not included in 417; range and diversity of Shakespeare's art in his time and ours.

419 Milton (4)

Selected works of John Milton.

424 Greek and Roman Drama in Translation (4)

Plays by Aeschylus, Sophocles, Euripides, Aristophanes, Seneca, Plautus, and Terence; characterization, style, focus, and problems of translation.

425 Epic and Legend (4)

Stylistic, thematic, generic, and cultural analysis of representative epics and legends from world literature.

426 African Literature (4)

(also listed as PAS 426) Prerequisite: ENGL 250. African literature and its cultural background; intensive study of writers in English and others in translation; critical compositions and reports.

427 Modern Drama: Continental, English, and American (4)

Representative plays by such dramatists as Ibsen, Strindberg, Chekhov, Shaw, Pirandello, O'Casey, O'Neill; major theatrical movements; naturalism, symbolism, and expressionism.

428 Contemporary Drama: Continental, English, and American (4)

Prerequisite: ENGL 427 recommended. Representative plays by such dramatists as Brecht, Lorca, Beckett, Sartre, Genet, Pinter, Miller, Williams. Modern poetic drama; epic, existential, and absurdist theatre; theatre of cruelty.

430 Children's Literature (4)

Prerequisite: ENGL 406 or passing WPE score. Analysis and evaluation of literature for children; role of literature in children's education.

432 Literature for Adolescents (4)

Prerequisite: ENGL 406 or passing WPE score. Analysis and evaluation of literature appropriate for adolescents; examination of adolescent concerns in literary works.

441 Major Critics (4)

Major critical approaches to literature; systems of Aristotle, Dryden or Johnson, Wordsworth, Coleridge; a modern critic or a contemporary critical problem.

446 The British Novel: Defoe to Hardy (4)

Representative works by major British novelists, e.g., Defoe, Fielding, Sterne, Dickens, and Hardy.

447 The British Novel: Conrad to Present (4)

Representative works by modern British novelists, e.g., Conrad, Joyce, Lawrence, Huxley, and Cary.

450 Analyzing Children's Film (4)

Children's films as art form and communication medium; cinematic explication; visual and verbal communication techniques; children's films adapted from folklore, fable, and children's books.

451 Film and Literature (4)

Critical study of films adapted from literary sources along with analysis of original literature for purpose of contrasting the media. May be repeated once as subject matter changes.

453 Modern Women Writers (4)

Representative works by such women writers of the modern world as Kate Chopin, Gertrude Stein, Willa Cather, Isak Dinesen, Colette, Virginia Woolf, Doris Lessing, and Gabriela Mistral.

454 Selected Topics in Literature (4)

Advanced study of representative works in literature of various thematic or stylistic types. Specific topics announced in *Schedule of Classes*. Open to English majors. May be repeated for credit.

460 Medieval English Literature (4)

Lyric poetry, epic and romantic narratives, and dramatic works, from Anglo-Saxon beginnings through fifteenth century, exclusive of Chaucer. Readings in Middle English and in translation.

461 Dramatic Literature of the English Renaissance (4)

Representative plays by Elizabethan and Jacobean dramatists exclusive of Shakespeare, e.g., Marlowe, Dekker, Webster, Jonson, Beaumont, and Fletcher.

463 The English Renaissance (4)

Nondramatic literature from Wyatt to Bacon; British and continental cultural, literary, and philosophical backgrounds.

464 Seventeenth Century Literature (4)

Prose and poetry from Donne to Dryden, excluding Milton; literary, social and political backgrounds.

465 The Augustan Age (4)

Literature from Swift and Pope through Johnson; social and philosophical backgrounds.

467 The Romantic Age (4)

Prose and poetry from Blake to Keats; cultural and philosophical backgrounds.

468 The Victorian Age (4)

Prose and poetry of major Victorian writers; social and philosophical backgrounds.

470 American Women Writers (4)

Critical study of the literary achievements of American women, such as Stowe, Dickinson, Chopin, Wharton, Cather, Hurston, Porter, Morrison, and Kingston.

471 American Literature: Beginnings to 1860 (4)

Puritanism to transcendentalism. Emphasis on such writers as Edwards, Emerson, Hawthorne, Melville, Poe, and Thoreau.

472 American Literature: 1860-1914 (4)

Prerequisite: ENGL 471. The movement toward realism and naturalism. Emphasis on such writers as Whitman, Dickinson, Twain, Howells, James, and Crane.

473 American Literature: 1914 to Present (4)

Representative writers of American modernism and postmodernism.

475ABC The American Novel Since 1920 (4, 4, 4)

Development of American novel from 19th century to present. Representative works by major American novelists. (Courses need not be taken in sequence.) Supervised practice in writing.

475A: 19th Century (e.g., Cooper, Hawthorne, Melville, Twain, James, Crane) 475B: 1900-1945 (e.g., Dreiser, Wharton, Cather, Anderson, Hemingway, Fitzgerald, Faulkner, Steinbeck) 475C: 1945-Present (e.g., Wright, Bellow, Ellison, O'Connor, Updike, Pynchon)

476 Ethnic Literature in the U.S. (4)

Fiction, nonfiction, poetry, and plays of U.S. modern ethnic writers. May include, among others, Asian-American, black American, Euro-American, Hispanic-American, and native American works.

477 Black American Literature (4)

Representative works of 19th and 20th century black American writers such as Forten, Chestnutt, Dunbar, Hughes, Hurston, Wright, Baldwin, Walker, Brooks.

478 Modern Poetry (4)

Backgrounds of modern poetry; representative works by major British and American poets to 1930s, such as Yeats, Eliot, Pound, Frost, Williams, Stevens, and Lawrence.

479 Contemporary Poetry (4)

Representative works by British and American poets from 1930s to present, such as Auden, Roethke, Thomas, Lowell, Plath, Hughes, Berryman, Creeley, Baraka, Metwin.

480 Literature and the Fine Arts, B.C. (4)

Ancient literature (Oriental, Greek, and Roman) in relation to other arts. May be taken independently of ENGL 4810r in any sequence with it.

481 Literature and the Fine Arts, A.D. (4)

Western literature (medieval romance, Dante, Cervantes, Voltaire, Goethe, Balzac) in relation to other arts. May be taken independently of ENGL 480 or in any sequence with it.

482 The Bible as Literature: Old and New Testaments (4)

Types and styles of Biblical literature; geographical, historical, cultural, and archaeological backgrounds of both Testaments.

483 Folklore and Literature (4)

Forms of folklore and their relationship to literature; identification and analysis of the heritage of folklore in literature.

484 Major Continental Fiction: Cervantes to Balzac (4)

Representative works by European authors, e.g., Cervantes, Rousseau, Goethe, and Balzac.

485 Major Continental Fiction: Stendhal to Tolstoy (4)

Representative works by European authors, e.g., Stendhal, Flaubert, Chekhov, Dostoyevsky, and Tolstoy.

486 Twentieth Century Continental Fiction (4)

Representative works by European authors, e.g., Proust, Mann, Kafka, Sartre, and Camus.

488 Canadian Fiction (4)

Canadian fiction in English by major 20th century authors including Atwood, Laurence, Davies, Munro, Kroetsch, Richler, and others.

490 Special Studies in British Writers (4)

Intensive study of one British writer or of a small group of writers whose works represent a significant movement or aspect of British literature. May be repeated for credit as content changes.

491 Special Studies in American Writers (4)

Intensive study of one or a small group of American writers whose works represent a significant movement or aspect of American literature. May be repeated for credit as content changes.

495 Seminar: British Literature (4)

Prerequisite: English major with senior standing. Variable content course in which each seminar studies in depth a selected topic in British literature. May be repeated for credit as content changes.

496 Seminar: American Literature (4)

Prerequisite: English major with senior standing. Variable content course in which each seminar studies in depth a selected topic in American literature. May be repeated for credit as content changes.

497 Special Studies in World Writers in Translation (4)

Prerequisite: English major with senior standing. Variable content course; each seminar studies in depth a selected topic in world literature. May be repeated for credit as content changes.

498 Seminar: Language (4)

Prerequisite: English major with senior standing. Variable content course in which each seminar will study in depth a selected topic in language. May be repeated for credit as content changes.

499 Undergraduate Directed Study (4)

Prerequisites: Consent of an instructor to act as sponsor. Project selected in conference with sponsor. maximum of 4 units accepted toward English major or minor. May be repeated for credit as content changes. GradedCR/NC.

FOREIGN LANGUAGES AND LITERATURES

School of Arts and Letters
DEPARTMENT OFFICE
King Hall D1054
Phone: (213)343-4230

The Department of Foreign Languages and Literatures offers programs leading to the Bachelor of Arts degree in French, Japanese, and Spanish, as well as minors in Chinese, French, Japanese, and Spanish to accompany a major in another field. In addition, opportunities are offered for one or several years of study in German, Italian, Latin, Portuguese, and Russian. Through the Foreign Language Cooperative Program, students are provided the opportunity for study of languages not taught on this campus.

Also offered are Master of Arts degrees in French and Spanish, described in the Graduate Programs section.

The Faculty

Emeriti: Alfred F. Michael Atlee, Matilde O. Castells, Kazumitsu Kato, Harold E. Lionetti, Allredo O. Morales, Francoise Pasques, Elba Torres de Peralta, Leon Schwartz, Marie*Antoinette U. Zrimc.

Professors: Abdallah J. Beddawi, E. Dale Carter, Jr.(*Chair*), Joseph A. Chrzanowski, Jeanine S. Gaucher-Morales, Alfonso Gonzalez, G. Grant MacCurdy, Hildebrando Villarreal, Frank W. Young.

Associate Professors: Felipe Diaz, Domnita Dumitrescu, Eri F. Yasuhara.

Assistant Professors: Maria Dolores Costa, Yoji Takata, QingYun Wu.

Reading Examinations

Foreign language reading examinations are administered by the Department of Foreign Languages and Literatures. Students in undergraduate or graduate programs requiring proficiency in a foreign language must enroll in FL 9010r 902, as appropriate, in the quarter in which any such examination is to be taken.

Limitation on Language Credit

Equivalent courses taken at the college level may not be repeated for credit toward a degree. A student with one year of high school language would normally be expected to enter 100B; a student with two years of high school language would enter 100C; with three years, 200A, and so on. However, it is recognized that special circumstances may make it advisable for some students to start at higher or lower levels. Therefore, the department will allow certain students who have studied a foreign language exclusively at the high school level to depart from the equivalency formula specified above after consultation and with the recommendation of a properly designated adviser.

Students who completed their secondary education in a foreign country where a language other than English is spoken natively may not receive credit for elementary language and lower division conversation courses in that language.

The Credential Program

The Bachelor of Arts degree programs in French, and Spanish, when completed with the credential option, and Japanese are approved by the Commission on Teacher Credentialing for examination waiver for the Single Subject credential.

In addition, the department shares partial responsibility for the Bilingual/Crosscultural Specialist credential, including content in Chinese, Japanese, and Spanish.

Candidates for admission to directed teaching in a foreign language are required to have achieved a B (3.0) grade point average or better in their major language. Language majors with a grade point average lower than 3.0, but no lower than 2.5, may petition the department for admission by examination to directed teaching.

Students who completed their baccalaureate at another college or university and who wish to obtain the Cal State L.A.-recommended teaching credential may be required to complete additional units of postgraduate course work in 300-, 400-, or 500-level courses in their major language. Students who have passed the National Teachers Examination (NTE) in French or Spanish are required to complete four to eight additional units in their major language.

For detailed information about these credentials, students should consult advisers in the department and in the School of Education.

English as A Second Language Programs

Students in need of instruction in English as a second language may wish to consult the Office of Continuing Education.

Foreign Language Cooperative Program (FLCP)

Courses in the Foreign Language Cooperative Program (FLCP 288 lower division, FLCP 488 upper division) are designed to give eligible students the opportunity to study at UCLA a foreign language that is not offered at this campus or any neighboring CSU campus. For information regarding enrollment and qualifications, consult the Department of Foreign Languages and Literatures.

CHINESE

Minor in Chinese

A minor in Chinese is available for students majoring in other fields. It may be of particular value to students interested in studying languages and literatures; history of the Far East in general and China especially; political science; or employment with the government, international business firms, or international agencies.

A total of 32 units in Chinese is required, of which 12 are in lower division and 20 are in upper division courses.

Requirements for the Minor (32 units)

Lower Division Required courses (12 units):

CHIN	200ABC	Intermediate Chinese (Mandarin)	(4, 4, 4)
------	--------	---------------------------------	-----------

Upper Division Required Courses (16 units):

CHIN	300AB	Advanced Chinese I, II (Mandarin)	(4, 4)
CHIN	310	Chinese Civilization	(4)
CHIN	322	Newspaper Chinese	(4)

Elective (select 4 units from following):

CHIN	408 or 410	Chinese Literature lot II	(4)
------	------------	---------------------------	-----

Bachelor of Arts Degree in French

The study of French is conducive to proficiency in oral and written communication and also provides training in a humanistic discipline. It enhances enjoyment of travel abroad, foreign films, and great literary works. Students who achieve a mastery of French

may enter the teaching profession or work as translators, interpreters, or bilingual secretaries. Their skills are also useful in careers associated with international business, the foreign service, and the **news** media.

The undergraduate program in French includes a major for the Bachelor of Arts degree and a minor to accompany a major in another field. The Master of Arts degree program is described in the *Graduate Programs* section.

Requirements for the Major (68-70 units)

A total of 68-70 units is required, including at least 24 units earned in residence at Cal State L.A. Students select one of three options: Option I, Single Subject Teaching Option (30 units); Option II, Literary (28 units); or Option III, General Language (28 units). FREN 100 ABC or 130 is

prerequisite to all options and may be satisfied by appropriate high school preparation or by examination.

Lower Division Required Courses (12 units):

FREN 200AB	Intermediate French	(4, 4)
FREN 201	Conversation and Composition	(4)

Upper Division Required Courses (28 units):

FREN 300ABC	Advanced Grammar and Reading	(4, 4, 4)
FREN 301	Advanced Conversation and Composition	(4)
FREN 401	Cours de Style	(4)
FREN 410	Introduction to French Prose and Dramatic	

Literature I (4)

FREN 411	Introduction to French Prose and Dramatic Literature II	(4)
----------	---	-----

* **Option I: Single Subject Teaching Option (30 units)**

Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs.

Required Courses (22 units):

FREN 305	Phonetics	(4)
FREN 310AB	French Culture and Institutions	(4, 4)
FREN 403	Contrastive Analysis of French and English Structures	(4)
FREN 412	Masters of French Poetry	(4)
FL 496	Instructional Practicum	(2)

Electives (select 8 units from following):

FREN 315, 380, 405, 450, 451; 4610r 471

* **Option II: Literary Option (28 units)**

Required Courses (16 units):

FREN 310A or 310B	French Culture and Institutions	(4)
FREN 412	Masters of French Poetry	(4)
FREN 450	Selected Topics in French Literary Prose	(4)
FREN 451	Selected Topics in French Dramatic Literature	(4)

Electives (select 12 units from following):

FREN 310A or 310B; 315; 405; 4610r 471

* **Option III: General Language Option (28 units)**

Required Courses (16 units):

FREN 305	Phonetics	(4)
FREN 310B	French Culture and Institutions	(4)
FREN 380	Commercial French	(4)
FREN 405	Translation	(4)

Electives (select 12 units from following):

FREN 310A, 315, 412, 450, 451, 471

Minor in French

A minor in French is available for students majoring in other fields. It may be of particular value to students interested in the study of languages and literatures, the history of Europe in general and France especially, in political science, or in employment with the government, international business firms, or international agencies.

Requirements for the Minor (40 units)

A total of 40 units in French is required, of which 12 are in lower division and 28 are in upper division courses.

Lower Division Required Courses (12 units):

FREN 200AB	Intermediate French	(4, 4)
FREN 201	Conversation and Composition	(4)

Upper Division Required Courses (28 units):

FREN 300ABC	Advanced Grammar and Reading	(4, 4, 4)
FREN 301	Advanced Conversation and Composition	(4)

Select one or both of following:

FREN 310AB	French Culture and Institutions	(4, 4)
------------	---------------------------------	--------

Select additional courses from following to complete 24-unit upper division requirement:

FREN 315, 380, 401,405, 410, 411,412

French minors should consult the department adviser regarding the choice of the most appropriate electives.

GERMAN

The Department of Foreign Languages and Literatures does not offer a major or a minor in German. However, courses in German are available for students majoring in other fields. Study of German may be of particular value to students of music, science, history, or political science. Knowledge of German may be helpful in securing employment with U.S. or international agencies or with international business firms.

ITALIAN

The Department of Foreign Languages and Literatures does not offer a major or a minor in Italian. However, the courses offered can be of value to students preparing to teach Romance languages; to those interested in the culture of Italy; or to those preparing for language prerequisites to graduate degrees.

Bachelor of Arts Degree in Japanese

The program in Japanese includes a major for the Bachelor of Arts degree and a minor. The program places emphasis on the development of communicative skills in Japanese and offers in-depth study of Japanese literature and civilization.

Study of the language gives students direct access to the Japanese people, their literature, and their civilization. Knowledge of a culture so different from those found in North America broadens intellectual horizons and enables students to better understand and interact with members of contemporary Japanese society.

Students who wish to qualify for the Single Subject credential are referred to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs.

Requirements for the Major (60 units)

A total of 60 units is required, including at least 24 units earned in residence at Cal State L.A. JAPN 100ABC or 130 is prerequisite to the major and may be satisfied by appropriate high school preparation or by examination.

Lower Division Required Courses (12 units):

JAPN 200ABC	Intermediate Japanese	(4, 4, 4)
-------------	-----------------------	-----------

Upper Division Required Courses (36 units):

JAPN 300ABC	Advanced Japanese	(4, 4, 4)
JAPN 310	Japanese Civilization to 1600	(4)
JAPN 311	Japanese Civilization since 1600	(4)
JAPN 400A or 400B	Advanced Reading and Composition	(4)

JAPN	408	Classical Japanese Literature	(4)
JAPN	410	Modern Japanese Literature	(4)
JAPN	460	Proseminar: Masters of Japanese Culture and	

Thought (4) Electives (select 12 units from following):

JAPN 307, 395, 400A or 400B, 403**, 454L, P, 460

** Required for the Single Subject credential

Minor in Japanese

Prerequisite: JAPN 100ABC or 130 (may be satisfied by appropriate high school preparation or by examination). The minor requires completion of 36 units in Japanese as listed below.

Requirements for the Minor (36units)

Lower Division Required Courses (12 units):

JAPN 200ABC (4, 4, 4)

Upper Division Required Courses (12 units):

JAPN 300ABC (4, 4, 4)

Options (8 units)

Select one from following:

Literature: JAPN 408, 410 or

Civilization: JAPN 310, 311

Elective (4 units):

Select from: JAPN 400A, 400B, 454L, P, 460

LATIN

The Department of Foreign Languages and Literatures does not offer a major leading to the Bachelor of Arts degree in Latin, or a minor to accompany a major in another field. However, the courses offered can be of value to students preparing to teach Romance languages or interested in the Classics and in Roman and Early Christian history.

PORTUGUESE

The Department of Foreign Languages and Literatures does not offer a major leading to a Bachelor of Arts degree in Portuguese or a minor to accompany a major in another field. However, the courses offered can be of value to students preparing to teach Romance languages or interested in the Classics.

RUSSIAN

The Department of Foreign Languages and Literatures does not offer a major leading to a Bachelor of Arts degree in Russian or a minor to accompany a major in another field. However, the courses offered may be of value to students who wish to acquire a knowledge of the Russian language, culture, and literary forms.

Bachelor of Arts Degree in Spanish

The undergraduate program includes a major for the Bachelor of Arts degree with two options, and a minor for students majoring in other fields. The Master of Arts degree is described in the *Graduate Programs* section.

Requirements for the Major (72 or 74 units)

A total of 72 or 74 units is required, including at least 24 units earned in residence at Cal State L.A.

Following completion of a common core, students may select either Option I, General Program, which stresses literature or Option II, Single Subject Teaching Option, which includes linguistic study as well as literature. The first is recommended for students interested in careers other than teaching; the second is recommended for students intending to teach. SPAN 100ABC or 130 is prerequisite to all undergraduate programs and may be satisfied by appropriate high school preparation or by examination.

Options

Select one of the following programs.

* **Option I: General Program (72 units)****Lower Division Required Courses (8 or 16 units):****Select either:**

SPAN 200ABC	Intermediate Spanish	(4, 4, 4) <i>plus</i>
SPAN 115	Conversation	(4) or
SPAN 205AB	Intermediate Written Spanish	(4, 4)

(above choice subject to adviser approval)

Upper Division Required Courses (40 units):

SPAN 300AB	Composition and Grammar	(4, 4)
SPAN 310	Spanish Civilization	(4)
SPAN 315	Spanish-American Civilization	(4)
SPAN 401	Introduction to Hispanic Literary Criticism	(4)
SPAN 408	Spanish Literature I	(4)
SPAN 410	Spanish Literature II	(4)
SPAN 411	Spanish-American Literature I	(4)
SPAN 413	Spanish-American Literature II	(4)
SPAN 414	Don Quixote de la Mancha	(4)

**Electives (16-24 units):

Select at least four, including two 400-level courses, from following:

SPAN 320, 350, 351,380, 400B, 417, 418, 419, 421,424, 426, 428, 429, 454, 459, 460, 475, 483, 485

** Students who complete 205AB rather than 200ABC plus 115 are required to take 24 units of electives.

* **Option II: Single Subject Teaching Option (74 units)**

Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs.

Lower Division Required Courses (8 or 16 units): Select either:

SPAN 200ABC	Intermediate Spanish	(4, 4, 4) <i>plus</i>
SPAN 115	Conversation	(4) or
SPAN 205AB	Intermediate Written Spanish	(4, 4)

(above choice subject to adviser approval)

Upper Division Required Courses (46 units):

SPAN 300AB	Composition and Grammar	(4, 4)
SPAN 305	Introduction to Spanish Linguistics	(4)
SPAN 320	Phonetics	(4)
SPAN 350	Translation	(4)
SPAN 400B	Syntax	(4)
SPAN 401	Introduction to Hispanic Literary Criticism	(4)
SPAN 402	Morphology	(4)
SPAN 403	Grammatical Structures of Spanish and English	(4)
SPAN 408	Spanish Literature I	(4)
SPAN 413	Spanish-American Literature II	(4)
FL 496	Instructional Practicum (2)	

**Electives (12-20 units):

Select one from following:

SPAN 310 or 315

Select additional courses from following:

SPAN 351,380, 410, 411,414, 417, 418, 419, 421, 424, 426, 428, 429, 459, 460, 475,483, 485, 506, and FL 496.

**Students who complete 205AB rather than 200ABC and 115 are required to take 20 units of electives.

Minor in Spanish

A minor in Spanish, totaling 40-44 units, depending on their prior experience with the language, is available for students majoring in other fields. Following completion of a common core, students select a total of two to three electives. Electives encompass literature, linguistics, and civilization, as well as applied language. Those interested in broadening their knowledge and understanding of the Hispanic language and culture would typically complete SPAN 320, 408 or 410, 411 or 413, and either 310 or 315. Students whose career goals require communicative proficiency in Spanish are encouraged to enroll in SPAN 350, 397, and 400A. SPAN 100ABC or 130 is prerequisite to this program and may be satisfied by appropriate high school preparation or by examination.

Requirements for the Minor (40-44 units)

Lower Division Required Courses (8 or 16 units):

SPAN 115	(4) plus
SPAN 200ABC	(4, 4, 4) or
SPAN 205AB	(4, 4)

Upper Division Required Courses (20 units):

SPAN 300AB, 305, 401

Select from following (4 units):

SPAN 310, 315

Electives (select 8-12 units from following):

SPAN 320, 350, 351, 380, 395N, 397, 400A, 408, 410, 411, 413

Courses in Foreign Languages (FL)

Lower Division Course

154 Special Topics in (a) Foreign Language (1-5)

Topics of special interest to students of foreign language, as announced in Schedule of Classes.

Upper Division Courses

354L, P Special Topics in (a) Foreign Language (1-4)

Prerequisites: As needed for specific topic. Topics of special interest to students in foreign languages as announced in *Schedule of Classes*.

383 Themes of Adult Life in Philosophy and Literature (4)

(also listed as ENGL 383 and PHIL 383) Prerequisite: GE humanities requirement. Meaning of selected experiences of adult life, for example, initiation and coming of age; self-actualization and responsibility; love and intimacy; parenthood; change in middle years; death and dying.

389 Human Emotions in Literary Expression (4)

(also listed as ENGL 389) Prerequisite: GE humanities requirement. Emotions such as love, anger, laughter, joy, sorrow, guilt, pain or oppression, etc., as represented in prose and poetic forms of various cultures.

392 Literary Gazette (1-4)

Prerequisites: Upper division standing, instructor consent. Techniques of producing a university literary magazine. May be repeated to maximum of 6 units. Graded CR/NC.

399 Directed Reading (1-4)

Prerequisite: Consent of adviser. Reading in foreign language about topics of interest to student under direction of faculty member; regular oral and/or written reports in the language.

460 Cultural Crosscurrents in Literature (4)

Prerequisite: Upper division standing. Study of a distinctive theme, movement, or genre in a number of foreign Western and non-Western literatures. Conducted in English. May be repeated for credit as content changes.

496 Instructional Practicum (1-4)

Prerequisites: Minimum 3.0 grade point average in major, completion of 400-level grammar class in major, approval by coordinator. Supervised experience in instructional activities related to the teaching of a second language. Regular progress meetings required. May be repeated to maximum of 4 units. GradedCR/NC.

Courses in Chinese (CHIN)

Lower Division Courses

100ABC Elementary Mandarin (4, 4, 4)

Prerequisite: Must be taken in sequence. Students with one year of high school Mandarin should elect 100B; those with two years, 100C. Methodical presentation of structure of language through hearing, speaking, reading, and writing Mandarin.

101 ABC Elementary Cantonese (4, 4, 4)

Prerequisite: Must be taken in sequence. Students without background in Cantonese are advised to take first year course. Introduction to structure of language through hearing, speaking, reading, and writing Cantonese.

200ABC Intermediate Mandarin (4, 4, 4)

Prerequisite: CHIN 100C or three years of high school Mandarin for 200A; four years for 200B. Emphasis on understanding and speaking Mandarin; rapid reading of Mandarin for comprehension, grammar review, and writing.

201 ABC Intermediate Cantonese (4, 4, 4)

Prerequisite: CHIN 101 C. Must be taken in sequence. Emphasis on understanding and speaking Cantonese; further development of conversational ability and reading Romanized Cantonese texts.

Upper Division Courses

300AB Conversation and Composition (Mandarin) (4, 4)

Prerequisite: CHIN 200C. Must be taken in sequence. Practice in oral and written Mandarin. Emphasis on fluency, correct expression in writing, and vocabulary expansion through reading contemporary literature.

303 Mandarin for Cantonese Speakers (4)

Prerequisite: CHIN 201C. Emphasis on spoken Mandarin; drills for better understanding differences between Cantonese and Mandarin syntactic and idiomatic expressions.

310 Chinese Civilization (4)

Prerequisite: CHIN 200B. Major cultural and social trends of China from beginning to present.

322 Newspaper Chinese (4)

Prerequisite: CHIN 300B. Extensive reading in leading Chinese newspapers and magazines from People's Republic of China, Republic of China (Taiwan), Hong Kong, etc. Emphasis on abbreviated phrases used in contemporary newspapers and magazines.

408 Chinese Literature I (4)

Prerequisite: CHIN 300B. Chinese literature from the beginnings to the 13th century.

410 Chinese Literature II (4)

Prerequisite: CHIN 300B. Chinese literature from the 13th century to the present.

454L,P Special Topics in Chinese (1-4)

Current topics of special interest to students in Chinese as announced in *Schedule of Classes*. May be repeated for credit to maximum of 8 units.

Courses in French (FREN)

Lower Division Courses

100ABC Elementary French (4, 4, 4)

Prerequisite: Must be taken in sequence. Students with one year of high school French should elect 100B; those with two years, 100C. Methodical presentation of fundamental structure of the language through hearing, speaking, reading, and writing French.

130 Intensive Elementary French (12)

Offered summer quarter only. Emphasis on acquisition of communicative skills. Presentation of structure of language and information about francophone cultures. Credit allowed for only one of FREN 130 and 100ABC.

200AB Intermediate French (4, 4)

Prerequisite: Must be taken in sequence. Students with FREN 100C or three years of high school French should elect 200A; those with four years, 200B. Students with equivalent background may request placement by examination. Continued methodical study of French grammatical structures. Emphasis on understanding and speaking French, reading for analysis and comprehension, and writing.

201 Conversation and Composition (4)

Prerequisite: FREN 200B. Practice in oral and written French expression of intermediate difficulty; development of fluency and accuracy.

Upper Division Courses

All upper division courses except 461 and 471 are conducted in French.

300ABC Advanced Grammar and Reading (4, 4, 4)

Prerequisites: FREN 200B. Must be taken in sequence. Complete review of all French grammatical structures; grammatical and stylistic analysis of difficult French texts; reading for comprehension, vocabulary building, and oral practice.

301 Advanced Conversation and Composition (4)

Prerequisite: FREN 300C. Practice in oral and written French expression; development of fluency and accuracy approximating native skill. May be repeated once for credit.

305 Phonetics (4)

Prerequisites: FREN 200AB, 201. Production of French sounds such as assimilation, liaison, vowel length, rhythm, accent, intonation, etc. Laboratory practice in pronunciation.

310AB French Culture and Institutions (4, 4)

Prerequisite: FREN 300C or 301. Contributions of France to western world; origin and development of its political and social institutions, as well as evolution of its literature, thought, and art.

315 The French Popular Song (4)

Prerequisite: FREN 200B. French popular song from Middle Ages to present; relationship of song to historical, social, and cultural events.

380 Commercial French (4)

Prerequisite: FREN 300C or 301. Intensive study of French used in business; theory and practice of fundamentals of commercial correspondence in French; translation of business English into business French.

401 Cours de Style (4)

Prerequisites: FREN 300C, 301. Writing and analysis of literary French.

403 Contrastive Analysis of French and English Structures (4)

Prerequisites: FREN 300C, ENGL 401. Contrastive analysis of structures of French and English describing similarities and differences of each; emphasis on studying structures that cause interference in language learning.

405 Translation (4)

Prerequisites: FREN 300C, 301. Techniques of translation processes in rendering into French and English materials ranging from official documents to technical essays and literary texts.

410 Introduction to French Prose and Dramatic Literature I (4)

Prerequisite: FREN 300C or 301. Development of French prose and dramatic literature from beginnings to French Revolution: cultural influences, literary landmarks, and analysis of genre and style.

411 Introduction to French Prose and Dramatic Literature II (4)

Prerequisite: FREN 300C or 301. Development of French prose and dramatic literature from the French Revolution to the 20th century: cultural influences, literary landmarks, and analysis of genre and style.

412 Masters of French Poetry: Beginnings to Symbolism (4)

Prerequisite: FREN 300C or 301. French poetic evolution as seen in the principal poets from Viion to Mallarme.

450 Selected Topics in French Literary Prose (4)

Prerequisite: FREN 410 or 411. Selected masters of French literary prose and their influence on world letters and ideas. Focus on cultural significance and literary theory. May be repeated for credit as subject matter changes.

451 Selected Topics in French Dramatic Literature (4)

Prerequisite: FREN 410 or 411. Selected masters of French dramatic literature and their influence on world letters and ideas. Focus on cultural significance and aesthetic theory. May be repeated for credit as subject matter changes.

454 Special Topics in French (1-4)

Prerequisites: As needed for specific topic. Current topics of special interest in French as announced in *Schedule of Classes*. May be repeated for credit.

461 Masters of French Literature in Translation (4)

Study of one or several French authors whose writings are of special significance today. Conducted in English. May be repeated as subject matter changes.

471 The French Film (4)

Study of great traditions and personal styles of outstanding film makers. Critique and literary analysis of intellectual approach in French cinema. Conducted in English.

499 Undergraduate Directed Study (1-4)

Prerequisites: 3.0 grade point average in French, senior or graduate standing, adviser consent. Project selected in conference with instructor before registration; progress meetings held regularly and culminating in written reports. May be repeated for credit.

Courses in German (GERM)

Lower Division Courses

100ABC Elementary German (4, 4, 4)

Prerequisite: Must be taken in sequence. Students with one year of high school German should elect 100B; those with two years, 100C. Methodical presentation of structure of language through hearing, speaking, reading, and writing German.

200ABC Intermediate German (4, 4, 4)

Prerequisite: Must be taken in sequence. Students with GERM 100C or three years of high school German should elect 200A; those with four years, 200B. Emphasis on understanding and speaking German; rapid reading of German for comprehension, grammar review, and writing.

201 Spoken German (4)

Prerequisite: GERM 100C. Intensive practice in spoken German at intermediate level. Intended for non-natives only.

Courses in Italian (ITAL)

Lower Division Courses

100ABC Elementary Italian (4, 4, 4)

Prerequisite: Must be taken in sequence. Students with one year of high school Italian should elect 100B; those with two years, 100C. Methodical presentation of the language through hearing, speaking, reading, and writing Italian.

200ABC Intermediate Italian (4, 4, 4)

Prerequisite: Must be taken in sequence. Students with ITAL 100C or three years of high school Italian should elect 200A, those with four years, 200B. Emphasis on understanding and speaking Italian; rapid reading for comprehension; grammar review, writing and culture.

Courses in Japanese (JAPN)**Lower Division Courses****100ABC Elementary Japanese (4, 4, 4)**

Prerequisite: Must be taken in sequence. Students with one year of high school Japanese should elect 100B; those with two years, 100C. Methodical presentation of structure of the language through hearing, speaking, reading, and writing Japanese.

130 Intensive Elementary Japanese (12)

Offered summer quarter only. Emphasis on functional acquisition of spoken Japanese; reading and writing introduced. Credit allowed for only one of JAPN 130 and 100ABC.

200ABC Intermediate Japanese (4, 4, 4)

Prerequisite: Must be taken in sequence. Students with JAPN 100C or three years of high school Japanese should elect 200A; those with four years, 200B. Emphasis on understanding and speaking Japanese; rapid reading of Japanese, grammar review and writing.

230 Intensive Intermediate Japanese (12)

Offered summer quarter only. Emphasis on functional acquisition of spoken Japanese; reading and writing introduced. Credit allowed for only one of JAPN 230 and 200ABC.

Upper Division Courses

All upper division courses except 307 are conducted in Japanese.

300ABC Advanced Japanese (4, 4, 4)

Prerequisite: JAPN 200C. Advanced study of Japanese with emphasis on reading and writing. Continuation of aural-oral practice as an integral part of the course.

307 Japanese Literature in Translation (4)

Study of major works of Japanese literature organized around different themes. Subject matter may change with each offering. No knowledge of Japanese required. May be repeated for credit as content changes.

310 Japanese Civilization to 1600 (4)

Prerequisite: JAPN 200C. Origin and development of Japanese culture; religion, thought, literature, art, and patterns of life from neolithic age to 1600 A.D.

311 Japanese Civilization Since 1600 (4)

Prerequisite: JAPN 200C. Significant aspects of Japanese culture from 1600 A.D. to present; their evolution, characteristics, and synthesis in modern period.

395 Japanese in Community Service(1-4)

Prerequisites: JAPN 300C; approval by departmental faculty adviser in consultation with EPIC director, and acceptance by community agency. Participation in work of a community agency or campus program utilizing communication skills in Japanese. May be repeated to maximum of 6 units. Graded CR/NC.

400AB Advanced Reading and Composition (4, 4)

Prerequisite: JAPN 300C. Should be taken in sequence. Improvement of reading ability in modern Japanese; expository writing and use of advanced vocabulary and composition.

403 Contrastive Analysis of Japanese and English Structures (4)

Prerequisites: JAPN 300ABC and ENGL 401. Contrastive analysis of structures of Japanese and English describing similarities and differences of each; emphasis on studying structures that cause interference in language learning.

408 Classical Japanese Literature (4)

Prerequisites: JAPN 300C. Selected works of Japanese prose and poetry from earliest times to 1868. Introduction of classical grammar and vocabulary as needed.

410 Modern Japanese Literature (4)

Prerequisite: JAPN 300C. Selected works of Japanese prose and poetry from 1868 to the present. Literary trends of Meiji, Taisho, and Showa periods.

454L,P Special Topics in Japanese (1-4)

Prerequisite: As needed for specific topic. Current topics of special interest to students in Japanese as announced in *Schedule of Classes*. May be repeated to maximum of 8 units.

460 Proseminar: Masters of Japanese Culture and Thought (4)

Prerequisite: JAPN 300C. Original works of a major figure in Japanese intellectual history. Individual subjects for study change with each offering. May be repeated as subject matter changes.

**Courses in Latin (LA TN)
Lower Division Courses****100ABC Elementary Latin (4, 4, 4)**

Prerequisite: Must be taken in sequence. Students with one year of high school Latin should elect 100B; those with two years, 100C. Methodical presentation of structure of language through hearing and translating Latin classics.

222 Readings in Latin Prose (4)

Prerequisite: LATN 100C. Intensive reading in Latin prose works from Roman Republic through Renaissance; practical exercises in Latin grammar.

Upper Division Courses**354 Special Topics in Latin (1-4)**

Prerequisite: As needed for specific topic. Topics of special interest to students of Latin as announced in *Schedule of Classes*. May be repeated for credit.

450 Latin Readings in History (4)

Prerequisite: LATN 222. Directed student research in classical and medieval texts. Original Latin source material for study of history and related subjects.

**Courses in Portuguese (PORT)
Lower Division Courses****100ABC Elementary Portuguese (4, 4, 4)**

Prerequisite: Must be taken in sequence. Students with one year of high school Portuguese should elect 100B. Methodical presentation of structure of the language through hearing, speaking, reading, and writing Portuguese. Not appropriate for students with backgrounds in spoken Portuguese.

**Courses in Russian (RUSS)
Lower Division Courses****101 AB Elementary Russian (6, 6)**

Prerequisite: Must be taken in sequence. Students with two years of high school Russian should elect 101 B; those with equivalent background may request placement by examination. Methodical presentation of structure of language through hearing, speaking, reading, and writing Russian.

**Courses in Spanish (SPAN)
Lower Division Courses****100ABC Elementary Spanish (4, 4, 4)**

Prerequisite: Must be taken in sequence. Students with one year of high school Spanish should elect 100B; those with two years, 100C. Methodical presentation of structure of the language through hearing, speaking, reading, and writing Spanish. Not appropriate for students with backgrounds in spoken Spanish. Such students should consult a departmental adviser.

105 Elementary Written Spanish (4)

Prerequisite: Ability to speak Spanish. Emphasis on reading comprehension, vocabulary building, and writing. Recommended for Spanish speaking students with little or no knowledge of the written language. Credit allowed for only one of SPAN 100A and SPAN 105.

110 Spanish Conversation for Professions (4)

Prerequisite: SPAN 100A. Course in Spanish conversation which focuses, according to student need, upon vocabulary used in medicine, law enforcement, or the social sciences. Basic grammar presented inductively. May be repeated for credit. May not be taken for credit by Spanish majors. Graded *CR/NC*.

115 Conversation (4)

Prerequisite: SPAN 100C. May be taken concurrently with 200AB. Emphasis on use of spoken Spanish. Individual reports, small group discussions, and panel presentations on topics of current interest based on listening, viewing, and reading assignments.

130 Intensive Elementary Spanish (12)

Offered summer quarter only. Emphasis on acquisition of communicative skills. Presentation of structure of language and information about Hispanic cultures. Credit allowed for only one of SPAN 130 and 100ABC.

200ABC Intermediate Spanish (4, 4, 4)

Prerequisite: Must be taken in sequence. SPAN 115 (4) is prerequisite to 200C. Students with SPAN 100C or three years of high school Spanish should elect 200A; those with four years, 200B. Emphasis on understanding and speaking Spanish; rapid reading of Spanish for comprehension; grammar review, and writing. Methodology of 200ABC not appropriate for students with native speaking capability. Such students should select SPAN 205A or 205B in consultation with departmental adviser.

205AB Intermediate Written Spanish (4, 4)

Prerequisites: Ability to speak Spanish, and basic knowledge of written Spanish or SPAN 105. Must be taken in sequence. Emphasis on reading comprehension, vocabulary building, and writing. Students completing SPAN 205B may proceed to SPAN 300A. Credit allowed for only one of SPAN 200AB and SPAN 205AB.

230 Intensive Intermediate Spanish (12)

Prerequisite: SPAN 130, 100C, or three years of high school Spanish. Offered summer quarter only. Emphasis on understanding and speaking Spanish; rapid reading of Spanish for comprehension, grammar review, and writing. Credit allowed for only one of SPAN 230 and 200ABC.

Upper Division Courses

All upper division courses are conducted in Spanish.

300AB Composition and Grammar (4, 4)

Prerequisite: SPAN 200C or 205B. Must be taken in sequence. Intensive review of grammar; student compositions, emphasizing current writing practices in Spanish; letter-writing in Spanish; idiom review.

305 Introduction to Spanish Linguistics (4)

Prerequisite: SPAN 200C or 205B. Basic concepts of linguistics as applied to Spanish language; introduction to historical development of Spanish and regional dialects including Spanish spoken in U.S.

310 Spanish Civilization (4)

Prerequisite: SPAN 200C or 205B. Synthesis of cultural characteristics of Spain.

315 Spanish-American Civilization (4)

Prerequisite: SPAN 200C or 205B. Synthesis of cultural characteristics of Spanish America.

320 Phonetics (4)

Prerequisite: SPAN 305. Production of Spanish sounds, analysis of intonation, rhythm, accentuation, vowel length, vowel linkage; laboratory practice in pronunciation.

350 Fundamentals of Translation (4)

Prerequisite: SPAN 300B. Intensive study of art of translation;

practice in English-to-Spanish and Spanish-to-English translation.

351 Spanish for Interpreters (4)

Prerequisite: SPAN 300B. Intensive study and practice in the art of sight, consecutive, and simultaneous oral translation.

380 Commercial Spanish (4)

Prerequisite: SPAN 200C. Intensive study of Spanish used in business; theory and practice of fundamentals of commercial correspondence in Spanish.

395N Spanish in Community Service (1-4)

Prerequisites: SPAN 300B, approval of departmental faculty adviser in consultation with EPIC director, acceptance by community agency. Participation in work of a community agency or program utilizing communication skills in Spanish. May be repeated once to maximum of 6 units. Graded *CR/NC*.

397 Field Work in Spanish (1-4)

Prerequisite: To be established by coordinator in consultation with host organization. Field work and internships in occupations in which communication skills in Spanish can be used and perfected. Minimum of 4 hours per week per credit hour. May be repeated to maximum of 4 units. Graded *CR/NC*.

400A Spanish Morphology (4)

Prerequisite or corequisite: SPAN 320. Study of parts of speech with attention given to nominal and verbal inflections, pronominal paradigms, and morphological structure of derived and compound Spanish words.

400B Syntax (4)

Prerequisite: SPAN 400A. Comprehensive review of Spanish syntax; analysis of structure of simple and complex sentences.

401 Introduction to Hispanic Literary Criticism (4)

Prerequisite: SPAN 300B. Introduction to major forms and aesthetic concepts of, and critical approaches to, Hispanic literature.

403 Grammatical Structures of Spanish and English (4)

Prerequisites: SPAN 400B, ENGL 401. Contrastive analysis of syntactic structures of Spanish and English; emphasis on structures that cause interference in language Learning.

408 Spanish Literature I (4)

Prerequisite: SPAN 401. Introduction to Spanish literature from medieval period through the Golden Age.

410 Spanish Literature II (4)

Prerequisite: SPAN 401. Introduction to Spanish literature from 1700 to present.

411 Spanish-American Literature I (4)

Prerequisite: SPAN 401. Spanish-American literature from the Conquest to 1888.

413 Spanish-American Literature II (4)

Prerequisite: SPAN 401. Spanish-American literature from 1888 to present.

414 Don Quixote de la Mancha (4)

Prerequisites: SPAN 408, 410. Reading and analysis of Don Quixote de la Mancha.

417 Spanish-American Short Story (4)

Prerequisites: SPAN 411,413. Spanish-American short story from the Tradiciones of Ricardo Palma to the present.

418 Golden Age Prose (4)

Prerequisites: SPAN 408, 410. Reading and analysis of prominent prose writers of the Golden Age.

419 Colonial Spanish-American Literature (4)

Prerequisites: SPAN 411,413. Intensive study of colonial masterworks including prose, poetry, and theatre.

421 Mexican Literature of Twentieth Century (4)

Prerequisites: SPAN 411,413. Intensive study of significant works and movements of Mexican literature from 1900 to present.

424 Golden Age Drama of Spain (4)

Prerequisites: SPAN 408,410. Principal Spanish dramatists of the Golden Age; their thematic, poetic, social, and historical values and their influence on and contrast to subsequent literary history.

426 Nineteenth Century Spanish Novel (4)

Prerequisites: SPAN 408, 410. Intensive study of novelists of 19th century Spain.

428 The Generation of '98 (4)

Prerequisites: SPAN 408, 410. Intensive study of poets, novelists, and essayists who promoted literary revival following 1898.

429 Nineteenth Century Spanish-American Literature (4)

Prerequisites: SPAN 411,413. Intensive study of 19th century masterworks including novel, poetry, and theatre.

454L, P Special Topics in Spanish (1-4)

Prerequisite: As needed for specific topic. Current topics of special interest in Spanish as announced in *Schedule of Classes*. May be repeated for credit to maximum of 8 units.

459 Hispanic Play Production (3-4)

(also listed as TA 459) Prerequisite: Completion of intermediate Spanish. Introduction to major forms of Spanish drama; mechanics and production of a major work of Hispanic theatre. May be repeated to a total of 6-8 units of which maximum of 4 may apply to major.

460 Proseminar: Masters of Hispanic Culture and Thought (4)

Prerequisites: Three upper division literature courses, including relevant introductory literature course. Outstanding Spanish and Spanish-American writers from Middle Ages to present; an individual author will be studied at each offering. May be repeated as subject matter changes.

475 Proseminar: Spanish-American Theatre (4)

Prerequisites: SPAN 411,413. Intensive study of selected Spanish-American playwrights from 17th century to present.

483 Contemporary Spanish-American Novel (4)

Prerequisites: SPAN 411, 413. Intensive study of the Spanish-American novel of the past thirty years.

485 Literature of Argentina and Uruguay (4)

Prerequisites: SPAN 411,413. Representative works of Argentine and Uruguayan literature; drama, essay, poetry, and prose fiction.

499 Undergraduate Directed Study (1-4)

Prerequisite: Instructor consent to act as sponsor. Project selected in conference with sponsor before registration; progress meetings held regularly, and final report submitted. May be repeated for credit.

LIBERAL STUDIES

School of Arts and Letters

PROGRAM OFFICE

Engineering and Technology A427

Phone: (213) 343-4100

Liberal Studies is an interdisciplinary program that offers students the opportunity to pursue a major leading to a Bachelor of Arts degree in this field of study.

The Liberal Studies major provides an appropriate foundation for professional training in education, librarianship, law, medicine, various fields of public service, and business and industry. In addition, with careful selection of electives, students may prepare for graduate study in such areas as American Studies, education, English, and the social sciences.

The Faculty

Faculty for this interdisciplinary program is drawn from cooperating departments, with Alfred Bendixen, Associate Professor of English, serving as Coordinator.

Bachelor of Arts Degree

The Bachelor of Arts degree program in Liberal Studies offers students the opportunity to design a major that focuses on understanding oneself, one's cultural heritage, the natural and social world, contemporary issues, and methods of analysis, inquiry, and problem solving. Courses in methods of interdisciplinary study also cover various topics from an interdisciplinary point of view and provide integrative learning experiences. The program draws extensively from courses throughout the university curriculum.

Students may incorporate preparation for teaching into the major by completing the Multiple Subject teaching option. Particular requirements and restrictions apply to candidates for teaching. Therefore, early consultation with a Liberal Studies adviser is essential. Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs.

Advisement

All students who intend to major in Liberal Studies must confer with a Liberal Studies program adviser by the end of the first quarter of their junior year in order to devise an official degree program.

Requirements for the Major (71-151 units)

* General Option (76 units)

This option requires completion of 76 units, 16 in Liberal Studies and 60 in the four areas described below; at least 52 of the 76 units must be upper division. Courses that appear more than once in the following lists may be taken for credit in only one theme. LBS 454L, P may be used in one of the areas with adviser approval. Courses taken for credit within the major cannot be used to meet lower or upper division general education requirements; however, students can select general education courses that will serve as prerequisites for courses within the major.

Required Courses (16 units):

LBS	301	Interdisciplinary Investigation	(4)
LBS	360	Library Research Techniques	(4)
LBS	454L,P	Selected Topics in Liberal Studies	(4)
LBS	489	Senior Thesis	(4)

AREA I: CULTURAL HERITAGE (16 units)

Select 16 units from one theme with no more than 9 units from any department. Certain sections of LBS 454L,P may be used with adviser approval.

Theme 1: The Ancient and Medieval Heritages

ANTH 425

ART 406, 411, 416, 476

ENGL 416, 424, 460, 480

HIST 400A, 410-413, 419, 421,422,445
 MUS 370
 PHIL 311,452
 POLS 410
 RELS 300
 SPCH 470
 TA 462

Any ancient or medieval language course

Theme 2: European Heritage

ART 421,436, 451
 ENGL 318-320, 417, 418,446, 447, 461,465, 484-486
 FREN 310AB, 461 GEOG 423
 HIST 400B, 420, 423-431,437, 439, 440, 442, 446
 MUS 370-372 PHIL 313, 474
 POLS 411,450, 455 SOC 412
 SPAN 310 TA 463
 Any modern European language course

Theme 3: Cultures of the Developing World

ANTH 350, 401,404, 408, 410, 413, 414
 ART 431,446, 481 CHIN 310
 CHS 400 ECON 460
 GEOG 424, 425, 427, 428, 430, 433
 HIST 414AB-420, 461,462, 465, 466, 490AB, 491, 494ABC, 495AB
 JAPN 307, 310, 311 LAS 424, 435
 LAS/PAS 442. 460 MUS 457, 458
 PAS 423, 432 PHIL 433, 435
 POLS 451-453 SPAN 315

Any foreign language course relevant to the developing world (Arabic, Chinese, Hebrew, Hindi, Japanese, Korean, Pidgin, Spanish, Swahili, Tagalog, etc.)

Theme 4: United States Cultural Heritage

ANTH 406, 407 ART 441
 CHS 440, 444 ECON 350,471
 ENGL 401,471-475ABC GEOG 421,431,446
 HIST 470-474, 476, 477, 479 MUS 450, 451
 PAS 402, 403, 420 PHIL 430
 POLS 405, 413 SOC 448, 460
 SPCH 473AB TA 313

AREA II: THE NATURAL WORLD (16 units)

Select 16 units from one theme with no more than 9 units from any one department. Certain sections of LBS 454L, P may be used with adviser approval.

Theme 1: Humanity and Its Natural Environment

ANTH260,460-462
 BIOL 101-103, 155, 156, 165, 168, 350N
 BIOL/CHEM/CS/PHYS 358N
 CHEM 101,102, 103, 152, 158, 159, 160, 353, 380N
 GEOG 160, 410, 415
 GEOL 155, 158, 252, 321,420N
 PHYS 150, 155 PSY 170, 401

Theme 2: The Universe and Its Mathematical Rules

ASTR 151,152, 160
 BIOL 361N
 BIOL 302 or ECON 209 or 309 or PSY 302 or SOC 210AB
 CS 190, 203, 290

ENGR/GEOG 358 or MATH 274
 GEOG 160
 HIST 400C, 402
 MATH 206, 207, 242
 PHIL 404, 405, 461,485
 PHYS 150

AREA III: CREATIVE DIMENSIONS (16 units)

Select 16 units from one theme with no more than 9 units from any one department. Certain sections of LBS 454L, P may be used with adviser approval.

Theme 1: Aesthetics and Religion

ANTH 437, 445
 ART 351,476, 482
 ART/MUS 455, 456
 BCST 397
 DANC 476, 477
 ENGL 441,451,481,482
 FL 460
 FREN 471
 FSCS 409, 466, 467
 HIST 480
 MUS 351,355, 452
 PHIL 415, 418, 460, 475
 SOC 445
 RELS 300, 350, 425, 430, 450, 461
 SPCH 467
 TA 311,312,480

Theme 2: Creative Use of Leisure

In this theme you may complete all 16 units in one academic discipline.

Art: With approval of a Liberal Studies adviser and the art instructor involved, you may include any art activity course numbered 202493 (do not include art history, appreciation, or literature classes).
 ENGL 408

Music:

MUS 230, 243ABC, 343ABC and With approval of a Liberal Studies adviser and the music instructor involved, you may include any music performance course (do not include music appreciation, literature, theory, or history classes).

SPCH 267 or 367; 268

With approval of a Liberal Studies adviser and the theatre arts and dance instructor involved, you may include any DANC or TA performance courses numbered 100-485 (do not include dance or theatre arts history, appreciation, or theory courses).

AREA IV: THE CONTEMPORARY IDIOM (16 units)

Select 16 units from one theme with no more than 9 units from any department. Certain sections of LBS 454L, P may be used with adviser approval.

Theme 1: 20th Century Conceptualizations

ANTH 435, 443, 444, 450
 ART 426
 ENGL 308,340, 358, 405, 406, 451,475ABC, 486
 GEOG 481
 MUS 372, 451
 PHIL 313, 410, 412,420, 440, 445, 459
 POLS 411
 PSY 308, 41
 OAB, 412AB, 462
 RELS 435
 SOC 414, 425, 426, 441

SPCH 482

Theme 2: Current Domestic Problems

ANTH 406
 BIOL 361 N
 CHS 410, 430
 ECON 350, 390, 433, 440
 ENGL 308,406
 GEOG 446, 475--477
 HIST 475, 476, 477, 480, 483, 488, 489
 MGMT 308
 PAS 402,403
 POLS 405, 417,430
 PSY 422 or SOC 422
 PSY 442, 447
 SOC 430, 447, 448, 460
 SPCH 489

Theme 3: Current International Problems

ANTH 434, 439
 ECON 426, 461,480
 ENGL 308, 406
 GEOG 370, 441,476, 477, 481
 HIST 415, 429, 447, 453, 459, 463, 478, 490B, 492, 494C
 POLS 421,425-427, 446, 450, 455, 459

*** Multiple Subject Teaching Option (146-151 units)**

Students who select this option complete a separate core which is common to all Multiple Subject teaching options. That common core contains 106-111 units and is described in the *Undergraduate Study* chapter. In addition to the core, the 68 units listed below are required in the option. Refer to the *undergraduate School of Education* chapter of this catalog for regulations governing all teaching credential programs.

Required Courses (106-111 units):

Refer to the *Undergraduate Study* chapter of this catalog.

Major Courses (20 units)

BIOL	165	Humans and the Biological Environment	(4)
LBS	301	Interdisciplinary Investigation	(4)
LBS	360	Library Research Techniques	(4)
LBS	454L	Selected Topics in Liberal Studies	(4)
LBS	489	Senior Thesis	(4)

Depth Area (20 units)

Select one of the fifteen depth areas listed below.

American Civilization (Foundations)

HIST	450	Special Studies in History	(4)
------	-----	----------------------------	-----

Native Americans (select one from following):

ANTH 406 or HIST482	(4)
---------------------	-----

Early America (select one from following):

HIST 470 or 471	(4)
-----------------	-----

California (select one from following):

HIST 488 or 489	(4)
-----------------	-----

Topics in U.S. History (select one from following):

HIST477, 480, or 485	(4)
----------------------	-----

Ancient World

ANTH	425	Archaeology of the Old World	(4)
HIST	410	Ancient Near East: 4000-323 B.C	(4)
HIST	450	Special Studies in History	(4)

Classical World (select one from following):

HIST411,412A, 412B, 413	(4)
-------------------------	-----

Non-Western World (select one from following):

HIST 414A, 490A, 494A	(4)
-----------------------	-----

Earth Science

GEOG	402	Geomorphology	(4)
GEOG	410	Weather and Climate	(4)
GEOG	415	Perspectives on Environment	(4)
GEOL	321	Geology of Southern California	(4)
GEOL/PHYS	350N	Evolution of Universe and Earth	(4)

Humanities (Critical Thinking and Western Civilization)

PHIL	304	Ethics	(4)
PHIL	311	History of Ancient Philosophy	(4)
PHIL	313	History of Modern Philosophy	(4)
PHIL	410	Social and Political Philosophy	(4) or
PHIL	420	Ethics II	(4)
PHIL	470	Theory of Knowledge	(4) or
PHIL	480	Philosophy of Language	(4) or
PHIL	485	Philosophy of Science	(4)

Humanities (Multicultural Approach to Morality and Values)

PHIL	415	Philosophy of Religion	(4)
RELS	350	Religions in the U.S	(4)

Select three from following (12 units)

ART/RELS 450;
 PHIL 418, 433, 435;
 RELS 300, 410, 425

Language (Communication)

SPCH	489	Intercultural Communication	(4)
------	-----	-----------------------------	-----

Select four from following (16 units)

ANTH 470/ENGL 403;
 ENGL 401; PAS 425;
 PSY 420;
 SPCH 350, 462, 463, 478, 479

Literature (Current Trends)

Select five from following:

ENGL 358, 428, 447, 451,453, 473, 475C, 479, 486

Literature (Multicultural)

ENGL	476	Ethnic Literature in the U.S	(4)
------	-----	------------------------------	-----

Select four from following (16 units):

CHS 403;
 ENGL 453, 477;
 ENGL/PAS 426;
 FREN 461,471; FL 460;
 JAPN 307; PAS 422, 423

Literature (Pan-African)

ENGL	477	Black American Literature	(4)
PAS	422	Themes in Black Literature	(4)
PAS	423	Caribbean Literature	(4)
PAS	426	African Literature	(4)
PAS	427	Institutional Racism: Black Response in Literature	(4)

Literature (Traditional)

ENGL	471	American Literature: Beginnings to 1860	(4)
ENGL	472	American Literature: 1860-1914	(4)
ENGL	476	Ethnic Literature in the U.S	(4)

Select one from following (4 units):

ENGL 424, 425, 482, 483

Electives (4 units):

Select one 300- or 400-level literature-based ENGL course or SPCH 367.

Multicultural Arts

ART	460	Multicultural Approaches to Visual Arts	(4)
-----	-----	---	-----

Select two from following (8 units):

ART 431,446, 461,481

Select two from following (8 units):

CHS 446;
MUS 452, 457, 458;
PAS 421

Social Science (Geography)

GEOG	370	World Regions	(4)
GEOG	415	Perspectives on Environment	(4)
GEOG	421	United States	(4)
GEOG	431	California	(4)
GEOG	446	U.S. Ethnic Communities	(4)

Social Science (Interdisciplinary Focus on California)

GEOG	432	Metropolitan Los Angeles	(4) or
HIST	489	Los Angeles	(4)

Select four from following (16 units):

ANTH 407;
CHS 445;
GEOG 431;
HIST 467, 488;
POLS 403

Social Science (Latin America)

Select one four-unit course each from areas A-D, representing at least four departments, with no more than four units of LAS 450.

A. The Region

HIST 461,462,463;
LAS 424, 450

B. Chicano Studies and Mexico

CHS 406, 444, 467, 470;
CHS/HIST 466;LAS 450

C. Central America and the Caribbean

ANTH 408;
 GEOG 427;
 LAS 450;
 PAS/POLS 456

D. South America

ANTH 404;
 GEOG 428;
 HIST 465;
 LAS 450;
 POLS 451

E. Select one additional four-unit course from any of the above four areas.

Social Science (Mexican-American Studies)

CHS	405	The Mexican People as Immigrants	(4)
CHS	406	Hispanic Communities in U.S. Society	(4)
CHS	430	Chicano Political Behavior	(4)
CHS	445	History of the Chicano in Los Angeles	(4)
CHS	470	Educational Institutions of the Barrios	(4)

Electives (28 units)

Professional education courses are recommended. See a credential adviser in the School of Education.

GENERAL EDUCATION UPPER DIVISION THEME

Select a GE upper division theme in consultation with an adviser and complete one course in each of the three areas within that theme. Theme courses are not part of the major but are included in credential requirements.

Bilingual Emphases

Students who select a bilingual emphasis must consult the *School of Education* for current requirements which include knowledge of a teaching methodology and a culture and the language of an ethnic group covered by the Bilingual Program. Familiarity with this information may be tested by an examination.

Minor in Women's Studies

The Women's Studies minor, which requires 32 units, is a multidisciplinary program comprised of courses in Women's Studies and related areas.

Based on recent contribution of gender scholarship, theory, and history, the Women's Studies minor is designed to examine the influence of gender on the roles, status, and interaction of women and men in society; to increase knowledge of women's contributions to the liberal arts and sciences and the professional fields; and to enhance the ability of women to formulate challenging and satisfying goals and to achieve them.

Both men and women benefit from such a program, which helps them understand the influence of gender and gender role on key aspects of human behavior and interaction in a variety of contexts.

The courses that comprise the minor must be selected with the approval of a Women's Studies adviser.

Requirements for the Minor (32 Units)

Lower Division Required Course (4 units):

WOMN	200	Introduction to Women's Studies	(4)
------	-----	---------------------------------	-----

Upper Division Required Courses (13-16 units):

*	ANTH	438	Sex Roles in Crosscultural Perspective (4) or
*	SOC	441	Sociology of Sex Roles	(4)
*	BIOL	488N/PSY 488	Gender Differences	(4)

* ENGL/SPCH 385	Sex and Gender in Language and Literature	(4) or
* PHIL 412	Philosophy and Sex Roles	(4)
WOMN 491	Proseminar: Women's Studies	(1-4)

* Completion of these courses satisfies the upper division general education theme # 10, Gender in Human Experience. The 12 required units may be used to satisfy both general education and Women's Studies minor requirements.

Recommended Electives (12-15 units):

Select 12-15 units (at least 8-11 upper division) with no more than two courses from the same area or discipline, with assistance of a Women's Studies adviser. Courses listed above but not used to satisfy the GE theme requirement may be used as electives for the minor. Other approved electives appear below.

Lower Division

CHS 230

Upper Division

ENGL 453

FSCS 424

HIST 485, 486

HS 455

PAS 412

POLS 442

PSY 419

RELS 435

SPCH 479

WOMN 454, 499

The Credential Program

A diversified major program in Liberal Studies has been approved by the Commission on Teacher Credentialing for examination waiver for the Multiple Subject credential. Students may incorporate preparation for teaching into the major by completing the Multiple Subject Credential Option. Particular requirements and restrictions apply to candidates for teaching; therefore, early consultation with Liberal Studies advisers is essential. Students should also contact advisers in the School of Education regarding admission to and requirements of the credential program.

Courses in *Liberal Studies* (LBS)

Lower Division Course

200 Methods and Materials of Library Research (4)

Development of library research skills. Survey and analysis of major categories of research tools and their application in various disciplines.

Upper Division Courses

300ABC: Romance Versus Reason I-III (4 each)

300A: First in a series of three courses exploring the social, humanistic, and scientific transformations of thought, imagination, and behavior in the revolutionary period. Reason, romance, and revolution, 1789-1848.

300B: Prerequisite: LBS 300A. Explores how scientific discovery, humanistic inquiry, and social theory transform the earlier, revolutionary fervor into institutionalized or evolutionary change in the debate over man's and woman's place in nature, 1848-1871.

300C: Prerequisite: LBS 300B. Crisis of Victorian culture, 1871-1914. Explorations of the ways in which psychic, intellectual, and political tensions of the Victorian era reach a climactic synthesis in the cataclysm of 1914.

301 Interdisciplinary Investigation (4)

Prerequisite: Passing WPE score. Principles and techniques of interdisciplinary problem-solving: nature and limitations of knowledge, evaluation of evidence, strategy and methods of integrating materials drawn from different disciplines.

360 Library Research Techniques (4)

Prerequisite: LBS 301. Library research techniques; major reference works; principles of problem definition, organization, and style. Prospectus for undergraduate thesis.

454L,P Selected Topics in Liberal Studies (1-4)

Prerequisites: Upper division standing, and others as needed for specific topic. Intensive study of selected topic from interdisciplinary perspective; subjects vary. May be repeated once.

489 Senior Thesis (4)

Prerequisite: LBS 360, senior standing, approval of prospectus for undergraduate thesis. Advanced principles and techniques of interdisciplinary problem solving; supervised thesis.

499 Undergraduate Directed Study (1-4)

Prerequisites: Instructor consent to act as sponsor, approval of coordinator, minimum 2.5 grade point average. Projects must be approved before registration, progress meetings held regularly, and final report submitted. May be repeated for credit.

Courses in Women's Studies (WOMN)**Lower Division Course****200 Introduction to Women's Studies (4)**

Concepts of women's studies; examination of current areas of concern to women.

Upper Division Courses**454 Special Topics in Women's Studies (4)**

Prerequisites: As needed for specific topic. Topics of special interest in women's studies as announced in *Schedule of Classes*. May be repeated to total of 8 units as subject matter changes.

491 Proseminar: Women's Studies (1-4)

Prerequisite: WOMN 200. Topics of special interest in women's studies as announced in *Schedule of Classes*. May be repeated to total of 4 units.

499 Undergraduate Directed Study (1-8)

Prerequisite: Instructor consent to act as sponsor. Project selected in conference with sponsor before registration, progress meetings held regularly, and final report submitted. May be repeated to total of 8 units as subject matter changes.

MUSIC

School of Arts and Letters
DEPARTMENT OFFICE Music 145
Phone: (213) 343-4060

The Department of Music offers programs leading to the Bachelor of Music, Bachelor of Arts, and Master of Arts degrees. Many opportunities are provided for creative performance activities, both for majors and for students pursuing personal development in music along with career preparation in other fields. The Master of Arts degree program is described in the Graduate Programs section.

The Faculty

Emeriti: Gerhard Albersheim, Francis H. Baxter, Robert M. Fowells, Celeste Griffith, Louis A. Hansen, William H. Hill, Vernon L. Leidig, Richard McComb, Mona Paulee, Inez R. Schubert, Keith D. Snyder, Milton Stern, Robert Strassburg, Vito G. Susca, Maurine Timmerman, Maryo Van Deman, Patti W. Schliestett Wiggins.

Professors: William L. Belan, David A. Buck, Millie Burnett, H. David Caffey, Elizabeth L. Elrod, Byong-Kon Kim, Ellen KingKravitz, John J. Swain(*Chair*), Olga Termini, Paul W. Van Ness.

Associate Professors: Pollyanne Baxter, Irene M. Girton, Thomas Miyake.

Assistant Professors: Jeffrey W. Benedict, David Conors, Peter Terry.

The Undergraduate Program

The undergraduate programs in Music are designed to provide students with a broad, general foundation in the theoretical branches of music, competence in artistic performance, and professional preparation for successful graduate study. The Bachelor of Music degree stresses instrumental, keyboard, or vocal performance. The Bachelor of Arts degree serves students whose primary interest is music history, theory, and literature and those who wish to teach music or to achieve a liberal arts education with an emphasis in music.

Students who wish to major in music are required to audition in their performance area (voice, piano, or other. principal instruments), upon entrance, to develop their performance ability, and to appear in at least one student solo or ensemble recital each year. All music majors must demonstrate progress in their major performing area before a faculty jury at the end of each quarter. Those who are not making satisfactory progress are asked to take additional work. Students must present a satisfactory senior recital before being approved for graduation.

The Music Department Handbook contains other policies and regulations, including a concert attendance policy, that pertain to all music majors and minors. It is each student's responsibility to obtain a copy of the handbook and to become familiar with its contents. Failure to comply with policies and regulations outlined in the handbook may affect continued enrollment in the program and/or eligibility for graduation.

Participation in performance organizations is required during the quarters in which students are registered for applied music credit. After large performance requirements are met, that is, choir, chorus, symphony orchestra, or symphonic band, students will, while receiving applied music credit, select electives from the following MUS courses: 320, 321,326, 327, 420, 421,422, 424, 425, 426, 447.

The nature of these groups makes it essential that they maintain a constant personnel.

Students who demonstrate competence in performance and theory above the minimum requirement may earn advanced standing. Lower division students may register for and earn credit in upper division performance courses.

Bachelor of Music Degree

The Bachelor of Music degree curriculum is designed to provide professional training for serious, talented musicians seeking preparation for careers in performance. Students interested in qualifying for entrance into this degree program are required to audition before the faculty committee for their performance area to show potential for professional development as performing

musicians. As soon as possible after acceptance, students are assigned to faculty advisers for guidance in planning course work.

Lower division studies build a foundation of musicianship in the following fields: theory (including sight singing, ear training, harmony, counterpoint, composition, form, and analysis) and music literature (including study of composition styles and performance practices in several periods of music history). In addition, a foundation will be built for the development of technical competence in performance.

Upper division studies concentrate on further development of musicianship through individual and group performance, and advanced music theory and literature appropriate to the performance area. One successful recital each during the junior and senior years is required.

Requirements for the Major (105 units)

A total of 198 units is required for the degree, of which 105 are in the major.

Core Program (44 units)

All students complete a required core program of 44 units in Music.

Lower Division Required Courses (16 units):

MUS 170AB	Music Literature	(2, 2)
MUS 260ABC	Music Theory I-III (4, 4, 4)	

Students must demonstrate basic proficiency in piano skills or take MUS 243AB before enrolling in 260A.

Upper Division Required Courses (28 units):

MUS 360ABC	Theory IV-VI	(3, 3, 3)
MUS 362	Orchestration and Arranging	(4)
MUS 370-371-372	History of Music in Western Civilization I-III	(4, 4, 4)
MUS 380	Beginning Conducting	(3)

All entering students must take a functional piano skills placement examination and pass it, or complete MUS 343C (Class Piano Instruction), before being approved for graduation. Those who are deficient in this area should take appropriate additional course work as recommended by their adviser.

Options

*** Option I: Keyboard Performance (Piano, Organ, or Harpsichord) (61 units)**

A total of 61 units is required in this option which emphasizes high standards in performance of solo and ensemble literature. Performance requirements include two solo recitals plus a concerto or other ensemble performance.

Required Courses (22 units):

MUS 244A	Organ Repertory, Technique, and Performance	(1)
MUS 247	Keyboard/Sightreading Ensemble	(1, 1, 1)
MUS 405AB	Piano Pedagogy	(3, 3)
MUS 447	Accompanying	(2, 2)
MUS 465	Contemporary Techniques	(4)
MUS 475	History and Literature of Keyboard Music	(4)

Select two from following (6 units):

MUS 460	Composition	(3)
MUS 463	Counterpoint	(3)
MUS 464	Musical Form	(3)

Preparation for Required Recitals (18 units):

See course descriptions for limitations on repeatability. Select from following:

MUS 145, 245, 345, 445	Piano or Harpsichord	(1, 1-2, 2) or
MUS 146, 246, 346, 446	Organ	(1, 1-2, 2)

Performing Organization (10 units):

See course descriptions for limitations on repeatability. Select from following:

MUS	320	Symphonic Band	(2)
MUS	321	Symphony Orchestra	(2)
MUS	326	Concert Choir	(2)
MUS	327	Chorus	(2)

Electives (5 units):

Select from upper division music courses, with adviser approval.

*** Option II: Instrumental Performance (61 units)**

A total of 61 units is required in this option, which prepares students for performance in small ensembles and in band or orchestra. Students study the preparation of repertoire and recital programs. Prior to graduation, students prepare and successfully perform a 50-minute recital of solo works from the Baroque, Classic, Romantic, and Contemporary periods.

Required Courses (7 units):

MUS	473	History and Literature of Symphonic Music	(4) or
MUS	474	History and Literature of Chamber Music	(4)
MUS	481	Instrumental Conducting	(3)

Preparation for Required Recitals (18 units):

See course descriptions for limitations on repeatability.

Select from performance specialty area:

MUS 115-215-315-415	Strings	(1, 1-2, 2)
MUS 116-216-316-416	Woodwinds	(1, 1-2, 2)
MUS 117-217-317-417	Brass	(1, 1-2, 2)
MUS 118-218-318-418	Percussion	(1, 1-2, 2)

Performance Area (30 units):

Select courses from each area below, appropriate to instrument of specialization, for a total of 30 units. These courses are repeatable within limits specified in course descriptions.

Instrumental Courses (9 units):

Select from following:

MUS 312B, P, S, W	Orchestral Instruments	(3, 3, 3, 3)
MUS 410B, S, W	Orchestral Instruments	(3, 3, 3)

Performing Organization (12 units):

MUS	320	Symphonic Band	(2)
MUS	321	Symphony Orchestra	(2)

Ensemble Courses**(9 units):**

MUS	420	String Ensemble	(1)
MUS	421AB	Woodwind Ensemble	(1, 1)
MUS	422	Brass Ensemble	(1)
MUS	423	Percussion Ensemble	(1)
MUS	424 J	azz Ensemble	(1)

Electives

(6 units):

Select music courses with adviser approval.

*** Option III: Vocal Performance (61 units)**

A total of 61 units is required in this option, which prepares students to perform as soloists in choral groups, to perform art songs in the style and manner of the period in which they were written, to demonstrate awareness of poetic song content by translation from at least two foreign languages, and to prepare repertoire and recital programs. Prior to graduation students prepare and successfully perform a 50-minute recital of songs from at least four of the following historical periods: Renaissance, Baroque, Classic, Romantic, Contemporary.

Required Courses (28 units):

MUS	330	Principles of Applied Vocal Development	(3)
MUS	343	Class Piano Instruction	(1)
MUS	406	Comparative Vocal Techniques	(3)
MUS	425	Chamber Singers	(1, 1, 1)
MUS	426	Opera Repertory, Performance, and Production	(2)
MUS	436	Foreign Language Diction for Singers	(2, 2, 2)
MUS	461	Choral Arranging	(3)
MUS	471	History and Literature of Large Vocal Forms	(4) or
MUS	472	History and Literature of Vocal Solo Music	(4)
MUS	480	Choral Conducting	(3)

MUS 425, 426, and 436 are repeatable with limitations; see course descriptions.

Preparation for Senior Recital (18 units):

See course descriptions for limitations on repeatability.

MUS 135-235-335-435	Voice	(1, 1-2, 2)
---------------------	-------	-------------

Performing Organization (12 units):

See course descriptions for limitations on repeatability.

MUS	326	Concert Choir	(2)
MUS	327	Chorus	(2)
Electives			(3 units):

Select music courses with adviser approval.

*** Option IV: Jazz Studies (61 units)**

A total of 61 units is required in this option, which prepares students in jazz performance production, composition, recording, and conducting. Students must successfully complete a Junior Recital (all classical content) and a Senior Project/Recital (all jazz content).

Required Courses (15 units):

MUS	424	Jazz Ensemble	(6)
MUS	466A	Commercial Arranging	(3)
MUS	480	Choral Conducting (Vocalists)	(3) or
MUS	481	Instrumental Conducting (Instrumentalists)	(3) (3)
MUS	483	Analysis of Jazz Styles and Literature	(3)

Performing Area (18 units):

See course descriptions for limitations on repeatability. Select from performance specialty area:

MUS 115-215-315-415	Strings	(1, 1-2, 2)
MUS 116-216-316-416	Woodwinds	(1, 1-2, 2)
MUS 117-217-317-417	Brass	(1, 1-2, 2)
MUS 118-218-318-418	Percussion	(1, 1-2, 2)
MUS 135-235-335-435	Voice	(1, 1-2, 2)
MUS 145-245-345-445	Piano	(1, 1-2, 2)

Select courses from each area below, appropriate to specialization.

These courses are repeatable within limits specified in course descriptions.

Instrumental Courses(9 units):

Select from following:

MUS	312B	Brass	(3)
MUS	312P	Percussion	(3)
MUS	312S	Strings	(3)
MUS	312W	Woodwinds	(3)

Performing Organization (8 units):

Instrumentalists divide 8 units between:

MUS	320	Symphonic Band	(2) and
MUS	321	Symphony Orchestra	(2)

Vocalists divide 8 units between:

MUS	326	Concert Choir	(2) and
MUS	327	Chorus	(2)

Ensemble Courses (2 units):**Instrumentalists:**

MUS	420	String Ensemble	(1)
MUS	421AB	Woodwind Ensemble	(1, 1)
MUS	422	Brass Ensemble	(1)
MUS	423	Percussion Ensemble	(1)

Vocalists:

MUS	425	Chamber Singers	(1)
-----	-----	-----------------	-----

Pianists:

MUS	447	Accompanying	(2)
-----	-----	--------------	-----

Electives-select 9 units from following:

MUS 269AB, 368ABC, 424, 452, 466B, 467, 499

(maximum credit in this course: 6 units; content to center around examination of areas of jazz methods, rehearsal techniques, and literature)

Bachelor of Arts Degree

The Bachelor of Arts degree in Music emphasizes history, theory, composition, and literature of music, with a foundation in performance. Included are courses in keyboard, instrumental, and vocal performance, and conducting, with opportunity for development in one of the areas of specialization as required for the senior recital. Students interested in pursuing a career in teaching must complete the Bachelor of Arts degree along with the additional requirements for the Single Subject credential.

Requirements for the Major (75-76 units)

A total of 186 units is required for the degree, of which 75--76 are in the major. The core requires 51 units; the remaining 24-25 are allocated to one of the three areas of specialization: Choral Teaching, Instrumental Teaching, or Performance or Composition.

Required Core (51 units):

The 51-unit core consists of 12 units of lower division foundation courses and 39 units of upper division courses.

Lower Division (12 units):

MUS	260ABC	Music Theory I-III	(4, 4, 4)
-----	--------	--------------------	-----------

Upper Division (39 units):

MUS	330	Principles of Applied Vocal Development	(3)
MUS	360ABC	Music Theory IV-VI	(3, 3, 3)
MUS	362	Orchestration and Arranging	(4)
MUS	370-371-372	History of Music in Western Civilization I-III	(4, 4, 4)
MUS	380	Beginning Conducting	(3)

Select 8 units from the following repeatable courses: MUS 320, 321, 326, 327

Piano Proficiency Requirement

All entering students must take a functional piano skills placement examination and pass it, or complete MUS 343C(Class Piano Instruction), before being approved for graduation. Students who are deficient in this area should take appropriate additional course work as recommended by their adviser.

Areas of Specialization

Select one of the following areas of specialization.

*** Choral Teaching (25 units)**

Designed for students with an aptitude in voice or keyboard who wish to become choral conductors. Those who wish to teach in public schools must also complete the requirements for the Single Subject credential. A senior recital is required.

Required Courses (25 units):

MUS	406	Comparative Vocal Techniques	(3)
MUS	480	Choral Conducting	(3)

Select from following applied music courses (4 units):

MUS	135-235-335-435	Voice	(1 unit each)
MUS	145-245-345-445	Piano	(1 unit each)
MUS	146-246-346-446	Organ	(1 unit each)

Select from following (9 units):

MUS	211	BP,S,W Orchestral Instruments	(3 each)
MUS	312	BP,S,W Orchestral Instruments	(3 each)

Select from following (6 units):

MUS	403	Training Select Children's Choirs	(3)
MUS	405AB	Piano Pedagogy	(3, 3)
MUS	461	Choral Arranging	(3)

*** Instrumental Teaching (24 units)**

Designed for students with an aptitude in orchestral or band instruments who wish to become instrumental conductors. Those who wish to teach in public schools must also complete the requirements for the Single Subject credential. A senior recital is required.

Required Courses (8 units):

MUS	314	Instrumental Music Laboratory	(1, 1)
MUS	407	Practicum in Instrumental Techniques	(3)
MUS	481	Instrumental Conducting	(3)

Select from following applied music courses (4 units):

MUS	115-215-315-415	Strings	(1 unit each)
MUS	116-216-316-416	Woodwinds	(1 unit each)
MUS	117-217-317-417	Brass	(1 unit each)
MUS	118-218-318-418	Percussion	(1 unit each)

Select from following (12 units):

MUS	211	BP,S,W Orchestral Instruments	(3 each)
MUS	312	B,P,S,W Orchestral Instruments	(3each)

Up to 38 elective units are available to music majors. It is suggested that a substantial number of these be selected, from appropriate courses, in consultation with an adviser.

*** Performance or Composition (24 units)**

Designed to teach students the techniques of solo performance on their chosen instrument. A senior recital is required.

Required Courses (24 units):**Select from following ensembles (2 units):**

MUS	320	Symphonic Band	(2)
MUS	321	Symphony Orchestra	(2)
MUS	326	Concert Choir	(2)
MUS	327	Chorus	(2)

Select from following (6 units):

MUS 211	BP,S,W	Orchestral Instruments	(3 units each)
MUS 312	B,P,S,W	Orchestral Instruments	(3 units each)

Select from following applied music courses (5 units):

MUS 115-215-315-415	Strings	(1 unit each)
MUS 116-216-316-416	Woodwinds	(1 unit each)
MUS 117-217-317-417	Brass	(1 unit each)
MUS 118-218-318-418	Percussion	(1 unit each)
MUS 135-235-335-435	Voice	(1 unit each)
MUS 145-245-345-445	Piano	(1 unit each)
MUS 146-246-346-446	Organ	(1 unit each)

Electives (11 units):

Select courses in theory, history, and applied music with adviser approval.

Additional Requirements for Single Subject Credential (11-12 units)

In addition to the Bachelor of Arts degree program, the following courses are required for the credential, are prerequisite to directed teaching in music, and may be taken either for elective credit for the degree outside the major or in postbaccalaureate standing. Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs.

Required Courses (11--12 units):

MUS 344	Functional Piano for Teachers	(2)
MUS 401	Music Literature for Children	(3)
MUS 408	Analysis of Choral Literature and Performance	(3) or
MUS 409	Analysis of Instrumental Literature and Performance	(4)
EDSE 421 U	Methods of Teaching General Music	(3)

Minor in Music

A minor in Music is available for students majoring in other fields. A minimum of 42 units is required; at least half must be upper division.

Requirements for the Minor (minimum 42 units)

Lower Division Required Courses (15 units): MUS 243ABC*, 260ABC

* may be waived for keyboard minors

Upper Division Required Course (3 units):
MUS 380 Beginning Conducting (3)

Select 6 units from following:

MUS 320, 321, 326, 327

Select 8 units from following:

MUS 351, 370, 371, 372

Select 10 additional units from following, with adviser approval:

Applied Music

MUS 115-215-315-415	Strings	(1 unit each)
MUS 116-216-316-416	Woodwinds	(1 unit each)
MUS 117-217-317-417	Brass	(1 unit each)
MUS 118-218-318-418	Percussion	(1 unit each)
MUS 135-235-335-445	Piano	(1 unit each)
MUS 146-246-346-446	Organ	(1 unit each)

Keyboard

MUS 247 (1) or

Orchestral Instruments

MUS 211BP,S,W (3)

MUS 312B,P,S,W (3)

Voice

MUS 230, 330

The Credential Program

The Bachelor of Arts degree program in Music, including the additional requirements for the Single Subject credential, is approved for examination waiver for the Single Subject credential in Music. Students should consult advisers in the department and the School of Education.

Courses in Music (MUS)**Lower Division Courses****115 Strings (1)**

Prerequisite: Students admitted by audition only. Instruction in technique, repertoire, literature, and pedagogy for students of violin, viola, cello, bass, classical guitar, and harp. May be repeated to maximum of 3 units.

116 Woodwinds (1)

Prerequisite: Students admitted by audition only. Instruction in technique, repertoire, literature, and pedagogy for students of flute, oboe, bassoon, clarinet, saxophone, and recorder. May be repeated to maximum of 3 units.

117 Brass (1)

Prerequisite: Students admitted by audition only. Instruction in technique, repertoire, literature, and pedagogy for students of trumpet, French horn, trombone, baritone, and tuba. May be repeated to maximum of 3 units.

118 Percussion (1)

Prerequisite: Students admitted by audition only. Instruction in technique, repertoire, literature, and pedagogy for students of snare drum, mallet instruments, multiple percussion, and timpani. May be repeated to maximum of 3 units.

135 Voice (1)

Prerequisite: Students admitted by audition only. Principles and techniques of singing. Development of song repertoire. May be repeated to maximum of 3 units.

145 Piano (1)

Prerequisite: Admission by audition only. Instruction in development of technique and repertoire; performance in a public recital expected. May be repeated to maximum of 3 units.

146 Organ (1)

Prerequisite: Admission by audition only. Instruction in development of technique and repertoire. May be repeated to maximum of 3 units.

147 Keyboard Harmony and Sight Reading (1)

Corequisite: MUS 145. Keyboard harmony and sight reading music on the piano: chord progressions, harmonization, patterns of pitch and rhythmic notation. Activity two hours. May be repeated to maximum of 3 units.

150 Music in World Culture (4)

Cultural role of music within broad humanities framework of visual arts, literature, history, and philosophy.

160 Music Fundamentals (4)

Understanding basic musical elements common to the major world cultures; emphasis on rhythm, melody, harmony, texture, and form.

161 Solfeggio (1)

Prerequisite: MUS 160. Application of techniques of singing musical material at sight. May be repeated to maximum of 3 units.

170AB Music Literature (2, 2)

170A: Representative music literature from Middle Ages through Classical period.

170B: Representative music literature from Romantic period to present.

211Orchestral Instruments (3 each)

Class instruction in theory and performance of orchestral instruments; ensemble experience provided. Designed for all music majors and minors except those with an instrumental focus. Meets 4 hours weekly.

211 B Brass and Percussion**211S Strings 211W Woodwinds****215 Strings (1)**

Prerequisite: MUS 115 or jury examination. Instruction in technique, repertoire, literature, and pedagogy for students of violin, viola, cello, bass, classical guitar, and harp. May be repeated to maximum of 3 units.

216 Woodwinds (1)

Prerequisite: MUS 116 or jury examination. Instruction in technique, repertoire, literature, and pedagogy for students of flute, oboe, clarinet, bassoon, saxophone, and recorder. May be repeated to maximum of 3 units.

217 Brass (1)

Prerequisite: MUS 117 or jury examination. Instruction in technique, repertoire, literature, and pedagogy for students of trumpet, French horn, trombone or baritone, and tuba. May be repeated to maximum of 3 units.

218 Percussion (1)

Prerequisite: MUS 118 or jury examination. Instruction in technique, repertoire, literature, and pedagogy for students of snare drums, mallet instruments, multiple percussion, and timpani. May be repeated to maximum of 3 units.

230 Elementary Voice Instruction (2)

Primarily for students not majoring in music. Technique of voice production, study of song interpretation, emphasis upon recreational singing, some attention to elementary musicianship and remedial problems. Meets 4 hours weekly. May be repeated to maximum of 6 units.

235 Voice (1)

Prerequisite: MUS 135 or jury examination. Principles and techniques of singing. Development of song repertoire. May be repeated to maximum of 3 units.

243ABC Class Piano Instruction (1, 1, 1)

Prerequisite: MUS 160. Development of piano skills: technique harmonization and transposition, score reading, sightreading, and accompaniment. Activity 2 hours.

244ABC Organ Repertory, Technique, and Performance (1, 1, 1)

Prerequisite: MUS 343C. Introduction to organ performance and literature for piano students: basic functional knowledge of registration, pedal, manual technique, and literature for various services.

245 Piano (1)

Prerequisite: MUS 145 or consent of piano faculty by audition. Instruction in development of technique and repertoire; performance in a public recital is expected. May be repeated to maximum of 3 units.

246 Organ (1)

Prerequisite: MUS 146 or jury examination. instruction in development of technique and repertoire. May be repeated to maximum of 3 units.

247 Keyboard Sightreading/Ensemble (1)

Prerequisite: MUS 145. Development of sightreading skills and ensemble experience on the piano: score reading and reduction technique. May be repeated to total of 6 units.

250 Pop Music in America (4)

Survey of American popular music; rock, blues, soul, country, Broadway, fusion, and salsa. Includes discussion of European and African origins. Lecture-discussion; tapes, videos.

260ABC Music Theory I, II, III (4, 4, 4)

Prerequisites: MUS 160, 243AB. Integrated approach to music theory: sight singing, rhythmic problems, essentials of harmony, counterpoint, form, and keyboard experience emphasized. Meets 5 hours weekly.

261ABC Musicianship IV, V, VI (1, 1, 1)

Prerequisites: MUS 160, 161; corequisite: MUS 260C. Sight singing, ear training, keyboard application, and aural analysis correlated with MUS 260ABC. Activity two hours.

264 The Shaping of Music (4)

Human thought and how it shapes creative effort, with music as the point of departure.

265 Composition I (3)

Prerequisites: MUS 160, 161. Beginning composition including writing for an unaccompanied orchestral solo instrument and surveying 20th century techniques and styles. May be repeated to maximum of 9 units.

269A Basic Techniques of Sound Recording (2)

Various recording techniques: selection and placement of microphones; operation of mixing boards; equalization, editing, and noise reduction. Meets 3 hours weekly.

269B Intermediate Techniques of Sound Recording(2)

Prerequisite: MUS 269A. Techniques involved in multitrack recording. Maintenance of equipment, application of recording equipment, and recording session procedures. Repeatable to maximum of 6 units. Meets 3 hours weekly.

Upper Division Courses

312 Orchestral Instruments (3)

Prerequisite: MUS 260ABC. Development of performance proficiencies on orchestral instruments; fingering and acoustics. (For majors with instrumental focus.) Meets 4 hours weekly. Each section may be repeated to maximum of 9 units if different instruments are studied.

312B Brass 312S Strings**312P Percussion 312W Woodwinds****Instrumental Pedagogy (3)**

Prerequisite: MUS 312. Methods, materials, and techniques related to individualized instruction in woodwinds, brass, percussion, strings, and keyboard instruments; lecture and laboratory experience in teaching. Lecture 2 hours, activity 2 hours.

314 Instrumental Music Laboratory (1)

Prerequisites or corequisites: Two courses in instruments, to include one in woodwinds, brass, or percussion, and one in strings. Basic band and orchestra laboratory experience with emphasis on literature suitable for use in schools. Open to students in other majors. Meets 2 hours weekly. May be repeated to maximum of 6 units.

315 Strings (10r 2)

Prerequisite: MUS 215 or jury examination. Instruction in technique, repertoire, literature, and pedagogy for students of violin, viola, cello, bass, classical guitar, and harp. Students preparing for B.A. degree enroll for 1 unit; may be repeated to maximum of 3 units. Students preparing for B.M. degree enroll for 2 units; may be repeated to maximum of 6 units.

316 Woodwinds (10r 2)

Prerequisite: MUS 216 or jury examination. Instruction in technique, repertoire, literature, and pedagogy for students of flute, oboe, clarinet, bassoon, saxophone, and recorder. Students preparing for B.A. degree enroll for 1 unit; may be repeated to maximum of 3 units. Students preparing for B.M. degree enroll for 2 units; may be repeated to maximum of 6 units.

317 Brass (10r 2)

Prerequisite: MUS 217 or jury examination. Instruction in technique, repertoire, literature, and pedagogy for students of trumpet, French horn, trombone, baritone, and tuba. Students preparing

for B.A. degree enroll for 1 unit; may be repeated to maximum of 3 units. Students preparing for B.M. degree enroll for 2 units; may be repeated to maximum of 6 units.

318 Percussion (10r 2)

Prerequisite: MUS 218 or jury examination. Instruction in technique, repertoire, literature, and pedagogy for students of snare drum, mallet instruments, multiple percussion, and timpani. Students preparing for B.A. degree enroll for 1 unit; may be repeated to maximum of 3 units. Students preparing for B.M. degree enroll for 2 units; may be repeated to maximum of 6 units.

320 Symphonic Band (2)

Prerequisite: Instructor consent. Preparation and performance of standard and contemporary literature of the symphonic band. Meets minimum of 4 hours weekly, 60 hours during quarter. May be repeated to maximum of 24 units.

321 Symphony Orchestra (2)

Prerequisite: Instructor consent. Preparation and performance of standard and contemporary literature of the symphony orchestra. Meets minimum of 4 hours weekly, 60 hours during quarter. May be repeated to maximum of 24 units.

326 Concert Choir (2)

Prerequisite: Instructor consent through audition. Preparation and public performance of standard choral literature and contemporary choral works. Concerts given on and off campus. Meets minimum of 4 hours weekly, 60 hours during quarter. May be repeated to maximum of 24 units.

327 Chorus (2)

Preparation and performance of standard choral literature, primarily in large forms, with accompaniment. Meets minimum of 4 hours weekly, 60 hours during quarter. May be repeated to maximum of 24 units.

328 Vocal Jazz Ensemble (1)

Prerequisite: Faculty consent by audition. Preparation and public performance of standard and contemporary vocal jazz literature. May be repeated to maximum of 12 units.

330 Principles of Applied Vocal Development(3)

Prerequisite: MUS 230 or one year of choral experience. Open to music majors and minors only. Principles of correct vocal production development through lecture and demonstration with laboratory experience in solo singing. Analysis by class members and instructor. Lecture 2 hours, laboratory 2 hours.

335 Voice (10r 2)

Prerequisite: MUS 235 or jury examination. Principles and techniques of singing. Development of song repertoire. Students preparing for B.A. degree enroll for 1 unit; may be repeated to maximum of 3 units. Students preparing for B.M. degree enroll for 2 units; may be repeated to maximum of 6 units.

343ABC Class Piano Instruction (1, 1, 1)

Prerequisite: MUS 243C. Continuation of technical development from previous study. Emphasis on piano repertoire for individual student development. Activity 2 hours.

344 Functional Piano for Teachers (2)

Prerequisites: MUS 260ABC, 343C; acceptable performance on placement examination or instructor consent. Development of keyboard competency by application of principles of musicianship, including harmonization, transposition, improvisation, score reading, playing by ear, and directing from the piano. Activity 4 hours. May be repeated to maximum of 4 units.

345 Piano (10r 2)

Prerequisite: MUS 245 or consent of piano faculty by audition. Instruction in development of technique and repertoire. Performance in a public recital expected. Students preparing for B.A. degree enroll for 1 unit; may be repeated to maximum of 3 units. Students preparing for B.M. degree enroll for 2 units; may be repeated to maximum of 6 units.

346 Organ (10r 2)

Prerequisite: MUS 246 or jury examination. Instruction in development of technique and repertoire. Students preparing for B.A. degree enroll for 1 unit; may be repeated to maximum of 3 units. Students preparing for B.M. degree enroll for 2 units; may be repeated to maximum of 6 units.

351 Music Appreciation (4)

Understanding and enjoying music through study of various musical cultures including those of Western Europe, Latin America, Asia, and Africa. Required attendance at selected concerts.

355 The Creative Aspects of Music (4)

Prerequisite: MUS 160. Development of an awareness of our innate musicality: the natural physical and mental rhythms of everyday life and all the perceptual skills that are related to music.

357 Creative Experiences for Well-Being (4)

(also listed as ART 357, DANC 357, and TA 357) Prerequisites: HS 150, one GE humanities (arts-C2) course. Exploration of creative experiences in the arts for promotion of mental, emotional, and physical well-being.

360ABC Music Theory IV, V, VI (3, 3, 3)

Prerequisite: MUS 260C. Continued study of materials of music using more complex forms and more difficult techniques and styles. Writing emphasis on student's performing medium. Meets 3 hours weekly.

362 Orchestration and Arranging (4)

Prerequisite: MUS 260C; prior completion of MUS 2110r 312 recommended. Theory of writing for instrumental ensembles, study of orchestral scores, and introduction to symphonic orchestration.

365 Composition II (3)

Prerequisites: MUS 260B, 261 B, 265. Original work in composition accompanied by study and analysis of advanced 20th century composition and creative concepts. May be repeated to maximum of 9 units.

368ABC Jazz Improvisation (2, 2, 2)

368A: Prerequisite: MUS 260C. Basic improvisation technique, including scales, chords, simple harmonic progressions, and standard blues literature characteristic of jazz (commercial) idiom. Meets 3 hours weekly.

368B: Prerequisite: MUS 368A. Continuation of development of improvisational techniques with emphasis on standard jazz literature. Meets 3 hours weekly.

368C: Prerequisite: MUS 368B. Continued development of improvisational techniques, composition, and transcription of jazz melodies. Meets 3 hours weekly.

370-371-372 History of Music in Western Civilization I-II-III (4 each)

Prerequisites: One year of music theory for B.A. degree candidate; MUS 170AB and one year of music theory for B.M. degree candidate. Survey of music in general culture, emphasizing evolution of musical style and practice.

370 Middle Ages through Renaissance 371 Baroque through Classical 372 Romantic Period to Present

380 Beginning Conducting (3)

Prerequisite: MUS 260C. Elements of baton techniques, interpretation, score reading, and rehearsal techniques utilizing suitable choral and instrumental literature. Meets 4 hours weekly.

400 Development of Perception in Musical Arts (4)

Perceptual, expressive, historical, and cultural components associated with musical-aesthetic phenomena. Lecture, demonstrations, and field trips. Meets 5 hours weekly. Lecture 3 hours, activity 2 hours.

401 Music Literature for Children (3)

Prerequisite: MUS 400 or EDSE 421 U. Development of a repertoire for children, including songs and guided listening.

403 Training Select Children's Choirs (3)

Prerequisites: MUS 330, 380. Choral techniques as applied to children with vocal ability or interest prior to and during voice change. Arranged visits with school and community children's choir rehearsals. Meets 3 hours weekly.

404 Acoustical Analysis of Instrument Construction (3)

Prerequisite: MUS 312B,S,W. Physical and acoustical principles of musical instrument construction with laboratory experience in evaluation and maintenance of instruments. Meets 4 hours weekly.

405AB Piano Pedagogy (3, 3)

Prerequisite: MUS 345.

405A: Approaches to piano teaching.

405B: Materials for beginning/intermediate piano students; observation of teaching.

406 Comparative Vocal Techniques (3)

Prerequisite: MUS 330. Comparative analysis of theories of vocal production as applied to the child voice, changing voice, and mature voice; study of the literature for each category.

407 Practicum in Instrumental Techniques (3)

Prerequisite: Knowledge of orchestral instruments. Symposium on comparison of ideas and practices relevant to instrumental techniques. Observation and participation in laboratory provided. Lecture 2 hours, activity 2 hours.

408 Analysis of Choral Literature and Performance (3)

Prerequisites: MUS 330, 344, 360C, 480. Period, style, form, and other technical aspects of literature suitable for various types of vocal ensembles, and analysis of performance problems. Lecture 2 hours, activity 2 hours.

409 Analysis of Instrumental Literature and Performance (4)

Prerequisites: MUS 344, 407. Leadership and technical aspects of performance, and selection of music literature suitable for various types of instrumental ensembles. Lecture 3 hours, activity 2 hours.

410 Orchestral Instruments (3)

Prerequisites: MUS 312B,S,W. Advanced class instruction on orchestral instruments with emphasis on theory of tone production and analysis of literature. Meets 4 hours weekly. Each of sections (410S,W, or B) may be repeated to maximum of 9 units. Different instrument studied each time course is repeated.

410B Brass 410S Strings

410W Woodwinds

411 Performance Pedagogy (2)

Prerequisite: 300-level applied music course. Solo repertoire for brass, winds, percussion, strings, keyboard, or voice; emphasis on analysis, interpretation, and performance of representative literature. May be repeated to maximum of 6 units. Lecture 1 hour, activity 2 hours.

411 B Bass 411 K Keyboard

411P Percussion 411S Strings

411V Voice 411W Winds

415 Strings (10r 2)

Prerequisite: MUS 315 or jury examination. Instruction in technique, repertoire, literature, and pedagogy for students of violin, viola, cello, bass, classical guitar, and harp. Students preparing for B.A. degree enroll for 1 unit; may be repeated to maximum of 3 units. Students preparing for B.M. degree enroll for 2 units; may be repeated to maximum of 6 units.

416 Woodwinds (10r 2)

Prerequisite: MUS 316 or jury examination. Instruction in technique, repertoire, literature, and pedagogy for students of flute, oboe, clarinet, bassoon, saxophone, and recorder. Students preparing for B.A. degree enroll for 1 unit; may be repeated to maximum of 3 units. Students preparing for B.M. degree enroll for 2 units; may be repeated to maximum of 6 units.

417 Brass (10r 2)

Prerequisite: MUS 317 or jury examination. Instruction in technique, repertoire, literature, and pedagogy for students of trumpet, French horn, trombone, baritone, and tuba. Students preparing

for B.A. degree enroll for 1 unit; may be repeated to maximum of 3 units. Students preparing for B.M. degree enroll for 2 units; may be repeated to maximum of 6 units.

418 Percussion (10r 2)

Prerequisite: MUS 318 or jury examination. Instruction in technique, repertoire, literature, and pedagogy for students of snare drum, mallet instruments, multiple percussion, and timpani. Students preparing for B.A. degree enroll for 1 unit; may be repeated to maximum of 3 units. Students preparing for B.M. degree enroll for 2 units; may be repeated to maximum of 6 units.

420 String Ensemble (1)

Prerequisite: Instructor consent. Rehearsal and performance of standard ensemble literature, including quartets, quintets, sextets, and larger works. Meets minimum of 3 hours weekly. May be repeated to maximum of 12 units.

421AB Woodwind Ensemble (1, 1)

Prerequisite: Instructor consent. Rehearsal and performance of standard ensemble literature, including quartets, quintets, sextets, and larger works. Meets minimum of 3 hours weekly.

421 A: For mixed woodwind instruments (for example, flute; oboe; clarinet and bassoon; and flute trios). May be repeated to maximum of 12 units.

421 B: For clarinet choir, clarinet, and saxophone trios. May be repeated to maximum of 12 units.

422 Brass Ensemble (1)

Prerequisite: Instructor consent. Rehearsal and performance of standard ensemble literature, including quartets, quintets, sextets, and larger works. Meets minimum of 3 hours weekly. May be repeated to maximum of 12 units.

423 Percussion Ensemble (1)

Prerequisite: Instructor consent. Rehearsal and performance of standard ensemble literature, including quartets, quintets, sextets, and larger works. Meets minimum of 3 hours weekly. May be repeated to maximum of 12 units.

424 Jazz Ensemble (1)

Prerequisite: Instructor consent. Rehearsal and performance of standard commercial orchestra literature, including original and published arrangements for dance bands, radio and television orchestra, and motion picture orchestras. Meets minimum of 3 hours weekly. May be repeated to maximum of 12 units.

425 Chamber Singers (1)

Prerequisite: Instructor consent by audition. Choral music from 15th century to present with special attention to madrigals; music of all styles for choral ensemble of twenty or less. Concerts on and off campus. Meets minimum of 3 hours weekly. May be repeated to maximum of 12 units.

426 Opera Repertory, Performance, and Production (2)

Prerequisite: Instructor consent. Performance of excerpts and complete works in concert versions and/or full stage production. Meets minimum of 3 hours weekly. May be repeated to maximum of 12 units.

428 New Music Ensemble (1)

Prerequisite: Instructor consent. Rehearsal and performance of 20th century chamber music literature with special emphasis on recent works and student compositions. Meets minimum of 3 hours weekly.

429 Jazz Ensemble: Small (1)

Prerequisite: Instructor consent. Rehearsal and performance of jazz literature for small ensemble (2-9 players) in a variety of combinations. May be repeated to maximum of 12 units.

430 Style Analysis (4)

Prerequisite: MUS 370 or 3710r 372. Analytical techniques for study of musical style including rhythmic, melodic, harmonic, tonal, textural, and formal characteristics; verbal presentation of musical analyses.

431 Proseminar: Theory Pedagogy (4)

Prerequisite: MUS 260C. Comparative study of various techniques, procedures, and instructional materials used in teaching music theory with special emphasis on new instructional media.

432 Notation and Calligraphy (2)

Prerequisites: MUS 160, 161. Procedure utilized for preparing and copying music manuscripts in professional manner. Lecture 1 hour, activity 2 hours.

435 Voice (10r 2)

Prerequisite: MUS 335 or jury examination. Principles and techniques of singing. Development of song repertoire. Students preparing for B.A. degree enroll for 1 unit; may be repeated to maximum of 3 units. Students preparing for B.M. degree enroll for 2 units; may be repeated to maximum of 6 units.

436 Foreign Language Diction for Singers (2)

Prerequisite: Instructor consent. Italian, German, and French vocal texts in original language; phonetic pronunciation, comprehension through lectures, listening, speaking, and translation techniques; emphasis on one language each quarter. See schedule of Classes for language emphasis. Lecture 2 hours, laboratory 1 hour. May be repeated to maximum of 6 units.

445 Piano (10r 2)

Prerequisite: MUS 345 or consent of piano faculty by audition. Instruction in development of technique and repertoire. Performance in a public recital expected. Students preparing for B.A. degree enroll for 1 unit; may be repeated to maximum of 3 units. Students preparing for B.M. degree enroll for 2 units; may be repeated to maximum of 6 units.

446 Organ (10r 2)

Prerequisite: MUS 346 or jury examination. Instruction in development of technique and repertoire. Students preparing for B.A. degree enroll for 1 unit; may be repeated to maximum of 3 units. Students preparing for B.M. degree enroll for 2 units; may be repeated to maximum of 6 units.

447 Accompanying (2)

Prerequisite: Instructor consent. Training in performance styles of different periods and combinations of performers and in the specific tasks of accompanying. Practical experience through guided performance with vocalists and instrumentalists. Meets 4 hours weekly. May be repeated to maximum of 6 units.

450 History of American Music (4)

Prerequisite: MUS 150 or 3510r AMER 401. Historical survey of music in the U.S. from early colonial times to present.

451 Contemporary American Music (4)

Prerequisite: MUS 150 or 3510r AMER 401. Approaches to understanding and enjoyment of twentieth century music.

452 History of Jazz (4)

Nature and processes of jazz with concentration on its historical background and development in the U.S., and its resultant impact on culture and music worldwide.

454L, P Special Topics in Music (1-4)

Prerequisites: Upper division standing; specific prerequisites subject to course content. Selected topics reflecting specific issues, problems, and interests in music, as announced in *Schedule of Classes*. May be repeated to maximum of 12 units as subject matter changes.

455 The Creative Genius in Art and Music(4)

(also listed as ART 455) Great artists and musicians throughout history; their philosophy, innovations, accomplishments, and effects on culture and history.

456 Nature, Environment, and the Arts (4)

(also listed as ART 456) Human attitudes toward the natural environment as revealed in the visual arts and music. Analysis and interpretation of examples from various periods and cultures.

457 Music of China, Korea, and Japan (4)

Prerequisites: Instructor consent, upper division standing in music or program with emphasis on Asian culture. Development of music of China, Korea, and Japan, from earliest period to present.

458 Music of Latin America (4)

Prerequisite: MUS 150 or 351. Development of understanding of and appreciation for music of Latin America; examination of representative works from folk and art music of the twenty republics.

460 Composition (3)

Prerequisites: MUS 360C, 362. Writing for small instrumental and/or vocal ensembles. May be repeated to maximum of 18 units.

461 Choral Arranging (3)

Prerequisite: MUS 360C. Writing and arranging for vocal groups, problems in arranging for the usual school groups, and creative arranging in smaller vocal forms.

462 Advanced Orchestration and Arranging (3)

Prerequisite: MUS 362. Survey of techniques necessary for orchestrating compositions for symphonic band and symphony orchestra; special attention given to problems encountered in public school bands and orchestras.

463 Counterpoint (3)

Prerequisite: MUS 260C. Eighteenth century contrapuntal techniques, including some work in the species; invertible counterpoint, motive development, two- and three-part inventions, and the fugue.

464 Musical Form (3)

Prerequisite: MUS 260C. Analytic techniques for study of balance in organization of musical material.

465 Contemporary Techniques (4)

Prerequisite: MUS 360C. Techniques used in contemporary composition.

466A Commercial Arranging (3)

Prerequisites: MUS 360C, 362. Basic arranging techniques, including commercial harmonization, voicings, passing chords, and practical writing experience.

466B Commercial Arranging, Advanced (3)

Prerequisite: MUS 466A. Advanced arranging techniques for various commercial orchestral requirements. Practical use of extended forms, woodwind doublings, unusual meters. May be repeated to maximum of 9 units.

467 Music Composition for Television and Films (3)

Prerequisites: MUS 360C, 362. Techniques used in composing music for television and film productions; practical writing experience.

468 Jazz Pedagogy (3)

Prerequisite: MUS 368C. Techniques and materials for teaching jazz improvisation, jazz arranging, jazz history, and jazz ensemble.

469 Techniques of Electronic Music (3)

Prerequisite: At least one quarter of MUS 460. Composing for electronic media; recording, synthesis, notation, sound resources. Study of aesthetics of composition for electronic sounds. Lecture 2 hours, activity 2 hours.

470 History and Literature of Opera (4)

Prerequisites: MUS 370-372. Development of opera from Baroque to present; discussion and analysis of representative opera texts and scores with emphasis on visual experience.

471 History and Literature of Large Vocal Forms (4)

Prerequisites: MUS 370-372. Development of large vocal forms from Baroque to present; discussion and analysis of representative works including masses, cantatas, and oratorios.

472 History and Literature of Vocal Solo Music (4)

Prerequisites: MUS 370-372. Development of solo song from Baroque to present; discussion and analysis of representative art songs and vocal chamber music.

473 History and Literature of Symphonic Music (4)

Prerequisites: MUS 370-372. Development of symphonic music from pre-classicism to present; discussion and analysis of representative orchestral scores.

474 History and Literature of Chamber Music (4)

Prerequisites: MUS 370--372. Development of instrumental chamber music from Renaissance to present; discussion and analysis of representative works.

475 History and Literature of Keyboard Music (4)

Prerequisites: MUS 370-372. Development of keyboard music from Renaissance to present; discussion and analysis of representative works for keyboard instruments including harpsichord, organ, and piano.

477 History and Literature of Wind Band in U.S. (4)

Prerequisites: MUS 370-372. History of wind band in U.S.; emphasis on twentieth century literature.

480 Choral Conducting (3)

Prerequisite: MUS 380. Application of basic conducting techniques to problems of choral conducting. May be repeated to maximum of 9 units. Meets 4 hours weekly.

481 Instrumental Conducting (3)

Prerequisite: MUS 380; 312 recommended. Experience offered in transposition, score reading, baton technique, and interpretation of symphonic literature; recognition of psychologically sound rehearsal procedure. Conducting rehearsal orchestra is integral part of course. Meets 4 hours weekly.

482 Rehearsal Techniques for Band Directors (4)

Prerequisites: MUS 312B, P, W; experience in the field. Systematic examination of specific rehearsal techniques applicable to amateur performers in school situations. Includes rehearsal preparation and literature for marching and symphonic bands.

483 Analysis of Jazz Styles and Literature (3)

Prerequisites: MUS 360C, 368C, 452. Survey of significant jazz composers, their contributions and performance practices; analyses of representative compositions and improvisations.

485 Chamber Music (2)

Prerequisite: 300-level applied music course. Study and performance of selected works from the duo, trio, quartet, or larger chamber ensemble literature. Activity four hours. May be repeated to maximum of 6 units.

490 Music for Early Childhood (4)

Prerequisites: EDFN 413, CHDV 320, PSY 412A. Music activities suitable for the young child. Includes five field trips for observation of children in preschool or kindergarten and primary situations. May not be taken in lieu of MUS 400.

491 Music as Therapy in Human Development (4)

Exploration of music and movement as vehicles for therapy, including activities designed to promote a sense of health and well-being for disabled children and adults.

492 Musical Creativity for Children (4)

Prerequisite: MUS 400 or 490. Use of Orff-Schulwerk method to develop creativity in children through singing, movement, instruments, and language. Lecture 3 hours, activity 2 hours.

497 Research Techniques in Music (2)

Basic bibliography, survey of literature, methods of research in music and music education, and practice in organizing and reporting data, both oral and written.

499 Undergraduate Directed Study (1-4)

Prerequisite: Consent of an instructor to act as sponsor. Project selected in conference with sponsor before registration; progress meetings held regularly, and a final report submitted. May be repeated for credit.

PHILOSOPHY

School of Arts and Letters

DEPARTMENT OFFICE

Engineering and Technology A429

Phone: (213) 343-4180

The programs of study in Philosophy are intended to provide students with principles of inquiry and evaluation relevant to the various areas of human activity, such as science, law, religion, education, government, and art; to develop in them skills of analysis, criticism, and synthesis needed for advanced work in any scholarly field; and to acquaint them with noteworthy contributions by philosophers to intellectual traditions.

A minor in Philosophy is available for students majoring in other fields.

An interdisciplinary minor in Classics is administered by the Department of Philosophy. The faculty is provided by cooperating departments of the School of Arts and Letters and the School of Natural and Social Sciences.

The graduate program is described in the *Graduate Programs* section.

The Faculty

Emeriti: Sidney P. Albert, Thomas Annese, Arthur J. Benson, Donald R. Burrill.

Professors: Sharon Bishop, Ann Garry (*Chair*), Ricardo J. Gomez, Joseph B. Prabhu, George R. Vick.

Associate Professors: Daniel A. Herwitz, Henry R. Mendell *Assistant Professor.* Mark Balaguer.

Bachelor of Arts Degree

The Bachelor of Arts degree in Philosophy is suited to the needs of several groups of students: those seeking a broad and integrated liberal education; those interested in careers in law, government, education, publishing, theology, or the ministry; and those planning to do graduate work in philosophy with an aim of teaching at the college level.

Students seeking to combine the study of Philosophy with a multiple subject credential waiver program can satisfy both goals in the Multiple Subject Teaching Credential Option.

Requirements for the Major (60-151 units)

A total of 60 quarter units in philosophy is required for the major with the General Option, including at least 44 units in upper division courses.

* General Option (60 units)

Lower Division Required Courses (8 units):

PHIL	151	Philosophical Ideas: Knowledge and Reality	(4)
PHIL	250	Introduction to Symbolic Logic	(4)

Upper Division Required Courses (16 units):

PHIL	304	Ethics	(4)
PHIL	311	History of Ancient Philosophy	(4)
PHIL	313	History of Modern Philosophy	(4)
PHIL	496	Philosophical Writing and Method	(4)

Electives (16 units):

Select one from following:

PHIL	410	Social and Political Philosophy	(4)
PHIL	420	Contemporary Ethical Theory	(4)
PHIL	475	Aesthetics	(4)

Select one from following:

PHIL	452	Medieval Philosophy	(4)
PHIL	458	Major Figures in Modern Philosophy	(4)

PHIL 459 Recent Philosophy (4)

Select at least two from following including at least one from 405, 460, 470:

PHIL 404 Inductive Logic (4)
 PHIL 405 Symbolic Logic (4)
 PHIL 406 Advanced Logic (4)
 PHIL 460 Metaphysics (4)
 PHIL 470 Theory of Knowledge (4)
 PHIL 480 Philosophy of Language (4)
 PHIL 485 Philosophy of Science (4)

Additional Electives (20 units):

Select philosophy courses with adviser approval.

* **Multiple Subject Teaching Option (146-151 units)**

Students who select this option complete a separate core which is common to all Multiple Subject teaching options. That common core contains 106-111 units and is described in the *Undergraduate Study* chapter. In addition to the core, the 68 units listed below are required in the option. Refer to the *undergraduate School of Education* chapter of this catalog for regulations governing all teaching credential programs.

Required Courses (106-111 units):

Refer to *Undergraduate Study* chapter of this catalog.

Major Courses (20 units)

PHIL 151 Philosophical Ideas: Knowledge and Reality (4) or
 PHIL 152 Philosophical Ideas: Human Values (4)
 PHIL 304 Ethics I (4)
 PHIL 311 History of Ancient Philosophy (4)
 PHIL 313 History of Modern Philosophy (4)
 PHIL 496 Philosophical Writing and Method (4)

Humanities (Philosophy) Depth Area (20 units)

PHIL 410 Social and Political Philosophy (4) or
 PHIL 420 Ethics II (4)
 PHIL 433 Latin American Philosophy (4) or
 PHIL 435 Eastern Philosophy (4)
 PHIL 470 Theory of Knowledge (4) or
 PHIL 485 Philosophy of Science (4)

Two four-unit, upper division elective courses in philosophy.

Electives (28 units)

Professional education courses are recommended. See a credential adviser in the School of Education.

Minor in Philosophy

A total of 32 units is required, including at least 24 units in upper division courses.

Requirements for the Minor (32 units)

Lower Division Required Courses (8 units):

PHIL 151 Philosophical Ideas: Knowledge and Reality (4) or
 PHIL 152 Philosophical Ideas: Human Values (4)
 PHIL 250 Introduction to Symbolic Logic (4)

Upper Division Required Courses (12 units):

PHIL 304 Ethics (4)
 PHIL 311 History of Ancient Philosophy (4)
 PHIL 313 History of Modern Philosophy (4)

Electives (select 12 philosophy units with adviser approval)

Minor in Classics

The minor in Classics is an interdisciplinary program that provides students with an understanding of the culture of ancient Greece and Rome. In conjunction with a major program in anthropology, art history, English, history, philosophy, or political science, the Classics minor will prepare students for graduate study in the major field. Alternatively, the Classics program can serve as a means of enriching one's experience and achieving a fuller understanding of contemporary Western culture.

The minor consists of 28 units, of which 4 are required in Classics and 24 are selected from the five areas listed below. Courses chosen must include at least one from each of three different areas. Prior approval must be obtained from the adviser for selected topics and directed study courses. No more than 8 units taken for credit in the student's major program can be used to meet requirements for the minor. Each student's program must be approved by the director and principal adviser of the Classics program.

Requirements for the Minor (28 units)**Core course (4 units):**

CLAS	300	Origins of Classical Thought	(4)
------	-----	------------------------------	-----

*** Area I: Anthropology and Art**

ANTH	425	Archaeology of the Old World	(4)
ART	406	Ancient Near Eastern Art and Archaeology	(4)
ART	411	Greek and Roman Art	(4)
ART	476	Early Christian and Byzantine Art	(4)

*** Area II: Mythology, Literature, and Rhetorical Theory**

ENGL	258	Mythology in Literature (4)(<i>when classical</i>)	
ENGL	354	Selected Topics in Literature (4)(<i>when classical</i>)	
ENGL	424	Greek and Roman Drama in Translation	(4)
ENGL	480	Literature and the Fine Arts, B.C	(4)
ENGL	481	Literature and the Fine Arts, AD	(4)
ENGL	497	Special Studies in World Writers in	

Translation (1-4) (*when classical*)

SPCH	454	Selected Studies in Speech	
------	-----	----------------------------	--

Communication (1-4) (*when classical*)

TA	460	Studies in Selected Dramatists	(1-4) (<i>when classical</i>)
----	-----	--------------------------------	---------------------------------

*** Area III: History and Political Theory**

HIST	400A	History of Science: Antiquity to Renaissance	(4)
HIST	410	Ancient Near East: 4000-323 B.C	(4)
HIST	411	History of Ancient Greece	(4)
HIST	412A	Early Rome, The Republic	(4)
HIST	412B	The Roman Empire	(4)
HIST	413	Greek History: The Alexandrian Age	(4)
POLS	410	Classical Political Theory	(4)

*** Area IV: Philosophy**

PHIL	311	History of Ancient Philosophy	(4)
PHIL	450	Plato	(4)
PHIL	451	Aristotle	(4)
PHIL	474	Philosophy in Literature (4)(<i>when classical</i>)	

*** Area V: Languages**

LATN	100ABC	Elementary Latin	(4, 4, 4)
------	--------	------------------	-----------

Greek (through directed study in any of those departments associated with this minor whose faculty are qualified to direct such study).

Directed study or independent study about a selected classical figure or topic is also available from each department associated with this minor program.

Course in Classics (CLAS)

Upper Division Course

300 Origins of Classical Thought (4)

Beginnings of classical culture in ancient Greece; analysis of early classical conception of art, sciences, technology, politics, philosophy, and religion; emphasis on role of basic concepts in shaping Greek and Roman civilization.

Courses in Philosophy (PHIL)

Lower Division Courses

151 Philosophical Ideas: Knowledge and Reality (4)

An examination of major philosophical views concerning reality, knowledge and belief, and human nature. *CAN PHIL 2*

152 Philosophical Ideas: Human Values (4)

An examination of major philosophical views concerning human values, our capacity to know them, and their relation to reality.

160 Critical Thinking (4)

Critical analysis of informal argumentation in everyday language; informal fallacies, valid and invalid argument forms, principles of the syllogism, rudiments of scientific method.

220 Contemporary Moral Problems (4)

Philosophical examination of some principles and arguments that occur in contemporary discussions of personal morality and social practice.

238 Comparative Religions (4)

Comparative study of world's living religions: Buddhism, Confucianism, Judaism, Christianity, Islam, and others. Concepts of deity, immortality of the soul, methods of salvation, and influence of environment and culture upon these beliefs.

250 Introduction to Symbolic Logic (4)

Introduction to modern symbolic logic and its relation to everyday language; methods of establishing the logical content of statements and the validity or invalidity of arguments. *CAN PHIL 6*

Upper Division Courses

304 Ethics I (4)

Analysis of empirical and normative factors involved in choice, types of ethical theory, nature of moral standards and judgments.

311 History of Ancient Philosophy (4)

Development of philosophical thought from pre-Socratics to Plotinus; principal thinkers, major problems, and dominant trends in Western thought.

313 History of Modern Philosophy (4)

Prerequisite: One PHIL course. Development of philosophical thought from the Renaissance to Kant; principal thinkers, major problems, and dominant trends in Western thought.

321 Ancient Thought and its Modern Legacy (4)

Prerequisite: Upper division standing. Major themes in classical thought and their ongoing influence, for example, the development of self-consciousness, the concepts of rationality and scientific method, human values and the meaning of life.

350 Evolution and the Modern World (4)

(also listed as *ART350, ENGL 350, and HIST350*) Prerequisite: GE humanities requirement. History of the idea of evolution from antiquity to the present and its impact on the culture of the 20th century.

354 Special Topics in Philosophy (1-6)

Prerequisite: As needed for specific topic. Topics of special interest in philosophy as announced in *Schedule of Classes*. May be repeated for credit as subject matter changes.

383 Themes of Adult Life in Philosophy and Literature (4)

(also listed as ENGL 383 and FL 383) Prerequisite: GE humanities requirement. Meaning of selected experiences of adult life, for example, initiation and coming of age; self-actualization and responsibility; love and intimacy; parenthood; change in middle years; death and dying.

404 Inductive Logic (4)

Prerequisite: PHIL 250. Analysis of induction and probability in everyday affairs and in science, systematic development of inductive logic, elements of the probability calculus and applications, philosophical issues in inductive logic.

405 Symbolic Logic (4)

Prerequisite: PHIL 250. Logic and language, nature of argument, meaning and truth, propositional calculus, and predicate calculus.

406 Advanced Logic (4)

Prerequisite: PHIL 405. Selected topics in logic; e.g., identity, definite descriptions, foundations of mathematics, metalogic, philosophical logic, as announced in *Schedule of Classes*. May be repeated as content changes.

407 Philosophy and Artificial Intelligence (4)

Philosophical investigation of computational technology, and the relation of the structure and operation of computers to human thought.

410 Social and Political Philosophy (4)

Prerequisite: One PHIL course. Philosophical foundations of social and political thought; analysis of such concepts as state, law, obligation, and sanction, and their relation to issues in metaphysics, theory of knowledge, and ethics.

412 Philosophy and Sex Roles (4)

Prerequisite: One PHIL GE course. Philosophical analysis of concepts and principles relevant to gender, for example, the "nature" of men and women, love, friendship, justice, equality, liberty, and rights.

415 Philosophy of Religion (4)

Prerequisite: One PHIL course. Systematic approach to issues of noteworthy religious significance, such as eternity, faith, worship, the holy, with aim of distinguishing religion from other modes of human experience.

418 Religion, Traditional Values, and Modernization in the Third World (4)

Prerequisite: GE humanities requirement. A philosophical investigation of the interaction of tradition and modernity in the development of the Third World.

420 Ethics II (4)

Prerequisite: PHIL 304. Contemporary meta-ethical theories, analyses of concept of good, analyses of concept of obligation, validation of moral statements, ethical relativism, praise and blame, moral responsibility.

425 Philosophy of History (4)

Prerequisite: One PHIL course. Philosophical study of Western historical writing and thought, nature of historical knowledge, historical explanation, history and values, meaning of history.

430 American Philosophy (4)

Prerequisite: One PHIL course. Major movements of thought and principal thinkers in America from colonial times to 20th century; relationships of American philosophy to European intellectual currents; influence and effect of dominant doctrines on American life and outlook.

433 Latin American Philosophy (4)

Prerequisite: One PHIL course. Philosophical thought in Latin America with emphasis on contemporary philosophers, especially those of Mexico and Argentina.

435 Eastern Philosophy (4)

Prerequisite: One PHIL course. Indian philosophy; Jainism, Buddhism, and Tantra. Philosophy of China and Japan; Confucianism, Taoism, Buddhism, Shintoism, and related modern movements. May be repeated once as content changes.

440 Contemporary Philosophy (4)

Prerequisite: One PHIL course. Major problems and trends in 20th century philosophy.

445 Existentialism (4)

Prerequisite: One PHIL course. Major works of existential philosophy; relation of existentialism to contemporary value problems; 19th century background and contemporary varieties of existential thought, both religious and nonreligious.

446 Phenomenology (4)

Prerequisite: One PHIL course. Descriptive and constitutive methodologies of phenomenology; application of phenomenological method to problems in ontology, aesthetics, language, psychology, and social theory.

450 Plato (4)

Prerequisite: PHIL 311. Exposition and analysis of principal works of Plato.

451 Aristotle (4)

Prerequisite: PHIL 311. Exposition and analysis of principal works of Aristotle.

452 Medieval Philosophy (4)

Principal themes in neo-Platonic and/or neo-Aristotelian philosophy, with concentration on teachings of particular figures, e.g., Plotinus, Augustine, Pseudo-Dionysius, Anselm, Bonaventure, Aquinas, Duns Scotus, Ockham.

458 Major Figures in Modern Philosophy (4)

Selected philosophers in the modern era: e.g., Descartes, Hobbes, Spinoza, Locke, Berkeley, Hume, Rousseau, and Kant. Specific topic listed in *Schedule of Classes*. May be repeated as content changes.

459 Recent Philosophy (4)

Prerequisite: One PHIL course; PHIL 313 recommended. Selected philosophical themes from Kant to late 19th century; contributions of selected philosophers, e.g.: Kant, Hegel, Marx, Nietzsche, Kierkegaard, Comte, and Mill.

460 Metaphysics (4)

Prerequisite: One PHIL course. Critical examination of fundamental principles and their implications in various fields of knowledge, including philosophy itself, and of basic assumptions implicit in certain human activities, such as art, religion, and science.

461 Philosophy and the Nuclear Age Prerequisite: Upper division standing. The implications of nuclear physics on our way of understanding the world, ourselves, and our values and responsibilities.

470 Theory of Knowledge (4)

Prerequisite: One PHIL course. Analysis of how we know, and how we know we know; theories of evidence, truth, and confirmation.

471 Philosophy of Mind (4)

Prerequisite: One PHIL course. Philosophical analysis of concepts of mind, mental phenomena, actions, emotions, and will; philosophical theories of mind.

474 Philosophy in Literature (4)

Philosophical ideas and issues in selected literary works. 475 Aesthetics (4)

Prerequisite: One PHIL course. Main problems and principal theories of art creation, appreciation, and criticism; aesthetic experience and the work of art; principles of aesthetic evaluation and their effect on morality, government, society, science, and philosophy.

480 Philosophy of Language (4)

Prerequisite: PHIL 250, one additional PHIL course. Semantic, syntactic, and pragmatic dimensions of language; theories of signs and meaning; cognitive, emotive, and other features of

language; ordinary language and formal language as analytical tools; philosophical importance of language.

485 Philosophy of Science (4)

Prerequisite: PHIL 250 or upper division standing in any major. Philosophical issues in the physical, life, and social sciences. Problems selected for study may include: concept formation, hypotheses and models, meaning and verification, prediction and explanation, causality and natural law.

490 Philosophy of Law (4)

Prerequisite: One PHIL course. Philosophical investigation of fundamental presuppositions of legal theory, analysis of basic legal concepts.

491 Medical Ethics (4)

Prerequisite: One PHIL GE course or GE humanities requirement. Consideration of moral issues in medicine from a philosophical viewpoint.

495 Proseminar: Selected Works in Philosophy (4)

Prerequisite: Varies according to subject matter. Close study of major philosophical writings, stressing meaning, methods of inquiry, and grounds upon which argued. Content varies. May be repeated for credit as subject matter changes.

496 Philosophical Writing and Method (4)

Prerequisite: ENGL 102*; passing WPE score recommended. Principles and techniques important in philosophical writing; examination of philosophical methodology and styles of argumentation; practice in philosophical writing.

*Students subject to easier catalogs satisfy this prerequisite with ENGL 1010r 190.

499 Undergraduate Directed Study (1-4)

Prerequisite: Consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare written and oral reports. Project selected in conference with sponsor before registration; progress meetings held regularly. May be repeated for credit.

THEATRE ARTS AND DANCE

School of Arts and Letters
DEPARTMENT OFFICE
Theatre 110
Phone: (213) 343-4110

The Department of Theatre Arts and Dance offers undergraduate programs leading to the Bachelor of Arts degree in Theatre Arts, as well as a minor in Theatre Arts for students majoring in other fields. The Theatre Arts major includes an option in Dance and courses offering experience in performance. The department also offers a Master of Arts degree in Theatre Arts which is described in the Graduate Programs section.

The Faculty

Emeriti: Walter S. Beaver, Louis G. Gardemal, Marjorie M. Smith.

Professors: Pamela Barragar-Dunne, Lawrence P. Goodman, Clifford D. Harper (Chair), Maris U. Ubans.

Associate Professors: Linda I. Kostalik, Nancy Kupka.

Assistant Professors: Jose Cruz Gonzalez, Grace Shizuko Herrera, Theresa Larkin, Susan Mason.

Bachelor of Arts Degree in Theatre Arts

The Bachelor of Arts degree in Theatre Arts is designed for students who plan to engage in careers which utilize skills in theatre arts and dance.

Department policy requires that all undergraduate Theatre Arts majors make themselves available for participation in scheduled department productions.

Requirements for the Major (78-85 units)

The major requires a total of 78-85 units, including core and option requirements. The Acting-Directing, Theatre History and Literature, and Technical Theatre options share a common core of 51 units. The Dance option has a separate core and requires a total of 85 units. In addition to course requirements, all Theatre Arts majors must enroll in 2 units of TA 300 each quarter they enroll for two or more TA courses (except 152 or 357). Concurrent enrollment in TA 300 and TA 310 is required of students who are cast in major department productions.

Core Requirements (51 units):

Lower Division Required Courses (26 units):

TA 131	Stagecraft I	(3)
TA 132	Stagecraft II	(3)
TA 133	Stagecraft III	(3)
TA 141	Acting Fundamentals: Games and Exercises	(3)
TA 142	Acting Fundamentals: Character Study	(3)
TA 143	Acting Fundamentals: Scene Study	(3)
TA 149	Diction and Dialects for Performer	(4)
TA 152	Analysis of Drama	(4)

Upper Division Required Courses (25 units):

TA 311	Development of World Theatre I	(4)
TA 312	Development of World Theatre II	(4)
TA 313	Development of American Theatre	(4)
TA 322	Theatrical Makeup	(3)
TA 390	Theatre Research and Writing	(4)
TA 439	Theatre Management	(3)
TA 445	Principles of Directing I	(3)

Options

Select one of the following options, with adviser approval.

* Acting-Directing Option (27 units)

Required Courses (16 units):

TA 341	Advanced Acting: Improvisation	(3)
TA 342	Advanced Acting: Characterization	(3)
TA 343	Advanced Acting: Playing a Role	(3)
TA 348	Movement for the Actor	(2)
TA 349	Voice for the Stage	(2)
TA 446	Principles of Directing II	(3)

Electives (11 units):**Select two from following:**

TA 301,306, 460--476, 485

Select one from following:

TA 426, 431,434

*** Technical Theatre Option (26-27 units)****Required Courses (9 units):**

TA 426	Introduction to Stage Costuming	(3)
TA 431	Introduction to Stage Scenery	(3)
TA 434	Introduction to Stage Lighting	(3)

Electives (17-18 units):**Select two from following (8 units):**

TA 301,306, 460-463, 471,472, 485

Select three from following (9-10 units):

TA 422,427, 432, 435, 454L, P

*** Theatre History and Literature Option (30-31 units)****Required Courses (20 units):**

TA 460	Studies in Selected Dramatists	(4)
TA 461	Nature of Dramatic Comedy	(4)
TA 462	Nature of Dramatic Tragedy	(4)
TA 463	Shakespeare as Living Theatre	(4)
TA 471	Theatre of the Avant-Garde	(4)

Electives (10-11 units):**Select one from following (3-4 units):**

TA 301,306, 341,454L,P, 472,476, 485

Select one from following (3 units):

TA 426, 431,434

Select one from following (4 units):

ENGL 417, 424, 427, 428

*** Dance Option (85 units)**

The Dance option does not share the common core with the other three options in Theatre Arts. It utilizes a separate, 27-unit core and includes a total of 85 units.

This option was designed to prepare dance specialists for careers as professional dancers, choreographers, teachers of all dance forms, dance arts managers, costuming and stage technicians, lighting designers, or directors of video for dance and recreation loaders, and to offer a solid foundation and practice for all Theatre Arts majors in the various dance forms necessary for careers in musical theatre. Course offerings in dance therapy prepare students for careers working with handicapped populations.

Core Requirements (27 units):**Lower Division Required Courses (13 units):**

TA 131,132	Stagecraft I, II	(3, 3)
------------	------------------	--------

TA	141	Acting Fundamentals: Games and Exercises	(3)
TA	152	Analysis of Drama	(4)

Upper Division Required Courses (14 units):

TA	313	Development of American Theatre	(4)
TA	322	Theatrical Make-up	(3)
TA	390	Theatre Research and Writing	(4)
TA	439	Theatre Management	(3)

Option Requirements (58 units)

Lower Division Required Courses (9 units):

DANC	100	Beginning Ballet	(2)
DANC	130	Beginning Dance Improvisation	(1)
DANC	140	Beginning Modern Dance	(2)
DANC	157	Survey of Dance Forms	(4)

Upper Division Required Courses (39 units):

DANC	340	Advanced Modern Dance	(2)
DANC	372	Dance Composition	(2)
DANC	471	Rhythmic Form and Analysis for Dance	(3)
DANC	472	Choreography	(3)
DANC	474	Dance Philosophy	(3)
DANC	475	Choreographic Accompaniment	(3)
DANC	476	Dance History: Primitive to 19th Century	(3)
DANC	477	Dance History: 20th Century	(3)
DANC	480	Orchestrated Dance Performing Ensemble	(2, 2, 2)
DANC	485	Dance Production	(3)
PE	400A	Kinesiology	(4)
PE	400B	Physiology of Activity	(4)

Electives in Dance (select 6 units from following):

DANC	120	Beginning Jazz Dance	(2)
DANC	160	Beginning Tap Dance	(2)
DANC	200	Intermediate Ballet	(2)
DANC	220	Intermediate Jazz Dance	(2)
DANC	240	Intermediate Modern Dance	(2)
DANC	260	Intermediate Tap Dance	(2)
DANC	300	Advanced Ballet	(2)
DANC	320	Advanced Jazz Dance	(2)
DANC	470	Theory and Analysis of Dance	(3)
DANC	478	Choreography for the Camera	(3)
DANC	483	Dance Performance Workshop	(2) or

select six units in dance courses with adviser approval.

Electives in Theatre Arts/Dance (4 units):

Select with adviser approval.

Minor in Theatre Arts

This program is suggested for students in allied arts, music, and recreation and students whose career objectives include interpersonal relationships in a humanistic context. A total of 31-32 units is required.

Requirements for the Minor(31-32 units)

Lower Division Required Courses (13 units):

TA	131	Stagecraft I	(3)
TA	132	Stagecraft II	(3)
TA	141	Acting Fundamentals: Games and Exercises	(3)
TA	152	Analysis of Drama	(4)

Upper Division Required Courses (12 units):

TA	311	Development of World Theatre I	(4)
TA	312	Development of World Theatre II	(4)

TA 313 Development of American Theatre (4)

Electives (6-7 units):

Select one from following:

TA 445, 454L, P, 460, 461, 462, 472

Select one from following:

TA 322, 426, 431, 434

The Credential Program

The Department of Theatre Arts and Dance has no examination waiver program for the Single Subject credential in English approved by the Commission on Teacher Credentialing. Students interested in this credential should consult advisers in the **Departments** of English or Communication Studies and in the School of Education.

Courses in Dance (DANC)

Lower Division Courses**100 Beginning Ballet (2)**

Activities designed to develop beginning skills in ballet accompanied by background information relevant to the dance form. May be repeated to maximum of 6 units.

120 Beginning Jazz Dance (2)

Activities designed to develop beginning skills in jazz dance accompanied by background information relevant to the dance form. May be repeated to maximum of 6 units.

130 Beginning Dance Improvisation (1)

Improvisational techniques utilizing movements of dance to develop individual/group sensitivities, concentration, selectivities, and discoveries and to begin the forming process used in creating dances. May be repeated to maximum of 3 units.

135 Therapeutic Uses of Dance (1)

Dance therapy as a process that affects an individual's transformation of ongoing energy flow to overt body movement to imagery to verbalization. May be repeated to maximum of three units.

140 Beginning Modern Dance (2)

Activities designed to develop beginning skills in modern dance accompanied by background information relevant to the dance form. May be repeated to maximum of 6 units.

154 Special Topics in Dance (1)

Current topics of special interest in dance, as announced in *Schedule of Classes*. May be repeated as subject matter changes.

157 Survey of Dance Forms (4)

Analysis of the historical and technical development of dance forms as they cultivate imagination and sensitivity to humanistic behavior. Participation in activities demonstrating techniques utilized in these forms.

160 Beginning Tap Dance (2)

Activities designed to develop beginning skills in tap accompanied by background information relevant to the dance form. May be repeated to maximum of 6 units.

180 Dance Laboratory (1)

Creative and physical activities designed to augment advanced level technique classes. May be repeated to maximum of 6 units.

200 Intermediate Ballet (2)

Prerequisite: DANC 100. Activities designed to develop intermediate skills in ballet accompanied by background information relevant to the dance form. May be repeated to maximum of 6 units.

220 Intermediate Jazz Dance (2)

Prerequisite: DANC 120. Activities designed to develop intermediate skills in jazz dance accompanied by background information relevant to the dance form. May be repeated to maximum of 6 units.

240 Intermediate Modern Dance (2)

Prerequisite: DANC 140. Activities designed to develop intermediate skills in modern dance accompanied by background information relevant to the dance form. May be repeated to maximum of 6 units.

254L, P Special Topics in Dance (1-3)

Current topics of special interest in dance, as announced in *Schedule of Classes*. May be repeated as subject matter changes.

260 Intermediate Tap Dance (2)

Prerequisite: DANC 160. Techniques and practice of tap dance; single, duple, triple, and quadruple tap sounds combined in rhythmic sequences and developed into dances. May be repeated to maximum of 6 units.

Upper Division Courses**300 Advanced Ballet (2)**

Prerequisite: DANC 200; corequisite: DANC 180 (specific lab to be designated each quarter). Expanded development of skill and knowledge of ballet. May be repeated to maximum of 6 units.

320 Advanced Jazz Dance (2)

Prerequisite: DANC 120; corequisite: DANC 180 (specific lab to be designated each quarter). Expanded development of skills, knowledge, analysis ability, and study of application of elements of jazz dance in solo and group work. May be repeated to maximum of 6 units.

340 Advanced Modern Dance (2)

Prerequisite: DANC240; corequisite: DANC 180 (Specific lab to be designated each quarter). Expanded development of skill and knowledge of modern dance. May be repeated to maximum of 6 units.

357 Creative Experiences for Well-Being (4)

(also listed as ART 357, MUS 357, and TA 357) Prerequisites: HS 150 and one GE humanities (arts-C2) course. Exploration of creative experiences in the arts for promotion of mental, emotional, and physical well-being.

372 Dance Composition (2)

Prerequisite or corequisite: DANC 300, 320, or 340. Introduction to principles of dance composition through individual experiences, studies in use of varied stimuli, processes of construction, and simple compositional forms.

400 Development of Dance Arts Literacy (4)

Perceptual, expressive, historical, and cultural components associated with dance-aesthetic phenomena; lectures, movement experiences, visits to dance events. Lecture 2 hours, activity four hours.

435ABC Dance Movement for Human Awareness (4)

Prerequisites: DANC 130, 135, 140. Theoretical framework, conceptual development, and practice of using dance to promote awareness, insight, and growth, allowing for integration of cognitive, emotion, and physical functions. Lecture 3 hours, activity 2 hours.

454L,P Special Topics in Dance (1-3)

Current topics of special interest in dance, as announced in *Schedule of Classes*. May be repeated as subject matter changes.

470 Theory and Analysis of Dance (3)

Prerequisite: Advanced level in dance technique. Theory, analysis, and advanced performance of dance; structural elements, rhythm, creativity, and selection of accompaniment. Lecture 2 hours, demonstration laboratory 2 hours each.

471 Rhythmic Form and Analysis for Dance (3)

Historical analysis of rhythmic elements inherent in music and movement; application and appreciation of their organization as a basis of form in dance. Lecture 2 hours, laboratory 2 hours.

472 Choreography (3)

Prerequisite: DANC 372. Application of principles and materials of dance in development of group and solo compositional forms. Lecture 2 hours, demonstration-laboratory 2 hours.

474 Dance Philosophy (3)

Prerequisites: DANC 473; PHIL 1510 152; PHIL 475 recommended. Philosophical bases, heritage, purposes, values, and basic beliefs in various forms of dance.

475 Choreographic Accompaniment (3)

Prerequisite: DANC 472. Sound as it relates to movement, critical analysis of music for dance, special attention to selection of appropriate accompaniment. Lecture 2 hours, demonstration-laboratory 2 hours.

476 Dance History Primitive to 19th Century (3)

Study of various forms of dance including ethnic, folk, and formal art forms as related to social, economic, and political history from primitive times through the 19th century.

477 Dance History of the 20th Century (3)

New directions of the modern age and current trends in dance as they relate to world culture of the 20th century.

478 Choreography for Camera (3)

Prerequisite or corequisite: DANC 472; BCST 201 recommended. Investigation and application of choreographic principles appropriate to television and/or cinema. Lecture 2 hours, laboratory 2 hours.

480 Orchestral-Dance Performing Ensemble (2)

Prerequisite: Instructor consent. Preparation of lecture-demonstrations and dance performances. May be repeated to maximum of 12 units.

483 Dance Performance Workshop (2)

Corequisite: DANC 480. Rehearsals for and participation in developing written and performed materials for special performance events complementary to the performance activities of DANC 480. May be repeated to maximum of 6 units.

485 Dance Production (3)

Prerequisite: DANC 472. Preparation of dance materials for performance; directing, lighting, costuming, and makeup for dance. Lecture 2 hours, demonstration-laboratory 2 hours.

Courses in Theatre Arts (TA)

Lower Division Courses

100 Play Practicum (1)

Active participation in University-sponsored dramatic activities. Assignments may include acting, directing assistance, lighting, scenery, costuming, props, and house management. May be repeated to maximum of 4 units.

131 Stagecraft (3)

Technical theatre practices developed in lectures, demonstrations, and workshop experience; basic tools and techniques of scenery construction; reading technical drawings; technical theatre procedures and organization. Additional hours required.

CAN DRAM 12

132 Stagecraft II (3)

Technical theatre practices developed in lectures, demonstrations, and workshops; stage properties, drafting techniques, basic stage lighting, and sound effects. Additional hours required.

133 Stagecraft III (3)

Introduction to basic materials, tools, construction techniques, costume paint and dye techniques, and wardrobe plotting used in costuming for the performing arts. Lecture 2 hours, laboratory 3 hours.

141 Acting Fundamentals: Games and Exercises (3)

Basic principles and techniques of acting. Exploration of creative processes through theatre games and improvisational exercises. Additional hours required. CAN DRAM 8

142 Acting Fundamentals: Character Study (3)

Basic principles and techniques of acting. Building a character through textual analysis and practical work based on text. Additional hours required.

143 Acting Fundamentals: Scene Study (3)

Basic principles and techniques of acting. Analysis of scene structure, use of subtext, actions, and objectives. Performance of selected scenes. Additional hours required.

149 Diction and Dialects for the Performer (4)

Phonation, articulation, and pronunciation; special attention to standard stage speech and commonly used dialects for actors and other performers in all mediums. *CAN DRAM 6*

152 Analysis of Drama (4)

Principles of dramatic art; consideration of elements of drama, dramatic structure, types, and styles; evaluation and appreciation through study and workshop presentation of representative plays.

154L, P Selected Topics in Theatre Arts (1-4)

Prerequisite: Instructor consent and as needed for specific topic. Current topics of special interest to students in Theatre Arts as announced in Schedule of Classes.

160 Living Theatre (4)

Survey of live theatre; appreciating and understanding actual theatrical productions and practices: acting, play writing, costumes and makeup design, nature of the theatrical event. Lecture 2 hours, demonstrations-practical work-field trips, 4 hours.

276 Introduction to Play Writing (3)

(also listed as ENGL 276) Prerequisite: ENGL 222 or TA 152. Collaborative approach to writing for the stage; emphasizes writing theory and techniques; introduction to dramaturgy, directing, literary management, and staged reading.

Upper Division Courses

300 Play Production (1-2)

Technical preparation/presentation of University-sponsored production; Theatre Arts majors must enroll every quarter; others must enroll whenever cast in department productions. Meets more than 6 hours each week. May be repeated to maximum of 24 units.

301 Creative Dramatics (4)

Philosophies and techniques of creative dramatics. Emphasis on improvisation, play making, pantomime, ongoing drama, story dramatization, role playing; selected projects and demonstrations.

306 Children's Theatre (4)

Philosophies, attitudes, and forces shaping current practices in children's theatre; selected scripts and production techniques.

310 Play Performance (2)

Prerequisite: Admission by audition only. Detailed work on a major production with rehearsal and performance requirements. Enrollment required for performance participation. Meets more than 6 hours each week. May be repeated to maximum of 12 units.

311 Development of World Theatre I (4)

Significant developments in world dramatic literature and theatre; emphasis on classical Greece, ancient Rome, medieval world, Italian Renaissance, Spain's Golden Age, Elizabethan England.

312 Development of World Theatre II (4)

Significant developments in world dramatic literature and theatre; emphasis on French Neoclassicism, Restoration, 18th century England, romantic movement, rise of Realism and Naturalism, beginnings of modern drama on the Continent, and early revolts against Realism.

313 Development of American Theatre (4)

Significant developments in American dramatic literature and theatre from colonial period to modern times.

322 Theatrical Makeup (3)

Prerequisite: Instructor consent. Basic concepts and skills in makeup for stage, television, and cinema; straight and corrective makeup; old age and character modeling; introduction to facial prosthetics; basic techniques in building facial hair pieces. Laboratory hours required.

323 Intermediate Theatrical Makeup (3)

Prerequisite: TA 322. Concepts and skills of three-dimensional techniques; special effects and fantasy makeup for stage and screen; makeup design; techniques for handling hair and wigs. Additional hours required.

339 Stage Management (3)

Basic skills; assembling prompt book, blocking notation, and organization and communication procedures; application to theatre production; detailing the process from preproduction and rehearsal through performance to postproduction.

341 Advanced Acting: Improvisations (3)

Prerequisites: TA 141-143. Advanced principles and techniques of acting; selected improvisations designed to increase creativity and solve textual problems; includes interview, fiction, preface, etude, and study. Additional hours required.

342 Advanced Acting: Characterization (3)

Prerequisites: TA 141-143. Advanced principles and techniques of acting; creation of characters through analysis of text and selected exercises, including inner monologue, sensory symbol, and the visual film. Additional hours required.

343 Advanced Acting: Playing a Role (3)

Prerequisites: TA 141-143. Advanced principles and techniques of acting; analysis and exercises designed to work on a role as a whole; includes main line of action, spine, core, and scoring the role. Additional hours required.

348 Movement for the Actor (2)

Psychological and physical sources of movement in the performer; application to development of dramatic roles in theatrical scenes. May be repeated to maximum of 8 units.

349 Voice for the Stage (2)

Prerequisite: TA 149. Voice and speech training for the stage; developing effortless yet controlled and varied vocal production appropriate to demands of theatrical art from Greeks to the present.

357 Creative Experiences for Well-Being (4)

(also listed as ART357, DANC 357, and MUS 357) Prerequisites: HS 150; one GE humanities (arts-C2) course. Exploration of creative experiences in the arts for promotion of mental, emotional, and physical well-being.

390 Theatre Research and Writing (4)

Prerequisite: ENGL 102*. Advanced writing practice with emphasis on critical and mechanical skills through specific assignments appropriate for Theatre Arts majors.

*Students subject to earlier catalogs satisfy this prerequisite with ENGL 1010r 190.

401 Advanced Creative Dramatics (4)

Exploration and application of advanced techniques and concepts of informal drama; special emphasis on European approaches to dramatics; practical experience through selected projects.

402 Children's Theatre Tour (4)

Student participation as actors, designers, stage managers, and drama leaders in touring children's theatre productions; skills gained in working with special populations. Additional hours required. May be repeated to maximum of 16 units.

422 Advanced Theatrical Makeup (3)

Prerequisite: TA 322. Advanced techniques in creation and application of latex, polyurethane, and wax dental prosthetics for stage, television, and cinema; ventilation processes for beard and wig construction; experimental design of stylized nonrealistic makeup. Laboratory hours required.

426 Introduction to Stage Costuming (3)

Prerequisite: Two dramatic literature courses. Basic principles of costume design and construction; historical survey of costumes from ancient to modern times as related to stage costume. Additional hours required.

427 Stage Costume Design (3)

Prerequisite: TA 426. Theory and application of costume design and construction for stage; research methods, principles of design, dramatic analysis, rendering layout, and construction techniques. Additional hours required.

431 Introduction to Stage Scenery (3)

Prerequisites: TA 131,132. Theory, practice of scenery design; physical stage, script, director demands; working drawings, models, sketches; perspective rendering. Additional hours required.

432 Stage Scenery Design (3)

Prerequisite: TA 431. Advanced design problems, projects in design of drama, comedy, and musical theatre. Additional hours required.

434 Introduction to Stage Lighting (3)

Prerequisites: TA 131,132. Theory and practice of lighting design; functions and properties of light on stage; basic electricity, optics, color; light plots and plans, lighting equipment and its use, control systems. Additional hours required.

435 Stage Lighting Design (3)

Prerequisite: TA 434. Advanced problems in lighting design; projects in conception and execution of designs for the stage. Additional hours required.

439 Theatre Management (3)

Prerequisites: TA 131,132, 152. Theory, practice of theatre operations, organization, administration: stage management, production, box office, promotional, and touring procedures.

441-443 Acting Studio I, II, III (3, 3, 3)

Prerequisites: TA 341-343. Organic approach to the physical and emotional demands of acting. Admission by audition only. Each course may be repeated to maximum of 6 units.

441: Material from the American English Realist tradition.

442: Material from the Early Realist tradition.

443: Material from classical and musical theatre.

445 Principles of Directing I (3)

Prerequisites: TA 141-143. Basic concepts of stage directing: script analysis, blocking, casting, rehearsal procedures, presentation of scenes from realistic plays. Additional hours required.

446 Principles of Directing II (3)

Prerequisite: TA 445. Advanced techniques of stage directing: development of style, problems of directing premodern and nonrealistic plays, working with actors; scene presentations. Additional hours required.

447-449 Acting for Musical Theatre I, II, III (3, 3, 3)

Performance approach to acting demands of musical theatre; characterization through voice, singing, speaking, movement, and scene study. Each course may be repeated once for credit. Suggested sequence: 447, 448, 449; however, none of the three courses is prerequisite to the others.

447: The maturation of the book musical (1940-1967).

448: Beginning to rise of book musical (1940).

449: The contemporary, avant garde (1967-present).

450 Principles of Directing III (3)

Prerequisite: TA 446. Directing laboratory in which each director selects a one-act play to explore through script analysis and rehearsal, culminating in performance. May be repeated to maximum of 6 units.

454L, P Selected Topics in Theatre Arts (1-4)

Prerequisite: Instructor consent and as needed for specific topic. Current topics of special interest to students in Theatre Arts as announced in Schedule of Classes.

457 Emotion in the Theatre and Film (4)

Exploration of audience emotional responses to techniques used by actors, writers, directors, designers, choreographers; theatre aesthetics in social/political context through history and in various cultures.

459 Hispanic Play Production (3-4)

(also listed as SPAN 459) Prerequisite: Intermediate Spanish. Introduction to major forms of Spanish drama; mechanics and production of a major work of Hispanic theatre. May be repeated to total of 6--8 units, of which maximum of 4 may apply toward major.

460 Studies in Selected Dramatists (1-4)

Prerequisite: Two dramatic literature courses. Intensive study of one or several important dramatists; specific course content varies. May be repeated to maximum of 8 units as subject matter changes.

461 Nature of Dramatic Comedy (4)

Prerequisite: TA 152 or a course in dramatic literature. Theory and techniques of comedy in literature and entertainment arts; emphasis on kinds of comedy in historical perspective.

462 Nature of Dramatic Tragedy (4)

Prerequisite: TA 152. Stage tragedy from ancient Greece to present; major theories and kinds of tragedy, and evolution of tragic hero and heroine.

463 Shakespeare as Living Theatre (4)

Prerequisites: TA 152 or ENGL 222; ENGL 417. History and theories involved in bringing Shakespeare's drama to life on stage. Analysis of major plays in relation to their potential production in contemporary theatre.

471 Theatre of the Avant-Garde (4)

Prerequisite: TA 152 or ENGL 222. Translation studies in development of avant-garde in French-, German-, and English-speaking theatres. Emphasis on experimental drama as producible, living theatre.

472 History and Analysis of Lyric Theatre (4)

Study and evaluation of lyric theatre from its origin to present; emphasis on development of form and style, analysis of representative works, emergence of American lyric theatre.

476 Play Writing (4)

Prerequisites: At least one upper division course in dramatic literature and instructor consent. Workshop in planning, preparing, and writing manuscripts for stage; emphasis on handling dramatic materials, play structure, characterization, and appropriate dialogue. May be repeated once for credit.

477 Psychodrama (4)

Prerequisites: Twelve units selected from following: TA 301,231, 238; PSY 308, 412AB, 418AB. Theory and practice of psychodrama and role playing; experience in psychodrama sessions as protagonists, doubles, and auxiliaries; warm-ups, role reversal, soliloquy, and other techniques. May be repeated to maximum of 8 units.

478 Therapeutic Uses of Drama (4)

Prerequisites: Twelve units selected from following: TA 301,231, 238; PSY 308, 412AB, 418AB. Theories, techniques, and practice of drama as an expressive arts therapy; applications of theatre games, fantasies, dream enactments, fairy tales, puppets, free improvisations to therapeutic needs of various client populations. May be repeated for credit.

479 Life Scripts (4)

Individual life programming employing drama therapy; effects of family/cultural messages on choices; writing and enactment of scenes revealing life scripts providing alternatives. Additional hours required. May be repeated to maximum of 8 units.

480 Cinema as a Dramatic Art (4)

Comparative analysis of dramatic media, consideration of media as art forms; emphasis on "Great Films" series. May be repeated once with instructor consent.

485 Children's Film (4)

Prerequisite: PSY 412A recommended. Instructional and aesthetic elements in films for preschool to adolescent children; film techniques, audience analysis, and development of a rationale for designating films appropriate for various age levels.

499 Undergraduate Directed Study (1-4)

Prerequisite: Consent of an instructor to act as sponsor. Project selected in conference with sponsor prior to registration; progress meetings held regularly and final report submitted. May be repeated for credit.

SCHOOL OF BUSINESS AND ECONOMICS

Office of the Dean
Simpson Tower F124
Phone: (213) 343-2800
Undergraduate Programs Office
Salazar Hall G256B
Phone: (213)343-2810

The major role of the School of Business and Economics is to equip men and women with the intellectual and professional tools needed to assume responsible positions in business, industry, education, government, and social service organizations. The preparation offered includes a basic understanding of the entire social, economic, and physical environment of the urban community, of which business institutions are an integral part. Further, a substantial theoretical and technical background is provided in the underlying fields of knowledge dealing specifically with functional areas in business.

The School of Business and Economics offers undergraduate degree programs in business administration, business education, computer information systems, and economics as well as several minors and certificate programs. Graduate degree programs are described in the *Graduate Programs* section.

Accreditation

The School of Business and Economics is nationally accredited, at both graduate and undergraduate levels, by the American Assembly of Collegiate Schools of Business (AACSB).

Office of Publications (Business Forum).

The School of Business and Economics Publications Office publishes a quarterly, refereed journal, *Business Forum*. The journal is directed to a national reading audience of scholars, business executives, and public administrators, and includes articles by representatives from the academic, government, and business sectors. *Business Forum* is the keystone of the school's effort to achieve effective two-way communication between business and Gal State L.A. The Publications Office produces all school publications including annual reports, alumni newsletters, various pamphlets and brochures, working papers, and news releases.

The Faculty

Department of Accounting

DEPARTMENT OFFICE

Simpson Tower F517
 Phone: (213) 343-2830

Emeriti: Emily C. Chang, Earl Kennedy Cobb, Clifford J. Craft, George N. Francis, Michael F. Grisafe, George A. Gustafson, Leonard W. Hein, Frederic E. Mints, J.C. Ray, Alvin E. Tuohino.

Professors: Adrian M. Abdeen, Joanne A. Collins, Jim D. Donohoo, Gary V. Jorden, Chor Tin Lau, Peter P. Lockett, Dennis M. Murphy, D. Lynn Rans, Ralph S. Spanswick, Hugh E. Warren, Robert G. Zahary.

Associate Professors: Cheryl Cruz, Michael M. Davidson, Glenn Freed, Rick S. Hayes, Ronald L. Pierce, William B. Schneider.

Assistant Professors: Jeong Youn Kim, Neung-Jip Kim, Richard Lau, Leslie Jane Park.

Department of Economics and Statistics

DEPARTMENT OFFICE

Simpson Tower F917
 Phone: (213)343-2930

Emeriti: William H. Bright, Ke Ting Hsia, Arthur J. Kirsch, Mildred G. Massey, Leonard G. Mathy, Donald A. Moore, William B. Simpson, Gerald F. Sorrensen.

Professors: Giorgio Canarella, Nell H. Garston, Judd Hammack, Sun K. Kim, Eduardo M.

Ochoa (*Chair*), Stephen K. Pollard, M. Richard Roseman, Donald Snyder, John A. Tomaske, Erika G. Wilson.

Associate Professors: Samantha Carrington, George Jensen, Kon Sun Lai, Nikolai Pulchritudoff, Sunil K. Sapra, Dang T. Tran.

Assistant Professors: Kathryn L. Combs, Miles M. Finney, Edward W.T. Hsieh, Tom E. Larson, Madhu S. Mohanty, Ashish K. Vaidya, Mann J. Yoon.

Department of Finance and Law

DEPARTMENT OFFICE

Simpson Tower F717

Phone: (213) 343-2870

Emeriti: Philip B. Bergfield, John R. Cox, Edward A. Nelson, Gordon B. Severance.

Professors: Maria Boss, Jack S.K. Chang, George N. Engler, Ching-Hsing (Jean) Loo, Paul E. Schnitzel (*Chair*), Gary Steele Watson.

Associate Professors: John M. Blackburn, Martha S. Cattell, Taewon Kim.

Assistant Professors: Hsing Fang, Barbara Keller, Michael Lat.

Department of Information Systems

DEPARTMENT OFFICE

Simpson Tower F603

Phone: (213) 343-2983

Emeritus Robert C. Verkler.

Professors: Mohammad B. Ayati, Nandakumar Ganesar (*Chair*), DunNard P. Jackson, George H. Jacobson, Parviz Partow-Navid, Paul Rosenthal, Harold Sackman, Ludwig Slusky.

Associate Professors: David Liu, Knox B. Wasley.

Assistant Professor: Stephen J. Baumgartner.

Department of Management

DEPARTMENT OFFICE

Simpson Tower F717

Phone: (213) 343-2890

Emeriti: Laird B. Allison, George Burstein, Donald G. Malcolm William C. Waddell.

Professors: Abdallah M.A. Aish, Mohammad Ala, William G. Baker, Keith R. Blunt, Peter D. Hechler, Lawrence S. Hill, Rauf-Ur R. Khan, Kwok Keung (Kem) Kwong, Mary Pat McEnrue, James M. Rosser, John F. Steiner (*Chair*), Paul V. Washburn.

Assistant Professors: Gordon Bagot, William Cordeiro, Cheng Li, Laura L. Whitcomb, Valerie Yates.

Department of Marketing

DEPARTMENT OFFICE

Simpson Tower F917

Phone: (213) 343-2960

Emeriti: Henry Ang, William A. Knoke, Paul T. McElhiney, L.D. Myers, H. Jean Waldrop.

Professors: Jens D. Biermeier, James D. Boulgarides, Bernard Codner, William A. Cohen, Richard A. Kao (*Chair*), John A. Kirchner, Moonsong David Oh, Marshall E. Reddick, Shirley Stretch.

Department of Office Systems and Business Education

DEPARTMENT OFFICE

Simpson Tower F517

Phone: (213) 343-2860

Emeriti: Nancy J. Billett, Jessie C. Gustarson, Charles J. Inacker, Kenneth Zimmer.

Professors: Darrell R. Clemmensen (*Chair*), Ralph S. Spanswick.

Associate Professors: Linda Beamer, Marguerite Joyce, Joseph C. Otto, Doris Van Horn-Christopher.

Undergraduate Programs

Undergraduate programs leading to bachelor's degrees are offered in Business Administration, Business Education, Computer Information Systems, and Economics, minors in Basic Business, Business Education, and Economics. Several certificate programs are offered, also. Students are required to complete lower division courses prior to taking upper division courses.

Bachelor of Science Degree in Business Administration

A total of 192 units is required for the Bachelor of Science degree in Business Administration, of which 105-114 units are in the major. All degree candidates must complete 72 units in courses outside the School of Business and Economics.

Requirements for the Major (105-114 units)

All options except Accounting (78 units) require a common core of 82 units of lower and upper division courses in the School of Business and Economics and the Department of Mathematics and Computer Science. In addition, each student with upper division standing completes one of the following options:

1. Accounting
2. Administrative Management
3. Business Arts-Prelegal
4. Business Economics and Statistics
5. Entrepreneurship
6. Finance
7. Human Resources Management
8. International Business
9. Labor Relations
10. Marketing
11. Office Systems
12. Production and Operations Management
13. Real Estate
14. Retailing
15. Special Business
16. Transportation

Core Requirements (78 or 82 units)**Lower Division Required Courses (31 units):**

ACCT	200AB	Principles of Accounting	(4, 4)
CIS	294	Business Computer Systems	(4)
ECON	201,202	Principles of Economics I, II	(4, 4)
ECON	209	Applied Business and Economic Statistics I	(3)
FIN	205	Foundations of Business Law	(4)
MATH	242	Mathematics for Business and Economics Majors	(4)

****Upper Division Required Courses (51 units):**

#ACCT	300	Managerial Accounting	(4)
CIS	301	Management Information Systems	(4)
ECON	303	Money, Banking, and the Economy	(4)
ECON	309	Applied Business and Economic Statistics II	(3)
ECON	310	Economics of the Business Firm	(4)
ECON	391	Quantitative Methods in Business and Economics	(4)
FIN	303	Business Finance	(4)
MGMT	306	Production and Operations Management	(4)
MGMT	307	Management and Organizational Behavior	(4)
MGMT	308	Business Responsibilities in Society	(4)
MGMT	497	Integrated Decision Making in Business	(4)
MKT	304	Principles of Marketing	(4)
OSBE	301	Business Communications	(4)

** Accounting option requires 47 units # not required in Accounting option

Options (23-36 units)

*** Option 1: Accounting (36 units)**

ADVISEMENT: Department of Accounting.

This option prepares students for careers in either *public accounting*, serving clients professionally in the areas of financial accounting, cost accounting, auditing, taxes and systems; or *managerial accounting*, dealing with the functions of the controller in a business firm, or an institutional or governmental agency.

Required Courses (24 units):

ACCT 320ABC, 321,322,424A

Electives (select 12 units from following):

ACCT 420, 421AB, 422, 424B, 427, 428, 433
FIN 305

Note the following Accounting Program Standards:**Part I.**

To enroll in upper division accounting courses (except 320AB) undergraduate students must have:

1. Completed the following courses:

ACCT	200AB	Principles of Accounting
ACCT	320AB	Intermediate Accounting
CIS	294	Business Computer Systems
ECON	201,202	Principles of Economics I, II
ECON	209	Applied Business and Economic Statistics I
FIN	205	Foundations of Business Law
FIN	303	Business Finance
MATH	242	Mathematics for Business and Economics Majors
OSBE	301	Business Communications

2. Earned a minimum 2.4 grade point average in all courses attempted, including those accepted by transfer from other institutions and those attempted at Cal State L.A.

3. Followed procedures specified by the Department of Accounting in the quarter preceding enrollment in the first upper division accounting course (except 320AB).

Part II.

Students in the Accounting Option must earn a grade of C or higher in all accounting courses.

*** Option 2: Administrative Management (24 units)**

ADVISEMENT: Department of Management.

This option develops competence in administrative and supervisory techniques required of managers, supervisors, and comparable administrative officers in industry, finance, government, and labor.

Required Courses (16 units):

MGMT 460, 461,462, 479

Electives (8 units):

Select two adviser-approved courses from 400-level MGMT courses and FIN 434.

*** Option 3: Business Arts-Prelegal (24 units)**

ADVISEMENT: Department of Finance and Law.

This option enables students to meet the needs of firms desiring business graduates with less specialization and may be used by prelaw students or those who wish a broader preparation at the undergraduate level. It combines the basic business sequence with liberal arts.

Required Courses (8 units):

ECON 471 HIST 479

Electives (select 16 units with adviser approval):

*** Option 4: Business Economics and Statistics (24 units)**

ADVISEMENT: Department of Economics and Statistics.

This option teaches students the major quantitative analysis skills needed by business statisticians in rapidly expanding research departments of business firms and governmental agencies and by executive assistants in moderate-sized and large firms.

Required Courses (12 units):

ECON 403, 409, 410

Electives (select 12 units from following):

ACCT 322

CIS 482, 486

ECON 413, 414, 491

MGMT 467

MKT 446

* **Option 5: Entrepreneurship (24 units)**

ADVISEMENT: Department of Marketing.

This option prepares students to work for a small business, start their own business, purchase existing companies, or manage ongoing small-to-medium enterprises.

Required Courses (16 units):

ACCT 426

FIN 494

MGMT 468

MKT 443

Electives (8 units):

With adviser approval, select two upper division electives in business and economics.

* **Option 6: Finance (24 units)**

ADVISEMENT: Department of Finance and Law.

This option prepares students for positions in corporate financial management or investments, banks, and other financial institutions.

Required Courses (20 units):

FIN 305,* 332,403, 431,434

* FIN 480 required instead of 305 for students with credit for 8 or more quarter units of lower division business law.

Electives (select one 4-unit course with adviser approval):

* **Option 7: Human Resources Management (24 units)**

ADVISEMENT: Department of Management.

The option prepares students for careers in personnel management-industrial relations, in both the public and private sectors. Career paths include generalist, as well as specialist, positions in recruitment and selection, compensation and benefits, training and development, and labor relations and collective bargaining.

Required Courses (16 units):

MGMT 473, 474, 477

ECON 472 or PSY 448

Electives (select 8 units from following):

MGMT 469, 470, 471,475, 476

POLS 463, 464 PSY 442

* **Option 8: International Business (24 units)**

ADVISEMENT: Department of Marketing.

This option prepares students for careers in firms operating on a multinational basis; in import-export, international finance and banking, or international agencies; and the Commerce Option of the federal government Foreign Service Officer Examination.

Required Courses (16 units):

FIN 431
 MGMT 462
 MKT 358, 456
 Electives (select 8 units from following):
 MKT 455, 457, 458
 ECON 460 or 461 or 480

* **Option 9: Labor Relations (24 units)**

ADVISEMENT: Department of Economics and Statistics.

This option develops competence in labor relations required of managers, supervisors, conciliators, and similar officials in industry, finance, education, government, or labor unions.

Required Courses (16 units):

ECON 402, 420, 472

MGMT 473

Electives (select 8 units with adviser approval):

* **Option 10: Marketing (24 units)**

ADVISEMENT: Department of Marketing.

This option offers a choice between two fields of concentration *Marketing Management* and *Promotion*.

Marketing Management: Develops an understanding of marketing techniques and strategies used to formulate plans and policies to deal with marketing environmental problems and to integrate marketing with other functional areas of business.

Required Courses (12 units):

MKT 342, 442, 446

Electives (select 12 MKT units with adviser approval)

Promotion: Provides a concentration in marketing communications in preparation for careers in advertising, public relations, sales management, sales promotion, and direct response marketing

Required Courses (16 units):

MKT 340, 341, 440, 448

Electives (8 units):

Select *two* from following (or others with adviser approval):

MKT 342, 444, 445, 446

* **Option 11: Office Systems (23 units)**

ADVISEMENT: Department of Office Systems and Business Education.

This option prepares students for careers in an automated office systems environment, developing their competence in office management and supervision, advanced office systems design and implementation, word processing, and microcomputer applications.

Required Courses (23 units):

OSBE 213, 313, 401, 412, 420, 421

* **Option 12: Production and Operations Management (24 units)**

ADVISEMENT: Department of Management.

This option teaches operations management including operative planning and control, quality management, robotics management, and integrated manufacturing systems. Students are prepared for related assignments in manufacturing, non-manufacturing firms, and government.

Required Courses (16 units):

MGMT 460, 464, 480, 496

Electives (select 8 units from following):

MGMT 463, 465, 467

* **Option 13: Real Estate (24 units)**

ADVISEMENT: Department of Finance and Law.

This option prepares students for careers in real estate, including positions with brokerage and appraisal firms, lending institutions, and governmental agencies.

Required Courses (20 units):

FIN 338, 381, 438, 439, and 493 *Elective (4 units):*

Select *one* course with adviser approval.

* **Option 14: Retailing (24 units)**

ADVISEMENT.. Department of Marketing.

This option prepares students for positions in the retail industry, or to become successful entrepreneurs in their own retail businesses.

Required Courses (12 units):

MKT 342,344, 349

Electives (select 12 units with retail adviser approval)

FSCS 407

MKT 340, 345, 346, 442, 443, 448, 452

* **Option 15: Special Business (24 units)**

ADVISEMENT: Undergraduate Programs Office, Physical Science 106, (213) 343-2810.

This option provides opportunities for programs designed to meet individual interests not covered by the other options. Permission to take this option must be secured from the dean of the school.

Required Courses (24 units):

Courses in business, economics, and relevant fields, to be worked out in conference with the

school dean and appropriate faculty members, depending upon the unique and special objectives of the student.

* **Option 16: Transportation (24 units)**

ADVISEMENT: Department of Marketing.

This option deals with the transportation and physical distribution alternatives and systems available in the business world. Also treated are management and government regulation of transportation carriers.

Required Courses (12 units): MKT 350, 351,451

Electives (12 units):

Select *three* marketing courses with transportation adviser approval.

Bachelor of Science Degree in Computer Information Systems

ADVISEMENT: Department of Information Systems

A total of 196 units is required for the Bachelor of Science degree in Computer Information Systems, of which 113-114 units are in the major. All degree candidates must complete 72 units in courses outside the School of Business and Economics.

Requirements for the Major(113-114 units)

Both options require a common core of 90 units of lower and upper division courses in the School of Business and Economics and the Department of Mathematics and Computer Science. In addition, each student with upper division standing selects an option in **Business Systems** or **Information Technology**.

Core Requirements (90 units)

Lower Division Required Courses (35 units):

ACCT	200AB	Principles of Accounting	(4, 4)
CIS	283	Introduction to Application Programming	(4)
CIS	294	Business Computer Systems	(4)
ECON	201,202	Principles of Economics I, II	(4, 4)
ECON	209	Applied Business and Economic Statistics I	(3)
FIN	205	Foundations of Business Law	(4)
MATH	242	Mathematics for Business and Economics Majors	(4)

Upper Division Required Courses (55 units):

ACCT	300	Managerial Accounting	(4)
CIS	301	Management Information Systems	(4)
CIS	310	Software and Hardware Concepts	(4)
CIS	442	Data Base Design	(4)
CIS	482	Systems Analysis Methods	(4)
CIS	484	Communications Systems	(4)
ECON	309	Applied Business and Economic Statistics II	(3)
FIN	303	Business Finance	(4)

MGMT 306	Production and Operations Management	(4)
MGMT 307	Management and Organizational Behavior	(4)
MGMT 308	Business Responsibilities in Society	(4)
MGMT 497	Integrated Decision Making in Business	(4)
MKT 304	Principles of Marketing	(4)
OSBE 301	Business Communications	(4)

Options (23-24 units)*** Option 1: Business Systems (23-24 units)**

This option prepares students for careers as information systems professionals in end-user departments (such as accounting, marketing, finance), in which they develop and maintain departmental information systems, or to work as business analysts and consultants or in information centers. Students who select this option are encouraged to pursue a second major in Business Administration.

Required Course (4 units):

CIS 487	Decision Support Systems	(4)
---------	--------------------------	-----

Computer Information Systems Electives

(select 8 units from following):

CIS 335, 407, 450, 454, 486

OSBE 412

Business and Economics Electives (11-12 units):

Select 11-12 units of upper division courses from ~~one~~ department (except Information Systems) within the School of Business and Economics, with adviser approval.

*** Option 2: Information Technology (24 units)**

This option provides students with the specialized knowledge needed for professional employment in a centralized management information systems department in a large enterprise.

Required Courses (8 units):

CIS 383	Advanced Application Programming	(4)
CIS 483	Advanced Information Systems Design	(4)

Electives (select 16 units from following):

CIS 227, 228, 316, 317, 450, 451, 452, 454, 486

CS 284

Minor in Basic Business

ADVISEMENT: Undergraduate Programs Office, Salazar Hall C256B, (213) 343-2810.

The purpose of the minor in Basic Business is to provide a structured program for students majoring in academic degree programs outside the School of Business and Economics but wishing to augment their major with basic knowledge in business and economics.

For students who intend to pursue further study in business at advanced undergraduate or graduate levels, MATH 242 is strongly recommended. The 39 units required for the minor are:

Requirements for the Minor (39 units)**Lower Division Required Courses (27 units):**

ACCT 200AB	Principles of Accounting	(4, 4)
CIS 294	Business Computer Systems	(4)
ECON 201, 202	Principles of Economics I, II	(4, 4)
ECON 209	Applied Business and Economic Statistics I	(3)
FIN 205	Foundations of Business Law	(4)

Upper Division Required Courses (12 units):

FIN 303	Business Finance	(4)
MGMT 307	Management and Organizational Behavior	(4)
MKT 304	Principles of Marketing	(4)

Certificate Program in Accounting

The Department of Accounting offers a credit certificate in Accounting, designed to prepare individuals who hold or are pursuing a bachelors degree in a field other than accounting for entry into the accounting profession.

Prerequisites (31 units):

- * Admission to the university with a bachelor's degree in a field other than accounting or as an undergraduate majoring in a field other than accounting;
- * Completion of the lower division business administration core subjects with a **minimum** 2.5 grade point average in the following courses:

ACCT	200AB	Principles of Accounting	(4, 4)
CIS	294	Business Computer Systems	(4)
ECON	201,202	Principles of Economics I, II	(4, 4)
ECON	209	Applied Business and Economic Statistics I	(3)
FIN	205	Foundations of Business Law	(4)
MATH	242	Mathematics for Business and Economics Majors	(4)

Submission of transcripts or official grade reports for the above courses to the Department of Accounting for evaluation.

A minimum of 47 units with a minimum 2.5 grade point average is required for completion of the program. Refer to the *Undergraduate Study chapter* of this catalog for general regulations governing all certificate programs.

Requirements for the Certificate (47-48 units)**Required Courses (32 units):**

ACCT	320ABC	Intermediate Accounting I, II, III (4, 4, 4)	
ACCT	321	Tax Accounting I	(4)
ACCT	322	Cost Accounting	(4)
ACCT	424A	Auditing I	(4)
FIN	303	Business Finance	(4)
OSBE	301	Business Communications	(4)

Electives (select 15-16 units from following):

ACCT 420, 421AB, 422, 424B, 427,428, 433

CIS 301

ECON 309

FIN 305

Certificate Program in Advanced Information Systems

The Department of Information Systems offers a credit certificate in Advanced information Systems, designed to provide an academic base for information systems professionals in such specialties as systems analysis and design, data administration, and distributed data processing as well as information systems management. The emphasis is on the study of advanced techniques and software productivity tools. This certificate is suitable for students who hold or expect to earn an undergraduate option other than Information Systems; graduate students in business administration; or information systems professionals who hold a bachelor's degree in any field.

The program contains a minimum of 28 units in CIS and related courses: 16 units in the core and at least 12 units of electives. Refer to the *Undergraduate Study chapter* of this catalog for general regulations governing all certificate programs.

Prerequisites:

- * A bachelor's degree in Business Administration; or
- * Senior standing in a Bachelor of Science degree program in Business Administration or Computer Science; or

- * Classified graduate standing in a master's degree program in the School of Business and Economics; or
- * A bachelor's degree in another field and at least two years of experience in business management or as an information systems professional; or
- * CIS383, Advanced COBOL, or equivalent programming experience.

Requirements for the Certificate (28 units)

Required Core (16 units):

CIS	301	Management Information Systems	(4)
CIS	442	Data Base Design	(4)
CIS	482	Systems Analysis Methods	(4)
CIS	484	Communications Systems	(4)

Electives (select at least 12 units from following):

CIS 450, 451,452, 486, 487, 527, 528, 543, 581,584, 598
CS 412, 486, 488

Certificate Program in Computer Programming

The Department of Information Systems offers a credit certificate in Computer Programming, designed to prepare individuals for entry level computer programming positions or other positions that require sophisticated knowledge of computer technology. The program consists of 28 units including a 20-unit core and 8 units of electives chosen from CIS and CS courses. Refer to the *Undergraduate Study* chapter of this catalog for general regulations governing all certificate programs.

Requirements for the Certificate (28 units)

Required courses (20 units):

CIS/SOCS280	The Computer World (4) or		
CIS	294	Business Computer Systems	(4)
CIS	283	Introduction to Application Programming	(4)
CIS	383	Advanced Application Programming	(4)
CIS	482	Systems Analysis Methods	(4)
CIS	484	Communications Systems	(4)

Electives (select 8 units from following)

CIS 227, 228, 301,316, 335, 442, 450, 451,452
CS 190, 202, 203, 290, 291,330, 432

Other courses may be selected with Information Systems Department approval.

Certificate Program in Commercial Transportation

The Department of Marketing, in cooperation with the Office of Continuing Education, offers a credit certificate program in Commercial Transportation, designed for individuals intending to pursue a career or enhance their advancement potential in the field of industrial traffic and transportation or carrier operation.

A total of 28 units is required. Refer to the *Undergraduate Study* chapter of this catalog for general regulations governing all certificate programs.

Requirements for the Certificate (28 units)

Students select *seven* courses, with approval of a transportation adviser. Five courses must be about transportation (the adviser may allow substitution of one or two GEOG or TECH courses when appropriate); the other two must be upper division courses in marketing or elsewhere within the School of Business and Economics.

Certificate Program in Entrepreneurship

The Department of Marketing offers a credit certificate in Entrepreneurship, designed to prepare students and business people for careers in starting, managing, or working in small businesses.

The program includes instruction about how to take a product or service from the idea stage through the introduction and growth stages, and how to successfully manage the business. A focus may be taken in *retailing, marketing of services and products, consulting, accounting, finance, or entrepreneurship*.

A total of 24 units is required. Refer to the *Undergraduate Study* chapter of this catalog for general regulations governing all certificate programs.

Requirements for the Certificate (24 units)

Required courses (16 units):

ACCT 426,
FIN 494,
MGMT 468,
MKT 443

Electives (8 units):

Select *two* upper division School of Business and Economics electives with adviser approval.
Certificate Program in International Business

The Department of Marketing offers a certificate in International Business, designed to prepare students for careers in firms operating on a multinational basis; for careers in import-export, international finance and banking, and international agencies; and for the Commerce Option of the Foreign Service Officer examination with the federal government. It also provides training for managers of internationally-oriented companies in the Los Angeles area.

A total of 24 units is required. Refer to the *Undergraduate Study* chapter of this catalog for general regulations governing all certificate programs.

Requirements for the Certificate (24 units)

Required courses (16 units):

FIN 431
MGMT 462
MKT 358, 456

Electives (8 units):

Select *two* upper division School of Business and Economics electives with adviser approval.

Certificate Program in Marketing

The Department of Marketing offers a credit certificate in *Marketing* designed to prepare students for professional careers in marketing in both profit and nonprofit organizations. A total of 24 units is required. Refer to the *Undergraduate Study* chapter of this catalog for general regulations governing all certificate programs.

Requirements for the Certificate (24 units)

Required courses (12 units):

MKT 304; 341; 342 or 446

Electives (12 units):

Select Marketing Department electives with adviser approval.

Certificate Program in Retail Professional Development

The Department of Marketing offers a credit certificate in *Retail Professional Development* designed to provide the skills required for executive positions in the retail industry and to prepare individuals to become successful entrepreneurs in their own retail business. A total of 24 units is required. Refer to the *Undergraduate Study* chapter of this catalog for general regulations governing all certificate programs.

Requirements for the Certificate (24 units)

Required courses (16 units):

MKT 304, 342, 344, 349

Electives (select 8 units from following):

FSCS 407

MKT 340, 345, 346, 442, 443, 448, 452

Bachelor of Science Degree in Business Education

ADVISEMENT: Department of Office Systems and Business Education.

The Business Education program is designed for students who plan to become business teachers and who may qualify for a California teaching credential. Students should consult advisers in both the School of Business and Economics and the Education.

Requirements for the Major (78-79 units)

Students electing the major in Business Education must demonstrate skills in microcomputer keyboard usage equivalent to those required for completion of OSBE 104.

Required for the Bachelor of Science degree are 195-196 units, of which 78-79 units are in the major.

Lower Division Required Courses (30 units):

ACCT 200AB	Principles of Accounting	(4, 4)
CIS 294	Business Computer Systems	(4)
ECON 201,202	Principles of Economics I, II	(4, 4)
ECON 209	Applied Business and Economic Statistics I	(3)
FIN 205	Foundations of Business Law	(4)
OSBE 213	Word Processing Applications	(3)

Upper Division Required Courses (48-49 units):

OSBE 301	Business Communications	(4)
OSBE 313	Office Organization and Management	(4)
OSBE 410AB	Problems of Business Education I, II	(3, 3)
OSBE 412	Advanced Office Systems	(4)
OSBE 420	Office Information Processing Software Applications	(4)
OSBE 421	Human Resources in the Automated Office	(4)
ECON 309	Applied Business and Economic Statistics II	(3)
FIN 303	Business Finance	(4)
MGMT 308	Business Responsibilities in Society	(4)
MGMT 497	Integrated Decision-Making in Business	(4)
MKT 304	Principles of Marketing	(4)

Select *one* from following (3-4 units):

OSBE 401,422

EDSE 421A, 421G

In addition to major requirements, students preparing for the Single Subject credential in Business Education are required to complete EDSE 421 K (Methods of Teaching Keyboarding and Office Systems) as a prerequisite to directed teaching. (This course is required for the credential, not the degree.)

Minor in Business Education

Students electing the minor in Business Education must demonstrate skills in microcomputer keyboard usage equivalent to those required for completion of OSBE 104.

Requirements for the Minor (36-37 units)

Lower Division Required Courses (15 units):

ACCT 200AB	Principles of Accounting	(4, 4)
CIS 294	Business Computer Systems	(4)
OSBE 213	Word Processing Applications	(3)

Upper Division Required Courses (18 units):

OSBE 301	Business Communications	(4)
OSBE 313	Office Organization and Management	(4)
OSBE 410AB	Problems of Business Education I, II	(3, 3)
OSBE 420	Office Information Processing Software Applications	(4)

Electives (select 3-4 units from following):

OSBE 401,422
EEDSE 421A, 421G

The Credential Program

The Bachelor of Science degree in Business Education has been approved by the Commission on Teacher Credentialing for examination waiver for the Single Subject credential in Business Education. Please consult advisers in the Department of Office Systems and Business Education and the School of Education.

Certificate Program in Office Systems

The Department of Office Systems and Business Education offers a credit certificate in Office Systems, designed for teachers and trainers in education and industry who are responsible for teaching students and employees widely used microcomputer business applications. Students enrolled in this certificate program will have an opportunity to study the latest advancements in office systems. Included in the certificate is the opportunity to learn integrated and stand-alone software packages in word processing, electronic spreadsheets, data base management systems, telecommunications, and graphics. Programs widely used in the business community-such as Lotus 1-2-3, Microsoft Works for Windows, WordPerfect, and dbase III Plus-are covered.

The program contains a total of 26-27 quarter units of OSBE and related courses: 19 units in the core and 7-8 units of electives. Refer to the *Undergraduate Study* chapter of this catalog for general regulations governing all certificate programs. Requirements for the Certificate (26-27 units)

Required Courses (19 units):

OSBE 313, 412,420, 421,422

Electives (select 7--8 units from following):

CIS 484
OSBE 213, 301,401

Certificate Program in Teaching Microcomputer Business Applications

The Department of Office Systems and Business Education offers a credit certificate in *Teaching Microcomputer Business Applications*. This certificate is designed for teachers and trainers in education and industry who are responsible for teaching students and employees widely used microcomputer business applications. Included in the program is the opportunity to learn integrated and stand-alone software packages in word processing, electronic spreadsheets, data base management systems, telecommunications, and graphics. Programs widely used in the business community-such as Lotus 1-2-3, Microsoft Works for Windows, WordPerfect, and dbase III Plus-are covered. A total of 24-26 units is required. Refer to the *Undergraduate Study* chapter of this catalog for general regulations governing all certificate programs.

Requirements for the Certificate (24-26 units)

Required courses (18 units):

CIS 294
OSBE 213, 412, 420, 422

Electives (select 6-8 units from following):

ACCT 200A
CIS 484
EDSE 421 A, 421 K

MGMT 469
OSBE 421

Bachelor of Arts Degree in Economics

Advisement: Department of Economics and Statistics.

The Bachelor of Arts degree with a major in Economics prepares students to qualify for positions in business and government. Specific areas include finance, labor, transportation, international trade, banking, and regulatory agencies. A major in Economics also provides foundations for teaching at the college or high school level, and for entrance into graduate school or law school.

Two options are offered: the first emphasizes applied and analytical economics, and the second, social and behavioral sciences.

Students pursuing either the major or minor are urged to complete lower division courses before taking upper division courses.

Requirements for the Major(66-78 units)

A total of 66-78 units is required for the major, depending on the option selected. All students complete a 26-unit common core of lower and upper division courses in economics and business plus one of the options to complete remaining degree requirements.

Core Requirements(26 units)

Lower Division Required Courses (11 units):

ECON 201,202	Principles of Economics I, II	(4, 4)
ECON 209	Applied Business and Economic Statistics I	(3)

Upper Division Required Courses (15 units):

ECON 303	Money, Banking, and the Economy	(4)
ECON 309	Applied Business and Economic Statistics II	(3)
ECON 310	Economics of the Business Firm	(4)
OSBE 301	Business Communications (4) or	
ENGL 306	Technical Writing	(4)

Option Requirements

Students select one of the following two options, comprising 40-52 units, to fulfill requirements for the major.

* **Option 1: Applied and Analytical Economics (44-52 units)**

This option is recommended for students who intend to obtain graduate training in economics. Students intending to enter graduate programs should take MAT206-207 sequence.

Lower Division Required Courses (12-20 units):

ACCT 200AB	Principles of Accounting	(4, 4) or
ACCT 202	Survey of Accounting	(4)
CIS 294	Business Computer Systems	(4)
MATH 242	Mathematics for Business and Economics Majors	(4) or
MATH 206 and 207	Calculus I, II	(4, 4)

Upper Division Required Courses (16 units):

ECON 403	Macroeconomics	(4)
ECON 410	Microeconomics	(4)
ECON 413	Mathematical Economics	(4)
ECON 412	Development of Economic Thought	(4) or
ECON 414	Econometrics	(4)

Electives (16 units):

Select upper division courses in economics, other courses in the School of Business and Economics, mathematics, and/or the public administration area of political science, with adviser approval.

* **Option 2: Social and Behavioral Sciences (40 units)**

This option serves students with interdisciplinary interests in economics and other areas of social and behavioral sciences: anthropology, geography, history, political science, psychology, and sociology; and American, Chicano, Latin American, PanAfrican, and urban studies.

Lower Division Required Courses (8 units):

ACCT 202	Survey of Accounting	(4)
MATH 242	Mathematics for Business and Economics Majors	(4)

Upper Division Required Course (4 units):

Select *one* from following:

ECON 403, 410, or 412

Electives (28 units):

Select 16-20 units in economics, other courses in the School of Business and Economics, and mathematics, and 8-12 units in social or behavioral sciences other than economics, with adviser approval.

Minor in Economics

A minor in Economics is available for students majoring in other fields.

A total of 30 units is required. Students majoring in fields that require the same courses as those that fulfill requirements for the minor in Economics will need to take only those courses in the minor program that are not incorporated into their major. Requirements for the Minor (30 units)

Lower Division Required Courses (11 units):

ECON 201,202	Principles of Economics I, II	(4, 4)
ECON 209	Applied Business and Economic Statistics I	(3)

Upper Division Required Course (4 units):

ECON 303 or 310

Electives (15 units):

Select upper division ECON courses in consultation with major and minor program advisers.

COURSES IN BUSINESS AND ECONOMICS

Courses in Business and *Economics-Interdepartmental* (BUS)

Lower Division Courses

154 Special Topics in Business (1-4)

Current topics of special interest in business as announced in *Schedule of Classes*. May be repeated for credit as subject matter changes.

Upper Division Courses

Upper division standing is prerequisite to enrollment in 300- and 400-level BUS courses.

395 Community Service in Business (1-3)

Prerequisites: Upper division standing in business; approval of school interdisciplinary faculty coordinator in consultation with EPIC director, and acceptance by an appropriate community agency or director of a campus-approved business assistance or development project. Participation in work of a community agency or activities in business assistance or development projects, utilizing professional and/or vocational skills in service to community. May be repeated to maximum of 6 units. Graded *CR/NC*.

454 Special Topics in Business (1-4)

Prerequisite: Varies with topic; see *Schedule of Classes* for specific prerequisites. In-depth presentation and analysis of topics significant to contemporary business world; lectures, discussions, speakers, and research projects. May be repeated for credit as subject matter changes.

499 Undergraduate Directed Study (1-4)

Prerequisite: Senior standing and instructor consent to act as sponsor. Independent work and preparation of oral and written reports. Project selected in conference with sponsor before registration; progress meetings held regularly. May be repeated for credit.

Courses in Accounting (ACCT)

Lower Division Courses

200AB Principles of Accounting (4, 4)

Measurement, valuation, and accumulation of accounting data; financial statement analysis and interpretation; limited coverage of accounting data use in decision making. Credit allowed for only one of ACCT 200AB and 202.200A = *CAN BUS 2*

202 Survey of Accounting (4)

Fundamentals of accounting theory and practice; how accounting serves the individual, the business entity, and the broader disciplines of law, government, and economics. Credit allowed for only one of ACCT 200AB and 202.

Upper Division Courses

Upper division standing is prerequisite to enrollment in 300- and 400-level ACCT courses.

300 Managerial Accounting (4)

Prerequisite: ACCT 200B, 202, or 260R. Use of accounting data for budgeting, cost control, pricing, evaluation of performance, and general decision making.

320A Intermediate Accounting I (4)

Prerequisite: ACCT 200AB with minimum C grades. Accounting theory and practice relating to problems of asset valuation and classification in accounts and statements.

320B Intermediate Accounting II (4)

Prerequisites: ACCT 320A with minimum C grade, FIN 303. Valuation and classification of liabilities and stockholders' equity; study of selected contemporary accounting issues.

320C Intermediate Accounting III (4)

Prerequisite: ACCT 320B. Examination of complex issues of accounting and financial disclosures. Pensions, leases, EPS, and income tax reporting covered in detail.

321 Tax Accounting I (4)

Prerequisite: ACCT 320B. Statutes, regulations, administrative rulings, and court decisions relating to federal and California income taxes of individuals.

322 Cost Accounting (4)

Prerequisite: ACCT 320B. Nature and control of cost; costing methods; job order and standard costs, joint and by-product costs, direct vs. full costing; cost allocation, cost-volume profit analysis, analytical cost reports.

420 Advanced Accounting (4)

Prerequisite: ACCT 320C. Problems associated with preparation of consolidated financial statements, foreign currency translation, partnerships, and governmental fund accounting.

421 A Tax Accounting II (4)

Prerequisite: ACCT 321. Statutes, regulations, administrative rulings, and court decisions relating to federal and California income taxes of partnerships and corporations; procedural problems, tax management and planning; tax shelters.

421 B Taxation of Estates, Trusts, and Gifts (4)

Prerequisite: ACCT 321. Statutory, regulatory, and case materials applicable to federal estate and gift taxes; California inheritance and gift taxes; income taxation of estates and trusts; preparation of returns.

422 Corporate Management Accounting Practice (4)

Prerequisite: ACCT 300 or 322. Contemporary management accounting practice employed by today's corporate America; both manufacturing and service industries covered.

423 Financial Accounting Theory (4)

Prerequisite: ACCT 420 and minimum B (3.0) grade point average in ACCT courses. Evolution of financial accounting theory and practice; survey of contemporary accounting field, with emphasis on latest developments and issues.

424A Auditing I (4)

Prerequisite: ACCT 320C. Auditing concepts and practices involved in financial and operational auditing, with emphasis on auditing of financial statements by the independent Certified Public Accountant.

424B Auditing II (4)

Prerequisite: ACCT 424A. Current problems in auditing, with emphasis on application of statistical sampling to auditing and audit of computer-based accounting records.

426 Accounting and Reporting Requirements of Small Business (4)

Prerequisite: ACCT 300. Theory, methodology, and practice of establishing, accounting for, and reporting in the small business. Emphasis on financing and establishing basic accounting systems and reporting requirements of creditors and taxing authorities.

427 Governmental and Institutional Accounting (4)

Prerequisite: ACCT 320B. Principles and problems of fund accounting for governments and nonprofit institutions. Budgets, revenues, expenditures, tax levies, appropriations, general fund, special funds, and financial reports. Separate treatment of local, state, and federal government agencies.

428 Internal Auditing (4)

Prerequisite: ACCT 424A. Establishment of an internal audit organization; staff selection and development; planning and controlling the audit; development of facts and supporting evidence; sampling plans and procedures; computer audits; preparation of oral and written reports.

433 Financial Planning and Control (4)

Prerequisites: FIN 303; ACCT 300 or 322. Principles and techniques involved in the formulation, enactment, and administration of the budget; relation of budget practices to scientific management in business; budget reports for analysis and control.

454 Special topics in Accounting (1-4)

Prerequisite: Varies with topic; see *Schedule of Classes* for specific prerequisite. In-depth presentation and analyses of topics significant to contemporary business world; lectures, discussions, speakers, and research projects.

Courses in Computer Information Systems (CIS) Lower Division Courses

227 PL/1 Programming (4)

Prerequisite: CIS 294 or CS 290. Language constructs and syntax; data types and storage control features; programming exercises.

228 Business Pascal/Ada (4)

Prerequisite: CIS 294 Programming in Pascal and Ada. Pascal portion covers structure of the language and hands-on programming assignments; Ada portion includes an introduction to Ada programming language.

280 The Computer World (4)

(also listed as SOCS 280) Basic information about computers and data base systems; terminology, technology, practical application, and social implications.

283 Introduction to Application Programming (4)

Prerequisite: CIS 294 or CS 290. Introduction to business application programming, primarily in COBOL, including data representation, input-output, calculations, report setup, sorting, control breaks, update, and structured programming concepts/techniques.

294 Business Computer Systems (4)

Computer system fundamentals; computer hardware and software concepts; programming in BASIC; introduction to microcomputer software.

Upper Division Courses

Upper division standing is prerequisite to enrollment in 300- and 400-level CIS courses.

301 Management Information Systems (4)

Prerequisites: CIS 294, ACCT 200AB. Organizational context of computer-based information systems; common business applications; information architecture; user role in systems development.

310 Software and Hardware Concepts (4)

Prerequisite: CIS 283. Technical topics related to computer systems including hardware architecture, operating systems, data communications, program translators, file management, data representation, and machine language.

316 Job Control Language (4)

Prerequisite: CIS 283. The IBM operating system control language-Job Control Language (JCL). Command language constructs, utility programs, linkage editor, and loader.

317 IBM Assembly Language (4)

Prerequisites: CIS 310, one programming course (COBOL, FORTRAN, Pascal, etc.). Basic input/output concepts; selected assembly language instructions for IBM mainframe computers; data set manipulation; system supervisor services; macros.

335 Advanced BASIC (4)

Prerequisite: CIS 294 or CS 290. Structured programming in BASIC. Sort, search techniques, built-in and user-defined functions: string manipulation, sequential direct and indexed-sequential file processing; business graphics; programming simulation and business examples.

383 Advanced Application Programming (4)

Prerequisite: CIS 283. Programming of complex, integrated business application systems; advanced language features such as table handling and subroutines; job control concepts.

407 Microcomputer Applications Development (4)

Prerequisite: CIS 301. Business applications development training using state-of-the-art microcomputer software such as Mathematica, Lotus 1-2-3, dBaseIV, Framework, and Procomm;

emphasis on developing information systems in accounting, finance, production, management, and marketing.

442 Data Base Design (4)

Prerequisites: CIS 283, 301. The role of data base design in system development; entity-relationship analysis; various constraints, including logical and physical system constraints; security considerations, role of system user; data base design examples.

450 Advanced Data Base Design (4)

Prerequisites: CIS 383, 442, 482. Role of the data base administrator; data modeling; implementing data base definition, processing, and recovery.

451 Data Base Design II (4)

Prerequisite: CIS 442. Mainframe data base analysis/programming; relational model and data definition and manipulation using IBM DBII and Structured Query Language (SQL); systems applications architecture contests; physical data structures and interface with COBOUCICS.

452 Customer Information Control System (4)

Prerequisite: CIS 383. Introduction to CICSNS command level with ANS COBOL including program concepts, transactions, tasks, creating maps, terminal input/output commands, and file maintenance.

454 Special Topics in Business Information Systems (1-4)

Prerequisite: Varies with topic; see *Schedule of Classes* for specific prerequisite. In-depth presentation and analysis of topics significant to contemporary business world; lectures, discussions, speakers, and research projects.

482 Systems Analysis Methods (4)

Prerequisite: CIS 283. Overview of systems development life cycle; emphasis on planning systems analysis and design activities; techniques and tools of system documentation and logical system specification; system development projects.

483 Advanced Information Systems Development (4)

Prerequisites: CIS 442, 482. Analysis, design, and specification of an information system using automated productivity tools and advanced systems development methodologies.

484 Communications Systems (4)

Prerequisite: CIS 294. Business data communications and local area network topics including data communications theory, communication hardware and software, microcomputers in communications, LANs, on-line services, electronic mail, and WANs.

486 Managing Information Systems Support (4)

Prerequisites: CIS 301, 482, MGMT 307. Effective techniques in managing data processing operations and information systems development.

487 Decision Support Systems (4)

Prerequisites: CIS 294, FIN 303, ECON 3910r MGMT 306. Computer-based decision analysis techniques and software packages; use of spreadsheet facilities, expert systems, optimization, and simulation techniques.

Courses in Economics (ECON)

Lower Division Courses

150 Economics for the Citizen (4)

Analysis of contemporary American economic problems. Topics may include inflation, unemployment, costs and benefits of control of crime, and pollution. Not to be taken for credit by students with majors in the School of Business and Economics.

201 Principles of Economics I: Microeconomics (4)

Introduction to basic concepts and tools of aggregate economic analysis; prices and outputs, marketing structures, wages and profits; international trade and effects of tariffs. CAN ECON 4

202 Principles of Economics II: Macroeconomica (4)

Prerequisite: ECON 201. Introduction to concepts and tools of economic analysis; inflation, unemployment, balance of payments, national income; determinants of the level of economic activity; money and banking; the role of government. *CAN ECON 2*

209 Applied Business and Economic Statistics I (3)

Prerequisite: MATH 0910r satisfactory score on mathematics placement examination. Elementary business and economics statistics with computer applications; descriptive statistics, frequency distribution, probability, sampling distribution, estimation, and significance tests. Meets 5 hours weekly.

Upper Division Courses

Upper division status is prerequisite to enrollment in 300- and 400-level ECON courses.

300 Economics for Engineers (4)

(also listed as ENGR 300) Basic economic concepts, relationships between economic and engineering problems, role of interest and capital in cost minimization, analysis of financial statements, original and alternative investments, capital depreciation, and replacement problems.

303 Money, Banking, and the Economy (4)

Prerequisite: ECON 202. Nature and flow of money and credit; influence on prices, production, and employment. The Federal Reserve and banking systems; national income, and international monetary relations.

309 Applied Business and Economics Statistics II (3)

Prerequisites: ECON 209, MATH 242. Linear statistical models and nonparametric methods emphasizing applications in business and economics; linear regression and correlation, analysis of variance, index numbers and time series analysis, analysis of enumerative data, nonparametric statistics. Meets 5 hours weekly.

310 Economics of the Business Firm (4)

Prerequisites: ECON 202, MATH 242. Operation of a price system in a free enterprise economy; special emphasis on economic factors governing and influencing managerial decisions.

350 Economics of Poverty in the U.S. (4)

Prerequisite: ECON 150, 201, or 202. Concept and measurement of poverty; analysis of both economic causes and effects of poverty; policy implications and remedies.

390 Current Economic Problems (4)

Prerequisite: ECON 202. Analysis of significant problems of the day; role of government, incentives, groups with large market power, inflation, national debt, maintaining aggregate demand, poverty, balance of payments, and economic growth.

391 Quantitative Methods in Business and Economics (4)

Prerequisite: ECON 309. Introduction to optimization techniques used in business administration; elements of quantitative decision theory applied to business problems. Annuities with special application to cost of capital investment.

402 Labor Economics (4)

Prerequisite: ECON 202. Use of labor resources in economic system; employment, wage rates, development of unions and collective bargaining; labor legislation.

403 Macroeconomics (4)

Prerequisites: MATH 242 or 206-207; ECON 303. Macroeconomic theory; determination of national income, theories of aggregate consumption, investment, unemployment, the price level; national income and product accounts; theory of growth.

405 Economics of Public Utilities and Regulation (4)

Prerequisite: ECON 310. Principles and techniques of government regulation of prices and product quality of privately held firms; problems of growth, pricing, demand, cost behavior, and financing of regulated industries.

409 Applied Business and Economic Statistics III (4)

Prerequisite: ECON 309. Additional techniques of inference statistics; theory and use of estimation and testing of hypothesis procedures for variances, multivariate regression and correlation analysis, analysis of variance, Chi-Square. Innovations in time series analysis.

410 Microeconomics (4)

Prerequisite: ECON 310. Intermediate microeconomic theory; intermediate economic analysis and evaluation of market system of resource allocation and income distribution.

412 Development of Economic Thought (4)

Prerequisite: ECON 202. Survey of intellectual origins and evolution of modern economic thought.

413 Mathematical Economics (4)

Prerequisites: ECON 303, 310. Introduction to use of mathematics in dealing with economic problems. Emphasis on optimization under constraints, using tools of differential and integral calculus, matrix algebra, and linear and nonlinear programming.

414 Econometrics (4)

Prerequisites: ECON 309, 413. Use of statistics to measure economic relationships, test economic theories, and prepare forecasts. Emphasis on advanced regression techniques and data analysis; use of computer software.

415 Applied Economic and Business Forecasting (4)

Prerequisite: ECON 309. Forecasting methods using univariate Box-Jenkins, ARIMA, transfer functions, intervention analysis, single equation models, vector autoregressive models; forecast evaluations; emphasis on applications that use state-of-the-art computer software.

420 Labor Legislation (4)

Federal and state labor laws and policies. Legislation protecting employees; regulation of labor management relations; social security. Contemporary legal issues and problems.

426 International Political Economy (4)

(also listed as POLS 426) Prerequisite: Four units each of ECON and POLS. Examination of interaction of politics and economics in the international arena.

433 Public Finance (4)

Prerequisites: ECON 202; 303 recommended. Economic role of government. Principles of government taxation, borrowing, spending; their impact on households, enterprises, and the national economy.

435 Employment, Inflation, and Growth (4)

Prerequisite: ECON 303. Causes of inflation, slow economic growth, and unemployment in the national economy. Policies and tools for anticipating and correcting these problems.

440 Urban and Regional Economics (4)

Prerequisite: ECON 201. Introduction to role of economic analysis in dealing with urban and regional problems; growth, land use, housing, transportation, and income distribution. Emphasis on role of economic models in policy making.

454 Special Topics in Economics and Statistics (1-4)

Prerequisite: Varies with topic; see *Schedule of Classes* for specific prerequisite. In-depth presentation and analysis of topics significant to contemporary business world; lectures, discussions, speakers, and research projects. May be repeated as subject matter changes.

460 Economic Growth of Underdeveloped Areas (4)

Prerequisite: ECON 150 or 201 or 202. Overview of economic factors that influence development of today's low income countries. Theories of development; problems with labor, capital, technology, and entrepreneurship; role of trade and international finance; government policy.

461 Principles of International Economics (4)

Prerequisites: ECON 202. Economic analysis of how and why commodities are traded among nations; tariffs and quotas; common market and other international institutions.

462 International Monetary Economics (4)

Prerequisite: ECON 202. International banking and financial markets, foreign exchange markets, economic adjustment mechanisms for balance of payments disequilibria, policies for internal and external balance, and the international monetary system.

471 American Economic History (4)

Prerequisite: ECON 150 or 2010r 202. Examination of sources and patterns of American economic development with emphasis on analysis of contemporary economic problems and policies in their historical setting.

472 Labor Relations and Collective Bargaining (4)

Prerequisite: ECON 202. Recommended corequisite: ECON 402. Relations between employers and employees as the latter are represented by organized labor. Collective bargaining as it relates to recognition, wages, hours, working conditions, grievance procedure, seniority, and health and safety.

480 Comparative Economic Systems (4)

Prerequisite: ECON 150 or 2010r 202. Comparison of economic systems including goals, degree of centralization, and underlying ideology. Economies of various countries examined, including Soviet Union, Mainland China, U.S., and selected Third World nations.

490 Economic Issues and Policies (4)

Prerequisites: ECON 202; 303 or 390. Priorities, goals and economic issues; laissez-faire capitalism versus "welfare-state" capitalism, or the conservative-liberal argument; responsibility of groups with large market power, current economic issues.

491 Sampling Theory and Techniques in Research (4)

Prerequisite: ECON 309. Techniques for conducting quantitative research in business, economics and related fields through sampling; theory of sampling designs and methodology in framework of complete process for conducting a study.

499 Undergraduate Directed Study (1-4)

Prerequisites: Economics major, senior standing, and consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare oral and written reports. Project to be selected in conference with sponsor before registration; progress meetings held regularly. May be repeated for credit.

courses in Finance (FIN)**Lower Division Courses****203 Law for the Citizen (4)**

Introduction to aspects of law affecting personal life. Legal system, crimes, torts, contracts, vehicle ownership, home ownership, marriage, divorce, consumer law, employment, checks and promissory notes, and business organizations. Credit allowed for only ~~one~~ of FIN 203 and 205.

205 Foundations of Business Law (4)

Prerequisite: Sophomore standing. Development and functions of common law, mercantile law, and the courts. Law contracts, agency, and sales. Credit allowed for only ~~one~~ of FIN 203 and 205. CAN BUS 8

Upper Division Courses

Upper division standing is prerequisite to enrollment in 300- and 400-level FIN courses.

303 Business Finance (4)

Prerequisite: ACCT 200B. Principles of planning, procuring, and controlling short and long-term financial resources of businesses; cash and capital budgeting; securities markets, costs of capital, and equity valuation.

305 Commercial Law (4)

Prerequisite: Four units of business law. Forms of business organization; partnerships, corporations; securities regulation, commercial paper, bankruptcy, legal responsibilities of accountants and business management.

330 Credits and Collections (4)

Business and social functions of credit, classifications of credit and credit instruments, investigation and analysis of credit risks, management and control of credit collection processes.

331 Financial Institutions and Markets (4)

Prerequisites: ECON 202, FIN 303. Characteristics, functions, and operations of financial institutions in money and capital markets; planning, procuring, and administering assets of banking and nonbanking financial institutions.

332 Investments (4)

Prerequisite: FIN 303. Principles of investment, survey of corporate securities, basic risks of investment, individual and institutional programs, principles of investment analysis, and selection of stocks and bonds.

335 Risk Management and Insurance (4)

Insurance as an economic and business institution; survey of fire, casualty, and life insurance for those interested as potential consumers or for a career.

338 Real Estate Principles (4)

Introduction to economics of land ownership and use; fundamentals of ownership, financing, appraisal, management, and transfer of residential and other real property.

339 Real Estate Practice (4)

Prerequisite: FIN 338. Analysis of real estate contracts, agency and brokerage relationships, physical components of real estate, private ownership interests, documents of transfer, escrows, title insurance, recording, and professional licensing.

381 Real Estate Law (4)

Prerequisites: FIN 338, four units of business law. Legal aspects of real property ownership and management; emphasis on California law affecting escrows, contracts, licensing, brokerage, co-ownership, deeds, conveyances, trust deeds, mortgages, titles, encumbrances, estates in land, and leases.

403 Intermediate Business Finance (4)

Prerequisite: FIN 303. Intermediate business financial management emphasizing intensive treatment of valuation, capital asset management, financial structure, sources of funds, and working capital management. Combines theory and applications.

425 Financial Software and Databanks (4)

Prerequisites: FIN 303, CIS 294. Uses of financial data banks such as COMPUSTAT and Dow Jones News Retrieval; financial applications of computer software packages such as Lotus 1-2-3 and Javelin.

429 Estate Planning (4)

Prerequisites: FIN 205, 303. Planning, creating, conservation, and transfer of individual wealth; case studies relating to investments, insurance, wills, probate, trusts, estate and gift tax, and avoiding probate and minimizing taxes.

430 Commercial Bank Administration (4)

Prerequisites: FIN 303. Case studies of organization, operation, and policies of commercial banks; sources and uses of bankfunds; cash and reserve positions, securities and loan portfolios. Utilizes a simulation approach to bank management.

431 Multinational Financial Management (4)

Prerequisite: FIN 303. Application of principles of managerial finance to international and multinational business; analysis of risks and problems unique to businesses involved in transnational operations; international sources and uses of funds.

432 Real Estate Management (4)

Prerequisite: FIN 338. Management of real property as part of the real estate industry; nature, functions, scope of management principles, services, property care, tenant relations, and records.

434 Financial Management (4)

Prerequisites: FIN 303; ACCT 300 or 322. Case studies of problems in planning, procuring, and maintaining optimum distribution of financial resources of business organizations; applications of

principles used in financing of industrials, utilities, trading enterprises, and selected financial institutions.

435 Working Capital Management (4)

Prerequisites: ACCT 300, ECON 309, FIN 303. Decision oriented, analytical approaches to problems and practices related to and arising in the course of financing and managing the acquisition, maintenance, and disposition of working capital assets.

436 Business Risk Management (4)

Negligence liabilities and related business risk problems. Workers' compensation, surety and fidelity, crime and peril, and their usefulness as tools of the business risk manager.

437 Securities Analysis (4)

Prerequisite: FIN 332. Investment practice in analysis of financial statements; selection and valuation of stocks and fixed-income securities, stockholder-management relations, applied securities analysis.

438 Real Estate Valuation (4)

Prerequisite: FIN 338. Valuation of real property; economic analysis of trends and factors influencing real estate ownership, development, and use; current appraisal theory.

439 Real Estate Finance (4)

Prerequisite: FIN 338. Position of real estate finance in the economy. Techniques and procedures used in financing real property, including sources of funds, lending policies, and instruments used in California today.

440 Futures and Options (4)

Prerequisite: FIN 332. Market structures, trading techniques, pricing models, hedging strategies, and investment implications for various futures, option contracts and derivative assets.

454 Special Topics in Finance (1-4)

Prerequisite: Varies with topic; see *Schedule of Classes* for specific requirement. In-depth presentation and analysis of topics significant to contemporary business world; lectures, discussions, speakers, and research projects.

480 International Business Law (4)

Prerequisite: Four units of business law. Legal issues that arise in international trade, licensing, and investment; national and international limitations that influence the movement of goods, labor, and technology.

492 Real Estate and Governmental Policy (4)

Prerequisite: FIN 338. Functioning of real estate industry within constraints and incentives of governmental policies; development and environmental regulations; income and property taxation; rent controls and housing for disadvantaged.

493 Real Estate Investment (4)

Prerequisite: FIN 338. Principles of investing in real estate. Analytic techniques and economic strategies for maximizing after-tax returns from land, residential properties, shopping centers, and other real estate.

494 Financial Management for Small Business (4)

Prerequisites: ACCT 300, FIN 303. Principles and practices of financial management for small business. Analytic techniques and financial strategies for financing and managing the resources of small businesses efficiently and profitably.

Courses in Management (MGMT)**Upper Division Courses**

Upper division standing is prerequisite to enrollment in 300- and 400-level MGMT courses.

306 Production and Operations Management (4)

Prerequisites: ECON 209, MATH 242. Analysis and applications of concepts and techniques of the quantitative approach, systems analysis, and operations analysis to managerial functions, with emphasis on production.

307 Management and Organizational Behavior (4)

Analysis of management process with emphasis on business environment; interpersonal and intergroup processes and relationships in organizations.

308 Business Responsibilities in Society (4)

Introduction to the business person's responsibilities and obligations in contemporary society; principles and problem-solving techniques related to major social problems confronting business organizations.

454 Special Topics in Management (1-4)

Prerequisite: Varies with topic; see *Schedule of Classes* for specific requirement. In-depth presentation and analysis of topics significant to contemporary business world; lectures, discussions, speakers, and research projects.

459 Women in Management (4)

Prerequisite: MGMT 307. Environmental, organizational, interpersonal, and individual factors that induce or inhibit the introduction and growth of women in management; impact of changing status on organizational, professional, and personal effectiveness.

460 Case Studies in Production and Operations Management (4)

Prerequisite: MGMT 306. Undergraduate seminar that analyzes factory management, including such topics as industrial standards, schematic and quantitative models, production management and control, programming aggregate rates of production, inventory control, and production scheduling.

461 Management Theory and Practice (4)

Prerequisite: MGMT 307. Undergraduate seminar covering development of theory of management through analysis and integration of fundamental relationships and principles; current and past practices analyzed in planning, organizing, directing, and controlling.

462 Comparative Management (4)

Prerequisite: Senior or graduate standing. Identification and analysis of management systems in differing national, functional, or institutional settings; impact of economic, social, political, and cultural variables on management systems; universality of management principles.

463 Motion and Time Study (4)

Prerequisites: ECON 309, MGMT 460. Quantitative aspects of scientific management including elements of motion economics, operation analysis, flow process charts, and time study with an introduction to methods-time measurement (written reports in these areas).

464 Production and Inventory Management (4)

Prerequisite: MGMT 306. Design of information and decision systems for allocating resources and scheduling activities; development of conceptual structures guiding integrated production and inventory systems in manufacturing environments; introduction of computerized MRP systems.

465 Purchasing Management (4)

Prerequisite: MGMT 306. Analysis and application of purchasing principles and procedures; organization of purchasing departments and relation to other departments; criteria for make-or-buy; supplier selection; quality, value, and cost analysis; supplier negotiations.

466 Managerial Innovation (4)

Prerequisite: MGMT 307. Intensive investigation of managerial innovation through analysis of cases; determinants, strategies, and impact of invention, adoption and implementation of new techniques and approaches in managing organizations.

467 Quality Control (4)

Prerequisite: ECON 309. Control of quality of manufactured products by statistical methods; control charts for variables, fraction defective, defects per unit; acceptance sampling; single, double, and multiple sampling methods; sampling tables.

468 Small Business Management (4)

Prerequisite: Majority of core courses. Use of case study method to investigate and analyze problems related to plant location, labor relations, organization control, finances, taxation, and others of interest to small business entrepreneur.

469 Managing Human Resource Development (4)

Principles, methods, and procedures for orienting, inducting, designing skill-building programs for, training, and educating/developing employees at all levels of business, governmental, and third sector organizations.

470 Managerial Leadership and Motivation (4)

Prerequisite: MGMT 307 or NURS 488. Nature, resources, strategies, and models of complex organizations; case analyses of process of managerial leadership, motivation, interpersonal relationships in work groups; impact on organizational effectiveness.

471 Managing Positive Employment Relations (4)

Prerequisite: MGMT 473. Principles, methods, and processes for creating and managing positive relationships with individual employees at all levels of an organization, and with employees who are members of labor organizations (union or nonunion).

472 Health Care Marketing Management (4)

Prerequisite: Senior or Graduate standing. Methods used by health care providers for forecasting needs for specific health services in their communities; hospital marketing strategies and cases; special problems and issues in marketing health care services.

473 Personnel Management (4)

Prerequisite: MGMT 307. Principles, methods, and procedures in effective utilization of human resources; development and objectives of personnel management, labor budgeting, job analysis, recruitment, selection, placement, training, wage and salary administration, and working conditions.

474 Compensation Management (4)

Prerequisite: MGMT 473. Theory and practices of wage and salary administration: job analysis and preparation of job descriptions, use of job evaluation scales, establishment of pay systems, performance appraisal, and additional compensation techniques.

475 Cases in Personnel Management (4)

Prerequisite: MGMT 473; courses in psychology, sociology, and labor economics recommended. Application of principles and methods of personnel management to specific cases, with view to developing proficiency in dealing with issues in personnel procurement, development, compensation, integration, and maintenance.

476 Personnel Interviewing (4)

Prerequisite: MGMT 473. Employment and evaluation interviews as management tools; analysis of interviewing process, including validity and reliability, legal and social constraints, and decision-making process.

477 Managing the Staffing Function (4)

Prerequisite: MGMT 473. Staffing as a human resources management function. Analysis of the staffing process, including planning, recruitment, and the final selection decision, with particular attention given to legal, social, and organizational constraints.

478 Financial Management of Health Care Institutions (4)

Financial management decision making in health care institutions with emphasis on techniques of budget development.

479 Seminar: Business in Its Social Setting (4)

Prerequisite: MGMT 308 or graduate standing. Analytical interdisciplinary investigation of evolution and contemporary status of business relative to changing dynamic forces: social, political, legal, and economic.

480 Managerial Issues of Automation and Robotics (4)

Managerial issues dealing with robotics and automated processes; feasibility, flexibility, productivity, and efficiency of robots with emphasis on how management, unions, and labor should deal with them.

485 Project Management (4)

Project management theories for planning and controlling resources to accomplish complex projects; case analyses from business and nonprofit organizations; exercises with selected project management software.

496 Operations Research (4)

Prerequisite: MGMT 306. Evaluation and application of operations research methods as a tool for management decision-making.

497 Integrated Decision Making in Business (4)

Prerequisite: Business core requirements. Integrates business knowledge developed in core courses; provides interdisciplinary exposure to complex executive decisions in business, including conditions of uncertainty.

Courses in Marketing (MKT)

Upper Division Courses

Upper division standing is prerequisite

304 Principles of Marketing (4)

Product planning, pricing, distribution, and promotion of goods and services. Market research, consumer behavior, international business, and the industrial market.

340 Principles of Advertising (4)

Prerequisite: MKT 304. Marketing and economic functions of advertising. Survey of roles played by clients, agencies, advertising departments, media, and auxiliary organizations in field.

341 Salesmanship (4)

Prerequisite: MKT 304. Fundamentals of selling and sales management concentration on sales techniques with student presentations of critiques and analyses; procedures for selection, training, compensation, and supervision of sales personnel.

342 Consumer Behavior (4)

Prerequisite: MKT 304. Reactions of consumer to promotional activities of retailers; concepts of consumer strategy and tactics; importance of product image, brand, package influence, and store image in influencing consumer purchases.

344 Principles of Retailing (4)

Structure of retailing industry; retailing trends; retail store organization; understanding retail consumers; store location, design, and layout; basic fundamentals of operating a retail business; retail controls and evaluation.

345 Marketing Channels (4)

Prerequisite: MKT 304. Marketing channels, their development, structure, and operation; transactional and physical distribution by manufacturers, wholesalers, and retailers as parts of total marketing system.

346 Marketing of Services (4)

Prerequisite: MKT 304. Marketing of services including promotion and pricing practices and strategies; practices of franchising and specific services sectors.

349 Retail Merchandising and Sales Promotion (4)

Prerequisite: MKT 304. Analysis of merchandising and sales promotion functions performed by retailers. Covers market segmentation, merchandising policies, budgeting, buying, inventory management, and pricing; emphasis on retail promotional planning, implementation, and evaluation.

350 Introduction to Transportation (4)

Importance of water, railway, highway, air, and pipeline transport modes in modern economy. Discussion of carrier management, government participation, and use of energy in transportation systems.

351 Industrial Transportation (4)

Prerequisite: MKT 304. Methods of purchasing transportation service used by business firms in solving shipping problems. Includes new transportation alternatives, domestic and international planning and documentation, and effects of government regulation and deregulation.

352 World Air Transportation (4)

Prerequisite: MKT304. Role of domestic, international, and foreign airlines in moving people and goods; history, operations, and marketing. Students analyze airline case studies and related materials concerned with identifying and satisfying air travel market.

353 Marketing Travel and Tourism (4)

Prerequisite: MKT 304. Examination of marketing activities in growing international travel industry. Components of tourism, methods, socioeconomic importance, motivation, and marketing of travel. Individual student research of travel market segments under instructor supervision.

357 Financial Aspects of Retailing (4)

Prerequisite: MKT 304. The fiscal aspects involved in operating a retail business; capital acquisition, expense budgeting, expense control, retail inventory valuation, credit management, and performance measurement.

358 International Business (4)

Business conducted within a world environment; transactions comprising international business. Institutional setting abroad; scope of managerial decision-making in international business operations.

359 Consumerism (4)

Consumer movement and its impact on marketing; marketing's attempt and success at countering and adapting to consumerism; marketers' responsibilities to consumer.

440 Advanced Advertising and Promotion (4)

Prerequisite: MKT 340. In-depth review of advertising and promotion management; emphasis on strategic decision-making through case study analyses; supplemental topic areas include sales promotion, agency/client relations, and measurement/evaluation techniques.

441 Industrial Marketing (4)

Prerequisite: MKT 304. Analysis of various types of industrial goods and markets for them, including government agencies; product planning; marketing research; determination of marketing channels; pricing policies; sales promotion; and cost distribution.

442 Marketing Management (4)

Prerequisite: MKT 304. Intensive study of marketing management, with emphasis on marketing environment. Development of marketing strategies and formulation of policies; integration of marketing with other functional areas of business through case studies.

443 Marketing in a New Business (4)

Prerequisite: MKT 304. Introduction of a new business or product concept into marketplace. Emphasis on small business marketing entrepreneurship.

444 Sales Management (4)

Prerequisite: MKT 304. Design, development, and administration of a cohesive total sales management program; scope and standards of supervision as applied to sales field; selection, training, and compensation of salesperson; motivation, evaluation, and control of sales personnel.

445 Public Relations Methods for Business (4)

Prerequisite: MKT 304. Public relations policies and techniques for business enterprises; development of good relationships with customer, employee, stockholder, government, and general public. Role of research, publicity, and mass media in public relations.

446 Marketing Research (4)

Prerequisites: MKT 304 and ECON 209. Marketing research functions and procedures utilized in measuring and analyzing environmental factors in consumer demand, sales efficiency, effectiveness of promotional programs, and effects of competitors strategies; methods of product distribution and pricing research. Projects emphasize current marketing research techniques.

447 Business Consulting (4)

Prerequisite: Majority of upper division core courses. Analytic, administrative, and communicative aspects of consulting and counseling processes. Application of functional knowledge and skills to consultation.

448 Mail Order/Direct Response Marketing (4)

Prerequisite: MKT 304. The growing direct marketing industry: catalogs, direct mail, broadcast and print media, and telemarketing; strategic applications in marketing/promotions plans of existing and entrepreneurship business situations.

449 Retail Planning and Policy Making (4)

Prerequisite: MKT 304. Retail strategic environmental/competitive appraisals; retail goal setting; competitive positioning and market share strategy; retail sales forecasting; and techniques of constructing, communicating, and implementing retail plans.

450 Seminar: Transportation Regulations (4)

Prerequisite: MKT 304. Transportation regulations, including bases, history, and case studies of leading litigation testing transportation regulatory acts.

451 Seminar: Modern Transportation (4)

Prerequisite: MKT 304. Uses of transportation theory and principles in discussion of current issues and problems involved in moving goods and people within and between cities of the world.

452 Physical Distribution Management (4)

Prerequisite: MKT 304. Cases and problems in logistics to show how distribution manager uses systems concept and cost tradeoffs in procuring transportation, storage, and optimum inventory for business firm.

453 Marketing for Nonprofit Organizations (4)

Prerequisite: MKT 304. Examination of relationship of marketing principles and marketing analyses to performance of nonprofit institutions in U.S. economy by use of case studies.

454 Special Topics in Marketing (1-4)

Prerequisite: Varies with topics; see *Schedule of Classes* for specific requirement. In-depth presentation and analysis of topics significant to contemporary business world; lectures, discussions, speakers, and research projects.

455 Proseminar: International Transportation (4)

Prerequisite: MKT 304. Use of ocean vessels, air transport, intermodal carriers, and foreign freight forwarders to move goods in our import/export trade. Discussions of multimodal concept, documentation, and marine insurance.

456 International Marketing Management (4)

Prerequisite: MKT 304. International marketing operations: product policies, pricing, advertising, distributional channels, marketing research. Factors governing the decision to engage in foreign transactions. In-depth market studies.

457 Import-Export (4)

Prerequisite: MKT 358. Import-export operations: organization, regulation, terms of access, documentation, shipment and financing involved with international movement of merchandise; trade patterns by countries and commodities.

458 Proseminar: Marketing and the Multinational Firm (4)

Prerequisite: MKT 358. international market entry and expansion; marketing management strategies, unique marketing problems of multinational firms, developing marketing management expertise for international business; future of multinational firms.

460 Retail Store Management and Operations (4)

Prerequisite: MKT 304. Physical distribution, customer service, store housekeeping, and loss prevention functions of retailers. Organizational structure, staffing, and administration of individual store outlets of multiunit retailers.

Courses in Office Systems and Business Education (OSBE)**Lower Division Courses****104 Beginning Keyboarding and Introduction to Word Processing (3)**

Touch method of microcomputer keyboard operation, development of speed and accuracy, and introduction to word processing on a microcomputer. For students with minimal or no typing/keyboard knowledge.

113 Organization of American Business (4)

Scope, function, and organization of modern business; fundamental concepts, principles, and current practices in the major areas of business activity. Not open to Business Administration and Economics majors.

154 Special Topics in Office Systems and Business Education (1-4)

Prerequisites: Instructor consent as needed for specific topic. Current topics of special interest in office systems and business education, as announced in *Schedule of Classes*. May be repeated for credit.

213 Word Processing Applications (3)

Prerequisite: OSBE 104 or equivalent keyboard/typing skills. Development of intermediate and advanced word processing production skills on a microcomputer; machine transcription. Activity 6 hours.

Upper Division Courses

Upper division standing is prerequisite to enrollment in 300- and 400-level OSBE courses.

301 Business Communications (4)

Prerequisite: ENGL 102*. Principles of business communication; emphasis on clear and correct written communication as a tool for business decision making.

*Students subject to earlier catalogs satisfy this prerequisite with ENGL 1010r 190.

313 Office Organization and Management (4)

Management functions applied to the traditional and automated office environment; layout, equipment evaluation and selection, forms design and control, administrative services-mailroom, reprographics, in-plant printing, word processing, and records administration.

401 Business Research and Report Writing (4)

Prerequisites: ENGL 102*, senior or graduate standing. Study of reports in business, education, and government; emphasis on collecting data and developing findings, conclusions, and recommendations. Students conduct research and write a report in an area of interest.

*Students subject to earlier catalogs satisfy this prerequisite with ENGL 1010r 190.

410A Problems of Business Education I (3)

Prerequisite: All lower division business education requirements. History and philosophy of education for business, including aims, scope, organization, and administration; study of current business education concepts, issues, and trends at secondary and college levels.

410B Problems of Business Education II (3)

Prerequisite: OSBE 410A. Programs, equipment, layout, and materials for business training; opportunity to learn how to plan, to carry out plans, and to evaluate; modern trends in business; motivational devices.

412 Advanced Office Systems (4)

Prerequisite: OSBE 313. Evaluation, implementation, and management of advanced office system technologies. Meets Data Processing Management Association Information Systems Model Curriculum criteria.

414 Records Systems Administration (4)

Prerequisite: OSBE 313. Principles of records creation, retention, transfer, and disposal. Organization and management of stored records. Coding, microfilming, and retrieval of information. Use of manual, mechanical, and computer means of storing and retrieving information.

417 Organization and Administration of Distributive Education (4)

Prerequisites: OSBE 410AB, MKT 304. Current trends and practices regarding development/maintenance activities of a distributive education program. Policy and procedure analysis of the operational components of the program.

418 Distributive Education Program Systems (4)

Prerequisite: OSBE 417. Planning, implementing, and supervising simulated directed work experience, and project-based program of delivery systems in Distributive Education. Fundamentals of cooperative education, community classroom (ROC/P), DECA activities, and laboratory projects emphasized.

420 Office Information Processing Software Applications (4)

Prerequisites: OSBE 213, 313. Survey and evaluation of office automation software; computer-based instruction in use of nonintegrated/integrated word processing, spreadsheet, data base, and business graphics programs.

421 Human Resources in the Automated Office (4)

Prerequisite: OSBE 313. Personnel supervision practices and policies in the office; selection, training, motivation, performance appraisal, job analysis, employee benefits, labor-management relations, impact of automation on employees.

422 Microcomputer Applications-Data Base and Spreadsheet 1(3)

Prerequisite: OSBE 104 or 213 or CIS 294. Intensive microcomputer-based instruction in popular financial spreadsheet and data base applications software such as Lotus 1-2-3 and dBase III Plus.

423 Microcomputer Applications-Data Base and Advanced Spreadsheet II (3)

Prerequisite: OSBE 422. Intensive and advanced microcomputer based software instruction in most popular business spreadsheet and data base applications software such as Lotus 1-2-3 and dBase III.

454 Special Topics in Business Education and Office Administration (1-4)

Prerequisite: Varies with topic; see *Schedule of Classes* for specific prerequisite. In-depth presentation and analysis of topics significant to contemporary business world; lectures, discussions, speakers, and research projects.

SCHOOL OF EDUCATION

Divisions within the school
Division of Administration and counseling
Division of Curriculum and Instruction
Division of Special Education'

SCHOOL OF EDUCATION
Office of the Dean

OFFICE
King Hall D2069
Phone: (213) 343-4300

Office of the Associate Dean for Instruction and Graduate Studies

OFFICE
King Hall D2070
Phone: (213) 343-4303
Office of the Associate Dean for Student Services

OFFICE
King Hall D2078
Phone: (213)343-4322

The School of Education offers programs leading to the Bachelor of Science degree in Rehabilitation Services, certification for specified fields of professional employment in California public schools, and the advanced degrees of Master of Arts in Education, Master of Arts in Educational Administration, Master of Arts in Special Education, Master of Arts in Teaching English to Speakers of Other Languages (TESOL), Master of Arts in Urban Education, Master of Science in Counseling. A Doctor of Philosophy degree in Special Education is offered jointly with the University of California, Los Angeles.

Graduate degree, advanced credential, and graduate level certificate programs, are described in the *Graduate Programs* section.

Admission to Programs

Admission to the university does not automatically admit students to credential or postbaccalaureate study in the School of Education. Formal application is required for admission to a specific degree or credential program. Applications for all degree and credential programs must be filed with the School of Education Student Services Office.

Accreditation

The School of Education is nationally accredited by the National Council for Accreditation of Teacher Education (NCATE). All credential programs are approved by the California Commission on Teacher Credentialing.

Credential Programs

University programs have been approved for the following credentials and areas of specialization.

- * *Teaching Credentials:* Multiple Subject, Multiple Subject/Bilingual Emphasis, Single Subject (preliminary professional clear, internship), Designated Subjects
- * *Specialist Credentials:* Reading/Language Arts, Special Education
- * *Services Credentials:* Administrative Internship, Clinical-Rehabilitative, Health-School Nurse, Library, Orientation and Mobility for the Blind, Preliminary Administrative, Professional Administrative, Pupil Personnel, School Counseling and Child Welfare and Attendance, School Psychology and Child Welfare and Attendance, School Psychology (internship)

Because credential programs described in this publication are subject to change without notice, students are urged to seek current information concerning new credential requirements from the appropriate division in the School of Education.

Candidates seeking additional authorization on prior credentials must seek advisement from the appropriate division about applicability of current courses to those requirements. Advisement of students working toward a credential is provided by both their major department and the Division of Curriculum and Instruction. General advisement about School of Education programs is available in the Student Services Center, King Hall D2078.

Recommendation for teaching credentials and eligibility for waiver of subject matter examinations are contingent upon satisfaction of all requirements specified in each area.

ADMINISTRATION AND COUNSELING

School of Education
DIVISION OFFICE
King Hall C1065
Phone: (213) 343-4250

The Faculty

Emeriti: Eugene Benedetti, Robert B. Benoit, Isaac Berman, V. Patricia Beyer, David Bilovsky, John A. Dahl, Shirlee D. Davis, Robert G. Hadley, Harold D. Hill, Lyle Hanna, Raleigh Jackson, Ralph E. Kloepper, Jane E. Matson, Donald G. Mortensen, Selmer Ostlie, Gerald Prindiville, Gerald R. Rasmussen, Fred G. Rhodes, J. Leonard Steinberg, Joseph Stubbins, Raymond D. Terrell, Roy T. Tozier, Joan B. Wilson.

Professors: Edmond C. Hallberg, Raymond E. Hillis, Randall B. Lindsey, Peter L. LoPresti, G. Roy Mayer, Lynda K. Mitchell, James I. Penrod, R. Carol Sweeney (*Chair*), Hershel Swinger.

Associate Professors: Randy V. Campbell, Kathleen Cohn, George K. Hong, Ruth S. Johnson, Sharon Kay Johnson, Edward Negrete, Jr., Thomas H. Peeler, Alex J. Pulido, Marcel Soriano.

Assistant Professors: Martin G. Brodwin, Michael J. Carter, Lori Yoonkung Kim, Pauline Mercado.

Program advisement provided for:

- * Administration and supervision programs for masters degrees and credentials
- * Counseling programs for master's degree, credentials, and state license
- * B.S. degree in Rehabilitation Services

Courses offered in:

- * Counseling (COUN)
- * Educational Administration(EDAD)

EDUCATIONAL ADMINISTRATION. Educational Administration programs include the Master of Arts degree in Educational Administration and the Preliminary and Professional Administrative Services credentials. The credential program is approved by the Commission on Teacher Credentialing. These programs are described in the *Graduate Programs* section.

COUNSELOR EDUCATION. Counselor Education programs include the Bachelor of Science degree in Rehabilitation Services and the Master of Science degree in Counseling with specialized options. The master's degree and various credential and certificate programs are described in the *Graduate Programs* section.

Bachelor of Science Degree in Rehabilitation Services

The Bachelor of Science degree in Rehabilitation Services specializes in rehabilitation services for people with disabilities, e.g., physical, emotional, and social, and prepares students for graduate professional training as rehabilitation counselors; community college counselors; school counselors; applied behavior analysts; marriage, family, and child counselors; and school psychologists.

Advisement

Rehabilitation Services majors must select an adviser by the end of the first quarter of their junior year to draw up an official degree program.

Requirements for the Major (94-104 units)

The degree requires a total of 186 units of which 94-104 are in the major. The major includes 18 lower division and 60--61 upper division required units plus 16-25 units of electives.

Lower Division Required Courses (14 units):

COUN	200AB	Introduction to Rehabilitation Services in Counseling	(3, 3)
PSY	150	Introductory Psychology	(4)
SOC	201	Principles of Sociology	(4)

Upper Division Required Courses (64-65 units)

COUN	405AB	Theoretical and Developmental Aspects of Behavior	(4, 4)
COUN	406	Behavioral Counseling and Self-Management	(4)
COUN	428	Measurement Issues in Counseling	(4)
COUN	442	Medical Factors in Rehabilitation	(3)
COUN	445	Developmental Self-Exploration	(2)
COUN	448	Career Counseling for Adults	(4)
COUN	449	Job Development and Work Evaluation	(4)
COUN	494	Seminar: Rehabilitation Services	(3, 3)
COUN	495	Field Work in Rehabilitation Services	(3, 3, 3)
EDFN	452	Statistics in Education	(4) or
PSY	302	Statistical Methods in Psychology	(5)
EDSP	400	Education and Psychology of Exceptional Individuals	(4)
ENGL	306	Technical Writing	(4)
HS	456	Health Studies on Alcohol, Narcotics, Nutrition, and Tobacco	(4)
SOC	447	Sociology of Occupations and Professions	(4)

Electives in Related Fields (16-25 units):

Select at least one course from three of the five groups.

Family and Consumer Sciences:

FSCS	441	Urban Family, Its Resources	(4)
FSCS	443	Management Problems in Urban Housing	(4)
FSCS	445	Management for Aged or Physically Handicapped	(4)

Health Science:

HS	465	Strategies in Drug Abuse Prevention	(2)
HS	467	Problem Drinking and Alcoholism	(3)
HS	468	Problems in Controlled Substances	(3)

Psychology:

PSY	410AB	Abnormal Psychology	(4, 4)
PSY	442	Industrial and Organizational Psychology	(4)
PSY	445	Community Psychology	(4)

Sociology:

SOC	422	Social Psychology	(4)
SOC	425	Medical Sociology	(4)
SOC	426	Deviant Behavior	(4)
SOC	430	Urban Sociology	(4)
SOC	448	Social Class and Inequality	(4)

Special Education:

Any 400-level course approved by adviser.

CURRICULUM AND INSTRUCTION

School of Education
DIVISION OFFICE
King Hall C2097
Phone: (213) 343-4350
The Faculty

Emeriti: Constance E. Amsden, Ratna Appadurai, John M. Austin, Mary A. Bany, Norman D. Berke, Harold C. Brown, Dan Cappa, Doris C. Ching, Persis H. Cowar, Earl W. Denny, Norman L. Ellenberg, Robert J. Forbes, Jewell Garner, Gloria S. Graham, Iris Timson Gwinn, Robert O. Hahn, Lyle Hanna, John O. Jones, Aaron Kriegel, Roderick Langston, Raquel Montenegro, Leslie W. Nelson, Donald A. Nielsen, June DeBode Oxstein, Anne M. Palmer, Dorothy R. Peckham, Edythe Rodriguez, Delwyn G. Schubert, Randolph G. Service, Carol J. Smallenburg, Bernice B. Smith, Harry K. Thrasher, John L. Townely, Philip D. Vairo, Marian E. Wagstaff, Eleanore C. Wilson, Wanna M. Wismaster.

Professors: Ralph Arroyo, James A. Bolton, Alan N. Crawford, Evalyn T. Dearmin, Janet C. Fisher-Hoult, J. Dennis Heim, Dorothy L. Keane, Dale L. Knapp, Richard A. Rundall, Judith M. Washburn.

Associate Professors: T. Jean Adenika-Morrow, Herminia Cadenas, John Eichinger, Noriko S. Horgan, Michael E. James, Chogollah Maroufi, Andrea P. Maxie, Darlene M. Michener, Allredo Schifini, Joan Sabrina Mims.

Assistant Professors: Cherie De Jong, Lynn Fox, Mary Lou Nevin, Gay Yuen Wong.

Program advisement provided for:

- * Early Childhood Education
- * M.A. degree options:
- * Elementary Teaching
- * Secondary Teaching
- * Multiple Subject credential
(including bilingual emphasis and inter options)
- * Reading/Language Arts Specialist
- * Single Subject Credential (*and inter option*)

Courses offered in:

- * Curriculum and Instruction (EDCI)
- * Elementary Education (EDEL)
- * Secondary Education (EDSE)

Admission to Credential Programs (General Information)

Admission Requirements for Multiple Subject and Single Subject Credential Programs

Under current laws and regulations, the Commission on Teacher Credentialing initially issues a credential, permit, or certification, or renewal of an emergency credential, only to persons to serve in the public schools who have demonstrated proficiency in basic reading, writing, and mathematics skills in the English language. The Superintendent of Public Instruction has adopted the California Basic Educational Skills Test (CBEST) as the state assessment instrument to measure teacher proficiency in the basic skills. Further information is available at the School of Education Student Services Center, KH D2078.

Admission requirements are based on Title 5 *California Code of Regulations*, and university regulations. Students seeking admission to Cal State L.A. teaching credential programs must enroll in EDCI 300, Introduction to the Teaching Profession. Requirements for preliminary admission to credential programs include the following. Students must complete all requirements to receive credit in EDCI 300.

- * Complete application form.

- * Record of oral interview with faculty adviser and completion of *Program Planning Sheet* (signed by adviser).
- * Verification of academic eligibility, as evidenced by a grade point average at or above the median of undergraduate students in the candidate's academic major but in no case lower than 2.5. The grade point average is based on the cumulative work at Cal State L.A. (minimum of 45 units attempted) or, if fewer than 45 units attempted at Cal State L.A., the cumulative work attempted at all campuses.
- * Verification of negative TB test (taken within the last year) by a personal physician or at the Cal State L.A. Health Center.
- * Verification of completion of PSY 150.
- * Verification of having applied for the *Certificate of Clearance*.
- * Successful completion of a supervised field experience.
- * A written personal history that includes a statement of professional goals and educational philosophy.
- * Transcripts and letters of reference received and evaluated.

Completion of Admission Requirements.

Students must satisfy the following criteria before registering for any restricted courses.

- * Minimum C grade in SPCH 150 or passing score on Cal State L.A. Speech Proficiency Evaluation.
- * Pass UNIV 400, the Writing Proficiency Examination (WPE).
- * Verification of having taken the CBEST. (Students who have not passed the CBEST prior to entry into the credential program must have an approved plan of remediation on file with the Student Services Center in the School of Education.)

Students are formally admitted to the teaching credential program upon completion of requirements stated above.

Admission Requirements for Multiple Subject and Single Subject Internship Credential Programs

- * Employment or commitment by a school district to employ the individual as a full-time teacher.
- * Completion of all requirements previously developed for admission to Preliminary Credential Programs.

Admission Requirements for Professional, Clear Multiple Subject and Single Subject Credential Programs

(for transfer students who hold a preliminary credential)

Students who complete the preliminary credential at Cal State L.A. may continue on for the clear credential. No additional application to the School of Education is necessary. Transfer students must meet the following requirements. State of California teaching credential requirements include a fifth year of study completed after the baccalaureate. Students may elect to complete all or part of their professional requirements in the fifth year and must follow a planned course of study approved by their adviser. In some instances courses that are taken as part of a master's degree program may also count toward completion of the fifth year credential requirement. All students who desire university recommendation for completion of the clear credential *must be formally admitted to the university and satisfy any writing or speech requirements pertaining to all postbaccalaureate students.*

- * Apply to School of Education Student Services Center.
- * Provide copy of your valid *Multiple Subject* or *Single Subject* credential.

- * Verify a minimum 2.5 overall grade point average (in the last 90 quarter units attempted for your bachelor's degree or in 14 quarter units taken after completion of your bachelor's degree).
- * See an adviser for oral interview and to plan credential program.
- * Provide official transcripts of all college/university work to School of Education Student Services Center.
- * Pass UNIV 400, the Writing Proficiency Examination (WPE).

Directed Teaching Information

Directed teaching is one of the most important phases of teacher education at Cal State L.A. Candidates are not automatically admitted to directed teaching by completion of course work alone; they must fulfill the following criteria.

- * Formal admission to the teaching credential program.
- * Attendance at directed teaching orientation meeting by first week of quarter preceding the assignment.
- * Application for directed teaching by application deadline (Wednesday of second week of quarter preceding the assignment).
- * Submit verification of completion of a Cal State L.A.-approved *diversified* waiver program (for Multiple Subject credentials) or *Single Subject* waiver program (for Single Subject credentials) or passing score on appropriate section of National Teachers Examination (NTE)** and recommendation of waiver subject area department. Approved Multiple Subject and Single Subject waiver programs are listed in the *Undergraduate Study* chapter of this catalog.

**CLEP scores required, also, for English majors

- * Provide transcripts or grade reports verifying completion of at least 12 units at Cal State L.A. and all prerequisite courses. A minimum B (3.0) grade point average and grades of C or higher are required in all professional education courses.
- * Submit verification of passing scores on all sections of CBEST.
- * Present a Certificate of Clearance or a valid State of California credential at Student Services Center, KH D207.
- * Submit verification of negative TB test taken within one year before completion of directed teaching by a personal physician or at Cal State L.A. Health Center.
- * Register for directed teaching or demonstration of competencies as appropriate.
- * Applicants for multiple subject directed teaching must show proficiency in art, music, and physical education, either by examination or completion of appropriate courses. New transfer students must complete at least one curriculum course at Cal State L.A.
- * Applicants completing an area of specialization in special education must be approved by the Division of Special Education.

Students who meet all of the above criteria and who have completed the prerequisite course work will be approved for directed teaching. Because of the amount of time and work required for directed teaching, students are advised to restrict the number of units in their program and curtail their out-of-school workload for the duration of such assignments.

Supplementary Authorizations

Holders of a Single Subject or Multiple Subject credential issued by the state of California may add a supplemental authorization to teach in another discipline by completing additional course work. Interested students should consult the appropriate academic department and the School of Education for further information.

Application Procedure for the Preliminary or Professional Clear Credential

Before the sixth week of your final quarter of credential course work, you must submit an application for the credential in the Student Services Center, King Hall D2078.

ELEMENTARY EDUCATION PROGRAMS

The Elementary Education programs include courses appropriate for preservice and inservice preparation of teachers in the elementary grades and directed teaching for candidates for the teaching credential with authorization in multiple subject instruction. The Master of Arts degree is described in the *Graduate Programs* section.

Multiple Subject Credential (Elementary Teaching)

The teaching credential with authorization in multiple subject instruction qualifies holders to teach in any self-contained classroom, preschool or kindergarten, grades 1 through 12, or in classes organized primarily for adults.

Requirements for Preliminary Credentials

Applicants must satisfy the following criteria to qualify for the university-recommended credential:

- * A bachelor's degree from an accredited college or university.
- * Passing score on CBEST.
- * Formal admission to credential program including fulfilling all EDCI 300 requirements; complete professional education requirements listed below. See *Admission to Credential Programs* and *Directed Teaching Information* earlier in this chapter.
- * Verification of completion of Cal State L.A.-approved diversified waiver program (see listings in *Undergraduate Study chapter*) or passing score on *general knowledge* section of National Teachers Examination (NTE) and verification of subject area competence by waiver subject-area department.
- * Minimum C grade in MATH 120.
- * Fulfillment of U.S. Constitution requirement. Professional Education Requirements (47 units):

**EDCI 450 Using ESL Techniques in the Content

Areas (2)

EDEL 400	Proseminar: Curriculum and Teaching of Reading and Language Arts	(4)
EDEL 401	Proseminar: Curriculum and Teaching of Mathematics	(3)
EDEL 402	Proseminar: Curriculum and Teaching of Social Science and Science	(4)
EDEL 403	Directed Teaching I: Multiple Subject	(12)
EDEL 404	Directed Teaching II: Multiple Subject	(12)
EDEL 405	Proseminar: Language Development in the Elementary Classroom	(3)
EDFN 413	Psychological Foundations of Education	(4)
EDFN 414	Social Foundations of Education	(3)

** may be taken concurrently with EDEL 403, 404, or 489

Additional Requirements:

Students must demonstrate competence in art, music, and physical education for elementary school, either through proficiency examinations or by successful completion of the following courses:

ART	400	Development of Literacy in Visual Arts	(4)
MUS	400	Development of Perception in Musical Arts	(4)
PE	420	Movement Experiences in Growth and Development	(3)

Preliminary Multiple Subject Credential with Bilingual Emphasis

Emphasis options qualify holders to teach in bilingual (Korean, Spanish, Cantonese, or Mandarin), self-contained classrooms at preschool, kindergarten, and grade 1 to 12 levels or in classes organized primarily for adults. In addition to requirements for the clear Multiple Subject credential, *Bilingual Emphasis* credential candidates must fulfill the following requirements:

- * Demonstrate spoken and written fluency in Korean, Spanish, Cantonese, or Mandarin.
- * Demonstrate knowledge of and sensitivity to the culture of Chicano, Korean, or Chinese children.

Students who select the Chicano, Korean, or Chinese option will be enrolled in special sections of the following curriculum and methods courses in Elementary Education:

EDEL	400C, 400K, or 400S	Proseminar: Curriculum and Teaching of Reading and Language Arts	(4)
EDEL	401C, 401K, or 401S	Proseminar: Curriculum and Teaching of Mathematics	(3)
EDEL	402C, 402K, or 402S	Proseminar: Curriculum and Teaching of Social Science and Science	(4)

Emphasis in these courses is given to meeting the special needs of bilingual children. Students must complete at least one directed teaching assignment in this option in an Elementary and Secondary Education Act (E.S.E.A.) Title VII bilingual/bicultural classroom.

Requirements for Professional Clear Multiple Subject Credential (including B/lingual and Prekindergarten options)

Applicants must fulfill the following requirements to qualify for the university-recommended credential:

- * Satisfy requirements for the preliminary credential.
- * Satisfy requirements for admission to fifth year, clear credential program.
- * Complete a minimum of 45 units of postbaccalaureate work approved by an adviser, including at least 16 units in residence and a maximum of 9 units in approved extension courses.
- * Satisfy the state requirement for course work in reading and in health education (including nutrition and the study of physiological and sociological effects of use of dangerous drugs, narcotics, alcohol, and tobacco).
- * Satisfy the mainstream requirement by completing: EDEL 406, 407, and 408 and EDSP 400 or 410.
- * Satisfy the state requirement for knowledge of computers and their uses in education by completing EDIT 430 or an appropriate introductory computer course (CS 160) plus EDIT 447.
- * As of September 1, 1992, every applicant for the initial clear Multiple or Single Subject Credential or initial clear Designated Subject Teaching Credential must complete approved training in Cardiopulmonary Resuscitation (CPR).

Internship Credential Requirements

The Internship credential program is designed for individuals who are employed as full-time teachers by cooperating school districts, have fulfilled all district and university prerequisites, and have been recommended by the district. The credential is issued for a two-year period during which candidates must fulfill all requirements for the *preliminary* or *professional clear credential*

Requirements for Preliminary and Internship Credentials

Applicants must satisfy the following criteria to qualify for the university-recommended internship credential.

- * A bachelor's degree from an accredited college or university.
- * Passing score on the CBEST.
- * Formal admission to credential program including completing EDCI 300 requirements; complete professional education requirements given below. See *Admission to Credential Programs* and *Directed Teaching Information* earlier in this chapter.
- * Verification of completion of Cal State L.A.-approved diversified waiver program (see listings in *Undergraduate Study* chapter) or passing score on general knowledge section of National Teachers Examination (NTE) and verification of subject area competence by waiver subject-area department (i.e., department of student's undergraduate major).
- * Pass UNIV 400, the Writing Proficiency Examination (WPE).
- * Minimum C grade in MATH 120.

Requirements for Preliminary Credential

(internship program to be completed within two years)

EDEL 400 or 400S	*Proseminar: Curriculum and Teaching of Reading and Language Arts	(4)
EDEL 4010r 401S	* Proseminar: Curriculum and Teaching of Mathematics	(3)
EDEL 402 or 402S	* Proseminar: Curriculum and Teaching of Social Science and Science	(4)
EDEL 405,	Proseminar: Language Development in the Elementary Classroom	(3)
EDEL 489	Demonstration of Instructional Competencies	(12, 12)
EDFN 413	Psychological Foundations of Education	(4)
EDFN 414	Social Foundations of Education	(3)
Satisfy the U.S. constitution requirement		

* Denotes course work in bilingual methodology. Bilingual emphasis credential also requires demonstration of language competence through FL 902 and successful completion of Culture Test.

Requirements for Professional Clear Credential (Internship Program)

EDCI 535	Instructional Strategies for Teaching Cultural Awareness	(4)
EDEL 406	The Handicapped Child: Individualization of Instruction	(1)
EDEL 407	The Handicapped Child: Observation of Behavior	(1)
EDEL 408	The Handicapped Child: Environment and Curriculum	(1)
EDEL 590	Problems in Classroom Group Behavior	(4)
EDIT 430	Introduction to Computers and Their Uses in Classrooms	(4)
EDSP 410	Education of Exceptional Individuals in Mainstream Settings	(3)
HS 456	Health Studies on Alcohol, Narcotics, Nutrition, and Tobacco	(4)

SECONDARY EDUCATION PROGRAM

The Secondary Education program includes courses appropriate for preservice and inservice teacher preparation in middle schools, junior high schools, senior high schools. The Master of Arts degree is described in the *Graduate Programs* section.

Single Subject Credential (*Secondary Teaching*)

The teaching credential with authorization in single subject instruction qualifies holders to teach in their authorized field at any grade level, preschool, kindergarten, and grades 1 through 12, or in classes organized primarily for adults. Fifteen categories of single subject instruction are defined by state legislation as follows: agriculture, art, business, English, government, health science, home economics, industrial arts, languages (including, but not limited to, Chinese, French, German, Russian, and Spanish), life science, mathematics, music, physical education, physical science, and social science.

Students considering pursuing a Single Subject credential are urged to obtain advisement at the start of the program from faculty advisers in their academic area and in Secondary Education. Candidates may enroll in programs leading to the preliminary/clear or the internship credential (see an adviser about admission requirements and enrollment limitations).

Requirements for Preliminary Credentials

Applicants must satisfy the following criteria to qualify for the university-recommended credential:

- * A bachelor's degree from an accredited college or university.
- * Passing score on CBEST.
- * Formal admission to credential program including completing EDCI 300 requirements; complete professional education requirements given below. See *Admission to Credential Program* and *Directed Teaching Information* earlier in this chapter.
- * Verification of completion of Cal State L.A.-approved *Single Subject* waiver program (see listings in *Undergraduate Study* chapter) or passing score on appropriate section of National Teachers Examination (NTE) (CLEP scores required, also, for English majors) and verification of subject area competence by waiver subject-area department (i.e., department of student's undergraduate major).
- * Pass UNIV 400, the Writing Proficiency Examination (WPE).
- * Fulfill the U.S. Constitution requirement. Professional Education Requirements (47 units)

**EDCI	450	Using ESL Techniques in the Content Areas	(2)
EDFN	413	Psychological Foundations of Education	(4)
EDFN	414	Social Foundations of Education	(3)
EDIT	450A	Instructional Materials Preparation Laboratory	(1)
EDSE	401	Instructional Strategies: Secondary Teaching	(4)
EDSE	415	Classroom Management in Secondary Schools	(4)
EDSE	421	Special Instructional Methods in Secondary School Subjects	(3)
EDSE	423	Teaching Reading in Secondary Schools	(4)
EDSE	442AB	Directed Teaching in Secondary Schools	(11, 11) or
EDSE	489	Demonstration of Instructional Competencies	(11,11)

** must be taken concurrently with EDSE 442A, 442B, or 489

Requirements for Professional Clear Single Subject Credential

Applicants must satisfy the following criteria to qualify for the university-recommended credential:

- * Requirements for the preliminary credential.
- * Requirements for admission to fifth year, clear credential program.

- * Minimum of 45 units in postbaccalaureate study approved by an adviser, including at least 16 units in residence and a maximum of 9 units in approved extension courses.
- * Satisfy the state requirement for knowledge of computers and their uses in education by completing EDIT 430 *or an* appropriate introductory computer course (CS 160) plus EDIT 447.
- * State requirement for course work in reading and in health education, (including nutrition and the study of physiological and sociological effects of use of dangerous drugs, narcotics, alcohol, and tobacco).
- * Mainstream requirement (EDSE 405 and EDSP 400 or 410).
- * As of September 1, 1992, every applicant for the initial clear Multiple or Single Subject Credential or initial clear Designated Subject Teaching Credential must complete approved training in Cardiopulmonary Resuscitation (CPR).

Internship Credential Requirements

The *internship credential* program is designed for individuals who are employed as full-time teachers by cooperating school districts, who have fulfilled all district and university prerequisites, and who have been recommended by the district. The credential is used for a two-year period. During that time, candidates must fulfill all requirements for the *preliminary or professional clear credential*. Applicants must satisfy the following criteria to qualify for the university-recommended internship credential.

- * A bachelor's degree from an accredited college or university.
- * Passing score on CBEST.
- * Formal admission to credential program including completing EDCI 300 requirements; complete professional education requirements given below. See *Admission to Credential Programs* and *Directed Teaching* earlier in this chapter.
- * Verification of completion of Cal State L.A.-approved *Single Subject* waiver program (see listings in *Undergraduate Study* chapter) or passing score on appropriate section of National Teachers Examination (NTE) (CLEP scores required also for English majors) and verification of subject area competence by the waiver subject-area department.
- * Pass UNIV 400, the Writing Proficiency Examination (WPE).

Requirements for Preliminary Credential (Internship Option-46 units)

EDFN	413	Psychological Foundations of Education	(4)
EDFN	414	Social Foundations of Education	(3)
EDSE	401	Instructional Strategies in Secondary Teaching	(4)
EDSE	415	Classroom Management in Secondary Schools	(4)
EDSE	421	Instructional Methods for Secondary School Subjects	(3)
EDSE	423	Teaching Reading in Secondary Schools	(4)
EDSE	489	Demonstration of Instructional Competencies	(8-8 -8)

Satisfy the U.S. Constitution requirement.

Requirements for Professional Clear Credential (Internship Option)

EDCI	450	Using ESL Techniques in the Content Areas	(2)
EDCI	535	Instructional Strategies for Teaching Cultural Awareness	(4)
EDIT	430	Introduction to Computers and Their Uses in Classrooms	(4)
EDSP	410	Education of Exceptional Individuals in Mainstream Settings	(3)
HS	456	Health Studies on Alcohol, Narcotics, Nutrition, and Tobacco	(4)

NOTE: Students who are enrolled in the *internship credential* program are encouraged to enroll concurrently in the M.A. degree program in Education, Secondary Teaching option. See a faculty adviser about additional requirements.

Supplementary Authorizations

Holders of a Single Subject or Multiple Subject credential issued by the state of California may add a supplemental authorization to teach in another discipline by completing additional course work. Interested students should consult the appropriate academic department and the School of education for further information.

EDUCATIONAL FOUNDATIONS AND INTERDIVISIONAL STUDIES

School of Education
DIVISION OFFICE
 King Hall C2098
 Phone: (213) 343-4330

The Faculty

Emeriti: Lois V. Johnson, Edward J. Neale, Helen Isabel Nicklin, Lamar Price, Morton J. Renshaw, Julian B. Roth, Carleton B. Shay, Patricia Bates Simun, Katherine Sistrom, Elfieda J. Tare, Edwin Wandt.

Professors: Kathryn Alesandrini, Webster E. Cotton, Stephanie Edwards-Evans, Fernando A. Hernandez, Fred Pycszak, Jr., Rolando A. Santos, Simeon P. Slovacek(*Chair*), James Wiebe.

Associate Professors: Judith L. Cope, Kathleen M. Costantini, Bernardo Gallegos, Ita Kreft, Dawn M. Patterson, Penelope Semrau, Marguerite Ann Snow, Elizabeth Viau.

Assistant Professors: Jose L. Galvan, Antony John Kunnan.

Program advisement provided for:

- * Adult and Continuing Education (Designated Subjects Credential)
- * Bilingual Specialist
- * Community College
- * Computer Education
- * Educational Foundations
- * Instructional Technology
- * Language Development Specialist
- * Library Services
- * Teaching English to Speakers of Other Languages (TESOL)
- * Urban Education

Courses offered in:

- * Adult and Continuing Education (EDAC)
- * Educational Foundations (EDFN)
- * Instructional Technology (EDIT)
- * Library Science (LIBR)

EDUCATIONAL FOUNDATIONS

Programs include the M.A. degree in Education, options in Adult and Continuing Education, Computer Education, Educational Foundations, Instructional Technology, Library Science, the M.A. degree in Teaching English to Speakers of Other Languages (TESOL), and the M.A. degree in Urban Education with several options. Credential programs include Language Development Specialist, Designated Subjects, and Library Media Teacher Services; credit certificate programs include Computer Applications in the Schools and English as a Second Language. These programs are described in the *Graduate Programs* section.

Designated Subjects Teaching Credential

This credential authorizes holders to teach in the subject designated on the credential in classes organized primarily for adults. Recommendations are submitted to the Commission on Teacher Credentialing for authorization in such general areas as *Technical and Trade Education, Business Education, Homemaking Education, Adult Education, Driver Education, and Driver Training*. For vocational area advisement, contact one of the following departments: Criminal Justice, Family Studies and Consumer Studies, Office Systems and Business Education, or Technology. The Division of Educational Foundations and Interdivisional Studies advises in adult education and coordinates the credential program. Requirements for Preliminary Credential

Applicants must satisfy the following criteria to qualify for the university-recommended credential.

- * Formal admission to the Designated Subjects credential program.
- * Verification of possession of bachelor's degree from regionally accredited institution and passing score on the CBEST (*for adult-academic authorizations and for driver education*)

- * Verification of five years' work experience in appropriate vocational area and high school diploma (*for vocational authorizations*)
- * Submission of acceptable plan for completion of requirements for clear credential.
- * Satisfaction of U.S. Constitution requirement.

Requirements for Clear Credential

Applicants must satisfy the following criteria to qualify for the university-recommended credential.

- * Satisfy requirements for preliminary credential.
- * Complete all formal admission requirements including development of a personalized program evaluation plan for professional studies and other requirements.
- * Complete a program of professional study and other academic or occupational requirements.
- * Satisfy state requirement for course work in health education (including nutrition and the physiological and sociological effects of using dangerous drugs, narcotics, alcohol, and tobacco) by completing HS 456.
- * Complete two years of full-time or part-time teaching as defined by the Commission on Teacher Credentialing.

Professional Education Requirements (20 units)

EDAC	471	Methods and Materials of Adult Education	(4)
EDAC	472	Principles of Teaching Adult and Occupational Education	(3)
EDAC	473X	Supervised Field Experiences in Adult and Occupational Education	(2)
EDAC	476	Curriculum Development in Adult and Occupational Education	(4)
EDAC	477	Counseling in Adult and Occupational Education	(3)
HS	456	Health Studies on Alcohol, Narcotics, Nutrition, and Tobacco	(4)

Determination of academic and/or occupational competence shall be made by university faculty and personnel from cooperating school districts and agencies.

SPECIAL EDUCATION**School of Education****DIVISION OFFICE**

King Hall C1064

Telephone: (213) 343-4400

The Faculty**Emeriti:** Robert A. Eisenberg, Donald B. Kinstler, Jean Utley Lehman, Jasper Little, Judith S. Margolis, C. Lamar Mayer, RoseMarie Swallow, F. Annette Tessier, Harry V. Wall.**Professors:** Gary A. Best, Philip C. Chinn(*Chair*), Barbara J. Clark, Mary A. Falvey, Colleen B. Jamison, M. Diane Klein, Allen A. Mori, Alice V. Watkins.**Associate Professors:** Nancy A. Hunt, Andrea G. Zetlin.**Assistant Professors:** Diane Fazzi, Diane Haager.**Program advisement provided for:**

- * Communication Handicapped
- * Early Childhood Handicapped
- * Gifted
- * Handicapped Adolescents and Young Adults
- * Learning Handicapped
- * Multicultural/Multilingual Special Education
- * Orientation and Mobility
- * Physically Handicapped
- * Resource Specialist
- * Severely Handicapped
- * Visually Handicapped
- * Joint Doctoral Program

Courses offered in:

- * Higher Education (EDHI)
- * Special Education (EDSP)

Curricula in Special Education are designed to prepare personnel for delivery of educational service to individuals who, because of physical, behavioral, and/or mental characteristics, require special instruction or services. Specialized preparation is offered for teachers of these exceptional individuals and for administrators and supervisors of special education programs. Information about these programs is contained in the graduate *School of Education* chapter of this catalog.

COURSES IN EDUCATION

The School of Education offers courses in several disciplines, each with a distinct four-letter course abbreviation. These disciplines are listed below with the names of the offering divisions. Courses that follow are arranged alphabetically by course abbreviation.

Discipline Name and Abbreviation	Division
Adult and Continuing Education (EDAC)	Educational Foundations and Interdivisional Studies
Counseling (COUN)	Administration and Counseling
Curriculum and Instruction (EDCI)	Curriculum and Instruction
Education (interdisciplinary) (EDUC)	School of Education
Educational Administration (EDAD)	Administration and Counseling
Educational Foundations (EDFN)	Educational Foundations and Interdivisional Studies
Elementary Education (EDEL)	Curriculum and Instruction
**Higher Education (EDHI)	Special Education
Instructional Technology (EDIT)	Educational Foundations and Interdivisional Studies
Library Science (LIBR)	Educational Foundations and Interdivisional Studies
Secondary Education (EDSE)	Curriculum and Instruction
Special Education (EDSP)	Special Education
<i>** graduate level courses only</i>	

Courses in Education (EDUC)

Upper Division Courses

490 Problems in Education (2-5)

Prerequisite: Instructor consent. Investigation and study of unique problems in education. Specific subject announced in *Schedule of Classes*. May be repeated for credit as subject matter changes.

499 Undergraduate Directed Study (1-4)

Prerequisite: Instructor consent to act as sponsor. Project selected in conference with sponsor before registration. Progress meetings held regularly and final report submitted. May be repeated for credit.

Courses in Adult and Continuing Education (EDAC)

(Division of Educational Foundations and Interdivisional Studies)

Upper Division Courses

471 Methods and Materials of Adult Education (4)

Prerequisites: Admission to Designated Subjects credential program. Corequisite: EDAC 473X. Facilitating learning process by individualizing instruction; use of media; evaluation of student achievement.

472 Principles of Adult and Occupational Education (3)

Prerequisite: Admission to Designated Subjects credential program. Basic principles of teaching the designated subjects; relationship of teaching and curricular practices to cultural differences of students and of communities; scope and function of the designated subjects program.

473XY Supervised Field Experiences in Adult and Occupational Education (2, 2)

Prerequisite: Admission to Designated Subjects credential program. Each section of 473 requires a minimum of 50 hours of field work including arranged seminars. Additional experience may be required by school or university supervisor. Graded CR/NC.

473X: Required in industrial studies, business education, driver education, and driver training and adult education; emphasizes teacher-learner interaction in classroom.

473Y: Required in adult education; emphasizes role and function of school administration, school counselor, front office, and role of school in community.

476 Curriculum Development in Adult and Occupational Education (4)

Prerequisite: Admission to Designated Subjects credential program. Corequisite: EDAC 473Y. Curriculum planning, selection and organization of content, design of work experience projects and programs, relationship of curricula to community characteristics and occupational needs.

477 Counseling in Adult and Occupational Education (3)

Prerequisite: Admission to Designated Subjects credential program. Counseling techniques to meet special needs of students enrolled in adult classes; student participation in intracurricular activities.

Courses in Counseling (COUN)

(Division of Administration and Counseling)

Lower Division Courses

101 Career Decision Making (3)

Development of decision making skills applied to college major and career objectives. Graded CR/NC.

200AB Introduction to Rehabilitation Services (3, 3)

Introduction to the profession of vocational and personal rehabilitation; characteristics of the "helping" process; qualities of "helper" techniques for working with people; exploration of settings that offer services. Field visits to agencies.

Upper Division Courses

403 The Psychosocial Dynamics of Child Maltreatment and Family Violence (4)

(also listed as PSY 403) Prerequisite: PSY 150. Psychosocial factors in child maltreatment and family violence: developmental considerations, assessment, interventions, legal and ethical issues, research findings, and community resources.

405AB Theoretical and Developmental Aspects of Behavior (4, 4)

Personality theories; vocational, cognitive, and personal-social theories of development; developmental data from all phases of life span.

405A: gestation through pubescence;

405B: pubescence through senescence.

406 Behavioral Counseling and Self-Management (4)

Prerequisite: PSY 150. Application of principles of learning to personal counseling and behavioral self-control programs.

428 Measurement Issues in Counseling (4)

Prerequisite: EDFN 452 or PSY 302. Principles, procedures, and ethical considerations underlying data collection and interpretation for purposes of client assessment in counseling settings.

442 Medical Factors in Rehabilitation (3)

Selected facets of medical, developmental, and administrative factors in the rehabilitation process, including medical terminology, specialties in medical practice, and workers' compensation law. Implications for rehabilitation counseling. Lectures, case discussions, field trip.

445 Developmental Self Exploration (2)

Relationships among personal attitudes, values, communication style, and professional development as a counselor. Graded CR/NC.

447 Career Education and Guidance in Schools (4)

Career education and guidance covering elementary through high school years. Use of activities, theory, and information in the construction of career education programs.

448 Career Counseling for Adults (4)

Vocational counseling of college students, rehabilitation clients, persons making midcareer changes, and returning homemakers; emphasis on career development theory, occupational information, job analysis, and job placement.

449 Job Development and Work Evaluation (4)

Prerequisites: COUN 428, 448, instructor consent. Methods for identifying, evaluating, and enhancing employment opportunities for people with physical, emotional, and mental disabilities; job analysis, work evaluation, employer development, job modification, assistive devices, community resources, placement planning, and work adjustment.

450 Counseling Theories (3)

Prerequisite: All GE requirements. Theories of counseling appropriate for individual and group work; functions of theory in research and practice including substance abuse counseling; background for subsequent training in group counseling methods and individual counseling.

460 Laws Relating to the Child and Family (4)

Legal and ethical guidelines for counselors, therapists, and child development practitioners; laws related to the family including marriage, divorce, and assessment and reporting of child abuse.

475AB Counseling in the Work Place (3, 3)

COUN 475A is prerequisite to 475B. Philosophical premises and operating principles of counseling programs for employees in business, industry and government, and outplacement. Methods of establishing, conducting, and evaluating these programs.

479 Counseling Older Adults (4)

Counseling issues in adult development and aging from a multidisciplinary perspective in context of biomedical, psychological, social, economic, political, environmental aspects; strategies for individual, family, group counseling with older adults.

480 Fundamentals of Counseling (4)

Skills in listening and communicating for working effectively with those seeking counseling assistance.

484 Conferences with Parents (4)

Dynamics of communication and methods of facilitating student growth through parent-teacher conferences.

489 Behavior Management Using Reinforcement in Classrooms (4)

Prerequisite: PSY 150. Constructive approaches to classroom management using individual and group reinforcing contingencies for preschool through high school age students.

490 Problems in Guidance (1-5)

Prerequisite: Instructor consent. Investigation of unique problems in guidance as announced in *Schedule of Classes*. May be repeated for credit as subject matter changes.

492 Futures Studies: Educational Implications of the Future (4)

Prerequisite: Senior or graduate standing. Examination of field of futuristics and implications for education; recognition of impact of technological and social change upon life-coping skills; familiarity with instructional strategies for helping students anticipate change and develop future-oriented attitudes.

494 Seminar: Rehabilitation Services (3)

Prerequisites: COUN 200AB, prerequisites or corequisites: COUN 406, 448 or 447. Enhancement and integration of techniques and skills needed for effective functioning in the field; senior thesis required. May be repeated to maximum of 6 units.

495 Field Work in Rehabilitation Services (3-9)

Prerequisites: Admission to Rehabilitation Services major, COUN 200AB, consent of field work supervisor; prerequisites or corequisites: COUN 406, 448; corequisite: COUN 494. Field placement arranged congruent with option area selected. Graded CR/NC.

499 Undergraduate Directed Study (1-4)

Prerequisite: Instructor consent to act as sponsor and consent of division chair. Project selected in conference with sponsor before registration; progress meetings held regularly; final report submitted. May be repeated for credit.

Courses in Curriculum and Instruction (EDCI)

(Division of Curriculum and Instruction)

Subcollegiate Course**093 Development of Study Skills: Reading (4)**

Prerequisite: Recommendation of a counselor or an instructor. Developing reading study skills necessary for academic success at university level. Current general education textbook material used to reinforce college level reading. Graded CR/NC. May be repeated to maximum of 12 units. *No credit toward baccalaureate.*

Upper Division Courses**300 The Teaching Profession (3)**

Prerequisites: GE basic subjects, upper division standing. Introduction to teaching as a professional career; minimum 20 hours of scheduled participation in variety of off-campus elementary or secondary schools; required of all students interested in pursuing California teaching credential. Graded CR/NC.

421 Advanced Educational Writing (4)

Prerequisite: ENGL 190. Principles and practice of educational written communication. *Students subject to earlier catalogs satisfy the prerequisite with ENGL 1010r 102.

450 Using ESL Techniques in the Content Areas (2)

Prerequisite: EDEL 400 or EDSE 401. Basic techniques for teaching English as a second language to ESL students in content area classes, e.g., social science, mathematics, art.

453 Teaching in Bilingual/Crosscultural Schools (4 each)

Prerequisite: Teaching credential. Specialized teaching techniques and materials for bilingual/crosscultural schools. School and community field assignments.

453C Chinese

453K Korean

453S Spanish

455 Methods of Teaching Reading in Target Language (4 each)

Prerequisites: Admission to Bilingual/Crosscultural credential program, including proficiency in target language at 300B level; EDFN 413 and either EDEL 400 or EDSE 423. Teaching reading, kindergarten through grade 12, in target language, to speakers of that language or to speakers of English in bilingual programs. Instruction partly in target language.

455C Chinese

455S Spanish

Courses in Educational Administration (EDAD)

(Division of Administration and Counseling)

Upper Division Course

480 Institutional Racism and Schools (4)

Institutional racism and its perpetuation in U.S. schools, while developing a definition of this concept and specific strategies for the elimination or reduction of institutional racism.

Courses in Educational Foundations (EDFN)

(Division of Educational Foundations and Interdivisional Studies)

Upper Division Courses

409 Tests, Measurement, and Evaluation (4)

Basic principles of educational measurement and evaluation; teacher-devised instruments and techniques; selection and interpretation of standardized tests; methods of marking and reporting.

413 Psychological Foundations of Education (4)

Psychological research and theory in human learning and development related to educational processes.

414 Social Foundations of Education (3)

Social issues related to educational processes in the U.S.

437 Education and Intergroup Relations (4)

Implications of community intergroup problems for schools, teachers, and administrators; educational problems resulting from *de facto* segregation, cultural differences, racial and ethnic discrimination, urbanization.

438 Traditional Asian-American Values in American School Setting (4)

Traditional Asian-American values as they relate to values found in American schools; ways in which these values reinforce or impede the teaching-learning process.

452 Statistics in Education (4)

Prerequisite: One year of algebra. Introduction to descriptive and inferential statistics basic to understanding and conducting educational research, including measures of central tendency, variability, covariability, sampling theory, interval estimation, testing statistical hypotheses.

490 Problems in Educational Foundations (2-5)

Prerequisite: Instructor consent. Investigation of unique problems in educational foundations. Specific subjects announced in *Schedule of Classes*. May be repeated for credit as subject matter changes.

499 Undergraduate Directed Study (1-4)

Prerequisite: Instructor consent to act as sponsor. Project selected in conference with sponsor before registration; progress meetings held regularly; final report submitted. May be repeated for credit.

Courses in Elementary Education (EDEL)

(Division of Curriculum and Instruction)

Upper Division Courses

400 Proseminar: Curriculum and Teaching of Reading/Language Arts (4)

Prerequisites: Admission to credential program; EDFN 413 *may be taken concurrently*.

Strategies for teaching reading and writing in various milieu, emphasizing reading skills and writing development. Field experience required. Offered in English or a second language as listed below.

400C Chinese**400K Korean****400S Spanish****401 Proseminar: Curriculum and Teaching of Mathematics (3 each)**

Prerequisites: Admission to credential program; EDFN 413 *may be taken concurrently*

and MATH 120 with grades of C or better. Analysis, application, and evaluation of strategies for teaching mathematics in various socioeconomic and cultural milieux. Laboratory experience provided. Offered in English or a second language as listed below.

401 C Chinese**401 K Korean****401 S Spanish****402 Proseminar: Curriculum and Teaching of Social Science and Science (4 each)**

Prerequisites: Admission to credential program; EDFN 413 *may be taken concurrently*. Analysis, application, evaluation of strategies for teaching social science and science in various socioeconomic and cultural milieux. Laboratory experience provided.

402C Chinese**402K Korean****402S Spanish****403 Directed Teaching I: Multiple Subject (12)**

Prerequisites: See *Directed Teaching* requirements; EDEL 400, 401, 402; EDFN 413. On-site laboratory experience consisting of teaching multiple subjects under direction of University supervisor with cooperation of supervising classroom teacher(s). Concurrent weekly seminar. Graded *CR/NC*.

404 Directed Teaching II: Multiple Subject (12)

Prerequisites or corequisites: EDEL 403, EDFN 414. On-site laboratory experience teaching multiple subjects under direction of University supervisor with cooperation of supervising classroom teacher(s). Concurrent weekly seminar. Graded *CR/NC*.

405 Proseminar: Language Development in the Elementary Classroom (3)

Prerequisite or corequisite: EDFN 413. Analysis, application, evaluation of strategies for teaching language acquisition/language arts and related cultural aspects in elementary classrooms, including primary language development, ESL, and sheltered English strategies.

406 The Handicapped Child: Individualization of Instruction (1)

Prerequisite or corequisite: EDSP 400 or 410. Analysis, application, and evaluation of strategies for individualization of instruction for handicapped children in the regular classroom; formal and informal assessment and development of instructional plans. Laboratory experiences provided.

407 The Handicapped Child: Observation of Behavior (1)

Prerequisite or corequisite: EDSP 400 or 410. Analysis, application, and evaluation of strategies for observation of behavior of handicapped children; implications for teaching strategies. Laboratory experiences provided.

408 The Handicapped Child: Environment and Curriculum (1)

Prerequisite or corequisite: EDSP 400 or 410. Analysis, application, and evaluation of instructional alternatives, environmental modifications, and curricular modification for individualizing instruction for handicapped children. Laboratory experiences provided.

413 Children's Reading Materials in Spanish (4)

Prerequisite: Proficiency in Spanish at 300B level. Spanish reading materials suitable for development or enrichment of reading at elementary level; oral and written language skills in bilingual/crosscultural classroom.

421 Teaching Language Arts in Elementary School (4)

Prerequisite: Teaching experience. Intensive study in teaching language arts in elementary school. Exploration, analysis, interpretation, and implementation of modern teaching trends and issues, with urban emphasis.

423 Teaching Basic Skills of Written Composition to Elementary School Children (4)

Prerequisites: EDEL 401, teaching experience, credential advanced composition requirements. Developing basic skills of written expression in elementary age children, including diagnosis of needs, objectives, strategies, mechanics of written expression, usage and grammar, and evaluation for nonexpository and expository writing.

424 Methods of Using Creative Dramatics with Children (3)

Prerequisite: SPCH 490. Methods of using creative dramatics with elementary age children. A preservice or inservice course for librarians, teachers, recreation and community leaders.

427 Using Children's Literature in Elementary Classrooms (4)

Survey, analysis, and utilization of elementary school level children's books and other instructional materials in classrooms.

431 Teaching Mathematics in Middle Schools (4)

Mathematics content and methodology appropriate for students in middle schools; emphasis on problems specific to urban areas and on discovery-activity techniques.

432 Teaching Mathematics for Early Childhood (4)

Prerequisite: MATH 120 with minimum C grade or teaching experience. Professional course presenting methods and materials for teaching mathematics to children, prekindergarten through grade three.

433ABCD Special Topics in Mathematics for Elementary Teachers (1 each)

Prerequisite: EDEL 401. Instructional laboratory for elementary teachers; current strategies, materials, and terminology for teaching specific strands from Mathematics Framework for California Public Schools.

433A Metric Measurement**433B Problem Solving****433C Geometry****433D Logic****435 Use of Hand Calculator in Teaching Mathematics in Elementary Classroom (2)**

Prerequisites: EDEL 401, MATH 120 (minimum C grade). Laboratory that examines the purpose of and teaching strategies for use of hand-held calculator in the elementary school; practical application of mathematics to problem-solving.

441 Teaching Social Studies in Elementary School (4)

Prerequisites: EDEL 400, 401,402; EDFN 413,414. Exploration, analysis, and interpretation of modern teaching trends and issues in social studies, with an urban emphasis. Does not meet EDEL 400-401-402 requirement in professional education.

451 Teaching Science in Elementary School (4)

Prerequisite: Teaching experience. Intensive study in teaching science in elementary school; exploration, analysis, interpretation, and implementation of modern teaching trends, issues, and materials, with urban emphasis.

461 Curriculum Procedures and Materials for Early Childhood Education (4)

Prerequisite: EDFN 413 or PSY412A. Curriculum, instructional procedures, and materials in early childhood education. Study of selected nursery schools and children's centers, including two hours per week of observation and participation.

462 Dynamics of Play (4)

Dynamics of group and individual play in children, focus on increased understanding of human development and behavior; Observation for two hours per week required.

463 Kindergarten-Primary Education (4)

Prerequisites: Admission to credential program; EDFN 413, EDEL 400, 401; 402 (may be taken concurrently). Principles, curriculum, methods and materials of instruction; teacher-parent relations; emphasis on inner city problems.

464 Prekindergarten Education in Metropolitan Areas (4)

Corequisite: EDFN 437. Selection of objectives, student population, curriculum content, materials and instructional procedures for teachers in public prekindergarten schools in various socioeconomic and cultural milieus.

465 Directed Teaching: Preschool (12)

Prerequisites: EDEL 461,462; see *Multiple Subject Credential with Prekindergarten Option* requirements. Directed teaching for credential at preschool level. Grade **CR/NC**.

466 Cultural Diversity in Early Childhood Classroom: Needs and Opportunities (4)

Prerequisites: Enrollment in teacher education program (Elementary or Early Childhood Education); teaching experience with young children. Workshop involving crosscultural perspective on urban preschools, children's centers, primary grades in elementary school; role of cultural contributions of diverse communities in child's self-image and learning ability.

470AM Introduction to Elementary Curriculum (3, 3)

Prerequisites: COMD 456, 461. Overview of curriculum, methods, and materials used by elementary teachers in presenting reading, mathematics, and language arts. Meets needs of Communicative Disorders majors pursuing Special Class Authorization of Severe Language Handicapped and/or Aphasic Pupils. May not be used for Multiple Subject credential.

470A Reading

470B Mathematics and Language Arts

473 Storytelling for Teachers (4)

Developing skills of storytelling, selecting appropriate literature, and including storytelling in the elementary school curriculum.

480 Teaching Microcomputing in Schools (4)

Theory, methods, and techniques for teaching the programming language (graphic and text modes) in schools through hands-on experience in a microcomputer laboratory.

489 Demonstration of Instructional Competencies (12)

Prerequisite: Approval of division chair. Demonstration of competencies related to instructional skills specified for components leading to completion of approved credential, certificate, or degree program requirements. May be repeated for credit with division approval. Grade **CR/NC**.

490 Problems in Elementary Education (2-5)

Prerequisite: Instructor consent. Investigation of unique problems in elementary education. Specific topic announced in *Schedule of Classes*. May be repeated for credit as subject matter changes.

495 Strategies for Organizing Elementary Curriculum (4)

Prerequisites: EDSP 494, enrollment in teacher education or teaching credential program. Methods and materials that present an integrated curriculum, including Learning centers and core curriculum, presented and discussed. Changes in classroom curriculum and environment to reflect focus on integrated curriculum including unit approach.

499 Undergraduate Directed Study (1-4)

Prerequisite: Instructor consent to act as sponsor. Project selected in conference with sponsor before registration; progress meetings held regularly and final report submitted. May be repeated for credit.

Courses in Instructional Technology (EDIT)

(Division of Educational Foundations and Interdivisional Studies)

t There is a special fee associated with registering for laboratory classes that carry this designation. Details appear in the Schedule of Classes.

Upper Division Courses**430 Introduction to Computers and Their Uses in Classrooms (4)**

Prerequisite: Multiple or Single Subject credential methods courses. Computer hardware, software, and related technology and their uses in and impact on society and education; hands-on experience with applications software, instructional software, and classroom management tools.

435 Computing Systems in Schools (4)

Prerequisite: EDIT 430 or 447. Computing systems and their uses in education including computer hardware, operating systems local area networks, peripherals, and telecommunications equipment. Lecture 3 hours, laboratory 2 hours.

447 Computers in the Classrooms (2)

Prerequisite: An introductory course in use of microcomputers. Survey of microcomputer applications in the classroom including software selection, computer use in and impact on the curriculum, methods of teaching computer literacy and classroom management.

t450 Instructional Materials Preparation Laboratory (1)

Prerequisites or corequisites: EDCI 300, EDSE 401. Applications of instructional media in classroom instruction; introduction to preparation, selection, lesson development, and evaluation of media from the chalkboard to computers. Laboratory 2 hours.

451 Instructional Media Techniques (4)

Methods and techniques of using audiovisual equipment and materials in communication: type, source, selection, teaching techniques and evaluation of materials. Two hours laboratory per week required in operation of equipment. Credit allowed for EDIT 451 in addition to EDSE 401; completion of machine laboratory requirement in 401 satisfies laboratory requirement for this course.

452 Introduction to Computers for Educators (4)

Introduction to computers for teachers and school administrators including hardware and software specifications, major programming languages used in schools, and ethical, legal, and historical considerations.

453 Instructional Technology and Programmed Instruction (4)

Prerequisite: Teaching experience. Development of technology in instructional process; emphasis on auto-instructional methods, devices, and programmed instruction; laboratory practice with existing programs designed for use in school, industry, and home.

456 Computer Applications in Schools (4)

Computer applications in the areas of learning, teaching, and instructional management; problem-solving approach to design, development, and evaluation of computer education within teaching discipline and grade level. Lecture 3 hours, laboratory 2 hours.

481 Microcomputing in Schools: BASIC I (4)

Prerequisite: EDIT 430. Curriculum, applications, and methods for teaching BASIC in schools with hands-on experience in a microcomputer laboratory.

482 Microcomputing in Schools: BASIC II (4)

Prerequisites: EDIT 430, 481. Curriculum, applications, and methods of BASIC including: structured BASIC programming, string manipulations, arrays, files, sorting techniques, high resolution graphics and animation, and memory manipulation.

483 Pascal for Teachers (4)

Prerequisites: EDIT 430; 4810r CS 190. Introduction to microcomputer-based Pascal, methods for teaching Pascal, and educational applications of Pascal.

484 Computer Authoring Tools (4)

Prerequisite: EDIT 430. Computer authoring tools and their uses in developing educational software; hands-on experience with various authoring tools.

490 Special Topics in Instructional Technology (2-5)

Prerequisite: Instructor consent. Investigation of unique problems and new developments in instructional technology as announced in *Schedule of Classes*. May be repeated for credit as subject matter changes.

Courses in *Library Science* (LIBR)

(Division of Educational Foundations and Interdivisional Studies)

Subcollegiate Courses

090 Introduction to Cal State L.A. Library (1)

Introduction to the organization and services of campus library with emphasis on strategies for successful library use. *No credit toward baccalaureate.*

091 Developing Basic Library Research Skills (1)

Prerequisite: LIBR 090. Introduction to research skills needed for effective utilization of campus library facilities; emphasis on strategies for successful completion of assigned papers and projects. *No credit toward baccalaureate.*

Upper Division Courses

401 Management of School Library Media Programs (4)

Role of library media programs in contemporary schools with attention to impact of technology, administration of facilities, and planning; implementation and evaluation of programs.

403 The School Library Media Program and the Curriculum (4)

Philosophy and strategies of integrating library media program into curriculum of contemporary schools.

406AB Information Services in School Library Media Programs I, II (4, 4)

LIBR406A is prerequisite to 406B. Philosophy and administration of information services in school library media programs; survey of information sources including reference books, periodicals, on-line services, and related technologies; introduction to instructional programs about searching.

407 Selection, Acquisition, and Utilization of Instructional Materials (4)

Philosophy and practice of building and utilizing library media collections; criteria for evaluating all types of instructional materials; background information about the publishing and producing industries and related concerns.

409 Cataloging and Classification of Instructional Materials (4)

Theory and methods of organizing collections in school library media centers; descriptive cataloging of all types of materials, classification systems, choice of subject headings, use of computers in information retrieval. Lecture 3 hours, laboratory 3 hours.

450 Field Work in School Library Media Programs (6)

Prerequisites: Admission to Library Services credential program; LIBR 401, 403, 406B, 407, 409, EDCI 560, EDEL 427, EDIT 451, EDSE 524, B (3.0) grade point average in Library Services credential program courses. Total of 180 hours of field work at two school library media centers under supervision and guidance of credentialed school library media specialists. Seminars arranged. Graded *CR/NC*.

Courses in *Secondary Education* (EDSE)

(Division of Curriculum and Instruction)

Upper Division Courses

401 Instructional Strategies in Secondary Teaching (4)

Prerequisite or corequisite: EDCI 300. Skills and understandings required by prospective and beginning secondary school teachers for effective planning, implementation, and evaluation of instruction; analysis of special instructional and curricular problems in secondary schools.

405 Mainstreaming in Secondary Schools (3)

Concept and practice of mainstreaming; role and responsibilities, skills and support services needed by classroom teachers in educational diagnosis of exceptional adolescents; instructional planning related to individualized education plans.

415 Classroom Management in Secondary Schools (4)

Identification and resolution of classroom management and control problems in junior and senior high schools; study and application of selected strategies, teacher control techniques, and related research.

421 Instructional Methods for Secondary School Subjects (3 each)

Prerequisites: EDCI 300, EDSE 401, admission to teaching credential program. and as specified for individual subjects below. Instructional strategies and curricular themes in specific subjects taught in secondary schools. *Single Subject credential candidates must complete one methods course to meet credential requirements.*

421 A Accounting and Microcomputer Applications

Prerequisite or corequisite: OSBE 410B. Methods and materials for teaching accounting and microcomputer applications at the secondary level.

421 C Science**421 E Home Economics****421 G Economics and General Business**

Prerequisite or corequisite: OSBE 410B. Methods and materials for teaching such high school subjects as economics, consumer economics, general business, and business law.

421 H Health and Safety Education

421I Industrial Education Prerequisite: TECH 300AB.

421 K Keyboard/Word Processing and Office Systems

Prerequisites: OSBE 410B, demonstrated proficiency in keyboarding. Methods and materials of teaching keyboard/word processing and office systems.

421 L Foreign Languages

Prerequisite: Six upper division units in the language.

421 M Mathematics**421 N English and Language Arts**

Prerequisites: ENGL 401;406 or 410; completion of all but two courses in English program for Single Subject credential.

421 P Physical Education**421 R Art****421 S Social Science****421 U General Music**

Prerequisite: MUS 344. 423

423 Teaching Reading in Secondary Schools (4)

Suggested corequisite: EDSE 442AB or 489 or current secondary school classroom employment. Reading in secondary school content areas; reading as an instructional tool in secondary classes; strategies to improve reading at secondary level; provision for field experience.

441 Observation/Participation in Secondary Schools (2)

Opportunity for firsthand experience with educational programs in secondary schools. May be repeated to maximum of 4 units. Grade **CR/NC**.

442AB Directed Teaching in Secondary Schools (11, 11)**442A.**

Prerequisites: EDFN 413, EDSE 401, admission to teaching credential program; completion of waiver program or passing score on NTE in subject area of teaching credential, recommendation of subject-area department; prerequisites or corequisites: EDSE 415, 421, EDIT 450. Four periods per day of directed teaching in assigned school. Seminars arranged. Grade **CR/NC**.

442B.

Prerequisites: EDSE 415,421,442A, EDIT 450; prerequisites or corequisites: EDFN 414, EDSE 423. Four periods per day of directed teaching in an assigned school. Seminars arranged. Graded CR/NC.

489 Demonstration of Instructional Competencies (8-11)

First quarter. Prerequisites: EDCI 300, EDFN 413, EDSE 401, admission to teaching credential program, completion of approved waiver program or passing score on NTE in subject of teaching credential; prerequisites or corequisites: EDSE 415, 421, EDIT 450. Demonstration of teaching competencies for full-time secondary teachers. Must include one period in subject area of credential. Meets California Single Subject teaching credential requirement for directed teaching. May be repeated for credit with division approval. Grade CR/NC.

Second quarter .

Prerequisites: EDSE 415, 421, 442A or 489, EDIT 450; prerequisites or corequisites: EDFN 414, EDSE 423. Demonstration of teaching competencies for full-time secondary teachers. Must include one period in subject area of credential. Meets California Single Subject teaching credential requirement for directed teaching. May be repeated for credit with division approval. Graded CR/NC.

490 Problems in Secondary Education (2-5)

Prerequisite: Instructor consent. Investigation of unique problems in secondary education. Specific subject announced in *Schedule of Classes*. May be repeated for credit as subject matter changes.

491 Problems of Junior High and Middle Schools in Metropolitan Areas (4)

Prerequisite: Teaching credential. Current trends and problems of American junior high and middle schools.

499 Undergraduate Directed Study (1-4)

Prerequisite: Instructor consent to act as sponsor. Project selected in conference with sponsor before registration; progress meetings held regularly; final report submitted. May be repeated for credit.

Courses in Special Education (EDSP)

(Division of Special Education)

Upper Division Courses

400 Education and Psychology of Exceptional Individuals (4)

Characteristics of and implications for education of individuals with exceptional needs; related current problems, trends, programs, legislation, and community resources.

401 Assessment of Exceptional Individuals in Educational Settings (4)

Prerequisite or corequisite: EDSP 400. Principles, procedures, and use of educational assessment and evaluation techniques for special needs students in educational settings; emphasizes mastery of assessment practices for planning and evaluating the Individualized Educational Program (IEP).

402 Curriculum Modification and Instructional Strategies for Exceptional Individuals (4)

Prerequisite: EDSP 401. Development of instructional strategies appropriate for exceptional individuals; current methodology and techniques of curriculum modification necessary to individualize instruction for handicapped.

403 Special Education Laboratory (1-5)

Prerequisite: EDSP 401; corequisite for preservice Special Education majors: EDSP 402. Practicum field experience with exceptional individuals in designated areas of special education. Graded CR/NC.

404 Teacher Guidance for Exceptional Individuals (2)

Prerequisite: EDSP 400. Problems of personal, educational, and social adjustment affecting individuals with exceptional needs. Guidance techniques for teachers working with exceptional individuals and their families.

405 Career Preparation for the Handicapped (2)

Prerequisite: EDSP 404. Implications of handicapped conditions for career selection and preparation. Programs in schools and other agencies to develop career awareness, information, and skills.

406 Observation in Special Education (1-2)

Opportunity for firsthand experience with educational programs in special education. May be repeated to maximum of 4 units. Graded CR/NC.

407 Directed Teaching In Special Education (3-12)

Prerequisites: See *Directed Teaching* requirements; 12 units of directed teaching in an area of special education other than speech and hearing may be used to satisfy requirement for equivalent amount on teaching credential. Assignments in city and county schools under supervision and guidance of qualified teacher and University supervisor. Graded CR/NC.

408 Cognitive and Linguistic Processes In Exceptional Individuals (4)

Prerequisite: COMD 456. Theories and sequences of cognitive and linguistic development: impact of sensory, motor, emotional, and mental factors on these processes.

410 Education of Exceptional Individuals In Mainstream Settings (3)

Deviations from normal, sensory, motor, perceptual, and mental development. Implications of deficit areas for learning. Functional assessment of exceptional individuals. For students in Multiple and Single Subject credential programs.

412 Issues in Child Abuse, Neglect, and Family Violence (4)

(also listed as FSCS 4 12) Overview of legal, health, social, psychological, educational, and cultural meaning of child maltreatment and family violence; field observations at appropriate agencies and sites.

415 Educational Assessment Techniques for Young Handicapped Children (4)

Prerequisite: Introductory course in child development. Assessment and educational planning for handicapped children from birth to five years old, and for their families.

416 Working with Families of Young Handicapped Children (4)

Prerequisites: EDSP 400, course work in child development. Techniques for teachers and other professionals working with families of young handicapped children in infant and preschool programs.

420 Implications of Communication Handicaps (4)

Prerequisite: EDSP 400. Survey of educational, psychological, and vocational implications of communication handicaps; emphasis on impact of auditory impairment.

430 Sign Language (3)

Methods of manual communication and relationships to other forms of communication; use of non-oral communication in therapeutic and educational settings.

431A Laboratory: Sign Language, Beginning (1)

Intensive sign language practice in the habilitation of prelingually hearing impaired individuals.

431B Laboratory: Sign Language, Advanced (1)

Advanced practice in sign language for the habilitation of prelingually hearing impaired individuals.

440 The Gifted Individual I (4)

Characteristics, needs, and identification of gifted individuals, with emphasis on early nurture. Problems of personal, educational, and social development of gifted individuals; overview of current and innovative programs.

441 The Gifted Individual II (4)

Prerequisite: EDSP 440. Strategies for education of gifted individuals, prekindergarten through grade 12. Methods of assessment; program planning to meet individual needs; evaluation of development. Emphasis on developing higher cognitive skills, including techniques of inquiry, simulation, open structure, and problem solving.

450 Educational and Vocational Implications of Retardation (4)

Implications of retardation for education and for community and vocational adjustment; current programs, services, and legal aspects. Observation in schools, workshops, and hospitals required.

460 Psychological, Sociological, and Vocational Implications of Physically Handicapped (3)

Prerequisite: EDSP 462. Psychological and sociological aspects of physical disabilities; services for individuals with physical disabilities.

461 Art, Music, and Recreation for Physically Handicapped (4)

Prerequisite: EDSP 462 or 465. Art, music, and recreation experiences relating to needs of physically handicapped children, including orthopedically and visually handicapped.

462 Survey of Physical Disabilities (4)

Prerequisite: EDSP 400. Physical defects commonly found among orthopedically handicapped children, accompanying defects of central nervous system damage, and resulting impairments in development.

465 Introduction to Vision (3)

Prerequisite: EDSP 400. Anatomy, physiology, and pathology of the eye; development of visual efficiency, use of low-vision aids; vision screening programs; assessment of visual perception problems.

466 Communication Skills for Vision Impaired (4)

Prerequisites: EDSP 402,403. Fundamentals of teaching specialized communication skills to vision-impaired children, including Braille, typing, handwriting, slate and stylus; Braille reading and listening.

467 Methods for the Visually Impaired (4)

Prerequisite: EDSP 466. Special learning theories; visual problems and educational intervention; functional low-vision assessment and teaching strategies; blind and low-vision specialized curriculum; diagnosis and planning; methods, materials, and aids.

469 Psychological, Sociological, and Vocational Implications of Blindness (3)

Psychological aspects of blindness, vocational assessment and employment possibilities, services of state and private agencies, and integration of the blind into sighted society.

475 Orientation and Mobility for the Blind (4)

Prerequisite: Instructor consent or division. Orientation and independent travel techniques for congenitally and adventitiously blind under conditions simulating blindness. Emphasis on use of other senses and long cane technique. Lecture/discussion 2 hours, practicum 6 hours.

476 Advanced Mobility Instruction for Teachers of the Blind (5)

Prerequisites: EDSP 475, instructor consent. Clinical practicum in application of basic techniques, interpretation and coordination of the sensorium, emphasis upon analysis of readiness, aptitude, development of environmental concepts; practicum in analysis of immediate environs.

480 Assessment and Curriculum in Integrated School and Community Settings (4)

Prerequisites: EDSP 402,403. Assessment and curricular strategies for students with severe disabilities in integrated school and community settings; working with school personnel, families, significant others, and the community.

481 Instructional Strategies for Students with Severe Disabilities (4)

Prerequisites: EDSP 402,403. Methods of teaching students with severe disabilities and other exceptionalities in integrated school and community settings; strategies for infusing academic, communication, and motor skills into functional and age-appropriate curriculum.

489 Demonstration of Instructional Competencies (3-12)

Prerequisite: Approval of division chairperson or designee. Demonstration of competencies related to instructional skills specified for components leading to completion of approved credential, certificate, or degree program requirements. May be repeated for credit with division approval. Graded CR/NC.

490 Problems in Special Education (2-5)

Prerequisite: Instructor consent. Investigation and study of unique problems in special education. Specific subject announced in *Schedule of Classes*. May be repeated for credit as subject matter changes.

499 Undergraduate Directed Study (1-4)

Prerequisite: Instructor consent to act as sponsor. Project selected in conference with sponsor before registration; progress meetings held regularly; final report submitted. May be repeated for credit.

SCHOOL OF ENGINEERING AND TECHNOLOGY

Departments within the School

Department of Civil Engineering

Department of Electrical and Computer Engineering

Department of Mechanical Engineering

Department of Technology

DEAN'S OFFICE

Engineering and Technology A221

Phone: (213) 343-4500

ASSOCIATE DEAN'S OFFICE

Engineering and Technology A237

Phone: (213) 343-4510

Engineering and technology contribute in many ways to the welfare, technological progress, and defense of the nation by developing methods for converting raw materials and power sources into useful products. Engineers and technologists also develop scientific equipment to probe outer space, the human body, and the ocean depths. They design, plan, and supervise the construction of buildings, highways, rapid transit systems, and water supplies and involve themselves in areas of solid state electronics, computers, electrical equipment, communications, controls, and power distribution systems. They also enter the fields of mechanics, thermal science, machinery design, instrumentation, and the development and transmission of power.

The School of Engineering and Technology offers programs leading to the Bachelor of Science degree in Engineering with an option in Civil, Electrical, or Mechanical Engineering or with a Special Option; Bachelor of Science in Industrial Technology, with options in Aviation Administration, Printing Management, and Production Technology; Bachelor of Science in Fire Protection Administration and Technology; Bachelor of Arts in Industrial Arts; and Bachelor of Vocational Education in Vocational Arts. A minor is available for students majoring in other fields.

The school offers Master of Science degrees in Civil, Electrical, and Mechanical Engineering and Master of Arts degrees in Industrial and Technical Studies and in Vocational Education. These are described in the *Graduate Programs* section.

ENGINEERING

Bachelor of Science Degree in Engineering

The Bachelor of Science degree program provides instruction in the basic sciences and in engineering design and synthesis. The degree may be earned with an option in Civil, Electrical, or Mechanical Engineering, or with a Special Option. Programs leading to the Bachelor of Science degree in Engineering, civil, electrical, and mechanical engineering options, are accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (EAC/ABET). Accreditation requires that all programs provide the following minimum level of instruction: one and one-half years of basic sciences and mathematics, one year of engineering sciences, one-half year of engineering design, and one-half year of humanities and social sciences. Students may prepare for both traditional and innovative careers in engineering fields and in interdisciplinary combinations such as materials sciences, fire protection engineering, and manufacturing engineering.

Requirements for the Major

The total number of units required for the Bachelor of Science degree in Engineering differs slightly with the option chosen, as shown below. All students complete a required basic program of lower division courses, followed by specific requirements and technical electives appropriate to their selected option and individual professional objectives.

Students consult a faculty adviser before registering for classes in their first quarter. They are then required to see their adviser before registering for each subsequent quarter to check for completion of prerequisites and granting of approval to register. Students are expected to develop working relationships with their advisers, and are expected to design elective programs with adviser

consultation. They must complete all required lower division course work and obtain upper division advisement before registering for elective courses.

Civil Engineering - The degree and major with this option require a minimum of 200 units including 152 in the major: 76 in lower division required courses, 58 in upper division required courses, and 18 in upper division electives.

Electrical Engineering - The degree and major with this option require a minimum of 203 units including 155 in the major: 63 in lower division required courses, 61 in upper division required courses, 14 in upper division EE electives (12 lecture, 2 lab), 4 in upper division MATH electives, and 13 in an upper division specialization.

Mechanical Engineering - This degree and major with this option require a minimum of 203 units including 155 in the major, 67 in lower division required courses, 60 in upper division required courses, and 28 in upper division electives.

Special Option - The degree and major with this option require a minimum of 200 units including 152 in the major: 72 in lower division required courses, 28 in upper division required courses, and 52 units in upper division electives.

In addition, all options require the completion of 72 units of general education; however, 24 general education units that are also required for the major are "double counted."

Transfer Students

The Engineering program is designed for students who transfer from a California community college as well as those who begin their work at Cal State L.A. Students at other colleges who are considering transferring to Cal State L.A. are urged to consult a department adviser for complete details and for program counseling.

In evaluating transfer courses, the Engineering Departments allow no subject credit for upper division work taken at another institution in which the grade of "D" or its equivalent was earned. Lower division courses, are not subject to this restriction.

TECHNOLOGY

The Department of Technology offers undergraduate study in various areas. The specific technical areas are aviation administration, production technology, printing management, fire protection administration and industrial arts. Graduates of these programs are employed in industry as management representatives, trainers, production supervisors, technical support specialists, or management trainees or as administrators in the fire services, and as teachers of industrial education in public schools. In addition, the department offers several upper division credit certificate programs to provide further technical depth.

CIVIL ENGINEERING**School of Engineering and Technology****DEPARTMENT OFFICE**

Engineering and Technology A211

Phone: (213) 343-4450

The Faculty**Emeriti:** King S. Luk, William G. Plumtree, Gunjit Sikand.**Professors:** Frank R. Balle, Anjan K. Bhaumik, Raymond I. Jeng(*Chair*), Irving Kett, Young C. Kim, Rupa P. Purasinghe, Narendra B. Taly, Wen L. Wang.**Associate Professor:** Hassan Hashemian.**Bachelor of Science Degree in Engineering with Civil Engineering Option**

The *Civil Engineering* option offers instruction in the basic sciences and in planning, designing, constructing, and managing civil engineering systems: water resources, environmental, highways and transportation, structural and geotechnical engineering.

Requirements for the Major (152 units)*Lower Division Required Courses (76 units):*

CE	202	Plane Surveying	(4)
CS	290	Introduction to FORTRAN Programming	(2)
CHEM	101,102	General Chemistry I, II	(5, 5)
ENGR	100	Introduction to Engineering	(1)
ENGR	103	Design Graphics	(3)
ME	412		

ELECTRICAL AND COMPUTER ENGINEERING

School of Engineering and Technology

DEPARTMENT OFFICE

Engineering and Technology A317

Phone: (213) 343-4470

The Faculty

Emeriti: Leslie Cromwell, Louis W. Eggers, Jr., Vincent A. Giroux, M. Morris Mano, Victor Payse, Jr., Howard Schug, Harold Sorch.

Professors: Kodzo O. Abledu, Roy I. Barnett, George B. Bouse, Helen R. Boussalis, Roger D. Brandt, Robert C. Howard, Kamran Karimlou, Jack G. Levine, Raj S. Ramchandani, Martin S. Roden (*Chair*), Sidney Soclof, Lili Tabrizi.

Associate Professors: George B. Killinger.

Assistant Professors: Fred Daneshgaran, Patricia Nava.

Bachelor of Science Degree in Engineering with Electrical Engineering Option

Electrical engineering is the largest major field within engineering. Electrical engineers are involved in all aspects of electrical devices, from conceptual design to manufacturing. They are generally involved in one or more major areas such as solid state electronics, computers, electrical equipment, communications, controls, or power distributing equipment. Each of these major areas includes a number of subdivisions such as aviation systems, microwaves, and integrated circuits. Besides employment in research, development, and design, many electrical engineering graduates are involved in manufacturing, management, sales, and teaching. Careers are readily available in industry, government, research, and education.

The *Electrical Engineering* option offers instruction in the basic sciences and in engineering analysis and design. The upper division offerings provide a flexible, broad curriculum to enable each student to match talents and interests with career objectives. The major areas of course concentrations are circuits, communications, computers, controls, electronics, and power.

Requirements for the Major (155 units)

Lower Division Required Courses (63 units):

CS	290. Introduction to FORTRAN Programming	(2)
CHEM	101 General Chemistry I	(5)
EE	244 Digital Engineering	(4)
EE	290 Electrical Engineering Computing	(3)
ENGR	100 Introduction to Engineering	(1)
ENGR	204 Circuit Analysis I	(4)
ENGR	207 Materials Science and Engineering	(4)
ENGR	208 Statics and Strength of Materials	(4)
MATH	206-209 Calculus I-IV	(4 each)
MATH	215 Differential Equations	(4)
PHYS	201-204 General Physics	(4 each)

Upper Division Required Courses (61 units):

EE	304 Electric Machines	(4)
EE	310 Electrical Measurements Laboratory	(1)
EE	317 Electronics Laboratory I	(1)
EE	320 Analog Communication Systems	(4)
EE	332 Systems Analysis	(4)
EE	333 Circuit Analysis II	(4)
EE	334 Probability and Random Processes(4)	(4)
EE	336 Electronics	(4)
EE	345 Microcomputer Programming	(4)
EE	346 Digital Logic Laboratory	(1)
EE	372 Digital Electronics	(4)
EE	437 Electric and Magnetic Fields	(4)
EE	438A Control Systems Theory I	(4)
EE	496AB Senior Design I, II	(2,2)
ENGR	300 Economics for Engineers	(4)

ENGR 301	Ethics and Professionalism in Engineering	(1)
ENGR 311	Electric Circuits Laboratory	(1)
ME 326A	Thermodynamics I	(4)
PHYS 333	Applied Modern Physics	(4)

Electives (31 units):

Elective Lectures (12 units) (select three from following):

EE 342, 347, 371, 411,412, 420, 421,422, 423, 424, 430, 432, 433,434, 436, 438B, 439,445, 449, 461,472, 473, 483
ENGR 490

Elective Laboratories (2 units):

EE 314, 321,340, 418,442, 443, 448,
ENGR 499

Upper Division Mathematics Elective (4 units):

Select one from following:

MATH 325,402A, 403,474

Upper Division Specialization (13 units):

With adviser approval, select a specialization that includes three lecture courses plus one laboratory course.

MECHANICAL ENGINEERING**School of Engineering and Technology****DEPARTMENT OFFICE**

Engineering and Technology A205

Phone: (213) 343-4490

The Faculty**Emeriti:** Alfred H. Fritz, Charles M. Haberman, George E. Mann, Dan R. Rankin.**Professors:** Neda S. Fabris, Stephen Felszeghy, Phillip I. Gold, Lih-Min Hsia, Raymond B. Landis, Ramachandra Manvi, Michael J. Maurer, Majdedin Mirmiran (*Chair*), Richard D. Roberto, Chivey C. Wu.**Bachelor of Science Degree in Engineering with Mechanical Engineering Option**

Mechanical engineering, one of the most general branches of engineering, requires broad knowledge in many fields: mechanics, thermal science, design, machinery, instrumentation, and more. The breadth and flexibility of a mechanical engineer's education provide a wide choice of careers and allow movement into a variety of engineering areas.

Mechanical engineers are concerned with the production, transmission, and use of power. They design and develop machines that produce and/or use power. Many mechanical engineers are employed in manufacturing. The technical versatility and importance of mechanical engineers are demonstrated by the diversity of industries that employ them.

The *Mechanical Engineering* option provides instruction in the basic sciences and in engineering design and analysis. During the junior and senior years, students may choose from a broad spectrum of electives to match individual talents and interests with a career objective. The major areas of course concentration are applied mechanics, machine design, energy, heat, and power.

Requirements for the Major (155 units)**Lower Division Required Courses (67 units)**

CS	290	Introduction to FORTRAN Programming	(2)
CHEM	101	General Chemistry I	(5)
ENGR	100	Introduction to Engineering	(1)
ENGR	103	Design Graphics	(3)
ENGR	201	Statics	(4)
ENGR	204	Circuit Analysis I	(4)
ENGR	205	Strength of Materials I	(4)
ENGR	207	Materials Science and Engineering	(4)
ENGR	210	Matrix Algebra for Engineers	(2)
ENGR	211	Statistics and Probability for Engineers	(2)
MATH	206-209	Calculus I--IV	(4 each)
MATH	215	Differential Equations	(4)
PHYS	201--204	General Physics	(4 each)

Upper Division Required Courses (72 units):*(includes area of specialization)*

EE	310	Electrical Measurements Laboratory	(1)
ENGR	300	Economics for Engineers	(4)
ENGR	301	Ethics and Professionalism in Engineering	(1)
ENGL	306	Technical Writing	(4)
ME	303	Fluid Mechanics I	(4)
ME	306	Heat Transfer I	(4)
ME	310	Engineering Measurements Laboratory	(1)
ME	312	Strength of Materials Laboratory	(1)
ME	318	Computer Aided Design Laboratory	(2)
ME	319	Computer Aided Mechanical Engineering Laboratory	(2)
ME	320	Dynamics I	(4)
ME	323	Machine Design I	(4)
ME	326AB	Thermodynamics I, II	(4, 4)

ME	327	Manufacturing Processes	(4)
ME	410	Control of Mechanical Systems	(4)
ME	497	Mechanical Engineering Senior Project	(4, 4, 4)

Area of Specialization (12 units):

Select one of following sets of courses:

MECHANICAL DESIGN:

ME 321,414, 421

THERMAL-FLUID SYSTEMS:

ME 407, 408, 426

Electives (16 units):

Select at least 12 units from lecture courses and four units from laboratory courses listed below. Interdisciplinary engineering courses may be included. Select in consultation with permanent adviser to ensure that a total of one-half year of design is included.

Lecture Courses (12 units):

EE or ME 481,

ENGR 490,

ME 321,328, 402-404, 406-409, 411, 414-416, 420-422, 425,426, 428

Laboratory Courses (4 units):

ENGR 499,

ME 313, 315, 329, 412,413, 417, 427

INTERDISCIPLINARY PROGRAMS IN ENGINEERING

School of Engineering and Technology

Bachelor of Science Degree in Engineering *with Special Option*

The *Special Option* allows students to select upper division courses that do not fit within the framework of the traditional branches of engineering. In consultation with their permanent adviser, Special Option students can select a combination of courses from all engineering departments to meet a specific professional objective or to provide a broader engineering base than can be obtained in the other options. Greater freedom in selecting professional courses outside the School of Engineering and Technology is also provided by this option.

Requirements for the Major (152 units)*Lower Division Required Courses (72 units):*

CS	290	Introduction to FORTRAN Programming	(2)
CHEM	101,102	General Chemistry I, II	(5, 5)
ENGR	100	Introduction to Engineering	(1)
ENGR	103	Design Graphics	(3)
ENGR	201	Statics	(4)
ENGR	204	Circuit Analysis I	(4)
ENGR	205	Strength of Materials I(4)	(4)
ENGR	207	Materials Science and Engineering	(4)
ENGR	210	Matrix Algebra for Engineers	(2)
ENGR	211	Statistics and Probability for Engineers	(2)
MATH	206-209	Calculus I-IV	(4 each)
MATH	215	Differential Equations	(4)
PHYS	201-204	General Physics	(4 each)

Upper Division Required Courses (28 units)

CE/ME	312	Strength of Materials Laboratory I	(1)
EE	310	Electrical Measurements Laboratory	(1) or
ME	310	Engineering Measurements Laboratory	(1)
ENGR	300	Economics for Engineers	(4)

ENGR 301	Ethics and Professionalism in Engineering	(1)
ENGR 311	Electric Circuits Laboratory	(1)
ENGL 306	Technical Writing	(4)

Select 16 units from following:

CE/ME 303	Fluid Mechanics I	(4)
CE/ME 320	Dynamics I	(4)
EE 304	Electric Machines	(4)
EE 336	Analog Electronic Circuits	(4)
ME 306	Heat Transfer I	(4)
ME 326A	Thermodynamics I	(4)

Electives (52 units):

With prior approval of permanent adviser and department chair, select a grouping of courses and laboratories with a specific objective. These may be chosen from the interdisciplinary lectures and laboratories and from an appropriate combination of approved courses in engineering, technology, mathematics, the natural sciences, business, and economics.

Lecture and Laboratory Courses:

CE 402
 EE 438A, 442
 ENGR 490
 ME 408, 412

Fire Protection Engineering Emphasis Within *Special Option*

An emphasis in Fire Protection Engineering within the Special Option has been established. Senior-year electives in this option will be selected from a group of courses in engineering and in technology. Fire protection engineers are concerned with controlling or eliminating the occurrence of fire. They are employed by a wide variety of industries from construction to insurance firms. Students interested in Fire Protection Engineering are advised to consult the associate dean for further information.

TECHNOLOGY

School of Engineering and Technology

DEPARTMENT OFFICE

Engineering and Technology A341

Phone: (213) 343-4550

The Faculty

Emeriti: Cortland C. Doan, Raymond E. Fausel, Keith E. Gummere, John LaMonica, William A. Mays, Kenneth Phillips, Kenneth N. Sweetnam, Norwood Teague.

Professors: Gregory S. Graham, Kenneth F. Hird, Pamela D. Jablonsky, Don M. Maurizio, Le D. Tang.

Associate Professors: Ethan Lipton (Chair), Maureen Pettitt, Virgil Seaman.

Bachelor of Arts Degree in Industrial Arts

A total of 186 units is required for the Bachelor of Arts degree in Industrial Arts. The program is designed primarily for students who plan to become industrial education teachers. Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs.

The department also offers graduate programs in industrial and technical studies and vocational education to further develop leadership skills for business, industry, and teaching, and to meet credential requirements. Graduate degree programs are described in the *Graduate Programs* section.

Requirements for the Major (84 units)

Required for the major are 84 units of professional and technical courses in technology.

The professional component requires 27 units and the technical program requires 57 units, distributed as follows: foundation courses, 24 units; area of concentration, 21-27 units; and additional specialization, 6-12 units.

PROFESSIONAL COURSES

Required Courses (27 units):

TECH 101	Industrial Safety for Industrial Education	(3)
TECH 200	History of Technology	(3)
TECH 300AB	Foundations of Industrial Education	(2, 2)
TECH 380	Industrial Graphic Communication Technology	(3)
TECH 381	Materials, Process, and Fabrication Technology	(3)
TECH 382	Power Technology	(3)
TECH 400	Written Communications Skill for Industrial Studies	(4)
TECH 481	Practicum in Industrial Studies	(4)

TECHNICAL COURSES

A minimum of 57 units is required in technical courses, chosen from the three areas below.

Foundation Program

Required Courses (24 units):

ART 287	Introduction to Photography	(3)
TECH 100	Introduction to Automotive Mechanisms	(3)
TECH 110	Introduction to Drafting	(3)
TECH 120	DC Electronics	(3)
TECH 130	Introduction to Graphic Arts	(3)
TECH 144	Introduction to Industrial Design	(3)
TECH 160	Introduction to Metalworking	(3)
TECH 170	Introduction to Wood Technology	(3)

Area of Concentration (21-27 units):

Select a total of 21-27 units of intermediate and advanced courses and laboratory work from one of the following areas:

Automotive
Drafting
Electronics
Graphic Arts
Metal Technology
Photography
Wood Technology

When needed, select additional related courses with adviser approval. As a rule, one or two of these courses will be lower division (3 or 6 units) and the remainder upper division (15-24 units).

Additional Specialization (6-12 units):

The remaining units needed to satisfy the technical requirement are used to strengthen the area of concentration or to develop a second area of concentration. Add the following courses to the designated areas of specialization.

Automotive

TECH 361	Welding Technology	(3)
TECH 463	Metal Machining I	(3)

Drafting

TECH 271	Wood Construction Technology	(3)
TECH 464	Metal Machining II	(3)

Electronics

TECH 415	Electromechanical Drafting and Design	(3)
----------	---------------------------------------	-----

Metal Technology

TECH 411	Tool Design	(3)
----------	-------------	-----

Photography

TECH 312	Technical Illustration	(3)
TECH 431	Lithography I	(3)

Wood Technology

TECH 311	Architectural Drafting	(3)
----------	------------------------	-----

Bachelor of Science Degree in Fire Protection Administration and Technology

The Bachelor of Science degree in Fire Protection Administration and Technology was designed to meet the needs of various fire services for educational experiences that provide both technical and administrative skills. The curriculum was developed through close consultation with representatives of all levels of the fire services from local groups to state committees and boards.

Requirements for the Major (100-108 units)

Required for the degree are 186 quarter units, including applicable lower division preparation at a community college. The major requires a total of 100-108 quarter units.

A minimum of 15 semester units (23 quarter units) of community college courses is required, as follows:

* Building Construction for Fire Protection	(3)
* Fire Company Organization and Management	(3)
* Fire Fighting Tactics and Strategy	(3)
* Fire Protection Equipment and Systems	(3)
* Fundamentals of Fire Prevention	(3)

A maximum of 6 semester units (9 quarter units) of community college course work may be used as lower division electives. Select from the following:

* Fire Apparatus and Equipment	(3)
* Fire Hydraulics	(3)

* Fire Investigation I	(3)
* Fire Service Communications Systems	(3)
* Fire Service Records and Reports	(3)
* Hazardous Materials I and II	(3 each)
* Related Codes and Ordinances	(3)
* Rescue Practices	(3)
* Wildland Fire Control	(3)

A total of 15-21 semester units (22-32 quarter units) of community college courses may be included in the major program.

The remainder of the major is primarily upper division work, with 68-86 *quarter units* required. Of these units, a maximum of 12 may be taken in lower division courses.

Required Courses (52 units):

OSBE 301	Business Communications	(4)
POLS 403	State and Local Government	(4)
POLS 415	Political Sociology	(4)
POLS 460	Foundations of Public Administration	(4)
POLS 463	Public Personnel Administration	(4)
POLS 466	Public Financial Administration	(4)
TECH 350	Fire Protection and the Community	(4)
TECH 351AB	Fire Defense Planning	(4, 4)
TECH 352AB	Fire Protection Aspects of Building Design	(4, 4)
TECH 353	Fire Disaster Administration	(4)
TECH 452	Fire Prevention Administration	(4)

Electives (16-34 units):

Select from following with adviser approval and attention to prerequisites.

Select 8-10 units from following:

ECON/ENGR 300 POLS 461, 470, 472, 473, 496
 POLS 2810r
 SOC 210AB

Select 8 units from following:

POLS 404
 SOC 201, 202, 420
 TECH 355

Select 0-16 units from following:

ENGR 352
 TECH 451, 453AB

Bachelor of Science Degree in Industrial Technology

The Bachelor of Science degree in Industrial Technology is available with a choice among three options: *Aviation Administration*, *Printing Management*, and *Production Technology*. The total unit requirements for the major and for the degree vary with the individual options, as indicated below.

Options

Aviation Administration Option

The Aviation Administration option, which provides appropriate training for middle management positions in aviation, was developed in response to needs identified by airlines, the aviation industry, and community colleges with two-year aviation programs.

Requirements for the Major (104 units)

The Bachelor of Science degree in Industrial Technology with the Aviation Administration option requires a total of 186 units. The major requires 104 units, including 21 semester units (32 quarter units) of community college work for students who have completed a two-year community college program in flight attendant training, maintenance, air transportation, or a similar aviation-oriented program.

The lower division program is completed at the community college. Students who have not completed lower division general education requirements at the time of entrance to Cal State L.A. must fulfill these remaining requirements in addition to upper division general education and major requirements. Transfer students must also complete prerequisites to required upper division courses in accounting, economics, finance, and marketing.

Lower Division Required Courses (32 units):

Must be completed at a community college as indicated above.

Upper Division Required Courses(8 units):

TECH	400	Written Communication Skills for Industrial Studies	(4)
TECH	447	Senior Seminar: Aviation Problems	(4)

Elective Courses (Select 32 units from the following.):

TECH 340, 341,342, 343, 344, 345, 346,440, 441,442, 443, 444, 445

Required in Related Fields (12 units):

ACCT	300	Managerial Accounting	(4)
FIN	305	Commercial Law	(4)
MKT	304	Principles of Marketing	(4)

Electives in Related Fields (20 units):

Required(4 units)

CIS	294	Business Computer Systems	(4)
-----	-----	---------------------------	-----

Select one from following (4 units):

ECON 303, 310, 402

Select two from following (8 units):

MKT 350, 351,450, 451

Select one from following (4 units):

MKT 340, 342, 346, 450, 451

Printing Management Option

The option in Printing Management has been designed to give students extensive training in the graphic arts industry as well as a grasp of the principles and techniques of business management. The curriculum has been developed through close consultation with the graphic arts industry.

Requirements for the Major (91-94 units)

The Bachelor of Science degree in Industrial Technology with the Printing Management option requires a total of 192 units. Required for the major are 91-94 units, of which 43-46 are in graphic arts and 48 are courses from the School of Business and Economics.

The lower division program is concerned primarily with acquisition of skills and techniques of the printing industry; the upper division portion is concerned primarily with business management. Students who have not had work experience with a printing firm will be advised to complete at least two units of UNIV (TECH) 398 (Cooperative Education).

Lower Division Required Courses (26 units):

TECH	130	Introduction to Graphic Arts	(3)
TECH	231	Graphic Arts Paste-up	(3)
ACCT	200AB	Principles of Accounting	(4, 4)
ECON	200, 201	Principles of Economics I, II	(4, 4)

FIN 205 Foundations of Business Law (4)

Upper Division Required Courses (65 units):

TECH 331	Typography I	(3)
TECH 332	Typography II	(3)
TECH 333	Presswork Procedures	(3)
TECH 400	Written Communication Skills for Industrial Studies	(4)
TECH 431	Lithography I	(3)
TECH 432AB	Typographical Layout and Design I, II	(4-5)
TECH 433	Printing Estimating	(5)
TECH 434	Printing Plant Management	(4)
TECH 435	Lithography II	(3)
ACCT 300	Managerial Accounting	(4)
ECON 303	Money, Banking, and the Economy	(4)
ECON 310	Economics of the Business Firm	(4) or
ECON 402	Labor Economics	(4)
FIN 303	Business Finance	(4) or
MGMT 306	Production and Operations Management	(4)
FIN 305	Commercial Law	(4)
FIN 330	Credits and Collections	(4) or
MKT 304	Principles of Marketing	(4) or
MKT 341	Salesmanship	(4)
OSBE 313	Office Organization and Management	(4) or
MGMT 460	Case Studies in Production and Operations Management	(4) or
MGMT 468	Small Business Management	(4)

Elective (0-3 units):

UNIV (TECH) 398 Cooperative Education (1-3)

Production Technology Option

The Production Technology option was created to provide technical management personnel for industry. The curriculum combines design, manufacturing, and service courses with leadership and business courses. This program was developed in close cooperation with the various local industries that employ large numbers of these professionals.

Requirements for the Major (111 - 121 units)

The Bachelor of Science degree in Industrial Technology with the Production Technology option requires a total of 192 units, including 111-121 units in the major, with 70-74 in technical courses and 41-47 in related courses in mathematics, natural sciences, and the School of Business and Economics.

REQUIRED PROFESSIONAL CORE (34 units)

MATH 102	College Algebra	(4)
TECH 101	Industrial Safety for Industrial Education	(3)
TECH 200	History of Technology	(3)
TECH 291	Computers in Technology	(3)
TECH 380	Industrial Graphic Communication Technology	(3)
TECH 381	Materials, Process, and Fabrication Technology	(3)
TECH 382	Power Technology	(3)
TECH 400	Written Communication Skills for Industrial Studies	(4)
TECH 481	Practicum in Industrial Studies	(4)
TECH 489	Industrial Training Methods	(4)

OTHER REQUIRED COURSES (27 or 29 units)

CS 190 BASIC Programming (2)

(or any programming language course of 2--4 units)

CHEM	151	Fundamentals of Chemistry I	(5)
PHYS	150	Principles of Physics	(4)
TECH	414	Robotics in Industry	(2)
TECH	482	Metrics for Industry	(3)
TECH	484	Automated Manufacturing Systems	(4)
TECH	488	Fluid Power	(3)
UNIV (TECH)	398	Cooperative Education	(4)

REQUIRED TECHNICAL CORE

Select 12 units from following:

TECH	100	Introduction to AutomotiveMechanisms	(3)
TECH	110	Introduction to Drafting	(3)
TECH	120	DC Electronics	(3)
TECH	130	Introduction to Graphic Arts	(3)
TECH	144	Introduction to Industrial Design	(3)
TECH	160	Introduction to Metalworking	(3)
TECH	170	Introduction to Wood Technology	(3)
ART	287	Introduction to Photography	(3)

ADVANCED TECHNOLOGY COURSES

Select 12-16 units with Adviser's approval from following with attention to prerequisites *

TECH	301	Fuel and Ignition Systems	(3)
TECH	403	Chassis and Suspension Systems	(3)
TECH	405	Engine Design	(3)
TECH	411	Tool Design	(3)
TECH	412	Manufacturing and Construction Drafting	(3)
TECH	415	Electromechanical Drafting and Design	(3)
TECH	321	Solid State Electronics	(3)
TECH	424	Industrial Controls	(3)
TECH	425	Programmable Controls	(3)
TECH	431	Lithography I	(3)
TECH	434	Printing Plant Management	(4)
TECH	435	Lithography II	(3)
TECH	461	Industrial Casting	(3)
TECH	463	Metal Machining	(3)
TECH	465	Industrial Machining Processes	(3)
TECH	372	Wood Finishing and Preservation	(3)
TECH	472	Wood Manufacturing Technology I	(3)
TECH	473	Wood Manufacturing Technology II	(3)
ART	387	Color Photography	(3)
ART	483	Advertising and Photography	(3)
ART	487	Functional Photography	(3)

*if 12 units are taken in this section, then must take 8 units from the Management Electives section. If 16 units are taken, then only 4 units are needed from the Management Electives section. Total of both sections to equal a minimum of 20 units.

REQUIRED MANAGEMENT COURSES (22 units)

ACCT	202	Survey of Accounting	(4)
ECON	209	Applied Business and Economic Statistics I	(3)
ECON	309	Applied Business and Economic Statistics II	(3)
MATH	242	Mathematics for Business and Economics Majors	(4)
MGMT	306	Production and Operations Management	(4)
MGMT	467	Quality Control	(4)

MANAGEMENT ELECTIVES

Select 4 or 8 units from following with attention to prerequisites:*

ECON/ENGR	300	Economics for Engineers	(4)
MGMT	460	Case Studies in Production and Operations Management	(4)
MGMT	461	Management Theory and Practice	(4)

MGMT 462	Comparative Management	(4)
MGMT 463	Motion and Time Study	(4)
MGMT 464	Production and Material Control	(4)
MGMT 473	Personnel Management	(4)
PSY 442	Industrial and Organizational Psychology	(4)

**If 4 units are taken in this section, then must take 16 units from Advanced Technology section. If 8 units are taken, then only 12 units are needed from the Advanced Technology section. Total of both sections to equal a minimum of 20 units.*

Bachelor of Vocational Education Degree

The Bachelor of Vocational Education degree in Vocational Arts is offered for vocational teachers recommended by the California State Board of Examiners for Vocational Teachers. Vocational teachers interested in details regarding this program should see the BVE degree adviser in the Department of Technology.

Students on time schedules that require the completion of 500-level courses before completion of the BVE degree may petition to enroll in the following graduate level secondary education courses and apply them toward the degree:

EDAC 581	The Community College	(3)
EDAC 582	Instruction in Community College	(4)
EDAC 589	Directed Teaching in Community College	(6)

The procedure to determine eligibility for enrolling in the above courses is as follows:

1. Students must present evidence of employment as an instructor in a community college. Verification may be presented in the form of a letter from the community college dean of instruction.
2. As evidence of the necessity to complete course work related to teaching at the community college level, students must submit the evaluation sent them by the Credentials Section of the Chancellor's Office of the California Community Colleges.

Evidence of employment and certification of 500-level course requirements described above must be submitted to the Cal State L.A. BVE degree adviser who will then certify to the registrar the student's eligibility to enroll in the 500-level courses for baccalaureate credit.

Requirements for the Major (91-100 units)

A total of 186 units is required for the Bachelor of Vocational Education degree, of which 91-100 units are taken in the following areas:

- * The Vocational Teacher Education program has a requirement of 33-42 units. Candidates should contact a university that offers the required teacher education courses in vocational education.
- * The major in Vocational Arts has a requirement of 58 units. Credit awarded by the state Board of Examiners for Vocational Teachers fulfills a portion of this major. Applicants for credit should contact the BVE adviser.

Minor in Industrial Studies

A minimum of 36 units is required for a minor in Industrial Studies. Included in a typical program for the minor are 3-9 units in lower division courses. However, the number of units may vary according to the selection of an area of concentration and the selection of electives.

Requirements for the Minor (36 units)

Area of Concentration (24 units):

At least 24 units are selected as a sequence in one of the eight areas of concentration listed for the Industrial Arts major. The normal pattern for an area of concentration consists of the introductory course and seven additional courses in the same area of industrial studies. When needed, select related courses in other areas with approval of adviser.

Required Course (4 units):

TECH 300AB	Foundations of Industrial Education	(2, 2)
------------	-------------------------------------	--------

Electives (8 units):

Select additional technology courses, with prior approval of adviser. If a basic college course in drafting has not been taken, TECH 110 is required for 3 of the 8 units.

Certificate Program in Electronics Technology

The Department of Technology offers a credit certificate program in Electronics Technology. This program is designed to prepare individuals for technical careers in electronics manufacturing, electronics field servicing, and electronics design-assisted environments. Possible job titles include electronics technician, electronics technologist, product testing specialist, field service representative, electronics control specialist, electronics design technician, product design specialist, and technical support specialist. The program emphasizes application-oriented knowledge and hands-on experiences in electronics. Every course has a lab component that provides opportunities for knowledge and skills integration.

The program contains a total of 30 units: 15 units of required courses and 15 units of electives. Courses taken to meet requirements of this program may also be applied toward the majors in Industrial Arts and Industrial Technology. Refer to the *Undergraduate Study chapter* of this catalog for general regulations governing all certificate programs.

Prerequisite (3 units):

TECH 321	Solid State Electronics	(3)
----------	-------------------------	-----

Requirements for the Certificate (30 units)*Required Courses (15 units):*

TECH 323	Industrial Electronics	(3)
TECH 324	Linear Electronics	(3)
TECH 325	Industrial Controls	(3)
TECH 326	Digital Electronics	(3)
TECH 327	Microprocessors	(3)

Electives (select 15 units from following):

TECH 421, 422, 425, 426, 427, 428, 490E		
---	--	--

Certificate Program in Fire Protection Risk Analysis and Reduction

The Department of Technology offers a credit certificate program in Fire Protection Risk Analysis and Reduction. This program is designed to offer students and individuals in the insurance industry or in private sector fire protection positions a series of professionally related courses in fire protection and fire safety. The courses compliment each other and, as a whole, prepare individuals to serve as fire protection and safety specialists, inspectors, evaluators, and managers.

The program contains a total of 32 units of upper division course work. Courses taken to meet requirements of this program may also be applied toward the major in Fire Protection Administration and Technology. Refer to the *Undergraduate Study chapter* of this catalog for general regulations governing all certificate programs.

An associate level degree (A.A. or A.S.), or its equivalent, in related subjects, or employment in a fire protection-related position is prerequisite to enrollment in the program.

Requirements for the Certificate (32 units) Required Courses (32 units):

TECH 352AB	Fire Protection Aspects of Building Design	(4, 4)
TECH 451	Fire Prevention and Building Codes: Interpretation and Enforcement	(4)
TECH 452	Fire Prevention Administration	(4)
TECH 453AB	Fire Protection Systems Design	(4, 4)
TECH 455AB	Fire Protection of Structural Members and Building Components	(4, 4)

A Fire Protection Administration program adviser may approve appropriate substitute courses to suit individual student needs.

Certificate Program in Fire Service Administration

The Departments of Technology and Political Science offer a credit certificate program in Fire Service Administration. This program is designed to offer fire department personnel who hold an associate degree an opportunity to continue their education. Course work covers effective functioning in modern fire departments: planning, prevention and disaster administration, public administration, and personnel and budgeting administration.

The program contains a total of 32 units of upper division course work: 28 units of required courses and 4 units of electives. Courses taken to meet requirements of this program may also be applied toward the major in Fire Protection Administration and Technology. Refer to the *Undergraduate Study* chapter of this catalog for general regulations governing all certificate programs.

An associate degree (A.A. or A.S.), or its equivalent, in a related subject or employment in a fire protection-related position is prerequisite to enrollment in the program.

Requirements for the Certificate (32 units)

Required Courses (28 units):

TECH	351AB	Fire Defense Planning	(4, 4)
TECH	353	Fire Disaster Administration	(4)
TECH	452	Fire Prevention Administration	(4)
POLS	460	Foundations of Public Administration	(4, 4)
POLS	463	Public Personnel Administration	(4)
POLS	466	Public Financial Administration	(4)

Electives (select 4 units from following):

POLS 403, 404, 430, 461, 464, 470, 472, 479

A Fire Protection Administration program adviser may approve appropriate substitute courses to suit individual student needs.

The Credential Program

Ryan Single Subject Credential

The Bachelor of Arts degree in Industrial Arts has been approved by the Commission on Teacher Credentialing for examination waiver for the Single Subject credential in Industrial Arts. Students should consult advisers in both the department and the School of Education.

Ryan Designated Subjects Credential (Vocational)

This teaching credential authorizes the holder to teach vocational classes in the subject(s) listed on the credential at preschool, grades 1-12, and adult levels. This credential requires qualifying industrial and/or professional work experience in the subject(s) listed on it. Interested applicants should contact the Department of Technology undergraduate adviser.

Requirements for Part-Time Credential (10 units)

EDAC	472	Principles of Adult and Occupational Education	(3)
EDSE	4211	Methods of Teaching Industrial Education	(3)
HS	456	Health Studies on Alcohol, Narcotics, Nutrition, and Tobacco	(4)

***Requirements for Full-Time Credential (18 units)**

TECH	300AB	Foundations of Industrial Education	(2, 2)
TECH	483A	Construction of Teaching Aids	(2)
TECH	486	Seminar: Vocational Education	(3)
TECH	487	Seminar. Comprehensive Career Education for Industrial Studies and Vocational Education	(3)
EDAC	473X	Supervised Field Experiences in Adult and Occupational Education	(2)
EDAC	476	Curriculum Development in Adult and	

Occupational Education
** in addition to courses listed above.*

(4)

COURSES IN ENGINEERING AND TECHNOLOGY

Courses in Engineering (ENGR)

Lower Division Courses

100 Introduction to Engineering (1)

Introduction to profession of engineering; ethical and legal aspects of engineering profession; engineering design process; communication and computer skills in engineering. Laboratory 3 hours. Graded CR/NC.

103 Design Graphics (3)

Prerequisite: MATH 103; one year high school mechanical drawing or TECH 110. Role of engineer, work of engineer, design process; problem identification, analysis of design data, pictorial presentation, design problems; spatial relationships, empirical equations, nomography. Lecture 2 hours, laboratory 3 hours.

154 Special Topics in Engineering (1-4)

Prerequisite: Instructor consent and as needed for specific topic. Current topics of special interest to students in Engineering, as announced in *Schedule of Classes*. May be repeated to maximum of 8 units.

201 Statics (4)

Prerequisites: MATH 207, PHYS 201. Fundamental principles of statics, resolution and composition of forces, algebraic and graphic solutions, friction, center of gravity, moment of inertia.

204 Circuit Analysis I (4)

Prerequisites: MATH 208, PHYS 203. Electric circuit analysis, transient and steady state; and introduction to frequency response.

205 Strength of Materials I (4)

Prerequisite: ENGR 201. Stresses and strains under axial, shearing, and torsional forces; flexural stresses and deflections of simple beams; columns; and combined stresses.

207 Materials Science and Engineering (4)

Prerequisites: CHEM 101, MATH 206, PHYS 201. Understanding structure and fundamental atomic and molecular mechanisms of engineering materials, atom and electron movement, physical and mechanical properties; overview of engineering materials, semiconductors, metals, ceramics, polymers, and composites.

208 Statics and Strength of Materials (4)

Prerequisites: MATH 207, PHYS 201. Principles of statics, force systems and equilibrium, structures, machines, distributed force, centroid, moment of inertia, stresses, strains, and deformations under axial, torsional, and bending loads *For Electrical Engineering students only.*

210 Matrix Algebra for Engineers (2)

Prerequisites: MATH 208, PHYS 201. Introduction to calculations using vectors; matrix operation; solution of linear simultaneous equations; coordinate transformation; application to engineering problems.

211 Statistics and Probability for Engineers (2)

Prerequisites: MATH 208, PHYS 201. Introduction to calculations using probability distributions and densities; concepts in statistics; application to engineering problems.

250 Impact of Technology on Society (4)

Role of technology as both solver and creator of technical and social problems. Social implications of technological progress. Intended for all majors.

Upper Division Courses

300 Economics for Engineers (4)

(also listed as ECON 300) Basic economic concepts, relationships between economic and engineering problems, role of interest and capital in cost minimization, analysis of financial statements, original and alternative investments, capital depreciation and replacement problems.

301 Ethics and Professionalism in Engineering (1)

Prerequisite: Senior standing in engineering. Ethical and professional standards in engineering profession; impact of engineering profession on society; professional registration and liability; government regulations and legal responsibilities.

311 Electric Circuits Laboratory (1)

Prerequisite: ENGR 204. Experimental verification of the laws of electric circuits. Laboratory 3 hours.

352 Technological Aspects of Urban Environment (4)

Prerequisite: Junior standing. Current engineering practice in dealing with urban problems such as public health, pollution, transportation, communications, public utilities, and land planning and use. Not acceptable for engineering technical elective credit. Intended for all majors.

358 Technology and Environment (4)

(also listed as GEOG 358) Prerequisite: GE natural science requirement. Problems of resource scarcity and environmental impact of technology, past, present, and future; relationships leading to an understanding of an increasingly complex global system.

454 Special Topics in Engineering (1-4)

Prerequisites: Senior standing in engineering; enrollment subject to approval of instructor in charge. Group study of selected topics not currently offered as technical electives; study groups may be organized in advanced engineering subjects upon approval of instructor.

490 Engineering Application of Digital Computers (4)

Prerequisites: CS 290, MATH 215. Use of FORTRAN programming and numerical solution techniques to solve engineering problems of various selected types.

499 Undergraduate Directed Study (1-4)

Prerequisite: Consent of an instructor to act as sponsor. Project selected in conference with the sponsor before registration; progress meetings held regularly, and a final report submitted. May be repeated for credit.

Courses in Civil Engineering (CE)**Lower Division Courses****202 Plane Surveying (4)**

Prerequisite: MATH 103 or satisfactory score on mathematics placement test. Principles and practices of measurement of distances, directions, and elevations; care and use of level, transit, plane table; mapping practice, and symbols. Lecture 2 hours, laboratory 6 hours.
Upper Division Courses

303 Fluid Mechanics I (4)

(also listed as ME 303) Prerequisites: CE/ME 320, PHYS 202. Fundamental principles and methods of fluid mechanics; thermodynamics of fluid flow; Newtonian fluids; equations of fluid flow; laminar and turbulent flow; applications.

312 Strength of Materials Laboratory I (1)

(also listed as ME 312) Prerequisites: ME 310, ENGR 103; 205 *may be taken concurrently*). Tests of engineering materials in tension, compression, bending, and torsion; verification by experiment; basic theories learned in strength of materials. Laboratory 3 hours.

313 Fluid Mechanics Laboratory I (1)

(also listed as ME 313) Prerequisites: ENGR 103, CE/ME 303. Experiments on fluid properties, fluid statics, conservation of mass, energy, and momentum, and fluid resistance. Laboratory 3 hours.

320 Dynamics I (4)

(also listed as ME 320) Prerequisite: ENGR 201. Kinematics and kinetics of rigid bodies; work, kinetic energy, impulse, momentum in two and three dimensions; applications to space mechanics.

360 Structural Mechanics I (4)

Prerequisite: Grade of C or higher in ENGR 205. Analysis of determinate structures: beams, frames, and cables. Introduction to influence lines and analysis of indeterminate structures.

361 Structural Design I (4)

Prerequisite: ENGR 205. Basic concepts of design of structures, allowable stresses, codes and design loads. Design of simple determinate members in steel, concrete, and timber.

364 Concrete Laboratory (1)

Prerequisites or corequisites: CE 361, CE/ME 312. Physical tests of cement, concrete aggregates, tensile strength test of cement, proportioning of concrete mixtures, slump test, compressive and flexural strength tests. Laboratory 3 hours.

365 Specifications and Cost Estimating (4)

Prerequisite: Senior standing in engineering. Building specifications and codes, estimating costs, materials handling and transport, excavation, concrete, wood, masonry, and steel construction.

366 Soil Mechanics I (4)

Prerequisite: ENGR 205; prerequisite or corequisite: CE/ME 303. Physical and mechanical properties of soils, classifications, permeability, seepage, capillarity, consolidation, settlement, stresses, pressures, strength theories, and testing methods.

368 Soil Mechanics Laboratory (1)

Prerequisites or corequisites: CE 366, CE/ME 312. Physical properties of soils, soil classification, mechanical analysis, permeability, shearing strength, and consolidation tests. Laboratory 3 hours.

370 Transportation Engineering (4)

Prerequisites: CE 202, ENGR 103, 210, 211. Fundamental principles for analysis, planning, design, and operation of transportation systems.

372 Asphaltic Materials Laboratory (1)

Prerequisite: CE/ME 312. Laboratory tests on asphalt cement and aggregates; design of asphaltic mixtures; proportioning of asphalt cement and aggregates; preparation of test specimens. Laboratory 3 hours.

384 Introduction to Environmental Engineering (4)

Prerequisites: CE/ME 303, CHEM 102. Introduction to environmental engineering; environmental and ecological systems; physical, chemical, and biological processes; water and wastewater treatment; air pollution; solid and hazardous wastes; regulations and impact assessment.

387 Hydraulics I (4)

Prerequisite: Grade of C or higher in CE/ME 303. Study of multiple pipe and reservoir systems; fundamentals of open channel hydraulics, uniform and gradually varied flow; pumps and turbines. Analysis of dams, spillways, and outlet structures.

390 Numerical Methods and Finite Element Analysis (4)

Prerequisites: CE 303, CS 290, ENGR 205, 210, 211, MATH 215. Numerical and computer methods in civil engineering; introduction to method of finite element analysis; use of digital computer to solve civil engineering problems. Lecture 3 hours, laboratory 3 hours.

402 Strength of Materials II (4)

Prerequisites: ENGR 205, MATH 215. Stress-strain relationship in three dimensions, energy principles, theories of failure, curved beams, thick wall cylinders, shear center, unsymmetrical bending, and torsion in non-circular sections.

413 Fluid Mechanics Laboratory II (1)

(also listed as ME 413) Prerequisite: CE/ME 313; prerequisite or corequisite: CE 387 or ME 408. Experiments on subsonic and supersonic flow, free surface flow, pumps, turbines, fans, and unsteady flow. Laboratory 3 hours.

460 Structural Mechanics II (4)

Prerequisite: CE 360. Analysis of indeterminate structures; moment distribution, slope deflection, and approximation methods; three dimensional frames and long span structures.

461 Design of Steel Structures (4)

Prerequisites: CE 360, 361. Design of steel structures; lateral buckling of beams and frames, built-up beams, girders and trusses; moment connections, torsion and unsymmetrical bending; diaphragms and lateral force designs.

462 Reinforced Concrete Design I (4)

Prerequisites: CE 360, 361. Strength design of reinforced concrete structures, beams, slabs, frames, columns, footings, and retaining walls.

463 Timber and Masonry Design (4)

Prerequisites: CE 360, 361. Wood properties and design of wood structural elements, plywood and glulam products; reinforced masonry (brick and concrete) units, material properties, design of reinforced masonry structural elements.

467 Foundations I (4)

Prerequisite: CE 366. Site exploration, bearing capacity, slope stability, lateral earth pressure, types of foundations, footings, caissons, piles, retaining walls, and cofferdams.

471 Highway Engineering I (4)

Prerequisites: CE 202, 370. Introduction to principles of highway design including route location, geometrics of horizontal and vertical curves, earthwork computations, drainage design; computer applications.

472 Highway and Airport Pavement Design (4)

Prerequisites: CE 361, 366. Theory and principles of pavement design for highways and airports; effects of soil characteristics and physical properties of basic materials; testing procedures.

473 Pavement Design Laboratory (1)

Prerequisites: CE 312; 472(*may be taken concurrently*). Basic tests performed in evaluation of treated and untreated bases, subbases, and subgrades necessary for pavement thickness design. Laboratory 3 hours.

474 Traffic Engineering (4)

Prerequisite: CE 370. Elements of traffic engineering; vehicle, driver, and road characteristics; capacity and flow determination; signalized intersections; parking and accident studies; street, freeway, and mass transit operations.

475 Advanced Surveying (4)

Prerequisite: CE 202. Advanced surveying, including triangulation, practical astronomy, and land and construction surveying. Lecture 2 hours, laboratory 6 hours.

483 Hydrology I (4)

Prerequisite: CE/ME 303. Precipitation, evaporation, infiltration, transpiration, and runoff; methods of predicting discharge from precipitation, flood routing, and measurement of hydrologic processes.

484 Sewerage and Sewage Treatment (4)

Prerequisite: CE/ME 303. Sanitary and storm sewer systems, sewage treatment and disposal, stream sanitation, and treatment plant design.

485 Water Supply (4)

Prerequisite: CE/ME 303. Sources and collection of surface and ground water, distribution systems, water quality, water treatment plants, sedimentation, filtration, softening, and disinfection.

487 Design of Water Resources Systems (4)

Prerequisites: CE 361, 387. Design of storm drains, sanitary sewers, and water distribution systems, culverts, small dams and diversion structures, spillways and outlet structures.

495 Civil Engineering Design Project (4)

Prerequisite: Required upper division CE courses. Planning and designing typical civil engineering project as encountered in practice; projects require integration and synthesis of acquired knowledge under given constraints. Lecture 2 hours, laboratory 6 hours.

Courses in Electrical Engineering (EE)**Lower Division Courses****244 Digital Engineering (4)**

Prerequisite: PHYS 203. Binary systems; Boolean functions and their simplification; introduction to analysis and design of digital systems.

290 Electrical Engineering Computing (3)

Prerequisites: CS 290 with C grade or higher, MATH 209, PHYS 203. Use of computers in electrical engineering; hardware, software; languages; algorithms; structured design; spreadsheets; graphics; word processing; curve fitting; SPICE and other electrical engineering applications.

Upper Division Courses

In addition to prerequisites listed for individual courses, ENGL 102, I SPCH 150, and EE 290 are prerequisite to all upper division EE courses.*

**Students subject to earlier catalogs satisfy this prerequisite with ENGL 1010r 190.*

304 Electric Machines (4)

Prerequisites: ENGR 204 with C or higher grade. Electromechanical principles and applications to electric machines.

310 Electrical Measurements Laboratory (1)

Prerequisite: PHYS 203. Characteristics and limitations of analog and digital electrical and electronic instrumentation, signal sources, and d-c power supplies. Analysis, tabulations, and graphical presentation of measurement data and technical report writing. Laboratory 3 hours.

314 Electromagnetic Energy Conversion Laboratory (1)

Prerequisites: EE 304, ENGR 311. Laboratory investigations of electromechanical machines. Laboratory 3 hours.

317 Electronics Laboratory I (1)

Prerequisites: ENGR 311, EE 310, 336. Laboratory study of semiconductor devices and applications in basic circuits. Laboratory 3 hours.

320 Analog Communication Systems (4)

Prerequisite: EE334. Bandwidth requirements of audio, video, and pulse signals; carrier communications systems; types of modulation; communication circuits; transmitters and receivers.

321 Communications Laboratory (1)

Prerequisites: EE317; 320(*may be taken concurrently*). Laboratory investigations of characteristics of communication systems and components. Laboratory 3 hours.

330 Writing for Electrical Engineers (1)

Prerequisites: Satisfactory completion of the Graduation Writing Assessment Requirement (GWAR); EE 332, 336. Writing for Electrical Engineers. Intensive practice in writing abstracts, reports, reviews, and other forms of technical writing. Some oral presentations required. Laboratory 3 hours.

332 Systems Analysis (4)

Prerequisites: ENGR 204 with C or higher grade; MATH 215; satisfactory score on EE placement examination. Linear systems analysis by Fourier and Laplace transform and state space methods; complete system response and system applications.

333 Circuit Analysis II (4)

Prerequisite: EE 332. Analysis of electric circuits with use of state variables and Laplace and Fourier transforms; two ports and filters.

334 Probability and Random Processes (4)

Prerequisite: EE 332. Random variables, bivariate probability distributions, multiple random variables, random processes, introduction to noise analysis; applications to engineering problems.

336 Electronics (4)

Prerequisite: PHYS 333. Analysis and design of small-signal and large-signal electronic amplifiers; frequency response; feedback.

340 Electronics Laboratory II (1)

Prerequisite: EE 317. Laboratory study of electronic amplifier circuits. Laboratory 3 hours.

342 Introduction to Software Engineering (4)

Software engineering concepts and techniques; structured design and modular construction; use of Pascal to demonstrate fundamentals of programming style; high-level language programming for microprocessors.

345 Microcomputer Programming (4)

Prerequisites: EE 244. Organization and structure of microcomputer systems; machine and assembly language programming; system software for microcomputers.

346 Digital Logic Laboratory (1)

Prerequisites: EE 244, ENGR 311. Laboratory experiments in logic design of digital systems. laboratory 3 hours.

347 Computer Logic Design (4)

Prerequisite: EE 244. Integrated circuit digital functions; design of computer system by means of register transfer method; processor unit design; control logic design; design of general purpose computers.

371 Analog Electronics (4)

Prerequisite: EE 336. Multistage amplifiers; frequency and time domain response; feedback; tuned amplifiers; distortion; power amplifiers; operational amplifiers.

372 Digital Electronics (4)

Prerequisites: EE 244, 336. Switching mode circuits; diode circuit applications; opto-electronic devices; TTL, CMOS, ECL families; logic gates; SSI, MSI, LSI circuit functions.

411 Waveguides and Transmission Lines (4)

Prerequisite: EE 437. Guided waves, waveguides, and transmission lines; design of waveguides and cavity resonators.

412 Antennas (4)

Prerequisite: EE 437. Dipole, loop, aperture, and other antennas; array theory, antenna patterns, and pattern multiplication; radiation resistance, directivity, and gain; antenna synthesis and design.

418 Electromagnetics Laboratory (1)

Prerequisites or corequisites: EE 411,412. Transmission line parameters, attenuation, reflected waves, characteristics of waveguides and waveguide parameters; antenna patterns.

420 Digital Communication Systems (4)

Prerequisite: EE 320. Analysis and design of digital communication systems; source encoders; PCM; matched filter detectors; timing considerations; baseband systems; ASK, FSK, PSK; error analysis; design considerations.

421 Coding for Communications (4)

Prerequisite: EE 320. Information theory; entropy coding; data compression; forward error detection and correction.

422 Digital Signal Processing I (4)

Prerequisite: EE 320. Sampling, A/D conversion; discrete linear system theory; Z-transform; digital filters, recursive and nonrecursive designs; quantization effects; fast Fourier transform; windowing.

423 Digital Signal Processing II (4)

Prerequisite: EE 422. Discrete random signals; finite word length effects; adaptive filters; high resolution spectral estimation.

424 Fiber Optics (4)

Prerequisites: EE 320, 437. Generation, transmission, and modulation of beams, propagation of optical beams in homogeneous and inhomogeneous media; electro-optic modulation of laser beams.

425 Data and Computer Communications (4)

Prerequisite: EE 320. Data communications, data communications networks, computer communications architecture, and integrated services digital networks.

426 Digital Image Processing (4)

Prerequisite: EE 320. Digital image fundamentals, image transforms, image enhancements, image restoration and image encoding.

430 Computer Aided Network Design (4)

Prerequisites: EE 333, 336. A study of computer programs for solution of electronic and passive networks. Analysis and design of circuits using existing computer programs.

432 Power Transmission Lines (4)

Prerequisite: EE 304. Function and structure of power systems, transmission lines, generalized circuit constants, circle diagrams, system representation.

433 Electric Power System Analysis (4)

Prerequisite: EE 432. Load-flow studies, load-flow control, symmetrical components, short circuits on machines and systems, system protection, elements of system stability, economic operation.

434 Electromagnetic Energy Conversion (4)

Prerequisite: EE 304. Analysis of realistic machine performance; steady state and dynamic response of d-c, synchronous and induction machines; fractional horsepower a-c motors.

436 Analog Integrated Circuits (4)

Prerequisite: EE 371. Analysis, design, and characteristics of operational amplifiers, voltage comparators and regulators, analog-to-digital, and digital-to-analog converters.

437 Electric and Magnetic Fields (4)

Prerequisite: EE 332. Static field theory and applications; Maxwell's equations and applications; electromagnetic waves; introduction to transmission lines.

438A Control Systems Theory I (4)

Prerequisite: EE 334. Analysis and design of feedback control systems by classical methods; introduction to state-variable methods.

438B Control Systems Theory II (4)

Prerequisite: EE 438A. Design of multiple-loop, multiple-signal control systems; nonlinear control systems; computers and optimization.

439 Digital Integrated Circuits (4)

Prerequisites: EE 336, 372. In-depth study of logic families aided by computer analysis; LSI and VLSI, circuit design; regenerative circuits; memories; A-D converters.

442 Control Systems Laboratory (1)

Prerequisite or corequisite: EE 438A. Analysis and design of fundamental control systems by model and full-scale construction in laboratory, and by employing root-locus, frequency response, analog simulation, and other standard techniques. Laboratory 3 hours.

443 Digital and Timing Circuits Laboratory (1)

Prerequisites: EE 317; 439(*maybe taken concurrently*). Laboratory experiments in design of digital, timing, and pulse forming electronic circuits. Laboratory 3 hours.

445 Microprocessor Interface Design (4)

Prerequisites: EE 345, 372; 347(*may be taken concurrently*). Microprocessor architecture and timing; bus structures; memory system design; parallel and serial input/output; interrupts and timers; analog-digital and digital-analog conversion.

448 Digital Design Laboratory (1)

Prerequisites: EE 346; 347(*maybe taken concurrently*). Hardware design of digital computer functions with MSI and LSI integrated circuits. Laboratory 3 hours.

449 Computer Organization (4)

Prerequisite or corequisite: EE 347. Central processor unit organization; microprocessor architecture; control unit organization; microprogramming; input-output, interface; microcomputer hardware organization.

461 Discrete-Time Control Systems (4)

Prerequisite: EE 438A. Discrete-time signals; difference equations; Z-transform; modified Z-transform; stability analysis techniques; design of digital controllers; state space representations of linear discrete systems; controllability and observability.

462 State Space Control Systems (4)

Prerequisite: EE 438A. State space representation; linear transformation; solution of state equations, model decomposition, equivalent systems; controllability, observability, duality theorem; stability analysis; design by state and output feedback.

472 Optoelectronic Systems Design (4)

Prerequisite: EE 336. Characteristics and applications of optoelectronic devices and systems including photodiodes and phototransistors, image sensors, light-emitting diodes and laser diodes, and fiber optic systems.

473 Television Systems Design (4)

Prerequisites: EE 320,371. Video and audio circuits and systems; amplitude, frequency, phase and pulse modulation techniques used in television systems.

481 Introduction to Robotics (4)

(also listed as ME 481) Prerequisite: EE 438A or ME 410. General considerations of robotic manipulator; spatial description, homogeneous transformations; manipulator kinematics; inverse manipulator kinematics; motion trajectories; static forces.

483 Power Electronics (4)

Prerequisite: EE 336. Electrical and thermal characteristics of power thyristors, BJTs and FETs, diodes, triacs, diacs, and UJTs; applications in energy conversion and control switching power supplies, converters, and inverters.

491 Robotics Laboratory (1)

(also listed as ME 491) Prerequisite or corequisite: EE/ME 481. Robot system installation; programming and languages; link kinematics and motion planning; control of the arm; automated manufacturing and computer-integrated manufacturing (CIM).

496A Senior Design I (2)

Prerequisite: Selection of upper division specialization within EE option; EE330. The design process; selection of a design project; preliminary report required.

496B Senior Design II (2)

Prerequisite: EE 496A with C grade or higher. Completion of design project for which proposal was developed in EE 496; final written and oral reports required.

Courses in Mechanical Engineering (ME)**Lower Division Course****Upper Division Courses****303 Fluid Mechanics I (4)**

(also listed as CE 303) Prerequisites: CE/ME 320, PHYS 202. Fundamental principles and methods of fluid mechanics; thermodynamics of fluid flow; Newtonian fluids; equations of fluid flow; laminar and turbulent flow; applications.

306 Heat Transfer I (4)

Prerequisites: CE/ME 303 or ME 326A; MATH 215. Fundamental principles of heat transfer; conduction, convection, and radiation; applications.

310 Engineering Measurements Laboratory (1)

Prerequisite: PHYS 203. Techniques and procedures used in making typical measurements in engineering laboratories. Laboratory 3 hours.

312 Strength of Materials Laboratory I (1)

(also listed as CE 312) Prerequisites: ME 310, ENGR 103; ENGR 205 (may be taken concurrently). Tests of engineering materials in tension, compression, bending, and torsion; verification by experiment; basic theories learned in strength of materials. Laboratory 3 hours.

313 Fluid Mechanics Laboratory I (1)

(also listed as CE 313) Prerequisites: CE/ME 303, ENGR 103. Experiments on fluid properties, fluid statics, conservation of mass, energy, and momentum, and fluid resistance. Laboratory 3 hours.

315 Thermal Systems Laboratory I (1)

Prerequisites: ME 310, ME 306, 326A. Experiments in heat transfer and thermodynamics; thermophysical properties of fluids; analysis, operation, and performance testing of thermal energy conversion systems. Laboratory 3 hours.

318 Computer Aided Design Laboratory (2)

Prerequisites: CE/ME 320, CS 290, MATH 215. Computer-aided drafting, geometric models, finite element modeling of mechanical systems, interactive design, intensive practice in hardware/software usage. Laboratory 6 hours.

319 Computer Aided Mechanical Engineering Laboratory (2)

Prerequisites: ENGR 210, 211; CS 290. Use of microcomputers, minicomputers, mainframe computers in mechanical engineering laboratories and projects; programming for interactive computer graphics, engineering design, simulation, word processing; intensive practice in hardware/software usage. Laboratory 6 hours.

320 Dynamics I (4)

(also listed as CE 320) Prerequisite: ENGR 201. Kinematics and kinetics of rigid bodies; work, kinetic energy, impulse, momentum in two and three dimensions; applications to space mechanics.

321 Kinematics of Mechanisms (4)

Prerequisite: ME 318, 319. Transmission of motion; theory of mechanisms; linkages; gears; cams; belts and chains.

323 Machine Design I (4)

Prerequisite: ENGR 205. Application of principles of mechanics, properties of materials, and fabrication processes to design of simple machines and structural elements.

326A Thermodynamics I (4)

Prerequisites: MATH 208, PHYS 202. Concepts of equilibrium and temperature; First and Second Laws of Thermodynamics. Properties of pure substances; ideal gases; application of thermodynamic principles to closed and open systems.

326B Thermodynamics II (4)

Prerequisite: ME 326A. Application of thermodynamic principles; steam generators, engines and turbines; combustion, vapor cycles; refrigeration; internal combustion engines.

327 Manufacturing Processes (4)

Prerequisite: ENGR 207. Manufacturing properties of metals, alloys, and nonmetallic materials; solidification processes; material forming; material removal; joining processes; unconventional processing; numerical control; and automated processes.

328 Introduction to Metallurgy (4)

Prerequisites: ENGR 207, ME 326A. Theory, composition, and properties of pure metals and alloys. Alloying, fabrication, and heat treatment of metals, with emphasis on nature of metals and their alloys.

329 Metallography Laboratory (1)

Prerequisite or corequisite: ME 328. Preparation of metallic samples and study of their internal structure by microscopic techniques. Laboratory 3 hours.

397 Introduction to Project Design in Mechanical Engineering (2)

Prerequisites: Lower division ENGR core, ENGR 300, ENGL 306, ME 319. Introduction to the planning and execution of engineering design projects; ethical and economic considerations; communications and reporting.

402 Advanced Mechanics of Materials (4)

Prerequisites: ME 323, MATH 215. Basic concepts; unsymmetrical beam bending, shear flow, curved beams; energy methods; theories of failure; introduction to theory of elasticity, plane elastostatic problems; torsion of prismatic cylinders.

403 Aerodynamics (4)

Prerequisites: CE/ME 303, ME 319, MATH 215. Air-foil characteristics; transonic, supersonic, and viscous effects on lift and drag; power considerations, airplane performances, introduction to airplane and missile stability and control.

404 Turbomachinery (4)

Prerequisites: CE/ME 303, ME 326B. General treatment of all forms of turbomachines; energy transfer, thermodynamics of compressible flow and flow of fluids in passages and over blades of turbomachines; application to pumps, compressors, hydraulic, gas, and steam turbines.

406 Heat Transfer II (4)

Prerequisites: ME 306, CS 290. Numerical methods in conduction; theory and applications of convection; thermal radiation, condensing and boiling heat transfer; mass transfer special topics.

407 Design of Thermal Systems (4)

Prerequisites: ENGR 300; ME 206, 326B. Design in engineering practice; system simulation and optimization; economic, environmental, other constraints; practical aspects of equipment selection; thermal design literature.

408 Fluid Mechanics II (4)

Prerequisites: CE/ME 303; ME 318, 319; MATH 215. Compressible and incompressible fluid dynamics; continuity, momentum, and energy equations for viscous fluids; circulation and vorticity, Navier-Stokes equation, boundary layer theory, turbulence, two-dimensional flow, three-dimensional flow.

409 Mechanical Engineering Analysis (4)

Prerequisites: CE/ME 320, ME 306. Setup of vibration, heat transfer, fluid flow, and other mechanical engineering systems as ordinary and partial differential equations; analogies between various physical systems. Classical, transform, numerical, and computer methods of solution.

410 Control of Mechanical Systems (4)

Prerequisites: CE/ME 303, ME 306, CS 290, MATH 215. Mathematical models of dynamic systems, fundamentals of feedback control, basic control actions and devices, applications to mechanical systems.

411 Vibrational Analysis I (4)

Prerequisites: CE/ME 320, MATH 215. Analysis of free and forced vibrations with and without damping, systems with several degrees of freedom, vibration isolation, mechanical transients, torsional vibrations, natural frequency computation techniques, digital and analog computer applications.

412 Strength of Materials Laboratory II (1)

Prerequisite: CE/ME 312; prerequisite or corequisite: CE 360 or ME 323. Fatigue tests of materials and connections, stress concentration, photoelasticity, creep tests, shock and vibration tests, combined stresses, and individual projects. Laboratory 3 hours.

413 Fluid Mechanics Laboratory II (1)

(also listed as CE 413) Prerequisite: CE/ME 313; prerequisite or corequisite: CE 387 or ME 408. Experiments on subsonic and supersonic flow, free surface flow, pumps, turbines, fans, and unsteady flow.

414 Machine Design II (4)

Prerequisites: ME 319, 323. Design of unit assemblies and machines; materials, safety, lubrication, and construction.

415 Air Conditioning (4)

Prerequisites: ME 306, 326B. Psychrometric properties of air, heat loads, air conditioning and heating equipment, and air distribution.

416 Energy Systems (4)

Prerequisite: ME 326B. Unconventional energy conversion systems, energy storage, thermoelectric power and refrigeration, absorption refrigeration and cryogenics.

417 Machine Analysis Laboratory (1)

Prerequisites: ME 310, 321,323. Experimental analysis of steady state and transient characteristics of machine components and of complete machines. Laboratory 3 hours.

420 Power Plants (4)

Prerequisite: ME 326B. Survey of power generating systems, theoretical analysis of power cycles; preliminary design calculations for sizing power station equipment.

421 Dynamics of Mechanisms (4)

Prerequisites: ME 321. Application of principles of statics, kinematics, and dynamics to analysis and design of mechanisms with rotating or reciprocating masses.

422 Optimization of Mechanical Engineering Systems (4)

Prerequisites: ME 319, ENGR 210; prerequisite or corequisite: ME 323. Design considerations of mechanical engineering systems; optimization techniques; application of existing computer programs and analytical methods to optimization of mechanical engineering systems.

425 Process Heat Transfer (4)

Prerequisite: ME 306. Computer design of single-phase heat exchangers including surface area, pressure drop, and flow arrangement. Prediction of process conditions for heat transfer systems, including pipe flow and pumping specifications.

426 Thermodynamics III (4)

Prerequisites: ME 318, 319, 326B. Application of thermodynamic principles. Thermodynamic relations, real gases and mixtures, applications of Corresponding States principle, concepts of stability and equilibrium, homogeneous and heterogeneous equilibria, Third Law.

427 Thermal Systems Laboratory II (1)

Prerequisite: ME 315; prerequisite or corequisite: ME 326B. Projects in thermal systems engineering; design and planning experiments and test procedures; instrumentation selection; data analysis and reporting.

428 Automation and Computer-Aided Manufacturing (4)

Prerequisite: ME 327. Automation of manufacturing processes, numerical control, computer-aided manufacturing, group technology, flexible manufacturing, applications of robots in industry.

481 Introduction to Robotics (4)

(also listed as EE 481) Prerequisite: EE 438A or ME 410. General considerations of robotic manipulator; spatial description, homogeneous transformations; manipulator kinematics; inverse manipulator kinematics; motion trajectories; static forces.

491 Robotics Laboratory (1)

(also listed as EE 491) Prerequisite or corequisite: EE/ME481. Robot system installation; programming and languages; link kinematics and motion planning; control of the arm; automated manufacturing and computer-integrated manufacturing (CIM).

497 Mechanical Engineering Senior Project (4)

Prerequisite: ME 414 (*for Mechanical Design specialization*); ME 407 (*for Thermal-Fluid Systems specialization*). Study of engineering design processes. Selection and completion of a faculty-supervised project focusing on typical problems encountered in engineering practice and resulting in a formal report.

Courses in Technology (TECH)

NOTE: Undergraduate technology courses are arranged alphabetically according to subject matter areas, as follows:

- Automotive
- Aviation Administration
- Drafting
- Electronics
- Fire Protection Administration
- Graphic Arts and Printing Management
- Industrial Crafts
- Industrial Design
- Metal Technology

Professional and Elective
Wood Technology

AUTOMOTIVE

100 Introduction to Automotive Mechanisms (3)

Designed to meet general industrial education needs of Industrial Arts majors. Emphasis on general mechanical concepts and related physical principles, maintenance procedures, and consumer data. Lecture 11/2 hours, laboratory 41/2 hours.

201 Automotive Electrical System (3)

Operating principles of battery, starter, and charging and accessory circuits of automobile; skill in diagnosis, testing, and repair procedures. Lecture 11/2 hours, laboratory 41/2 hours.

301 Fuel and Ignition Systems (3)

Prerequisite: TECH 100. Theories of design and operation of ignition and fuel system components; techniques of engine trouble shooting and tune-up procedures. Lecture 11/2 hours, laboratory 41/2 hours.

401 Engine Rebuilding (3)

Prerequisite: TECH 404. Theory of engine design, function, and operation, skill in engine rebuilding and engine machine tool operation. Lecture 11/2 hours, laboratory 41/2 hours.

402 Power Transmission Systems (3)

Prerequisite: TECH 100. Theory of clutch mechanisms, fluid couplings, torque converters, automatic transmission, overdrive and rear axle assemblies; repair and service of the power train. Lecture 11/2 hours, laboratory 41/2 hours.

403 Chassis and Suspension Systems (3)

Prerequisite: TECH 100. Theory and design of brakes, front ends, wheel alignment and balance; includes testing, trouble diagnosis, and repair procedures. Lecture 11/2 hours, laboratory 41/2 hours.

404 Small Power Plants (3)

Prerequisite: TECH 100. Design, construction, and service operations of one-cylinder engines, outboard motors, and gas turbines; emphasis on preventive maintenance procedures and testing. Lecture 11/2 hours, laboratory 41/2 hours.

405 Engine Design and Performance (3)

Prerequisite: TECH 401. Theory of engine design and operation; requirements of modern gasoline power plants studied and performance factors analyzed under varying operating conditions; emphasis on dynamometer testing, engine disassembly, and assembly. Lecture 11/2 hours, laboratory 41/2 hours.

AVIATION ADMINISTRATION

340 Airline Operations (4)

Prerequisite: Upper division standing. Operational techniques and current problems confronting airlines: control tower operations, airport lighting, radio and meteorological service, reservations, ticketing, passenger trends, feasibility route studies, fire and crash protection, and air route traffic control centers. Field trips included.

341 General Aviation Operations and Administration (4)

Prerequisite: Upper division standing. Airport administration; organization, personnel, maintenance, zoning, facilities adequacy, financing, planning, operations, revenues and expenses, public relations, evaluation and safety; socioeconomic effect of airports on communities served.

342 Airline Administration (4)

Prerequisite: TECH 340 or 341. Airline operation and organization; air carrier familiarization; effect of federal regulations; industrial, financial, and economic decision-making.

343 Airport Administration (4)

Prerequisite: TECH 340 or 341. Airport operations: lighting, fuel systems, field marking, field buildings, hangars, communications, maintenance, protection/security, fire fighting, and surrounding community problems.

344 Aviation Law (4)

Prerequisite: TECH 340 or 341. Local, state, federal, and international aviation laws and regulations, safety and economic regulations; air legal systems.

345 Air Cargo (4)

Prerequisite: TECH 340 or 341. Efficient cargo handling by air mail, air express, and air freight; research and utilization, comparison of scheduled and nonscheduled operations and contract or charter operations; flight equipment, stowage, and tie-down; insurance, tariffs, and operations.

346 National Airspace System and Air Traffic Control (4)

Prerequisites: Upper division standing; TECH 340 or 341. U.S. system of air navigation and air traffic control; communications, facilities, airways, controlled and special use airspace, and authorized flight procedures.

440 Safety Factors in Aviation (4)

Prerequisite: TECH 342 or 343. Safety related to air traffic control, passenger service, maintenance and ground/air operations; history, accidents, terminology, liability, worker performance, information sources, and safety program organization.

441 Aviation Sales (4)

Prerequisite: TECH 342 or 343. Sales in airline operation and aviation industry; research, demand analysis, advertising and promotion, traffic, and price determination.

442 Airport Planning (4)

Prerequisite: TECH 342 or 343. Concepts of airport planning and construction; community surveys related to social, economic, and physical characteristics; political influences and phases of airport construction.

443 Air Transportation (4)

Prerequisite: TECH 342 or 343. Facilities, state and federal regulations, legal characteristics, problems, and services of U.S. carriers; organizational function of Federal Aviation Agency, Civil Aeronautics Board, and U.S. Bureau of Transportation.

444 Airline Equipment and Personnel (4)

Prerequisite: TECH 342 or 343. Legislation and regulation of airport finance, capital management, operating costs, airport-airline leasing, intergovernmental relations; airport policies and practices.

445 Quality Control and Inspection in Aviation (4)

Prerequisite: TECH 342 or 343. Inspection of aircraft, ground equipment, quality standards, sampling methods, equipment use, materials testing, and processes. Field trips to commercial airline maintenance shops and aircraft industries required.

447 Senior Seminar: Aviation Problems (4)

Prerequisite: TECH 443. Selected topics about current aeronautical administration problems; interaction with aviation executives. Field trips may be required.

DRAFTING**110 Introduction to Drafting (3)**

Application of theory and fundamentals of drafting: orthographic projection techniques applied for a basic understanding of architectural, machine, forging, casting, welding, and electronic drafting. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

311 Architectural Drafting I (3)

Prerequisite: TECH 110. Architectural design with reference to building codes, construction details, financing, and planning of residential or light commercial structures; critical analysis and comparison of various types of architecture and framing systems. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

312 Technical Illustration (3)

Prerequisite: TECH 110. Basic principles of technical illustration with emphasis on industrial techniques; introduction to newest mechanical aids, grids, and templates for production of isometric, dimetric, and perspective drawings. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

411 Tool Design (3)

Prerequisite: TECH 110. Application of principles of precision dimensioning, mechanics, and drafting to design of machines, tools, gears, and cams; selection and design of tools for mass production. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

412 Manufacturing and Construction Drafting (3)

Prerequisite: TECH 110. Introduction to structural, piping, fluid power, and sheet metal drafting, with emphasis on production drafting techniques and practices leading to production release. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

413 Architectural Drafting II (3)

Prerequisites: TECH 311 for Industrial Arts majors; TECH 110 or FSCS 360 and 460 for Home Economics majors. Techniques of architectural rendering; application of color, shades, and shadows; use of grids and other mechanical devices; construction of architectural models. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

415 Electromechanical Drafting and Design (3)

Prerequisites: TECH 110, 120. Application of industrial methods of electromechanical drafting and design documentation through block diagrams, elementary diagrams, conversion drawings, master drawings, detail and assembly drawings, and generation of hardware. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

416 Piping Design Models (3)

Prerequisite: TECH 110. Exploration of concept of designing with models (rather than drawings) using petrochemical process piping as an exemplary learning vehicle. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

ELECTRONICS**120 DC Electronics (3)**

DC circuits; hands-on experiences in using VOM and DVM for basic electrical measurement and troubleshooting. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

221 AC Electronics (3)

Prerequisite: TECH 120. AC circuits; hands-on experiences testing inductors and capacitors and using oscilloscope for various voltage, frequency, and phase relationships measurement. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

321 Solid State Electronics (3)

Prerequisite: TECH 221. Behaviors of solid state devices (diode, BJT, MOSFET, IC) and their applications; project experiences in printed circuit board involving solid state devices. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

323 Industrial Electronics (3)

Prerequisite: TECH 321. SCR, TRIAC, DIAC, UJT, SSR; timers, optoelectronics, machine vision, operational amplifiers, and their applications; practical experiences in component testing, circuit operation, and applications. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

324 Linear Electronics (3)

Prerequisite: TECH 321. Linear circuits operations and applications; hands-on circuit testing and trouble-shooting plus applications projects. Lecture 1 1/2 hours; laboratory 4 1/2 hours.

325 Industrial Controls (3)

Prerequisite: TECH 321. Sensors and their control applications; process control and data acquisition; motor controls; practical control applications. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

326 Digital Electronics (3)

Prerequisite: TECH 321. Digital circuits with SSI and MSI chips applications; hands-on experiences in digital circuits and digital applications; trouble-shooting. Lecture 1 1/2 hours; laboratory 4 1/2 hours.

327 Microprocessors (3)

Prerequisite: TECH 326. Architecture, programming, interface, and applications of microprocessors; hands-on programming and interfacing applications. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

421 Electronic Communication I (3)

Prerequisite: TECH 321. Analog electronic communication devices and systems; hands-on experiences in various analog modulation methods. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

422 Electronic Communication II (3)

Prerequisite: TECH 421. Digital electronic communication devices and systems; hands-on experiences in various digital modulations methods. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

425 Programmable Controls (3)

Prerequisite: TECH 325. Applications, programming, and troubleshooting of programmable logic controllers (PLC) and motion controls with servo and stepper motors; hands-on applications. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

426 Advanced Digital Electronics (3)

Prerequisite: TECH 326. Digital electronics with MSI chips plus programmable logical devices; hands-on projects. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

427 Advanced Microprocessors (3)

Prerequisite: TECH 327. Interfacing microprocessors with various electronic devices; hands-on applications, trouble-shooting skills, and project experiences. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

428 Computer Assisted Design (CAD) in Printed Circuit Board (PCB) Design and Manufacturing (3)

Prerequisite: TECH 326. Principles and uses of CAD software in productivity improvement of printed circuit board design and manufacturing processes; CAD experiences and field trips. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

FIRE PROTECTION ADMINISTRATION**350 Fire Protection and the Community (4)**

Relationship of fire service and fire protection needs to critical urban issues, affirmative action, public education, communication with minority groups, interdepartmental and intradepartmental relations.

351AB Fire Defense Planning (4, 4)

Community fire defense needs, facilities, master plan development, federal assistance. Application of ISO Grading Schedule and Guide for Determining Fire Flow Requirements; impact of insurance. Field trips required.

352AB Fire Protection Aspects of Building Design (4, 4)

Building construction including fire resistive materials, protective systems, testing of fire assemblies, heat and smoke detection devices, high-rise structures; plan checking. Field trips required.

353 Fire Disaster Administration (4)

Fire disaster protection organization; disaster laws; establishment of central communications and field control centers; support groups, manpower, and equipment; overhaul and security; disaster and civil defense relationships.

355 Fire Protection Laws (4)

Authority for fire department operations; pertinent federal, state, and local laws; fire department liability, member and citizen liability; fire department trial boards.

451 Fire Prevention and Building Codes: Interpretation and Enforcement (4)

Prerequisite: TECH 352AB. Interpretation of building, fire prevention, and State Fire Marshal codes; review of building plans; enforcement procedures and techniques; case studies and problems in code enforcement.

452 Rre Prevention Administration (4)

Prerequisite: TECH 451. Organization of Fire Prevention Bureau; laws and regulations, building and fire code administration; coordination with governmental and other organizations; functions of Fire Prevention Bureau; planning and training.

453AB Fire Protection Systems Design (4, 4)

Theories, principles, and types of fire protection systems; design and hydraulic calculations for sprinkler systems; review of fire protection systems plans.

455AB Fire Protection of Structural Members and Building

Components (4, 4)

Fire protection of structural members, building components, and materials; their reaction under tension, compression, and shear during fire exposure.

GRAPHIC ARTS AND Printing MANAGEMENT

130 Introduction to Graphic Arts (3)

(also listed as JOUR 130) General industrial education course emphasizing the importance of graphic communications in our culture. History, theory, and laboratory-shop practice of varied printing processes, including letterpress, lithography, silk screen, and bookbinding. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

231 Graphic Arts Paste-up (3)

Prerequisite: TECH 130 or instructor consent based on previous training or occupational experience. Copy preparation, selection of paper and processes for printed material; cold type, paste-up techniques, reproduction proofs, and camera use emphasized. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

331 Typography I (3)

Prerequisite: TECH 130 or instructor consent based upon previous training or occupational experience. Intensive study of typography with emphasis on problems of type composition, make-up, imposition, and lock-up. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

332 Typography II (3)

Prerequisite: TECH 331. Principles of typography involved in machine composition; emphasis on operation and maintenance of slug casting machines. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

333 Presswork Procedures (3)

Prerequisite: TECH 130. Letterpress principles and procedures on platen and cylinder presses, make-ready, inks, automatic feeders. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

431 Lithography I (3)

Prerequisite: TECH 331. Lithographic theory and practice: copy preparation, camera, plate preparation, presswork, chemistry of lithography, photographic principles, color theory, printing inks and paper. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

432A Typographic Layout and Design I (4)

Prerequisite: Course in typography. Basic principles of design applied to products of the printer; thumbnail sketches, rough and finished layouts in solution of copy-fitting problems; selection of type, paper, and processes for reproduction.

432B Typographic Layout and Design II (5)

Prerequisite: TECH 432A. Continuation of 432A with stress upon layout and design of complete projects; use of working dummies to illustrate problems of printing production; elements of book design.

433 Printing Estimating (5)

Prerequisite: TECH 435. Elements of estimating all classes of printing and lithography involving type composition, presswork, binding, paper, photo engravings, and cost-finding problems.

434 Printing Plant Management (4)

Prerequisite: Senior standing in Printing Management option. Organizational and management of all departments in the printing plant; application of industrial management factors to the departments; inspection trips to study production methods and organization of local printing plants.

435 Lithography II (3)

Prerequisite: TECH 431. A continuation of TECH 431, with additional emphasis on camera, plate preparation, and press operation. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

438 Advanced Paste-Up (3)

Prerequisite: TECH 231. Advanced copy preparation techniques for makeup production for commercial, newspaper, and magazine printing; computerized photocomposition equipment operation including markup and programming methods. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

INDUSTRIAL CRAFTS**448 Plastics Technology (3)**

History, materials, processes, and application of plastics technology; principles and procedures of modern application in industry. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

INDUSTRIAL DESIGN**144 Introduction to Industrial Design (3)**

Creative problem-solving and aesthetics, application through two and three-dimensional exploratory exercises in color, texture, shape, form, structure, and space through simple industrial design problems. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

METAL TECHNOLOGY**160 Introduction to Metalworking (3)**

Basic metal properties, metalworking processes, and hand and machine tool applications. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

261 Sheet Metal Layout and Development (3)

Prerequisite: TECH 160. Sheet metal layout and development, cutting, forming, fastening, finishing; industrial applications of these processes. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

361 Welding Technology (3)

Prerequisite: TECH 160. Inert-gas, oxy-acetylene, and electric arc welding, cutting, brazing, and testing theory and practice. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

362 Heat Treating and Metallurgy (3)

Prerequisite: TECH 160. History, techniques and principles of forging, heat treating, and metallurgy. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

461 Molding and Casting (3)

Prerequisite: TECH 160. Techniques, principles, practices of metal molding and casting. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

463 Metal Machining I (3)

Prerequisite: TECH 160. Construction, utilization, and laboratory applications of the engine lathe, shaper, and milling machines. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

464 Metal Machining II (3)

Prerequisite: TECH 160. Advanced study of engine lathe, shaper, milling machines, grinding machines; emphasis on special setups and applications. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

465 Automated Metal Machining (3)

Prerequisite: TECH 160. Advanced study of metal machining with emphasis on semi-automatic, automatic tape controlled, and grinding operations. Lecture 1 1/2 hours, laboratory 4 1/2 hours. May be repeated to maximum of 9 units.

PROFESSIONAL AND ELECTIVE

101 Industrial Safety for Industrial Education (3)

Industrial safety related to industry and school shops; history, accident facts, liability, psychology, worker performance, sources of information, and industrial methods of operation.

200 History of Technology (3)

Human accomplishment in areas of discovery, invention, and industry from prehistoric times to present.

280 Tools for the Artist (3)

Safe, efficient, and appropriate operation, adjustment, and maintenance of power and hand tools used by artist. Not appropriate for Industrial Studies majors or minors; Art majors and minors have enrollment preference.

291 Computers in Technology (3)

Prerequisite: CS 190 or any programming language course. Introduction to computers with applications for the technologist. Designed to assist students in becoming literate in topics applicable to technological areas such as production, manufacturing, and CAD/CAM. Lecture 11/2 hours, laboratory 41/2 hours.

300AB Foundations of Industrial Education (2, 2)

Philosophy and development of industrial education, its present place and function in elementary and secondary education.

380 Industrial Graphic Communication Technology (3)

Concept of graphic communication technology in industrial education. Emphasis on practices in modern industry; examination of recent and projected technological development.

381 Materials, Process, and Fabrication Technology (3)

Technologies in conversion of raw materials to products; essential concepts and manipulative operations for cutting, forming, fastening, finishing, and testing wood, ferrous and nonferrous metals, plastics, and ceramic materials.

382 Power Technology (3)

Power technology concept in industrial education; survey of available energy, various forms of power conversion; utilization of power in modern industry and in industrial production processes.

385 Orientation to Vocational Education (3)

Prerequisite: Admission to BVE program. Introduction to requirements and content of BVE degree program including Swan Bill (career experience credit) evaluation.

395 Community Service in Technology (1-4)

Prerequisites: Eight units of upper division TECH courses, approval by faculty sponsor in consultation with EPIC Director; acceptance by a community agency. Participation in work of community agency or activity utilizing professional skills in community service. Grade *D/R/NC*. May be repeated to maximum of 8 units.

400 Written Communication Skills for Industrial Studies (4)

Prerequisite: ENGL 102*. Written communication skills for the professional needs of Industrial Studies students with emphasis on education, public, industrial, and business requirements.

**Students subject to easier catalogs satisfy this prerequisite with ENGL 1010r 190. 414*

Robotics in Industry (2)

Prerequisite: Upper division or graduate standing. History, terminology, economics, applications, and implications of industrial robots in the work place.

454L,P Special Topics in Industrial Studies (1-.4)

Prerequisites: Upper division standing; others as needed for specific topic. Current issues, problems, and interests in technology. May be repeated to maximum of 9 units as subject matter changes.

480 Comprehensive General Shop (3)

Prerequisite: Completion of required foundation program for Industrial Arts major. General shop movement, organization and operation of multiple laboratory programs, design and construction of

projects and aids; laboratory organization and management procedures. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

481 Practicum in Industrial Studies (4)

Prerequisites: Completion of an area of concentration and instructor consent. Application of industrial studies concepts and skills to design, production, and/or serving of commercial and industrial products and devices. Lecture 2 1/2 hours, laboratory 4 1/2 hours. May be repeated to maximum of 8 units.

482 Metrics for Industry (3)

Adapting industrial operations to metric system; standards and application; development of instructional materials; special problems for industrial educators.

483AB Construction of Teaching Aids (2, 2)

Development for industrial education of instructional aids such as cutaway models, mock-ups, assignment boards, checking devices for course coverage, blown-up models, electrical identification panels, procedure boards, specimens, and project materials. Activity 4 hours.

484 Automated Manufacturing Systems (4)

Applications and theories of advanced production systems in automated manufacturing environments; emphases include direct and computer numerical control, computer integrated manufacturing CAD/CAM; flexible manufacturing; group technology. Lecture 2 1/2 hours, laboratory 4 1/2 hours.

485 History, Philosophy, and Organization of Industrial Education (3)

Prerequisites: TECH 300AB, upper division standing, Industrial Arts major or minor or Vocational Arts major. History and philosophy of industrial education in Western civilization; comparative study of development and organization of industrial education in the U.S.

486 Seminar: Vocational Education (1-4)

Prerequisite: Upper division standing. Problems in maintaining and modifying vocational education programs. Emphasis on changing philosophies, concepts, practices, legislation, technical content, instruction, organization, and management. May be repeated with instructor consent.

487 Seminar: Comprehensive Career Education for Industrial Studies and Vocational Education (3)

Prerequisite: Upper division standing. Development, organization, and implementation of comprehensive career education for industrial arts and vocational education; emphasis on concepts, techniques, strategies, implementation, levels of instruction, leadership, administration, and organization. May be repeated to maximum of 9 units as subject matter changes.

488 Fluid Power (3)

Prerequisite: PHYS 150. Application of principles of industrial hydraulic and pneumatic circuits; emphases on basic laws and operation of pressure, directional control valves, and actuators as they apply to manual and automated circuits. Lecture 1 1/2 hours, laboratory 4 1/2 hours.

489 Industrial Training Methods (4)

Training approaches for industrial/technical management personnel; overview of design and management of the training function in the modern work world, instructional design, and delivery systems.

490 Advanced Problems in Industrial Studies (1-9)

Prerequisites: Completion of an area of concentration and instructor consent. Advanced problems in a specific industrial arts area of concentration. Lecture 1 1/2 hours, laboratory 4 1/2 hours for 3 units; other unit values use same ratio.

490A Automotive**490D Drafting****490E Electronics****490G Graphic Arts****490M Metal Technology****490W Wood Technology****499 Undergraduate Directed Study (1-4)**

Prerequisite: Consent of an instructor to act as sponsor. Project selected in conference with sponsor before registration; progress meetings held regularly, and final report submitted. May be repeated for credit.

WOOD TECHNOLOGY

170 Introduction to Wood Technology (3)

Wood working industries, their origins, developments, technical aspects, and influences upon human occupational, social, cultural, recreational, and consumer activities; safety, common properties, characteristics, structure, shaping, finishing processes of wood and its industrial usage. Lecture 11/2 hours, laboratory 41/2 hours.

271 Wood Construction Technology I (3)

Prerequisite: TECH 170. Physical and mechanical properties of wood and its architectural usage; application of uniform building code to construction of dwellings. Lecture 11/2 hours, laboratory 41/2 hours.

272 Wood Construction Technology II (3)

Prerequisite: TECH 170. Cabinetmaking and mill work procedures used in industry; design, joinery, hardware, and manufacture of plywood and veneers. Lecture 11/2 hours, laboratory 41/2 hours.

372 Wood Finishing and Preservation (3)

Prerequisite: TECH 170. Protection of wood against deterioration by fire, moisture, insects, fungus, and weather; surface enrichment emphasized; experiments and application of protective materials including finishes. Lecture 11/2 hours, laboratory 41/2 hours.

374 Wood Shaping Processes (3)

History, materials, processes, and application of wood carving; principles and procedures of modern application in industry. Lecture 11/2 hours, laboratory 41/2 hours.

471 Lamination, Forming, Bonding (3)

Prerequisite: TECH 170. Processes of lamination and forming of wood and other materials. Equipment and bonding materials; laminating and forming characteristics of various materials; laboratory includes design and construction. Lecture 11/2 hours, laboratory 41/2 hours.

472 Wood Manufacturing Technology I (3)

Prerequisite: TECH 170. Structure, identification, defects, curing, grading, joining, and fastening of commercial woods and related materials; design and construction of furniture and accessories. Lecture 11/2 hours, laboratory 41/2 hours.

473 Wood Manufacturing Technology II (3)

Prerequisite: TECH 472. Mass production of products using wood as a basic material; design and development of jigs, fixtures, and tooling; design and production of items. Lecture 11/2 hours, laboratory 41/2 hours.

SCHOOL OF HEALTH AND HUMAN SERVICES

SCHOOL OFFICE

Fine Arts 134

Phone: (213) 343-4600

The two credit certificate programs listed below are interdisciplinary in nature and are open to interested students in all majors throughout the campus. These programs are administered by the School of Health and Human Services.

Certificate Program in Applied Gerontology

The School of Health and Human Services offers a credit certificate program in *Applied Gerontology* designed to enhance the preparation of individuals interested in health and human service disciplines to increase their knowledge, skills, and effectiveness as practitioners with older populations, particularly the multiethnic and multiracial elderly. The program is designed for a wide range of students including those seeking a career change and those in the field seeking to enhance their promotional opportunities. A total of 28 units is required, including 16 units of core courses, 4 units of field experience, and 8 units of electives.

Admission to the program requires upper division standing (*completion of 90 quarter units*) and the consent of a faculty adviser in the student's major department or division (or the coordinator of the certificate program for students whose major is undecided).

Requirements for the Certificate (28 units)

Required core courses (16 units):

BIOL	484N	Biology of Human Aging	(4)
PSY	462	Psychology of Human Development: Maturity and Aging	(4) or
SOC	450	Sociology of Aging	(4)
SW	450	Crosscultural Practice with Aging Populations	(4)
SW	465	Programs and Policies Related to the Elderly	(4)

Required Field Experience/internship (4 units):

(Three units field work; one unit seminar)

Placement is arranged for each discipline through the offering department or division. Students in schools other than Health and Human Services will arrange field experience with their major adviser and the certificate program coordinator, as appropriate.

Electives (select 8 units from following with major adviser approval):

COUN 405AB, 479
 ENGL/FL/PHIL 383
 FSCS 445, 451
 FSCS/PE 458
 HS 462
 NURS 302, 344
 * PSY 462
 SOC 322B, * 450, 452, 453
 * if not taken in the core

Certificate Program in Child Maltreatment and Family Violence

The School of Health and Human Services offers an interdisciplinary credit certificate program designed to provide individuals in health and human service disciplines or other related fields with expanded knowledge and formalized education, multidisciplinary training, and field experience in child abuse and domestic violence. Course work includes theoretical, conceptual, and practical experiences leading to a multidisciplinary view of the relevant issues, processes, and systems involved. The goal of the program is to prepare individuals to better serve the needs of abused children and violent families and to qualify for career positions for which multidisciplinary training is essential.

Admission to the program requires upper division standing, formal application to the school, a screening interview with the program director covering the applicant's prior academic work, and approval of the individual student program. The program requires 24 units of upper division course work including 16 units of required core courses, 4 units of electives, and 4 units of field experience. Students must earn a minimum C grade point average to qualify for the certificate. Refer to the *Undergraduate Studychapter* of this catalog for general regulations governing all certificate programs.

Requirements for the Certificate (24 units)

Required Courses (16 units):

CHDV/EDSP 412	Issues in Child Abuse, Neglect and Family Violence	(4)
COMD 457	Communicating with Abused Children and Violent Families	(4)
COUN/PSY 403	Psychosocial Dynamics of Child Maltreatment and Family Violence	(4)
SW 456	Multidisciplinary Teams, Child Maltreatment, and Family Violence	(4)

Field Experience (minimum 4 units): Select from following:

** COMD 578

COUN 495

EDSP 499, ** 503

FSCS 495

HHS 495

NURS 443

PSY 485, ** 595 SW 495

** open to graduate students only

Electives (select at least 4 units from following with adviser approval):

COUN 406, 460, 480

CRIM 439

FSCS 421,423

NURS 470

NURS/SW 455

PSY 412AB, 426, 464

SOC 421,440, 482, 483

SW 476

Courses in Health and Human Services (HHS)

Upper Division Course

395 Community Service in Health and Human Services (1-4)

Volunteer work with the Visitation Alliance Program, working in conjunction with the Superior (probate) Court, dealing with adult conservatees utilizing professional skills in a learning environment. May be repeated to maximum of six units. Grade **CR/NC**.

495 Field Work in Health and Human Services (1-4)

Prerequisite: Admission to a Health and Human Services credit certificate program. Work with community service organizations; placement arranged by appropriate certificate program coordinator. May be repeated to maximum of 8 units. Grade **CR/NC**.

CHILD DEVELOPMENT

School of Health and Human Services

PROGRAM OFFICE

Engineering and Technology A535

Phone: (213) 343-4590

Child Development, the empirical study of the growth and development of the individual from birth through adolescence, provides an interdisciplinary foundation of understanding and skill for students interested in professional careers providing various services to children and families, such as day care centers, community agencies, special education programs, and recreational activities. It prepares students for advanced study in child development as well as for professional education courses leading to the Multiple Subject teaching credential and Special Education credentials.

Students with a background in child development are able to pursue professional opportunities in many fields other than teaching, including production of children's films, books, and magazines; educational television; children's toys and educational software; and child advocacy at local, state, and national levels.

The Faculty

The faculty for this interdisciplinary program is provided by cooperating departments within the schools of Arts and Letters, Education, Health and Human Services, and Natural and Social Sciences. Ann Bingham-Newman, Professor of Family Studies and Consumer Sciences, serves as coordinator.

Bachelor of Arts Degree

The interdisciplinary Bachelor of Arts degree in Child Development includes a choice between two options: Option I, which prepares students to work as administrators in preschools, day care centers, or youth agencies or to gain entry into professional areas other than teaching; and Option II, a diversified undergraduate program approved for examination waiver for the Multiple Subject credential.

Students entering the program should plan their course work with a Child Development adviser. Students seeking the credential should consult the School of Education. Current information is available in the Child Development office. Students who fulfill the requirements for the Multiple Subject credential by completing Option II are also eligible for the Bilingual/Crosscultural Emphasis credential in Spanish if they fulfill additional requirements listed under *The Credential Program* later in this chapter.

Departmental Honors Program

The Child Development major includes an honors program for students who have completed at least 16 upper division units in the Child Development core, maintained a minimum 3.5 grade point average, passed the Writing Proficiency Exam, and are approved by the Child Development Program Committee. Applications are available in the Child Development office.

The *honors program* is designed to introduce superior students to intensive and thorough study of theory, research and current issues in the field of child development. Honors students are advised by an honors adviser and may depart from the approved major program in various ways to enrich their program. During their last year, honors students enroll in CHDV 497, Senior Honors Thesis, and complete a written thesis. Diplomas and transcripts of honors program graduates are designated "*Graduated with Honors in Child Development.*"

Requirements for the Major (99-151units)

Option I, the *General option*, requires a core of 67-68 units of lower and upper division courses plus an area of specialization. The *Child and Family Development* specialization requires an additional 42 units of upper division course work; the *Preschool/Day care Administration* specialization, an additional 37 units; and the *Youth Agency Administration* specialization, an additional 32-38 units. Option II, the *Multiple Subject Credential* option, which is intended for students pursuing the Multiple Subject credential, requires 146-151.

Students should plan their programs with careful attention to prerequisites for upper division courses. Some courses that meet general education requirements are included in the core. Students should complete these requirements and other general education requirements before proceeding with the major.

Grades of C or higher are required in all courses used to meet major requirements.

Options

*** Option I: General Option (99-110 units)**

Specializations (Select one)

Core Requirements (67-68 units)

CHDV 200	(4)
201	(4)
CHDV 320	(4) or
426	(5)
CHDV/EDSP 412	(4)
CHDV 420 or PSY 412B or SOC 322A	(4)
CHDV/FSCS 425	(4)
CHDV 496 or 497*	(4)
COMD 456	(4)
COUN 460 or SW 476**	(4)
CS 160	(3)
EDEL 462	(4)
ENGL308 or 410	(4)
ENGL 430 or SPCH 490	(4)
NTRS 416	(4)
PSY 150+, 433	(4 each)
FSCS/SOC 120 or SOC 202	(4)

** open to Honors Program participants only*

***Students following Specialization C should take SW 476*

+indicates course meets G. E requirement

A. Child and Family Development (42 units)

EDSP 400	Education and Psychology of Exceptional Individuals	(4)
FSCS 321	Urban Family: Contemporary Trends	(4)
or CHS 410	Chicano Psychology	(4)
or PAS 404	The Black Family	(4)
FSCS 341	Personal and Family Management Dynamics	(4)
FSCS 421	Marriage and Family Dynamics	(4) or
PSY 426	Family Therapy Dynamics and Perspectives	(4) or
SOC 440	Marriage and the Family	(4)
FSCS 423	Parenting	(4)
FSCS 424	The Formerly Married	(4) or
SOC 443	Alternative Family Life Styles	(4)
NURS 460	Problems of Parenting	(2) or
NURS 464	Family Interaction Problems	(2)
PSY 410A	Abnormal Psychology	(4) or
SOC 482	Juvenile Delinquency	(4)
PSY 419	Psychology of Sex Roles	(4) or
PSY 488	Gender Differences	(4) or
SOC 441	Sociology of Sex Roles	(4) or
SPCH 479	Sex Roles in Communication	(4)
SPCH 478	Group Communication: Dynamics of Leadership and Participation	(4)
SPCH 489	Intercultural Communication	(4)

B. Preschool/Day Care Administration (37 units)

ART 435	Exploring the Arts in Early Childhood	(4)
CHDV 422	Administration of Preschool and Day	

		Care Programs	(5)
EDEL	461	Curriculum Procedures and Materials for Early Childhood Education	(4)
EDEL	465	Directed Teaching: Preschool	(12)
EDEL	466	Cultural Diversity in Early Childhood Classroom: Needs and Opportunities	(4)
EDSP	415	Educational Techniques for Young Handicapped Children	(4) or
EDSP	416	Working With Families of Young Handicapped Children	(4)
MUS	400	Development of Perception in Musical Arts	(4) or
MUS	490	Music for Early Childhood	(4)

C. Youth Agency Administration**(32-38 units)**

With careful planning, students can earn the credit certificate in Voluntary Youth Agency Administration concurrently with this specialization. Interested students should contact the American Humanics program director, Library North Lobby, (213) 343-4580. The certificate program is described in the section entitled *Youth Agency Administration* at the end of this chapter.

Required Core (8 or 12 units):

*SW	476	Child Welfare	(4)
YAA	290	Introduction to Youth Agency Administration	(4)
YAA	490	Volunteer Management and Fund Raising	(4)

**If not taken in the core.*

Accounting and Budgeting (4 units)

ACCT 202 or
POLS 466

Community Organization (4 units)

CRIM 439 or
PSY 445 or
SW 472

Counseling and Group Work (4 units)

Select one from following:

COUN 406,
PSY 405,
SOC 420,
SW 4610r 475

Personnel Management (4 units)

Select one from following:

MGMT 473,
POLS 463,
POLS 472,
PSY 446

Public Relations and Communication (4 units)

Select one from following:

JOUR 496
POLS 470
PSY 420
SOC 424
SPCH 330, 489*

*Students who select General Education Theme #6 cannot use SPCH 489 or the Public Relations and Communication *Block*.

Internship (4-6 units)

YAA 495 (must be arranged through American Humanics, Inc. executive director)

*** Option II: Multiple Subject Teaching Option (146-151 units)**

Students who select this option complete a separate core which is common to all Multiple Subject teaching options. That common core contains 106-111 units and is described in the *Undergraduate Study chapter*. In addition to the core, the 63-68 units listed below are required in the option. Refer to the undergraduate *School of Education chapter* of this catalog for regulations governing all teaching credential programs.

Required Courses (106-111 units)

Refer to the *Undergraduate Study chapter* of this catalog.

Major Courses (20 units)**Required Courses (16 units)**

CHDV 200	Introduction to the Study of Children	(4)
CHDV 201	Infant Development(4)	
CHDV 496	Senior Seminar	(4) or
*CHDV 497	Senior Honors Seminar	(4)
EDEL 462	Dynamics of Play	(4)

*Open only to Child Development Honors Program participants.

Select one from following (4 units):

CHDV/EDSP 412	Issues in Child Abuse, Neglect, and Family Violence	(4)
COUN 460	Laws Relating to the Child and Family	(4)
NTRS 416	Child Nutrition	(4)
SW 476	Child Welfare	(4)

Human Development Depth Area (20 units)**Required Courses (16 units)**

CHDV/FSCS 320	The Young Child	(4)
COMD 456	Development of Verbal Behavior in Childhood	(4)
PSY 433	Psychology of Cognitive Development	(4)
SPCH 494	Communication Behavior in Childhood	(4)

Select one from following (4 units):

FSCS 421	Marriage and Family Dynamics	(4)
SOC 440	Marriage and the Family	(4)
SOC 443	Alternative Family Life Styles	(4)

Electives (28 units)

Professional education courses are recommended. See a credential adviser in the *School of Education*.

GENERAL EDUCATION UPPER DIVISION theme (12 units)

Select one general education upper division theme and complete one course in each of the three areas within that theme. GE theme courses and credential courses listed above are not part of the major but are included in credential requirements.

Minor in Child Development

The minor in Child Development provides a foundation for students majoring in other fields who wish to prepare for child-oriented careers in community development, recreational services, business, management, early childhood law, family studies, speech or media studies or to fulfill requirements for a children's center permit. A total of 36-37 units is required for this minor. Prerequisites are required for some courses; students should consult with an adviser.

Requirements for the Minor (36-37 units)**Required courses (12 units):**

CHDV 200	Introduction to the Study of Children	(4)
----------	---------------------------------------	-----

CHDV 201	Infant Development	(4)
CHDV 320	The Young Child	(4)

Select one from following (4 units):

FSCS 321,421
PSY 326 440

Select three from following (12 units):

ART 435
COMD 456
EDEL 462
ENGL 430,
MUS 490
SPCH 490 3010r 306

Select one from following

CHDV/FSCS425
CHDV 426

(4-5 units):

(4) or
(5)

Select one from following

CHDV 420
PSY 412B
SOC322A

(4 units):

Certificate Program

The Child Development program offers course work acceptable toward fulfillment of requirements for the interdisciplinary credit certificate program *Child Maltreatment and Family Violence*, offered by the School of Health and Human Services.

The Credential Program

option II in the B.A. degree in Child Development has been approved by the Commission on Teacher Credentialing for examination waiver for the Multiple Subject credential. This approval as a diversified waiver status program waives the necessity of students having to pass the National Teachers' Examination (NTE) prior to entering the credential program.

Students who fulfill the requirements for the Multiple Subject credential by completing the Child Development major are also eligible for the Bilingual/Crosscultural Emphasis credential in Spanish if they meet the following additional requirements:

- * Demonstrate spoken and written fluency in the Spanish language.
- * Demonstrate knowledge of and sensitivity to the culture of the Spanish-speaking child.

Students should consult advisers in both the Child Development office and the School of Education. Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs.

Courses in Child Development (CHDV)

Lower Division Courses

154 L,P Selected Topics in Child Development (1-4)

Prerequisites: As needed for specific topic. Special topics of interest to students in child development as announced in *Schedule of Classes*. May be repeated as subject matter changes.

200 Introduction to the Study of Children (4)

Overview of the field of child development and career opportunities; theory, research, and ethical issues; observational techniques and use of observational data.

201 Infant Development (4)

Prerequisite: CHDV 200. Theory and dynamics of physical, cognitive, and affective development from conception to 2 1/2 years.

Upper Division Courses**320 The Young Child (4)**

Prerequisite: CHDV 200. Theoretical and empirical bases for understanding the child from 2 1/2 to 7 years. Lecture 3 hours, participation with children in supervised setting 3 hours.

412 Issues in Child Abuse, Neglect, and Family Violence (4)

(also listed as EDSP 412) Overview of legal, health, social, psychological, educational, and cultural meaning of child maltreatment and family violence; field observations at appropriate agencies and sites.

420 Middle Childhood and Adolescence (4)

Prerequisite: CHDV 200. Theoretical and empirical bases for understanding children from six to 18 years.

422 Administration of Preschool and Day Care Programs (5)

Prerequisite: CHDV320 or 426. Organization and management of finances, staff, equipment, physical space, and programs. Meets State Health Department requirements for licensing as a director. Lecture 4 hours, activity 2 hours.

425 Ethnic Identity and Awareness in Children and Families (4)

(also listed as FSCS 425) Prerequisite: CHDV 420 or PSY 412B. Children's development of ethnic identity and awareness; transmission of differing cultural patterns within family systems and social institutions; working with issues of prejudice, stereotyping, and ethnic pride.

426 Hospitalized Child/Child Life Program (5)

Prerequisites: CHDV 200; extensive experience in nursery school setting or CHDV 320. Working with hospitalized children from a nonmedical perspective; interaction and activity planning; play therapy. Activity six hours in hospital setting.

430 Parent-Child Development Over the Family Cycle (4)

Prerequisites: CHDV 200; FSCS 120. Interplay of personal and family developmental cycles; developmental tasks of parents, children, and mutual tasks; congruence and differences.

431 Family Dynamics and Parenting (4)

Prerequisites: CHDV 200, FSCS 120. Dynamics of family system over generations; impact of family systems dynamics on parents and parent-child relationships; dynamics of communication, cohesion, games, triangles, individualization, and role reversal.

432 Social Dynamics of Parenting (4)

Prerequisites: CHDV 200, FSCS 120. Influence of ethnicity, religion, social class, family size, timing of parenting, divorce, peer groups, schools, work, and other diverse social environmental factors on parenting dynamics.

433 Approaches to Parent Education (4)

Prerequisites: CHDV 200, FSCS 120. Various approaches to parenting; popular literature and media about parenting; uses of popular literature by parent-educators to empower parents; social, developmental, behavioral, and psychological models.

434 Group Dynamics for Parent Education (4)

Prerequisite: instructor consent. Culminating course in Parent Educators certificate program. Dynamics of parenting groups, especially didactic and growth models; group leadership, composition, goals, cohesion, and processes; placement in ongoing parenting group. Lecture 2 hours, laboratory 6 hours.

435 Parenting in High Risk Situations (4)

Prerequisites: CHDV 200, FSCS 120. Analysis of multiproblem families focusing on parenting in difficult situations: teen parents, drugs and alcohol problems, gangs, chronic illness, divorce, death, family violence, mental illness, and parental empowerment.

454L, P Special Topics in Child Development (1-4)

Prerequisite: Varies with specific topic. Current topics of special interest to CHDV students as announced in *Schedule of Classes*. May be repeated for credit as subject matter changes.

496 Senior Seminar (4)

Prerequisites: Completion of 135 units; passing WPE score. Integration of theory, research, and practice through readings about current topics in child development and preparation of research paper in selected area.

497 Senior Honors Thesis (4)

Prerequisites: completion of 135 quarter units; passing WPE score; admission to Child Development honors program. Integration of theory, research, and practice through reading of current topics in child development and writing of honors thesis under supervision of honors adviser; approval and regular consultation with adviser required.

499 Undergraduate Directed Study (1-4)

Prerequisite: Instructor consent to act as sponsor. Project selected in conference with sponsor before registration; progress meetings held regularly. May be repeated for credit.

COMMUNICATION DISORDERS

School of Health and Human Services

DEPARTMENT OFFICE

King Hall B106

Phone: (2'13) 343-4690

The Department of Communication Disorders offers an undergraduate, preprofessional program leading to a Bachelor of Arts degree in Communicative Disorders. Entry into the profession requires completion of organized programs of study at the graduate level. Graduate programs leading to the Master of Arts degree in Communicative Disorders, with an option in either Audiology or in Speech-Language Pathology, as well as credentials in audiology and speech-language pathology are described in the *Graduate Programs* section.

The Faculty

Emeriti: Robert L. Douglass, Elise S. Hahn, Mary W. Huber, Donald B. Kinstler, Lorraine Monnin.

Professors: Masako M. Matsuda, Patricia Savich,

Associate Professors: May E. Chin, Betty L. McMicken (*Chair*).

Assistant Professor: Miles Peterson.

Adjunct Assistant Professor: Margaret H. Briggs.

Bachelor of Arts Degree in Communicative Disorders

The Bachelor of Arts degree in Communicative Disorders (or its equivalency in course work and clinical practicum) must be completed by all students planning to concentrate at the graduate level in either audiology or speech-language pathology. The options offered after completion of all requirements include:

- * M.A. with options in audiology and/or speech-language pathology (or equivalency) required for California state licensure and the *Certificate of Clinical Competence* issued by the American Speech-Language-Hearing Association (ASHA).
- * Clinical Rehabilitative Services credential in Audiology and/or Speech-Language-Hearing (including Special Class Authorization) required for service in the public schools.
- * Certificate in Rehabilitative Audiology. Students who have started the major at another campus or completed majors in other fields must consult with a department adviser before beginning the program.

Majors in Communicative Disorders must meet personal and professional standards established by the department which include, but are not limited, to the following: acceptable speech, language and hearing; the capacity to accept instruction; willingness to assume professional responsibility for the welfare of clients; and the ability to relate well to clients, peers and faculty. Students must also possess qualities of personal integrity, maturity, and sound professional judgment.

A total of 73 units is required in communication disorders and related behavioral science courses. The following courses provide the basic core in the undergraduate major:
COMD 400, 401, 402, 450, 460AB, 461, 462AB

Students must earn a grade of C or better in each of the core courses. Repetition of core courses is limited to a maximum of two attempts in the entire core. Students who receive more than two D or F grades in the core courses included in the undergraduate major will be terminated from the major.

Students who have earned a degree in another major must complete the following undergraduate courses (or equivalents) and meet all standards established by the department:

COMD 400, 401, 402, 403 or 407, 420, 425, 429, 450, 460AB, 461, 462AB, 470, 471, 472, 476, 478A, 478B

Requirements for the Communicative Disorders Major with Planned Option in Speech-Language Pathology at the Graduate Level

Students planning to meet requirements for the Clinical Rehabilitative Services credential should include the following courses as electives in their undergraduate program: EDCI 300, EDFN 413, EDSP 400 and 403.

Requirements for the Communicative Disorders Major with Planned Option in Audiology at the Graduate Level

Undergraduate students planning to concentrate in Audiology at the graduate level must complete a bachelor's degree in Communicative Disorders.

In COMD 478A and 478B, students should complete at least 35 supervised clock hours of clinical practicum which is required for California licensure and ASHA *Certificate of Clinical Competence* in Audiology.

Some requirements for the public school credential for audiologists may be completed at the undergraduate level, including EDCI 300 and EDSP 400, 420, 430, and 431AB. The remaining requirements must be met at the graduate level.

To increase students' knowledge in areas basic to audiology, the following undergraduate electives are recommended:

BIOL 200AB
CHEM 101
PHYS 101,102
PSY 150, 170, 202
TECH 120

For assistance in planning the graduate program, students seeking an M.A. degree or certification in audiology should meet with an audiology adviser at least two quarters before beginning the graduate program.

Course work in audiology is required in other degree/certification programs as follows:

* Certificate as a School Audiometrist (granted by the California State Department of Health)

*** Health Services Credential: School Nurse Services Requirements for the Major (73 units)**

Lower Division Required Course (3 units):

COMD 160 Voice and Diction (3)

Upper Division Required Courses (70 units):

COMD 300	Writing Skills in Communication Disorders	(4)
COMD 400	Peripheral Hearing Mechanism	(3)
COMD 401	Audiological Acoustics	(2)
COMD 402	Pure-Tone Audiometry	(3)
COMD 403	Speech Audiometry	(3) or
COMD 407	Pediatric Audiology	(3)
COMD 420	Rehabilitative Audiology	(3)
COMD 425	Management of the Hearing Impaired Child	(3)
COMD 429	Clinical Practice in Aural Rehabilitation	(1)
COMD 450	Introduction to Communication Disorders	(4)
COMD 460AB	Speech and Language Acquisition in Children	(3, 3)
COMD 461	Descriptive Phonetics	(4)
COMD 462AB	Speech-Language Science	(3, 3)
COMD 469	Role of the Speech-Language Pathologist in Professional Settings	(1)
COMD 470	Clinical Processes in Communication Disorders	(4)
COMD 471	Language Disorders in Children	(4)
COMD 472	Voice and Articulation Disorders	(4)
COMD 476	Diagnostic Procedures in Speech and Language Disorders	(3)
COMD 478AB	Clinical Procedures in Communication Disorders	(2, 2)

COUN	405AB	Theoretical and Developmental Aspects of Behavior	(4, 4) or
PSY	412AB	Psychology of Human Development: Childhood and Adolescence	(4, 4)

Certificate Program

The department offers course work acceptable toward fulfillment of requirements for the interdisciplinary credit certificate in *Child Maltreatment and Family Violence*, offered by the School of Health and Human Services.

Courses in Communication Disorders (COMD)**Lower Division Course****160 Voice and Diction (3)**

Essentials of normal speech with training in voice production, articulation, pronunciation, projection, and related oral skills.

Upper Division Courses**300 Writing Skills in Communication Disorders (4)**

Prerequisite: Passing WPE score; corequisite: COMD 470, 471, or 472. Technical writing for the audiologist and speech-language pathologist.

400 Peripheral Hearing Mechanism (3)

Anatomy, physiology, and pathology of peripheral hearing mechanism, including theories of hearing and introduction to central auditory nervous system.

401 Audiological Acoustics (2)

Acoustical characteristics of sound, decibel notation as the unit of measurement for signal intensity, characteristics and calibration of portable pure-tone audiometers, measurement of ambient noise in test rooms.

402 Pure-tone Audiometry (3)

Pure-tone threshold measurements, interpretation of ideograms, introduction to basic diagnostic Audiological battery of tests, screening audiometry, functional hearing losses.

403 Speech Audiometry (3)

Prerequisites: COMD 400, 401, 402, 461. Information concerning speech perception by hearing impaired, auditory perceptual skills, and assessment of hearing with speech as the test signal; applications of diagnostic data.

406 Audiology for Teachers (4)

Prerequisite: Admission to special education program. Anatomy, physiology, and pathology of peripheral hearing mechanism; acoustic characteristics of sound; pure-tone and speech audiometry; application of audiologic data to programs for profoundly deaf, deaf-blind, or multihandicapped children.

407 Pediatric Audiology (3)

Prerequisites: COMD 400, 401, 402, 460AB, 461. Theories, principles, and methods of assessing hearing of preschool children; hearing disorders unique to children; differential diagnosis; case management.

409 Industrial Audiology (3)

Prerequisites: COMD 402, instructor consent. Protection of industrial workers from noise; noise-induced hearing losses, noise analyses, reduction of noise by engineering and administrative control; personal ear protection.

420 Rehabilitative Audiology (3)

Prerequisites: COMD 403 or 407; 461. Issues in rehabilitative audiology and effective strategies to assist the hearing impaired adjust to their hearing losses; rehabilitative techniques include speech reading, communication training, counseling, hearing aid use, and psychological aspects.

425 Management of the Hearing Impaired Child (3)

Prerequisites: COMD 400,401,402,460AB, 461. Issues concerning the habilitative management of hearing impaired children, including assessment and remediation of expressive and receptive speech and language skills, auditory training, and educational management.

429 Clinical Practice in Aural Rehabilitation (1, 2)

Prerequisites: COMD 403or 407; 420; 425; 476; grade of C or better in all COMD courses taken prior to enrollment. Supervised clinical practice in rehabilitation techniques for people with hearing losses. Laboratory 3 hours per week per unit. May be repeated to maximum of 4 units.

440 School Audiometry for Nurses (4)

Prerequisite: Public Health Nurse or School Nurse Credential Candidate. Anatomy, physiology, pathology of ear; acoustics of sound and instrumentation; school hearing conservation program; pure tone screening and audiometric testing, including audiogram interpretation and immittance testing.

450 Introduction to Communication Disorders (4)

Introduction to causes, characteristics, and remediation of common communication disorders, focusing primarily on children. Designed for majors in related fields and as a beginning course for Communicative Disorders majors.

452 Communication Disorders of the Neurologically Handicapped and Nonverbal Child (3)

Prerequisite: COMD 450. Sensorimotor, cognitive, symbolic dysfunctions affecting speech-language of neurologically handicapped child, including cerebral palsied; habilitation in educational and clinical settings; alternate means of communication for the nonverbal child.

454L, P Selected Topics in Communication Disorders (1-4)

Prerequisite: Varies with topic. Current issues and interests of students in communication disorders and related disciplines as announced in *Schedule of Classes*. May be repeated for credit as subject matter changes.

455 Natural Processes of First Language Acquisition (4)

Theories and principles of first language acquisition from infancy through adolescence including structures and role of language; social, cognitive, and cultural factors related to language development; and language evaluation procedures.

456 Development of Verbal Behavior in Childhood (4)

Acquisition of language forms and speech behavior; sequence of language/speech functions and cognitive/social development in preschool years; multiethnic and multicultural considerations.

457 Communicating with Abused Children and Violent Families (4)

Maltreatment and children's communication development/dysfunction relative to social-emotional and cognitive development; communication demands in judicial, legal, and intervention processes; principles for interacting with and interviewing maltreated children.

458 Research Methods in Communication Disorders (4)

Prerequisites: Upper division standing, COMD 300, 450. Methods of scientific inquiry in communication disorders including an overview of statistical procedures, basic research design, evaluating clinical data, and critiquing published clinical research.

459 Communication Intervention for Infants and Toddlers (4)

Prerequisites: COMD 450, 460A. Assessment and intervention techniques utilized for communicatively at-risk infants and toddlers; emphasizes working in multidisciplinary team setting with families; includes observations.

460A Speech and Language Acquisition in Children (3)

Acquisition of language in children from birth to two years, including syntax, phonology, semantics, and pragmatics; genetic and environmental variables; multiethnic, multicultural considerations.

460B Speech and Language Acquisition in Children (3)

Prerequisite: COMD 460A. Continuing study of language acquisition in children from two years to school age, including syntax, phonology, semantics, and pragmatics; genetic and environmental variables, multiethnic, multicultural considerations.

461 Descriptive Phonetics (4)

(also listed as SPCH 461) Phonetic-phonemic analysis of language; study of physical and physiological bases of speech.

462A Speech-Language Science: The Speech Mechanism (3)

Anatomy and physiology of body structures employed in speech production with emphasis on respiration, phonation, resonance, and articulation.

462B Speech-Language Science: The Nervous System (3)

Anatomy and physiology of the human nervous system related to speech and language.

469 Role of Speech-Language Pathologist in Professional Settings (1)

Recommended corequisite: COMD 478A or 478B. Professional performance requirements in various settings; legal and ethical considerations; requirements for credential, license, and certification.

470 Clinical Processes in Communication Disorders (4)

Prerequisites: COMD 450, 460A. Examination of therapy as a logical process of problem-solving. Includes collection and structuring of information, development of hypotheses, designing appropriate individual goals. Lecture 3 hours, laboratory 3 hours.

471 Language Disorders in Children (4)

Prerequisites: COMD 450, 460AB, 461, 462AB. Etiology and differential characteristics of language disorders in children, assessment considerations and strategies for intervention with mildly handicapped and severely handicapped populations. Lecture 3 hours, laboratory 3 hours.

472 Voice and Articulation Disorders (4)

Prerequisites: COMD 450, 460A, 461, 462A. Voice and articulation disorders, both functional and organic, including speech disorders associated with orofacial anomalies; assessment and therapeutic approaches. Lecture 3 hours, laboratory 3 hours.

476 Diagnostic Procedures in Speech and Language Disorders (3:)

Prerequisites (*may not be taken concurrently*): All following COMD core courses, each with a minimum C grade: COMD 402, 470, 471, 472; passing WPE score; COMD 300; approved application submitted quarter preceding enrollment in course. Procedures for studying and evaluating characteristics of communication handicapped persons; multiethnic, multicultural considerations. Lecture 2 hours, laboratory 3 hours. May be repeated once for credit.

478AB Clinical Procedures in Communication Disorders (2, 2)

Prerequisites: COMD 476 (*may not be taken concurrently*); approved application submitted quarter preceding enrollment in course; grade of C or better in all COMD courses taken prior to admission to clinic; satisfaction of departmental standards. Supervised clinical experience with communicatively handicapped children and adults. Satisfactory completion of two consecutive quarters is required.

480 Directed Teaching in Communication Disorders (6)

Prerequisites: EDCI 300, directed teaching requirements, approval of COMD faculty. Supervised practicum in diagnosis and treatment of speech, language, and hearing disorders in public school itinerant sites and public school severe language disorders classes. Grade CR/NC only.

490AB Language, Speech, and Hearing Service in Public Schools (1, 1)

Corequisite: One unit must be taken concurrently with each quarter of EDSP 407. Role of language, speech, and hearing specialist; implementation of appropriate techniques and procedures for the public school setting.

499 Undergraduate Directed Study (1-4)

Prerequisite: Consent of an instructor to act as sponsor. Project selected in conference with sponsor before registration; progress meetings held regularly and final report submitted. May be repeated for credit.

CRIMINAL JUSTICE

School of Health and Human Services

DEPARTMENT OFFICE

King Hall D1045

Phone: (213)343-4610

The Department of Criminal Justice offers programs leading to the Bachelor of Science degree in Criminal Justice, to serve career development in such areas as justice systems administration, investigative sciences, legal procedures, and security systems. Also offered is an undergraduate minor for students majoring in other fields. Students interested in a Master of Science degree in Criminal Justice or a Master of Science degree in Criminalistics are referred to the *Graduate Programs* section. The Criminalistics degree builds upon undergraduate preparation in chemistry.

The Faculty

Emeriti: Allen P. Bristow, Harry Diamond, William M. Cole, G. Douglas Gourley, Richard C. Grace, Robert H. Morneau, Jr.

Professors: David L. Chapman, Howard H. Earle, Thell E. Glascock (*Chair*), Nathaniel Trives.

Associate Professors: C. Allen Barrett, Anthony Longhetti.

Bachelor of Science Degree in Criminal Justice

The Bachelor of Science degree in Criminal Justice is designed for either preservice or inservice students who wish to prepare for or advance in careers in criminal justice.

Limitations on Transfer Credit

Students intending to transfer to Cal State L.A. from a community college to continue work toward a Bachelor of Science degree in Criminal Justice are advised to complete general education requirements and the six lower division core courses equivalent to those in the Cal State L.A. curriculum prior to transferring.

Requirements for the Major (88 units)

A total of 192 units is required for the Bachelor of Science degree in Criminal Justice, including a minimum of 88 units within the major. All students must complete a required core of 24 quarter units in lower division courses. The total upper division requirement includes 64 units, distributed among courses in criminal justice and related fields. A student's major program may contain no more than 24 units of credit for any combination of prior experience, work experience, community service, or directed study.

Lower Division Required Courses (24 units):

CRIM 101	Introduction to Administration of Justice	(4)
CRIM 126	Concepts of Criminal Law	(4)
CRIM 221	Legal Aspects of Evidence	(4)
CRIM 222	Principles and Procedures of Justice System	(4)
CRIM 223	Community Relations	(4)
CRIM 235	Elements of Investigation	(4)

Upper Division Required Courses (32 units):

CRIM 301A	Administration of Criminal Justice Systems	(4)
CRIM 301 B	Written Communication in Criminal Justice	(4)
CRIM 405	Ethics and Professional Responsibility	(4)
CRIM 408	Methods of Supervision	(4)
CRIM 428	Contemporary Criminal Procedures	(4)
CRIM 439	Juvenile Law and Procedure	(4)
CRIM 447	Drug Control Systems	(4)
CRIM 461	Physical Evidence	(4)

Electives in Criminal Justice (12 units):

With major adviser approval, students plan 12 units of electives in criminal justice which may be chosen to further diversify their program or grouped in a career-interest selection as listed below.

A. Justice Systems Administration

B. Investigative Sciences**C. Legal Procedures****D. Security Systems**

Electives in Related Fields (20 units):

With major adviser approval, students select 20 units of electives in related fields, or a certificate program (minimum 20 units) in a related field, or a minor in a related field (minimum 20 units), from the following disciplines:

Anthropology (ANTH)
 ChicanoStudies (CHS)
 Computer Information Systems(CIS)
 Computer Science (CS)
 Economics (ECON)
 Educational Foundations(EDFN)
 English (ENGL)
 Finance (FIN)
 Health Science (HS)
 History (HIST)
 Latin American Studies (LAS)
 Management (MGMT)
 Mathematics (MATH)
 Nursing (NURS)
 Office Systems and Business Education (OSBE)
 Pan-African Studies (PAS)
 Physical Education(PE)
 Political Science (POLS)
 Sociology (SOC)
 Technology (TECH)

Minor in Criminal Justice

The minor in Criminal Justice is designed for students majoring in other fields who wish to prepare for careers relating to the administration of criminal justice. A total of 32 units is required.

Requirements for the Minor (32 units)

Lower Division Required Courses (16 units):

CRIM 101,126, 222, 223

Upper Division Required Courses (16 units):

CRIM 301A, 428, 436, 439

Certificate Program in International Criminal Justice Administration

The Department of Criminal Justice offers a credit certificate program designed to prepare criminal justice practitioners from foreign nations for management and supervisory positions within criminal justice agencies in their own countries. Course work includes theoretical, technical, and conceptual experiences leading to a balanced view of contemporary thinking in the field. The program is applicable toward the bachelors degree in criminal justice. A total of 24 upper division units in criminal justice is required; students must earn a minimum C average to qualify for the certificate.

Admission to the program requires upper division standing (completion of 90 quarter units). Individual courses within the program

have prerequisite criminal justice courses; therefore, students are advised to plan their program carefully with the assistance of a department adviser. Refer to the *Undergraduate Study* chapter of this catalog for general regulations governing all certificate programs.

Requirements for the Certificate (24 units)

Required courses (minimum 24 units):

Select from following:

CRIM	361	Criminal Investigation Management	(4)
CRIM	401	Innovative Management Systems	(4)

CRIM 404	Unusual Occurrence Management	(4)
CRIM 408	Methods of Supervision	(4)
CRIM 423	Community Relations Program Management	(4)
CRIM 436	Correctional Institution Management	(4)
CRIM 437	Traffic Management Systems	(4)
*CRIM 454	Special Topics in Criminal Justice	(4)

* when appropriate

In addition, the department offers course work acceptable toward fulfillment of requirements for the interdisciplinary credit certificate in *Child Maltreatment and Family Violence*, offered by the School of Health and Human Services.

The Credential Program

The Commission for Teacher Credentialing has authorized approval for the Designated Special Subjects credential which includes the areas of Driver Education and Driver Training. Students interested in this credential should consult advisers in the Department of Criminal Justice and the School of Education.

Courses in *Criminal Justice* (CRIM)

Lower Division Courses

101 Introduction to Administration of Justice (4)

History and philosophy of law enforcement and administration of justice in America; examination of various agencies, systems, and subsystems; role expectations and their interrelationships; theories of crime, punishment, and rehabilitation; ethics, education, and training for professionalism in the system. *CANAJ 2*

126 Concepts of Criminal Law (4)

General provisions of criminal law; history and development; elements of a crime, parties to a crime; defenses to criminal culpability; elements of specific crimes; crimes against person, property, public place, and safety. *CAN AJ 4*

221 Legal Aspects of Evidence (4)

Leading rules and principles of exclusion and selection; nature of evidentiary matter; burden of proof, discovery; nature and effect of presumptions; examination, competence, and privilege of witnesses; proof of authenticity and contents of writings and other documentary evidence; constitutional provisions. *CAN AJ 6*

222 Principles and Procedures of Justice System (4)

Prerequisite: CRIM 101. Role and responsibilities of each segment within administration of justice system; law enforcement, judicial, corrections; subsystem procedures from initial entry to final disposition; interrelationships of segments within system.

223 Community Relations (4)

Development of positive and professional relationships between criminal justice agencies and the public, with emphasis on role expectations.

235 Elements of Investigation (4)

Basic investigative methodology; function of detective for justice system objectives; modus operandi; sources of information, public and private sectors; surveillance; personal identification; interviewing and interrogation techniques; preliminary and follow-up investigations. *CAN AJ 8*

Upper Division Courses

301 A Administration of Criminal Justice Systems (4)

Prerequisite: Lower division Criminal Justice required core or agency experience and instructor consent; corequisite: writing competency evaluation and remedial courses if required.

Administrative theory and practice in criminal justice systems, with emphasis on organization and functions of specialized subunits; analysis and improvement of writing skills.

301 B Written Communication in Criminal Justice (4)

Prerequisites: ENGL 102*, CRIM 301A. Fundamentals of report writing and data processing (gathering, analyzing, producing, and evaluating). Grade **CR/NC**.

**Students subject to earlier catalogs satisfy this prerequisite with ENGL 1010r 190.*

361 Criminal Investigation Management (4)

Prerequisite: CRIM 235. Case management, assignment of personnel, decisions about commitment of resources, and strategies for handling citizen and patrol-detective-technician interfaces.

362 Investigative Photography (4)

Prerequisite: ART 287. Use of photography in investigative processes; courtroom presentation of evidential photographs.

363 Interviewing Techniques (4)

Prerequisites: CRIM 235, PSY 150, upper division standing. Interviewing philosophy and concepts; effective techniques in handling witnesses, victims, informants, children, the mentally disturbed, inmates, criminal suspects; scientific equipment, legal aspects, psychological and physiological considerations, judicial process.

365 Personal Identification Systems (4)

Prerequisites: CRIM 235, 301A. Types of personal identification systems that serve investigative function in public agencies; existing and potential resources; analysis of modus operandi, fingerprints, voiceprints, psychological profile; visual identification.

395 Community Service in Criminal Justice (1-3)

Prerequisites: Approval by faculty sponsor in consultation with EPIC Director, acceptance by community agency. Participation in community service work. May be repeated to maximum of 6 units. Grade **CR/NC**.

401 Innovative Management Systems (4)

Prerequisites: CRIM 301A, upper division standing, instructor consent. Contemporary management concepts; management system adaptation for implementation in criminal justice agencies.

404 Unusual Occurrence Management (4)

Prerequisite or corequisite: CRIM 301A. Control techniques for management of unusual occurrences disruptive to community, including civil disturbance, confrontations, insurrection, disasters; planning for special events.

405 Ethics and Professional Responsibility (4)

Nature and scope of misconduct, special risks and responsibilities, legal and institutional controls, concepts of professionalism, codes of ethics, conflict of interest, and problems in exercise of discretion.

406 Comparative Justice Systems (4)

Exploration and comparison of foreign criminal justice systems, foreign innovations in crime prevention, corrections, investigation, administration, and training.

408 Methods of Supervision (4)

Prerequisite: CRIM 301A. Responsibility of first-level supervisors in management: motivation, leadership, morale, discipline, communication, counseling, interviewing. Resolution of complaints and grievances; performance appraisal, decision making, planning, and training.

409 Forensic Science (4)

Prerequisite: Upper division standing. History, concepts, and services of the forensic sciences to the criminal justice system, including criminalistics, forensic pathology, forensic dentistry, forensic anthropology, and forensic psychiatry.

410 Sex Crimes Investigation (4)

Prerequisite: Upper division standing. Steps in sex crime investigation; recognition of offenders, procedures used to identify and apprehend them; motivating influences in sex crimes; investigators' responsibilities; community resources for victims; and victims' rights.

423 Community Relations Program Management (4)

Prerequisites: CRIM 223, 301A. Managerial aspects of planning, programming, and operation for effective community relations by agencies in criminal justice system.

428 Contemporary Criminal Procedures (4)

Prerequisites: CRIM 126, 221. Bill of Rights and federal criminal procedure; application of due process clause of Fourteenth Amendment; exclusionary rule; case law reconciling civil rights and security of community.

429 Administrative Law (4)

Areas of civil law of particular significance to administrators in criminal justice systems, including administrative law, municipal corporation, torts, sovereign immunity, labor law, and agency relations.

435 Contemporary Vice Problems (4)

Philosophy and theory of vice control; community standards; organized crime; statutory and case law; suppression, investigation, and prosecution; special consideration of laws concerning gambling, prostitution, and sex crimes.

436 Correctional Institution Management (4)

Objectives of correctional administration; laws, records, public relations, personnel, and relationships to programs, including custodial and non-custodial interrelationships and divisions; physical plant and security, employment, and care and treatment program.

437 Traffic Management Systems (4)

Theory and functions of highway traffic administration activities, coordination among agencies. Supervision of traffic, accident control, including reconstruction and cause analysis.

439 Juvenile Law and Procedure (4)

California Juvenile Court Act, Youth Authority, other legislation governing juvenile delinquency; juveniles' rights; California law developments including probation procedures and institutional care.

447 Drug Control Systems (4)

Prerequisites: CRIM 221, upper division standing. Drugs and drug abuse; investigation methods, including undercover informants; field identification, surveillance, statutory and case law; presentation of cases in court.

454 Special Topics in Criminal Justice (4)

Current topics of special interest in Criminal Justice as announced in *Schedule of Classes*. May be repeated to maximum of 8 units for major and 24 for degree as topic changes.

460 Law Enforcement, Public Schools, and the Community (4)

Prerequisite: Upper division standing. Criminal justice majors must have adviser approval to enroll for credit. Interrelationships between law enforcement, school, and the community; juvenile delinquency, crime prevention and control, vice offenses, narcotic addiction, and other behavior problems.

461 Physical Evidence (4)

Prerequisite: CRIM 235. Collection, preservation, and utilization of physical evidence by investigator. Use of physical evidence in judicial processes.

475 Contemporary Security Administration (4)

Prerequisite: Upper division standing. Methods and techniques of security protection for buildings, personnel, and business, industrial, and technological equipment.

476 Retail Commercial Security (4)

Analysis and assessment of commercial security protection systems, including theft controls, legal authority and liability, safeguards for physical structures and contents.

482 Analyzing Criminal Justice Data (4)

Prerequisite: Upper division standing. Computer-generated analysis of criminal justice systems: budgeting protocols, simulation modeling and forecasting.

483 Computer Techniques in Criminal Justice (4)

Prerequisite: Upper division standing. Computer applications for criminal justice agencies: data types, collection, and format development. Use of programs to abstract and analyze data.

491 Contemporary Studies in Criminal Justice (1-8)

Prerequisite: Upper division standing or professional experience (with instructor consent). Investigation and study of contemporary problems in field. Various subjects as announced. May be repeated as subject matter changes.

499 Undergraduate Directed Study (1-4)

Prerequisites: Upper division standing, 2.5 grade point average; ability to assume responsibility for independent work and to prepare written and oral reports. Project selected in conference with sponsor before registration; progress meetings held regularly. May be repeated to maximum of 8 units.

Courses in Traffic and Safety Education (TSE)**Upper Division Courses**

Upper division standing is prerequisite to enrollment in all upper I division TSE courses.

473 Driver Training Programs (2)

Prerequisites: TSE 477 (*may be taken concurrently*), California driver's license, prior approval of department. Study and utilization of dual-control vehicles for use in driver training programs. Field experience required.

474 Driver Education Curriculum (2)

Prerequisites: California driver's license, prior approval of department. Teacher preparation for driver education programs. Field experiences required.

475 Accident and Safety Studies (3)

Accident causes and analysis, education for safe living.

477 Traffic Simulator Instruction (2)

Prerequisite: Prior approval of department. Study and utilization of traffic simulators for use in driver training programs.

479 Organization and Supervision of Safety and Driver Instruction (2)

Prerequisite: TSE 474. Analysis of programs, supervision problems, evaluation requirements, financial and personnel responsibilities, and program organization.

FAMILY STUDIES AND CONSUMER SCIENCES

School of Health and Human Services

DEPARTMENT OFFICE

Fine Arts 238

Phone: (213) 343-4630

The Department of Family Studies and Consumer Sciences offers courses at both undergraduate and graduate levels in fashion design, merchandising, and textiles; home economics education; consumer education; community services; and residential interiors and housing. A broad foundation in humanities and in the natural and social sciences is stressed. Career options in family studies and consumer sciences lead to professional opportunities in industry, government, research laboratories, educational institutions, retailing, and merchandising fields. The department also prepares students for doctoral level study.

The Master of Arts degree is described in the *Graduate Programs* section.

The Faculty

Emeriti: Winona Noland Brooks, Patricia Wright Ellis, Thelma Graves, Mary A. Kramer, Jane S. Lewis, Margaret McWilliams, Maxine L. Miller, Naoma P. Norton, Sumiye N. Onodera, Lois M. Rhinesperger, Pauline E. Schatz, Lilly Shen, Roine H. Thorup.

Professors: Ann M. Bingham-Newman.

Associate Professors: Bruce L. Campbell (*Chair*), Valerie C. Kehm, John Orta, Doris J. Sims, Patricia H. Stanley.

Assistant Professors: Rebecca L. Davis, Madoka Dawson, Bahram Faraji, Carol F. Tuntland, Marlene Zepeda.

The department offers a Bachelor of Arts degree in Home Economics. Students planning to teach should follow the Bachelor of Arts degree program with the credential option. *A minimum C grade is required in all courses used to meet major requirements.*

Bachelor of Arts Degree in Home Economics

The Bachelor of Arts degree in Home Economics includes a choice among several options: *Consumer Services, Fashion and Textiles, Interior Design and Housing, and Single Subject Teaching.* These options prepare students for professional careers in the area of study selected. The degree also provides an appropriate foundation in home economics for graduate study.

Requirements for the major (91-97 units)

The number of units required varies with the options. All options are based on completion of general education support courses, as described under each.

* Consumer Services Option (95-97 units)

This option provides preparation for careers in family financial counseling and consumer affairs and also a background for advanced study.

General Education Support Courses (17 units)

CHEM 151 (5)

PSY 150 (4)

ECON 150 (4)

SOC201 (4)

Required Core Courses (25 units):

FSCS/SOC 120	Intimate Relationships	(4)
FSCS 260	Contemporary Interiors	(4)
FSCS 283	Professional Encounters	(1)
FSCS 341	Personal and Family Management Dynamics	(4)
FSCS 471	Professional Writing in Family Studies and Consumer Sciences	(4)
FSCS 480	Family and Professional Interface	(3)
FSCS 483	Professional Perspectives	(1)
NTRS 210	Foundations of Food	(4)

Career Emphasis Courses (58-60 units)

FSCS 208 or 405 (4), 384 (4), 440 (4), 441 (4), 444 (4), 495 (2-4)

ACCT 200AB (4, 4)

CRIM 101,126, 235, 461 (4 each)

CHEM 152 (5)

FIN 205 (4)

NTRS 317 (3)

Electives (select 12 units from following 4-unit courses)

CRIM 362, 363

FSCS 430, 445, 460, 470

FIN 305, 480

MKT 304, 340, 342, 344

Approved elective

*** Fashion and Textiles Option (91-93 units)**

This option prepares students for careers in fashion merchandising, fashion design, or textiles or to pursue research or graduate study.

General Education Support Courses (12 units)

ECON 150

SOC 201

PSY 150

Required Core Courses (21 units):

FSCS/SOC 120 Intimate Relationships (4)

FSCS 207 Personal and Family Environmental Aesthetics (4)

FSCS 282 Management for Living (2)

FSCS 283 Professional Encounters (1)

FSCS 471 Professional Writing in Family Studies and
Consumer Sciences (4)

FSCS 480 Family and Professional Interface (3)

FSCS 483 Professional Perspectives (1)

NTRS 281 Food for Life (2)

Career Emphasis Courses (24 units)

FSCS 202, 204, 206, 208, 402, 404 (4 units each)

Specialization (46-48 units)

Select one of the following specializations.

Design

FSCS 101 (3), 102 (3), 304 (4), 306 (3), 400 (3), 406 (3), 495 (2-4)

ART 103, 203, 373 (3 each)

Select 16 units from following:

ART 244 (3), 312 (3), 333 (3), 378 (3), 463 (3)

FSCS 209 (4), 260 (4), 407 (4), 444 (4)

MKT 304 (4), 340 (4), 342 (4), 344(4)

Merchandising

FSCS 209 (4), 405 (4), 407 (4), 408 (4), 495 (2-4)

ART 151 (4)

MKT 341,344 (4 units each)

Select 16 units from the following:

ART 312 (3), 333 (3), 378 (3), 380 (4) 463 (3)

CIS 294 (4)

FSCS 101 (3), 260 (4), 306 (3), 384 (4), 409 (4), 444 (4), 470 (4);

MKT 304 (4), 340 (4), 342 (4) 457 (4)

Textiles

FSCS 101 (3), 209 (4), 260 (4), 405 (4), 409 (4), 495 (2-4)
 ART 151 (4)

Select 21-23 units from following:

ART 158 (4), 202 (3), 212 (3), 333 (3), 378 (3), 380 (4), 433 (3), 438 (3), 463 (3)
 CHEM 151 (5), 152 (5)
 FSCS 102 (3), 407 (4), 444 (4)
 MKT 304 (4), 340 (4), 342 (4)

*** Interior Design and Housing Option (91-93 units)**

This option is designed to provide a wide variety of career opportunities in business, government agencies, retail firms, and museums.

General Education Support Courses (15 units)

ART 153, 159, 203 (4, 4, 3)
 PSY 150 (4)

Required Core Courses (21 units):

FSCS/SOC 120	Intimate Relationships	(4)
FSCS 207	Personal and Family Environmental Aesthetics	(4)
FSCS 282	Management for Living	(2)
FSCS 283	Professional Encounters	(1)
FSCS 471	Professional Writing in Family Studies and Consumer Sciences	(4)
FSCS 480	Family and Professional Interface	(3)
FSCS 483	Professional Perspectives	(1)
NTRS 281	Food for Life	(2)

Career Emphasis Courses (70-72 units)

Required Courses (42-44 units)

FSCS 208 (4), 260 (4), 384 (4), 460 (4), 463 (4), 464 (4), 465 (4), 466 (4), 467 (4), 472 (4), 495 (2-4)

Electives (select 28 units from following)

ART 313, 322, 323, 328, 343, 428 (3 each)
 MKT 341,344 (4 each)
 TECH 311,490D (3 each)

*** Single Subject Teaching Option (95 units)**

The following courses are required of all students seeking a Single Subject credential with teaching authorization in Home Economics. Students must also complete professional education requirements and should consult advisers both in the School of Education and in the FSCS department. Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs.

General Education Support Courses (17 units)

CHEM 151 (5)
 FSCS/SOC 120(4)
 ECON 150 (4)
 SOC 201(4)

Required Core Courses (21 units)

FSCS 260	Contemporary Interiors	(4)
FSCS 283	Professional Encounters	(1)
FSCS 321	Urban Family: Contemporary Trends	(4)
FSCS 471	Professional Writing in Family Studies and Consumer Sciences	(4)
FSCS 480	Family and Professional Interface	(3)
FSCS 483	Professional Encounters	(1)

Career Emphasis Courses (74 units)**Required Courses (58 units)**

FSCS 101	Apparel Construction I	(3)
FSCS 202	Clothing, Self, and Society	(4)
FSCS 208	Textiles	(4)
FSCS 317	Fundamentals of Human Nutrition	(3)
FSCS 341	Personal and Family Management Dynamics	(4)
FSCS 384	Computer Applications in Family Studies and Consumer Sciences	(4)
FSCS 423	Parenting	(4)
FSCS 440	Personal and Family Financial Management	(4)
FSCS 444	Consumer Issues	(4)
FSCS 470	Demonstration Techniques	(4)
FSCS 491	Programs for Occupational Education in	

Family Studies and Consumer Sciences (4)

CHDV 201	Infant Development	(4)
CHDV 320	The Young Child	(4)
CHEM 152	Fundamentals of Chemistry I	(5)
EDCI 300	The Teaching Profession	(3)
NTRS 210	Foundations of Food	(4)

Electives (select 16 units from following)

FSCS 102 (3), 204 (4), 421 (4), 424 (4), 430 (4), 441 (4), 460 (4)
 NTRS 310 (3), or 312 (4), 411 (3)

Students seeking the Single Subject credential will also need to complete the following courses:

EDFN 413 (3), 414 (4)
 EDIT 430 (4), 450A (1)
 EDSE 401 (4), 405 (3), 415 (4), 421E (3), 442AB (11 each)
 EDSP 400 (4), 410 (3)

Minor in Home Economics

A minor in Home Economics is available for students majoring in other fields. A total of 50-51 units is required, of which 26-27 are in lower division and 24 are in upper division courses.

Requirements for the Minor(50-51 units)**Required Lower Division Courses (30-31 units):**

FSCS 101 (3), 202 (4), 208 (4), 260 (4)
 FSCS/SOC 120 (4)
 NTRS 210 (4), 250 (4) or 317 (3)

* Selection of an upper division course will change total number of lower and upper division units.

Required Upper Division Courses (20 units):

FSCS 321,341,444
 NTRS 310 or 312

Certificate Program in Fashion Design

The Department of Family Studies and Consumer Sciences offers a credit certificate program in Fashion Design for persons who wish to expand their knowledge and experience in the field of fashion design. Courses are drawn from the department and from the Department of Art in the School of Arts and Letters. Interested students should contact the FSCS department for further information. Refer to the *Undergraduate Study* chapter of this catalog for general regulations governing all certificate programs.

Requirements for the Certificate (43 units)**Prerequisites (9 units):**

FSCS 101,102	Apparel Construction I, II	(3, 3)
ART 103	Design I	(3)

Required Courses (minimum 34 units):

FSCS 204	Fashion Design: Flat Pattern I	(4)
FSCS 208	Textiles	(4)
FSCS 304	Fashion Design: Flat Pattern II	(4)
FSCS 306	Fashion Design: Draping I	(3)
FSCS 400	Tailoring	(3)
FSCS 402	The Fashion Industry	(4)
FSCS 406	Fashion Design: Draping II	(3)
ART 203	Design II	(3)
ART 244	Introduction to Life Drawing	(3)
ART 373	Creative Fashion Design	(3)

Electives (select at least 9 units from following):

FSCS 202, 206, 454 (when appropriate)
 ART 312, 333, 338, 378, 438,463, 471,486

Certificate Program in Fashion Merchandising

The Department of Family Studies and Consumer Sciences offers a credit certificate program in Fashion Merchandising for persons who wish to expand their knowledge and experience in the field of fashion merchandising. Courses are drawn from the department and from the School of Business and Economics. Interested students should contact the FSCS department for further information. Refer to the *Undergraduate Study* chapter of this catalog for general regulations governing all certificate programs.

Requirements for the Certificate (40 units)*Required Courses (28 units):*

FSCS 202	Clothing, Self and Society	(4)
FSCS 208	Textiles	(4)
FSCS 402	The Fashion Industry	(4)
FSCS 407	Fashion Merchandising	(4)
FSCS 495	Field Work in Home Economics	(4)
MKT 344	Principles of Retailing	(4)

Electives (select 12 units from following):

CIS 294
 FSCS 444, 499 (1-4 units)
 MKT 304, 340, 341
 UNIV 498 (1-4 units)

In addition, the department offers course work acceptable toward fulfillment of requirements of the interdisciplinary credit certificate in *Child Maltreatment and Family Violence* offered by the School of Health and Human Services.

The Credential Program*** Single Subject Credential**

The B.A. degree program in Home Economics with the credential option is intended for examination waiver for the Single Subject credential in Home Economics. Students should consult advisers in both the department and the School of Education.

*** Ryan Designated Subjects Credential (Vocational)**

This teaching credential authorizes the holder to teach vocational classes in the subject(s) listed on the credential at grades K-12 and adult levels. The credential requires qualifying industrial, business and/or professional work experience in the subject(s) listed on it.

Requirements for the Credential (19-21 units)

EDSE	421 E	Methods of Teaching Home Economics	(3)
EDAC	472	Principles of Adult and Occupational Education	(3)
EDAC	477	Counseling in Adult and Occupational Education	(3)
FSCS	441	Urban Family, Its Resources	(4)
FSCS	491	Programs for Occupational Education in Family Studies and Consumer Sciences	(4)
FSCS	495	Field Work in Family Studies and Consumer Sciences	(4)

Additional subject matter course work may be needed, as determined by advisement. Applicants must satisfy the U.S. Constitution requirement. Students interested in the credential should contact the department's credential adviser for further details.

Courses in Family Studies and Consumer Sciences (FSCS)

Lower Division Courses

101 Apparel Construction I (3)

Clothing construction techniques, with emphasis on application of principles. Lecture-laboratory 6 hours. *CAN H EC 10*

102 Apparel Construction II (3)

Advanced processes of apparel construction and finishing. Application of couture techniques and methods. Activity 6 hours.

120 Intimate Relationships (4)

(also listed as *SOC 120*) Principles of interaction in intimate relationships; development of knowledge, self awareness, control of choices, family life cycle, roles and interpersonal growth; sexuality, love, parenting, conflict, stress, starting and ending relationships. *CAN H EC 12*

202 Clothing, Self, and Society (4)

Prerequisites: FSCS 207, GE social science requirement. Dress and adornment as products of interrelationships among social, psychological, cultural, economic, aesthetic, and physical factors.

204 Fashion Design: Flat Pattern I (4)

Prerequisites for Home Economic majors: FSCS 101, 102, 208; for others: instructor consent. Principles and techniques of pattern making, with emphasis on style development and fitting. Lecture laboratory 8 hours.

206 Fashion Merchandising Concepts (4)

Concepts, principles, and overview of fashion merchandising.

207 Personal and Family Environmental Aesthetics (4)

Techniques for the development of critical and evaluative skills that influence the individual's and family's aesthetic environment.

208 Textiles (4)

Fundamental study of fibers, yarns, fabrics, color, and finishes; emphasis on properties and performance in relation to selection, use, and care. Lecture 3 hours, laboratory 2 hours.

209 Fashion Product Analysis (4)

Prerequisite: FSCS 208. Knowledge, analysis, and evaluation of fashion products.

260 Contemporary Interiors (4)

Survey and analysis of contemporary interiors. Selection and arrangement of furnishings and accessories. *CAN H EC 18*

282 Management for Living (2)

Managing personal and family resources for effective living.

283 Professional Encounters (1)

Professional opportunities and careers encompassed by family studies and consumer sciences; interaction with professionals and access to process of making career choices.

287 Aesthetics for Living (2)

Functional aesthetics in the human environment; emphasis on application to interiors, housing, textiles, apparel, and foods.

Upper Division Courses

Upper division standing is prerequisite to enrollment in 400-level I courses.

304 Fashion Design: Flat Pattern II (4)

Prerequisite: FSCS 204. Advanced fashion designing through flat pattern methods. Activity 8 hours.

306 Fashion Design: Draping I (3)

Prerequisite: FSCS 204. Precision draping; principles and techniques of creating design on the dress form. Lecture-laboratory 6 hours.

321 Urban Family: Contemporary Trends (4)

Developmental processes and related problems of marital, parental, and family functioning in the urban setting.

341 Personal and Family Management Dynamics (4)

Resource management within the family ecosystem: family goal setting, decision making and change; time, money, and stress management; household communication; ergonomics, work simplification; home production; and use of personal computers.

384 Computer Applications in Family Studies and Consumer Sciences (4)

Prerequisite: FSCS 341; recommended prerequisite: CS 160. Basic information and specific computer applications in the work place, classroom, and home for FSCS department majors, home economics teachers, and practitioners. Lecture 1 hours, activity 6 hours.

400 Tailoring (3)

Prerequisite: FSCS 204. Principles and techniques used in tailoring of coats and suits. Lecture-laboratory 6 hours.

402 The Fashion Industry (4)

Analysis of the fashion industry from textiles to retailing and consumerism.

404 Textiles: Analysis of Current Concepts (4)

Prerequisite: FSCS 208. Evaluation of research, technical developments, and issues related to the production and consumption of textile products.

405 Textile Study (4)

Prerequisites: FSCS 208, CHEM 152. Physical testing of textile fabrics; fiber identification; new developments in fiber production, special finishes, yarn and fabric structure and properties. Lecture 2 hours, laboratory 4 hours.

406 Fashion Design: Draping II (3)

Prerequisite: FSCS 306. Advanced techniques of designing garment on the dress form. Creative ideas emphasized. Activity 6 hours.

407 Fashion Merchandising Processes (4)

Prerequisites: FSCS 206, MKT 344. Merchandising processes and fashion promotion strategies: planning, buying, and control of fashion products.

408 Fashion Promotion (4)

Prerequisites: FSCS 206, 209; MKT 340. Merchandising process and strategies; advertising and sales promotion of fashion products.

409 Historic Textiles (4)

Prerequisite: FSCS 208. Historic textiles from earliest times to present; records and preserved textiles viewed as reflections of life and textile development of countries and major civilizations.

421 Marriage and Family Dynamics (4)

Prerequisite: FSCS/SOC 120. Dynamic processes of constructive family interaction.

423 Parenting (4)

Prerequisite: FSCS/SOC 120 or CHDV 200. Aspects and problems of parenting from conception to adulthood.

424 The Formerly Married (4)

Life situations of the divorced and widowed, with or without children; effect on children.

425 Ethnic Identity and Awareness in Children and Families (4)

(also listed as CHDV425) Prerequisite: CHDV 420 or PSY 412B. Children's development of ethnic identity and awareness; transmission of differing cultural patterns within family systems and social institutions; issues of prejudice, stereotyping, and ethnic pride.

430 Household Equipment (4)

Prerequisite: PHYS 150 recommended. Fundamental considerations governing selection, operation, and care; consumer and testing information. Lecture-laboratory 8 hours.

440 Personal and Family Financial Management (4)

Family financial concerns from the consumer viewpoint: banking, savings, and credit; home financing; insurance; investment; income tax; wills and estate planning.

441 Urban Family, Its Resources (4)

Prerequisites: Appropriate courses in sociology and economics. Focus on individual and family management of limited personal resources and use of community resources by low-income and otherwise disadvantaged families in urban environment.

443 Management Problems in Urban Housing (4)

Urban housing and home environments for low-income housing; related housing laws and regulations; home operation, beautification, and sanitation.

444 Consumer Issues (4)

Recommended prerequisites: FSCS 341. Factors influencing selection of goods and services for the family; role, responsibility, and protection of consumer.

445 Management for Aged or Physically Handicapped (4)

Prerequisites: EDSP 460, PSY 150. Management of resources to meet functional needs of aged and/or physically handicapped. Emphasis on adaptation of family living situations, life styles, work processes, and equipment in home. Field trips included.

454L,P Selected Topics in Family Studies and Consumer Sciences (1-6)

Current topics of special interest in family studies and consumer sciences as announced in *Schedule of Classes*. May be repeated for credit.

460 Housing: Shelter and Environment (4)

Relations of housing, environment, individual, family; development of criteria for evaluation and planning for life cycle; analysis of energy-saving techniques, passive and active solar.

461 Home Furnishings Problems (4)

Prerequisite: FSCS 360. Comparative study of products of industrial and custom drapery, upholstery, and wood finishing; materials, finishes, and structure. Lecture 3 hours, lecture-laboratory 2 hours.

463 Residential Interiors II (4)

Prerequisite: FSCS 360. Application of residential interior design concepts to development of home environment. Activity 8 hours. May be repeated to maximum of 8 units.

464 Materials and Resources for Residential Interiors (4)

Prerequisites: FSCS 208, 360. Materials and services; development of designs using interior finishing materials; specifications. Lecture and field trips.

465 History of Housing Design (4)

Development of housing in America from seventeenth century to present; international influences; social, economic, and cultural influences; architects and architectural styles and movements.

466 History of Furnishings and Interiors: Antiquity to Mid-Eighteenth Century (4)

Major furnishings and interior style developments from ancient times to mid-eighteenth century; influences of changing cultural patterns, materials, methods, designers, and philosophies.

467 History of Furnishings and Interiors: Neoclassic to Present (4)

Major furnishings and interior style developments from neoclassic period to present; influences of changing cultural patterns, materials, methods, designers, and philosophies.

470 Demonstration Techniques (4)

Practice in techniques used in promotional and educational demonstrations; field experience through cooperation with local business and utility companies. Lecture 2 hours, laboratory 6 hours.

471 Professional Writing in Family Studies and Consumer Sciences (4)

Prerequisites: ENGL 102*, SPCH 150, minimum of 20 FSCS units, passing WPE score. Aspects of written communication specific to family studies and consumer sciences in education, community service, and business.

**Students subject to earlier catalogs satisfy this prerequisite with ENGL 1010r 190.*

472 Interiors for Special Populations (4)

Prerequisite: FSCS 260. Designing interiors for the elderly and those with marginal-to-serious physical disabilities; safety considerations in public and private environments. Field trips.

480 Family and Professional Interface (3)

Prerequisites: FSCS/SOC 120, 281,282, 283, 287,471; corequisite: FSCS 483. Interface between family developmental needs and professional services.

483 Professional Perspectives (1)

Prerequisites: FSCS/SOC 120, 281,282, 283, 287, 471; corequisite: FSCS 480. Strategies for career development.

491 Programs for Occupational Education in Family Studies and Consumer Sciences (4)

Prerequisites: Senior standing, minimum of 20 FSCS units. Survey, organization, implementation, and coordination of home economics wage earning programs in high schools and community colleges.

495 Field Work in Family Studies and Consumer Sciences(2-4)

Prerequisites: Thirty-five FSCS units, of which at least 15 must be upper division; departmental approval. Supervised experience utilizing professional preparation in field setting. Lecture 1 hour, laboratory 6 hours. GradedCR/NC.

499 Undergraduate Directed Study (1-4)

Prerequisite: Consent of an instructor to act as sponsor. Project selected in conference with sponsor before registration; progress meetings held regularly, and final report submitted. May be repeated for credit.

HEALTH AND NUTRITIONAL SCIENCE**School of Health and Human Services****DEPARTMENT OFFICE**

Engineering and Technology A505

Phone: (213) 343-4740

Programs in Health and Nutritional Sciences include Bachelor of Science degrees in Health Science and Nutritional Science as well as a Master of Arts degree in Health Science and a Master of Science degree in Nutritional Science. Students in the Health Science programs are prepared for professional service in health education, the health sciences and safety studies fields, and for advancement in allied health positions such as teaching in public and private health agencies; environmental, safety, public health, and consumer health investigators, specialists in alcohol and drug programs. The Nutritional Science programs prepare students for careers in nutrition, dietetics, food service administration, and food science. The Masters programs are described in the *Graduate Programs* section.

The Faculty

Emeriti: Saxon C. Elliot, Robert L. Fennessy, Ben C. Gmur, Barbara O. Henkel, David L. Jacobsohn, Mary A. Kramer, Jane Sanford Lewis, Edward Maljanian, Margaret E. McWilliams, Ben F. Scherer.

Professors: Chick F. Tam

Associate Professors: Carlton Blanton, John Orta, Vicente S. Zapata (Chair).

Assistant Professors: Madoka Dawson, Bahram Faraji, Behjat A. Sharif, Constantina Skanavis.

Bachelor of Science Degree in Health Science

The Bachelor of Science degree in Health Science prepares students for leadership and educational roles in allied health, community health, safety studies, school health, and substance abuse prevention.

Requirements for the Major (89-109 units)

The Bachelor of Science degree in Health Science, available with a choice among five options- *Allied Health, Community Health, Safety, School Health, and Substance Abuse*-requires a total of 186 units. The major consists of 53-72 units (depending on the option selected) plus 36-37 units of lower division prerequisites which must be completed prior to enrollment in upper division courses. The core consists of 17 units.

Lower Division Prerequisite Courses (36 or 37 units):

HS	284	Utilizing Health Care Data	(4)
BIOL	200AB	Human Anatomy and Physiology I, II	(5, 5) or
BIOL	201	Structure of Human Body	(5) plus
BIOL	202	Function of Human Body	(5)
CHEM	151	Fundamentals of Chemistry I	(5)
MATH	102	College Algebra	(4)
MICR	1 51	Introductory Microbiology	(5) or
MICR	201,202	Microbiology for Health Related Sciences (w/lab)	(4,2)
PHYS	150	Principles of Physics	(4) or
PHYS	155	Nature of Physical World	(4)
SOC	201	Principles of Sociology	(4)

Upper Division Required Core Courses (17 units):

HS	350	Health Maintenance Problems	(3)
HS	360	Selecting Health and Medical Services and Products	(3)
HS	463	National and International Health Problems	(3)
HS	472	Data Analysis for Health Science	(4)
ENGL	306	Technical Writing	(4)

Options (36-55 units)

Select one from following:

* **Allied Health (43 units)**

Required Courses (35 units):

HS	440	Health Care Delivery System	(4)
HS	444	Health and Safety Law	(4)
HS	464	Community Health Care Programs	(4)
HS	473	Evaluation of Health Programs	(4)
HS	474	Seminar: Issues and Trends in Allied Health	(4)
HS	476	Quality Assurance in Health Programs	(4)
NURS	468	Legal Aspects of Health Care Provision of California	(3)
PHIL	491	Medical Ethics	(4)
SOC	425	Medical Sociology	(4)

Option Emphasis (8 units):

Select one from following:

Administration (8 units)

MGMT	478	Financial Management of Health Care Institutions	(4)
------	-----	--	-----

Additional administrative focus course selected with adviser approval.

Education (8 units)

HS	480	Program Design in Allied Health	(4)
----	-----	---------------------------------	-----

Additional educational focus course selected with adviser approval.

* **Community Health (36 units)****Required Courses (36 units):**

HS	201	Management of Medical Emergencies	(2)
HS	401	Medical Emergency Studies	(3)
HS	444	Health and Safety Law	(4)
HS	462	Chronic and Degenerative Disorders	(3)
HS	464	Community Health Care Programs	(4)
HS	470	Public Health Administration	(4)
HS	473	Evaluation of Health Programs	(4)
HS	479	Health Program Planning	(4)
NTRS	250	Human Nutrition	(4)
MICR	412	Epidemiology	(4)

* **Safety (50 units)**

With careful course selection and adviser approval, students may earn the credit certificate in *Occupational Safety and Health* concurrently with the major with this option.

Required Courses (34 units):

HS	201	Management of Medical Emergencies	(2)
HS	401	Medical Emergency Studies	(3)
HS	430	Occupational Safety and Health Programs	(4)
HS	431	Occupational Health and Safety Law	(4)
HS	432	Theory and Principles of Industrial Hygiene	(4)
HS	433	Principles of Hazard Control	(3)
HS	434	Control of Mechanical Hazards	(3)
HS	435	Control of Materials and Process Hazards	(3)
HS	436	Occupational Safety Program Administration	(3)
HS	496	Directed Field Work	(5)

Selected Electives (16 units):

With adviser approval, select 16 units from the following approved electives which are also applicable toward fulfillment of requirements of the certificate program in *Occupational Safety and Health*:

Communications Area (4 units)

Select one from following:

ENGL 306,
OSBE 301,
SPCH 430, 370,
TECH 400

Select two courses from one of the five areas listed below. Area selected should reflect the student's academic preparation and, when applicable, work experience and professional objective.

Business Orientation

CIS 301
ECON/ENGR 300
FIN 335, 436
MATH 342
PSY 442

Emergency Services

CRIM 362,404, 437
HS 301
TSE 475

Fire Protection

TECH 351 AB, 352AB, 451,453AB

Occupational Health/Industrial Hygiene Area

CHEM 301ABC, 401-403, 412AB, 418, 462
COMD 400, 401,402, 409
HS 444, 456, 462,467, 468
MICR 412 PHYS 351 N

Technical Aspects

CE/ME 320
PHYS 312, 313, 427
HS 422, 478
PSY 447
ME 321
TECH 411,440

Select remaining electives from any academic department or division with adviser approval.

* **School Health (49 units)**

This option is intended for students pursuing the Single Subject credential in Health Science. Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs

Required Courses (49 units):

HS	201	Management of Medical Emergencies	(2)
HS	301	Cardiopulmonary Resuscitation and Basic Life Support Systems	(1)
HS	401	Medical Emergency Studies	(3)
HS	444	Health and Safety Law	(4)
HS	455	Sex Information for Health Education	(3)
HS	460	School Health Programs	(4)
HS	462	Chronic and Degenerative Disorders	(3)
HS	464	Community Health Care Programs	(4)
HS	466	Strategies for Substance Abuse Treatment Programs	(2)
HS	473	Evaluation of Health Programs	(4)
HS	478	Human Factors in Health and Safety Studies Programs	(4)
HS	490	Administration of School Health Programs	(3)
NTRS	450N	Nutrition and Well-Being	(4)

PSY	170-171	Introductory Physiological Psychology (w/lab)	(4, 1)
TSE	475	Accident and Safety Studies	(3)

* **Substance Abuse (55 units)**

With careful course selection and adviser approval, students may earn the credit certificate entitled *Specialist in Alcohol and Drug Problems* concurrently with the major with this option.

Required Courses (25 units):

HS	201	Management of Medical Emergencies	(2)
HS	301	Cardiopulmonary Resuscitation and Basic Life Support Systems	(1)
HS	401	Medical Emergency Studies	(3)
HS	462	Chronic and Degenerative Disorders	(3)
HS	465	Strategies in Drug Abuse Prevention	(2)
HS	467	Problem Drinking and Alcoholism	(3)
HS	468	Problems in Controlled Substances	(3)
HS	469	Administration of Substance Abuse Programs and Facilities	(4)
HS	496	Directed Field Work	(4)

Selected Electives (30 units):

With adviser approval, select 30 units from the following approved electives which also apply toward fulfillment of requirements for the certificate program *Specialist in Alcohol and Drug Problems*):

ANTH 444
 ART 425, 440, 445
 COUN 405AB, 406, 445, 450, 480, 490
 CRIM 439, 447, 460
 HS 444, 456, 464, 466, 476, 491, 496
 MGMT 470 PSY 41
 OAB, 441
 SOC 422, 425
 SPCH 454, 478, 489

Bachelor of Science Degree in Nutritional Science

Students may select one of three available options: the *Foods* option; the *Nutrition* option (which also prepares students to enter dietetics internships approved by the American Dietetic Association); or the *Coordinated Dietetics Program (CDP)* option. Graduates with the Coordinated Dietetics Program (CDP) option are fully eligible for membership in the American Dietetic Association and to take the national examination to become a Registered Dietitian (R.D.).

Requirements for the Major (103-108 units)

The Bachelor of Science degree in Nutritional Science requires a total of 198 units. The major requires 103-108 units, depending on option selected. The *Coordinated Dietetics Program (CDP)* option requires 108 units, and the *Foods* and *Nutrition* options each require 103 units. *A minimum C grade is required in all courses used to meet major requirements.*

* **Coordinated Dietetics Program (CDP) Option (108 units)**

The Coordinated Dietetics Program (CDP) option is designed for persons seeking both academic course work and supervised practice required to qualify to take the examination to become a Registered Dietitian. Students who complete the degree requirements in the CDP are eligible for membership in the American Dietetic Association (ADA). The four-year curriculum integrates academic preparation and clinical experience needed by the generalist in dietetics. Upon passing the national examination administered under the direction of the ADA, graduates are recognized as Registered Dietitians (R.D.). Postbaccalaureate students enrolled in the graduate program in Nutritional Science also are eligible to apply for admission to the CDP.

Requirements for the Option

The major with this option requires a total of 108 units, of which 21 are in core courses and 87 are in professional courses, including clinical experience. *Students must earn grades of C or higher in courses used to meet major requirements.*

Eligibility

Students who seek preliminary admission to the CDP must fulfill the following criteria:

- * Eligible for admission to Cal State L.A.
- * Minimum 2.75 overall grade point average (on a 4.0 scale).
- * Minimum 2.75 grade point average in the major, with no grade lower than C in courses required for membership in the ADA.
- * Students may repeat CDP courses and prerequisite science courses in which they earned a grade lower than C only once to meet program admission criteria.
- * Students must repeat any nutrition and biochemistry prerequisite courses they completed more than three years before beginning the CDP before they may enter the program.
- * Satisfactory health for full participation in the clinical program. Before they may enter the CDP, students must complete a physical examination, including Mantoux skin test or chest x-ray and other laboratory tests (including proof of immunity to rubella), as specified in contractual agreements with clinical facilities.
- * Upper division standing and completion of the first two years of the Nutritional Science major. Because of the intensity of the CDP, undergraduate students must complete all lower division general education and major courses before they may enter the program. Graduate students must have completed all prerequisite courses for program admission.
- * Valid California driver's license and access to an automobile, or transportation to clinical facilities.
- * Professional liability, health, and automobile insurance.

Final approval for admission to the intensive clinical work in the senior year (NTRS 419ABC) is contingent upon recommendation of the CDP Review Board and maintenance of a minimum 2.75 grade point average.

Preparatory Courses (46 units)

ACCT	202	Survey of Accounting	(4)
ANTH	250	Cultural Anthropology	(4) or
SOC	201	Principles of Sociology	(4)
BIOL	200AB	Human Anatomy and Physiology I, II	(5, 5)
CHEM	151, 152	Fundamentals of Chemistry I, II	(5, 5)
CHEM	353	Nutritional Aspects of Biochemistry	(5)
ECON	150	Economics for the Citizen	(4)
MICR	151	Introductory Microbiology	(5)
PSY	150	Introductory Psychology	(4)

Required Core Courses (21 units)

FSCS/SOC	120	Intimate Relationships	(4)
NTRS	210	Foundations of Food	(4)
FSCS	282	Management for Living	(2)
FSCS	283	Professional Encounters	(1)
FSCS	287	Aesthetics for Living	(2)
FSCS	471	Professional Writing in Family Studies and Consumer Sciences	(4)
FSCS	480	Family and Professional Interface	(3)
FSCS	483	Professional Perspectives	(1)

Required Professional Courses (87 units)

NTRS	310	Meal Management	(3)
NTRS	312	Cultural Foods of California	(4)
NTRS	315	Communication Skills in Dietetics	(3)
NTRS	317	Fundamentals of Human Nutrition	(3)
NTRS	410	Experimental Foods	(5)
NTRS	413	Maternal and Child Nutrition	(4)
NTRS	414AB	Institutional Food Service	(4, 4)
NTRS	415AB	Nutrition and Diet Therapy	(4, 4)
NTRS	417AB	Advanced Nutrition	(3, 3)
NTRS	417L	Nutritional Assessment Laboratory	(1)
NTRS	418	Community Nutrition	(3)
NTRS	419ABC	Supervised Practice in Dietetics	(8, 8, 8)
NTRS	419S	Seminar: Dietetics	(2, 2, 2)
NTRS	434	Management Principles in Dietetics	(5)
NTRS	479	Clinical Interactions in Dietetics	(4)

*** Option in Foods (103 units)**

The option in *Foods* provides the academic preparation students need for careers in the food industry, including food science, product development, sales, and other aspects. Other career opportunities in the area of food service also are available.

Requirements for the Option

The major with this option requires a total of 103 units, including 21 in core courses and 82 in professional courses. *Students must earn grades of C or higher in all courses used to meet major requirements.*

Preparatory Courses (27 units)

ANTH	250	Cultural Anthropology	(4) or
SOC	201	Principles of Sociology	(4)
CHEM	151, 152	Fundamentals of Chemistry I, II	(5, 5)
ECON	150	Economics for the Citizen	(4)
MICR	151	introductory Microbiology	(5),
PSY	150	introductory Psychology	(4)

Required Core Courses (21 units)

FSCS/SOC	120	Intimate Relationships	(4)
NTRS	210	Foundations of Food	(4)
FSCS	282	Management for Living	(2)
FSCS	283	Professional Encounters	(1)
FSCS	287	Aesthetics for Living	(2)
FSCS	471	Professional Writing in Family Studies and Consumer Sciences	(4)
FSCS	480	Family and Professional Interface	(3)
FSCS	483	Professional Perspectives	(1)

Required Professional Courses (36 units)

NTRS	310	Meal Management	(3)
NTRS	312	Cultural Foods of California	(4)
NTRS	317	Fundamentals of Human Nutrition	(3)
NTRS	410	Experimental Foods	(5)
NTRS	412	Advanced Foods	(4)
NTRS	414AB	Institutional Food Service	(4, 4)
NTRS	434	Management Principles in Dietetics	(5)
FSCS	495	Field Work in Family Studies and Consumer Sciences	(2, 2)

Supporting Professional Courses (46 units):

Select from following:

ACCT 202 (4) or 200AB (4, 4)

NTRS 411 (3), 413 (4), 417AB (3, 3)
 FSCS 470 (4)
 MGMT 307, 473 (4 each)
 MKT 304, 340, 341,342, 442,445 (4 each)
 CHEM 353 (5) SOC 460 (4)
 FIN 303 (4)
 SPCH 300, 340, 370, 371,
 JOUR 345 (4) 430, 462 (4 each)

* **Option in Nutrition (104 units)**

The option in Nutrition leads to careers in businesses and agencies involved in nutrition-related products and services and enables students to complete the academic requirements needed to qualify for a dietetic internship or supervised practice needed to qualify to take the examination to become a Registered Dietitian (R.D.).

Requirements for the Option

The major with this option requires a total of 104 units, including 21 in core courses and 82 in professional courses. *Students must earn grades of C or higher in all courses used to meet major requirements.*

Preparatory Courses (32 units)

ANTH	250	Cultural Anthropology	(4) or
SOC	201	Principles of Sociology	(4)
BIOL	200AB	Human Anatomy and Physiology I, II	(5, 5)
CHEM	151, 152	Fundamentals of Chemistry I, II	(5, 5)
ECON	150	Economics for the Citizen	(4)
PSY	150	Introductory Psychology	(4)

Required Core Courses (21 units)

FSCS/SOC	120	Intimate Relationships	(4)
NTRS	210	Foundations of Food	(4)
FSCS	282	Management for Living	(2)
FSCS	283	Professional Encounters	(1)
FSCS	287	Aesthetics for Living	(2)
FSCS	471	Professional Writing in Family Studies and Consumer Sciences	(4)
FSCS	480	Family and Professional Interface	(3)
FSCS	483	Professional Perspectives	(1)

Required Professional Courses (75 units)

NTRS	310	Meal Management	(3)
NTRS	312	Cultural Foods of California	(4)
NTRS	317	Fundamentals of Human Nutrition	(3)
NTRS	410	Experimental Foods	(5)
NTRS	411	Evaluation of Current Nutrition Concepts	(3)
NTRS	413	Maternal and Child Nutrition	(4)
NTRS	414AB	Institutional Food Service	(4, 4)
NTRS	415AB	Nutrition and Diet Therapy	(4, 4)
NTRS	417AB	Advanced Nutrition	(3, 3)
NTRS	417L	Nutritional Assessment Laboratory	(1)
NTRS	418	Community Nutrition	(3)
NTRS	434	Management Principles in Dietetics	(5)
ACCT	202	Survey of Accounting	(4)
CHEM	353	Nutritional Aspects of Biochemistry	(5)
EDFN	452	Statistics in Education	(4)
MICR	151	Introduction to Microbiology	(5)
MKT	304	Principles of Marketing	(4)

Supporting Professional Courses (8 units)

Select from the following 4-unit courses:
 ANTH 444, FSCS 470,

NTRS 412
 MKT 340, 342, 346, 440, 442
 SOC 424, 425, 450, 460
 SPCH 300, 340, 350, 370, 371, 430, 462, 478

Minor in Health and Safety Studies

A total of 36 units is required for the minor in Health and Safety Studies. This program provides preparation for teaching in the areas of adult education, civil defense, driver education, medical self-help, Red Cross instructional programs, and in public schools.

Requirements for the Minor (36 units)

Lower Division Required Courses (12 units):

BIOL	200AB	Human Anatomy and Physiology I, II	(5, 5)
HS	201	Management of Medical Emergencies	(2)

Upper Division Required Courses (12 units):

HS	350	Health Maintenance Problems	(3)
HS	360	Selecting Health and Medical Services and Products	(3)
HS	401	Medical Emergency Studies	(3)
TSE	475	Accident and Safety Studies	(3)

Electives (select 12 HS units with adviser approval).

Certificate Program: Specialist in Alcohol and Drug Problems

The certificate requires a total of 60 units, including 30 units of course work and field experience in health science and 30 units in related fields. Course selection is designed to supplement previous academic and/or vocational experience and to apply to basic professional training leading to the baccalaureate or to graduate degrees. The program prepares alcohol and other drug abuse specialists for employment in educational, therapeutic, rehabilitative, and consultant settings. Refer to the *Undergraduate Study* chapter of this catalog for general regulations governing all certificate programs.

Requirements for the Certificate (60 units)

Required Courses (30 units):

HS	201	Management of Medical Emergencies	(2)
HS	301	Cardiopulmonary Resuscitation and Basic Life Support Systems	(1)
HS	401	Medical Emergency Studies	(3)
HS	467	Problem Drinking and Alcoholism	(3)
HS	468	Problems in Controlled Substances	(3) #
* HS	496	Field Work	(15)
# HS	499	Undergraduate Directed Study	(3)

**Rehabilitation Counseling majors may substitute COUN495 when placement is in agency providing services to alcohol-dependent or drug-dependent persons.*

maximum 15 units in internships and/or independent study courses

Electives (select 30 units from following):

ANTH 444
 ART 425, 440, 445
 BIOL 200AB
 CRIM 439, 447, 460
 COUN 200AB, 405AB, 445, 450, 480, 490, 494**
 HS 444, 456, 462, 464, 491***
 MGMT 470
 PSY 150, 405, 410AB, 441
 SOC 201, 322A, 422, 425
 SPCH 150, 278, 350, 454, 478, 489**
 TSE 472, 475
 UNIV 398

** maximum 6 units

*** maximum 4 units

Certificate Program in Occupational Safety and Health

The Department of Health Science offers a credit certificate program designed to prepare occupational safety and health professionals to function as generalists in implementing safety and loss control programs in industry or in medical institutions. Developed in accordance with federal and state legal occupational safety and health acts, the program is applicable to the requirements for a bachelors or a masters degree in health science. The program requires 45 units of upper division course work, including a 29-unit core and 16 units of electives. Admission to the program requires filing of a formal application to the department, a screening interview with the program adviser covering the applicant's prior **academic** work and employment experience, and departmental approval of the individual student program. Refer to the *Undergraduate Study and Graduate and Postbaccalaureate Study* chapters of this catalog for general regulations governing all certificate programs.

Prerequisites:

Required:

MATH 102

Select five from following, with adviser approval.'

BIOL 165 or 200AB

CHEM 1510r 158

HS 150 or 201

MICR 151

PHYS 150 or 155

POLS 150

PSY 150

SOC 201

Requirements for the Certificate (45units) Required core (29 units):

HS 496 or * 595 (5 units)

HS 430-436 (24 units)

**open only to graduate students*

Electives (16 units):

Communications Area (select 4 units from following)

ENGL 306

OSBE 301

SPCH 430, 370

TECH 400

Select two courses from one of the five areas listed below. Area selected should reflect the student's academic preparation and, when applicable, work experience and certificate objective.

Business Orientation

CIS 301

ECON/ENGR 300

FIN 335, 436

MATH 342

PSY 442

Emergency Services

CRIM 362, 404, 437

HS 301,401

TSE 475

Fire Protection

TECH 351AB, 352AB, 451,453AB

Occupational Health/Industrial Hygiene Area

COMD 400, 401,402, 409

CHEM 301ABC, 401-403, 412AB, 418, 462

HS 350, 360, 444, 456, 462, 467, 468

MICR 412

PHYS 351 N

Technical Aspects

CE/ME 320

HS 422, 478

ME 321

PHYS 312, 313, 427

PSY 447

TECH 411,440

Select remaining electives from any academic department with adviser approval.

The Credential Program

The Bachelor of Science degree in Health Science is authorized for examination waiver for the Single Subject credential in Health Science. Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs. Students interested in this credential should consult advisers in the Department of Health Science and the School of Education. In addition, they *must* include the following courses in the major:

HS 201,301,350, 360, 401,444, 455, 456, 460, 462, 464, 466, 490

BIOL 200AB

CHEM 151

ENGL 306 *or* 406

HS 478

PSY 170 and 171

TSE 475

Courses in Health Science (HS)**Lower Division Courses****150 Basic Health and Safety Studies (4)**

Current health and safety issues facing the student population; emphasis on utilizing scientific methods to solve personal health and safety problems and applying research findings to daily living.

201 Management of Medical Emergencies (2)

Prepares students to give immediate and temporary treatment in emergency situations; includes first aid and personal safety, legal and safety aspects of medical aid. Qualifies for Red Cross certification.

284 Utilizing Health Care Data (4)

An overview of the utilization of data in all phases of health care delivery, including administration, diagnosis, therapy, patient monitoring, and continuing education.

Upper Division Courses

Upper division standing is prerequisite to enrollment in all 300- and 1400-level HS courses.

301 Cardiopulmonary Resuscitation and Basic Life Support Systems (1)

Prerequisite: HS 201. Principles and techniques of cardiopulmonary resuscitation in emergency care. American Red Cross CPR certification.

350 Health Maintenance Problems (3)

Prerequisite: GE biological science requirement. Beneficial and detrimental factors of environment and their effect on the body and maintenance of health.

360 Selecting Health and Medical Services and Products (3)

Consumer health, evaluation of health and accident insurance, quackery and fraudulent health practices, food and drug controls.

401 Medical Emergency Studies (3)

Prerequisites: HS 201, BiOL 200AB. Includes instructor certification for first aid and medical self-help. Practice instruction required.

422 Radiological Health and Safety Education (4)

Prerequisites: BIOL 200AB, HS 350, PHYS 150. Responsibilities of schools and public agencies for programs of education, protection, and training; radiation exposure problems; radiation and environmental effects.

430 Occupational Safety and Health Programs (4)

Overview of safety and health programs in industrial settings including professional resources, typical safety problems, major program components; awareness, accident investigation, committees, job safety analysis. Site visits.

431 Occupational Health and Safety Law (4)

Laws related to Cal/OSHA; sources of law; employer/employee rights and responsibilities; legal procedures, enforcement, and penalties; selected statutes and case law.

432 Theory and Principles of Industrial Hygiene (4)

Principles and practices of industrial hygiene; consideration of selected substances, processes, and controls; uses and calibration of primary instruments.

433 Principles of Hazard Control (3)

Principles underlying protection of workers from hazards; systematic and practical analysis of hazards; discussions of applicable safety protection; relationships between engineering solutions, education, and personal protection.

434 Control of Mechanical Hazards (3)

Common physical hazards in industrial settings and applicable codes, standards, and methods of control; emphasis on facilities and mechanical and electrical hazards.

435 Control of Materials and Process Hazards (3)

Common processes and chemical hazards in the work place; standards, measurements, hazard control mechanisms for flammable liquids, industrial gases, welding, and other materials and processes.

436 Occupational Safety Program Administration (3)

Analysis of successful safety programs; management involvement, program evaluation, employee participation, and motivation component; goal setting and tactics designed to improve safety programs.

440 Health Care Delivery System (4)

U.S. health care delivery system and its relationship to health science professions using a systems model; input, throughout, and output issues identified and explored.

444 Health and Safety Law (4)

Prerequisites: GE biological and social science requirements. Study, analysis, and application of federal, state, county, and city codes and ordinances relating to health science and safety programs.

455 Sex Information for Health Education (3)

Advanced sex information and education, physiological individuality and response, contraceptives and their health effects, selection and application of content in teaching sex education.

456 Health Studies on Alcohol, Narcotics, Nutrition, and Tobacco (4)

Scientific data on effects of tobacco, alcohol, narcotics, nutrition, and dangerous drugs on health. Current problems relating to control of illegal substances *Fulfills teacher certification requirement in California.*

460 School Health Programs (4)

Prerequisites: HS 201,350. Responsibility of classroom teacher in instructing in health content areas commonly taught in elementary and secondary schools, assisting with school health services, and maintaining a healthful school environment.

461 Physiology and Pharmacology of Substance Abuse (5)

Effects and medical implications of substance abuse on the body at system, organ, and cell levels; for nonmedically trained professionals. Meets CAADAC requirements for substance abuse counseling certification.

462 Chronic and Degenerative Disorders (3)

Prerequisites: HS 350, BIOL 200AB. Etiology and prognosis of degenerating tissue and their effects on health; new developments and research.

463 National and International Health Problems (3)

Prerequisite: HS 350. Review of historical and modern efforts to solve health problems; survey of health problems on local, state, national and international levels.

464 Community Health Care Programs (4)

Prerequisite: HS 350. Analysis and review of community health programs and organizations; their structure, function and funding sources developed by professional and voluntary health agencies to address expanding community health needs.

465 Strategies in Drug Abuse Prevention(2)

Theories of drug abuse prevention; dysfunctional behavior related to drug abuse; practical application of specific techniques and strategies for drug abuse prevention.

466 Strategies for Substance Abuse Treatment Programs (2)

Prerequisite: HS 150, 350, or 456. Substance abuse problems with an emphasis on polysubstance abuse; analysis of appropriate strategies for polysubstance abuse programs.

467 Problem Drinking and Alcoholism (3)

Prerequisites: GE biological science requirement. Multidisciplinary study of problems of alcohol and alcoholism in society.

468 Problems in Controlled Substances (3)

Prerequisites: GE biological science requirement. Concepts of drug addiction; problems in education, prevention, and treatment.

469 Administration of Substance Abuse Programs and Facilities (4)

Prerequisites: HS 467; 456 or 468. Tasks and problems associated with administration and supervision of substance abuse programs and facilities.

470 Public Health Administration (4)

Prerequisite: HS 464. Fundamental and historical aspects of public health administration including development of public health in U.S., policies and procedures for disease control, present and future trends in public health.

471 General Principles of Environmental Health (4)

Prerequisite: ENGL 306. General scope of disciplines within environmental health field; routes of entry into those disciplines.

472 Data Analysis for Health Science (4)

Prerequisite: MATH 100 or 102. Techniques and methods for health science data analysis including basic statistical techniques; methods of deriving morbidity and mortality rates, life tables, and risk assessment.

473 Evaluation of Health Programs (4)

Prerequisite: HS 472. History and development of program evaluation techniques for health services including models, designs, and statistical techniques for program evaluation.

474 Seminar: Trends and Issues in Allied Health (4)

Prerequisite: HS 440. Critical issues and new trends involving allied health professionals; analysis of educational and practice implications and application of problem solving technique.

476 Quality Assurance in Health Programs (4)

Historical development of quality assurance regulations including accreditation, credentials, licenses, regulations, and health education evaluation; emphasis on current regulations including audits, utilization reviews, professional standards, and continuing education in relation to health care delivery programs.

478 Human Factors in Health and Safety Studies Programs (4)

Human factors, information input, human output, working environment, stress and fatigue, design implication, and safety management as they relate to health and safety studies.

479 Health Program Planning (4)

Prerequisite: HS 473. Concepts, organization, legislation, and techniques involved in health program planning.

480 Program Design in Allied Health (4)

Prerequisite: HS 474. Organization, planning, development, and administration of educational programs in allied health; budgeting, financing, student and faculty matters, clinical affiliations, program accreditation; includes in-service and continuing education.

482 Health Education in Health Care Setting (4)

(also listed as NURS 482) Prerequisite: Professional experience or upper division standing in health related field. Organization and development of health education programs in health care setting; patient education in acute, ambulatory, and long-term care facilities; methods of financing and evaluating program effectiveness, including cost benefit analysis.

486 Loss Control in Safety and Health (4)

Prerequisite: HS 476. Theories and principles of loss control in safety and health fields, components and strategies of loss control, administrative roles and responsibilities data analysis for loss, treatment, and evaluation.

490 Administration of School Health Programs (3)

Prerequisite: HS 460. Principles and practices of supervision and administration in school health programs.

491 Special Studies in Health and Safety (1-4)

Prerequisite: Senior or graduate standing. Intensive study of an area of health or safety; specific area announced in *Schedule of Classes*. May be repeated to maximum of 16 units as subject matter changes.

496 Directed Field Work (1-6)

Prerequisites: Departmental approval, agency acceptance. Supervised experience in a health or safety agency; group sessions and individual evaluative conferences. May be repeated to maximum of 18 units. Graded *CR/NC*.

499 Undergraduate Directed Study (1-4)

Prerequisites: For health studies, BIOL 200AB; for both health and safety studies, instructor consent to act as sponsor. Project selected in conference with sponsor before registration, progress meetings held regularly, and a final report submitted. May be repeated to maximum of 6 units.

Courses in Nutritional Science (NTRS)**Lower Division Courses****210 Foundations of Food (4)**

Introduction to foods as a profession. Principles and procedures of food preparation including selection, storage, food sanitation, and product evaluation and meal management. Lecture 1 hour, laboratory 6 hours. *CAN HEC 8*

250 Human Nutrition (4)

Nutrition and its relation to health, behavior, growth, and development and aging. No credit toward nursing or science majors of BA major or credential in home economics *CAN HEC 2*

281 Food for Life (2)

Ways of providing a nutritious diet for individuals and families in the world today.

Upper division standing is prerequisite to enrollment in 400- I level courses.

300 Physiological and Nutritional Bases of Fitness (4)

(also listed as PE 300) Prerequisite: BIOL 155 or CHEM 158. Analysis of physiological and nutritional bases of fitness, including energy, for exercise, body composition, and weight control; methods of altering lifestyles in terms of nutritional and exercise habits.

310 Meal Management (3)

Prerequisites: NTRS 210; 250 or 317. Management of time, energy, economic, and aesthetic factors to meet contemporary dietetic requirements. Lecture 2 hours, laboratory 3 hours.

311 Science of Nutrition (1)

Prerequisites: CHEM 152, NTRS 250. Scientific principles of human nutrition.

Prerequisite: NTRS 210. Cultural food patterns represented in California; food choices, typical dishes, menus, nutritional aspects, purchasing, preparation techniques, equipment, and significance for community nutrition. Lecture 2 hours, laboratory 6 hours.

314 Preserving Food at Home (2)

Home food preservation techniques; drying, canning, freezing, preserving, and pickling; causes of food spoilage, potential problems of toxicity, and safety factors; nutritional content, cost factors, storage, and use. Meets 4 hours weekly.

315 Communication Skills in Dietetics (3)

Prerequisites: NTRS 210, 317; PSY 150; SPCH 150. Basic communication skills needed by dietitian; sociopsychological aspects of nutritional care in outpatient or clinical setting. Lecture 1 hour, laboratory 6 hours.

317 Fundamentals of Human Nutrition (3)

Prerequisite: CHEM 152. Scientific role of nutrients in the body and in development, growth, and maturation.

410 Experimental Foods (5)

Prerequisites: NTRS 210, CFIEM 152. Application of scientific principles to experimental methods in food preparation and recipe analysis. Lecture 3 hours, laboratory 6 hours.

411 Evaluation of Current Nutrition Concepts (3)

Prerequisite: NTRS 317. Interpretation of nutrition research findings and consideration of possible applications for individuals and population groups.

412 Advanced Foods (4)

Prerequisites: NTRS 210, 311. Scientific principles and procedures concerned with food selection and preparation; experiences designed to broaden background in complex preparations; recipe analysis and development, and some analysis of foreign foods. Lecture 2 hours, laboratory 6 hours.

413 Maternal and Child Nutrition (4)

Prerequisite: NTRS 317. Nutritional requirements of pregnant women and of children; nutrition-related health considerations.

414AB Institutional Food Service (4, 4)

Prerequisites: NTRS 210; 250 or 317; MICR 151. Experience in organization and management of quantity food service, including menu writing, quantity food preparation, equipment selection and institutional kitchen design.

414A: Lecture 3 hours, laboratory 3 hours.

414B: Lecture 2 hours, laboratory 6 hours.

415AB Nutrition and Diet Therapy (4, 4)

Prerequisites: (for 415A) NTRS 210, 417B; (for 415B) NTRS 414A. Nutritional intervention in disease processes; special emphasis on interrelationships between pathophysiology of disease processes and dietary modifications. Lecture 3 hours, laboratory 3 hours.

416 Child Nutrition (4)

Prerequisite: CHDV 200. Nutritional needs of pregnant and lactating women and of children from conception through adolescence; strategies for nutrition education in early childhood.

417AB Advanced Nutrition I, II (3, 3)

Prerequisites: (for 417A) NTRS 317, BIOL 200B, CHEM 353, MICR 151; (for 417B) NTRS 417A. Scientific bases for nutritional needs of humans; factors involved in meeting such needs in individuals and population groups; metabolic factors in nutrition.

417L Nutritional Assessment Laboratory (1)

Prerequisites: NTRS 317, BIOL 200B, CHEM 353, MICR 151, each with a minimum C grade. Laboratory experience in nutritional assessment using anthropometric, dietary, biochemical, and clinical tests and criteria.

418 Community Nutrition (3)

Prerequisite: NTRS 417B. Community nutrition problems, agencies, and programs. Lecture 1 hour, field experience 6 hours.

419ABC Supervised Practice in Dietetics (8-8-8)

Prerequisites: NTRS 415B, 434, 479; corequisite: NTRS 419S. Intensive learning experiences in food service administration and nutritional intervention in hospitals, public health facilities, or other health care facilities. Field experience 24 hours weekly; concurrent weekly professional colloquium required.

419S Seminar: Dietetics (2)

Prerequisites: NTRS 415B, 434, 479; corequisite: NTRS 419A, 419B, or 419C. Selected professional topics in food service administration and nutritional care.

434 Management Principles in Dietetics (5)

Prerequisites: NTRS 414A,B; ACCT 202. Principles of management for quality food service systems. Lecture-laboratory 10 hours.

450N Nutrition and Well-Being (4)

Prerequisite: BIOL 165 or CHEM 158. Nutrition in the life cycle as related to maturation, aging, well-being, emphasizing the individual as an integrated being.

451 Nutrition and Aging (4)

Prerequisite: BIOL 165 or CHEM 158. Relationship of nutrition to aging and diseases common among elderly; nutritional needs and problems of elderly.

452 Nutrition for Educators (2)

Prerequisite: Admission to teaching credential program. Role of nutrition in physiologic and cognitive development and common nutrition problems of school children.

455 Nutrition Computing Skills (3)

Prerequisite: NTRS 317. Identification, implementation, and evaluation of computerized nutritional analysis procedures; lectures about computer applications in nutrition and dietetics, software demonstrations, software reviews, hands-on practice with state-of-the-art software and computers.

458 Physical Aspects of Aging (4)

(also listed as PE 458) Aging process, fitness, and nutrition; influences on wellness, life styles, and recuperation; strategies for optimizing physical quality of life for elderly.

479 Clinical Interactions in Dietetics (4)

Prerequisites: NTRS 315, 415B; PSY 150. Role, responsibilities, and practices of dietitian as a nutrition teacher on health care team. Lecture 3 hours, laboratory 3 hours. Concurrent weekly professional colloquium required.

NURSING

School of Health and Human Services

DEPARTMENT OFFICE

Simpson Tower F417

Phone: (213)343-4700

The Nursing curriculum prepares nurses for professional careers in the maintenance and promotion of health and in supportive, preventive, therapeutic, and restorative nursing care for individuals and families in institutional and community settings. Students who complete the undergraduate program will have acquired knowledge and skills specific to generalized professional nursing practice and will be qualified to assume leadership roles.

Students interested in undertaking graduate study leading to a Master of Science degree are referred to the *Graduate Programs* section.

The Faculty

Emeriti: Evelyn Malkin Barclay, Henry Etta Brown Blackmon, Miriam Blomquist, Eloise M. King, Wanda L. King, Marilyn A. Lemon, Irene M. Molloy, Helen O'Connell, S. Winifred Utz.

Professors: Marlohn Balas, Beverly R. Bigler, Loretta Birckhead, Linda LaPlante Fahey, Sarah P. Farnham, Marlene Farrell, Eleanor Ferguson-Marshalleck, Marilyn Friedman, Virginia Hunter, Jo Ann Johnson(*Chair*), Christine Pollack Latham, Freda V. O'Bannon-Lemmi, Judith L Papenhausen, Barbara Peterson Sinclair, Diane Vernon, Ruth R. Wu, DeAnn Marie Young.

Associate Professors: Evelyn Ruiz Calvillo, Marjorie Elaine O'Leary, Rhea P. Williams.

Assistant Professors: Patricia Ann Chin, Jung Kim Miller, Genevieve L. Monahan.

Bachelor of Science *Degree*

The professional Nursing curriculum leads to the Bachelor of Science degree with a major in Nursing.

The undergraduate program is accredited by the California Board of Registered Nursing and the National League for Nursing. Some courses are open to nonmajors who may find one or more courses helpful in achieving their own professional or personal goals.

Admission to the Program

The program consists of lower and upper division segments. Students admitted to Cal State L.A. as freshmen or lower division transfers are enrolled in the lower division portion of the program. Students who transfer from community colleges with the Associate of Arts or Associate of Science degree in Nursing and the R.N., or from N.L.N.-accredited hospital diploma schools, are admitted to the upper division program. This professional program is designed for students who have completed the lower division nursing courses in accredited colleges and universities, including Cal State L.A.

General Information

Students in the Nursing program must carry malpractice insurance, personal health insurance, and workers' compensation when required by a clinical agency. Low-cost insurance is available through the Student Nurses Association of California and the California Nurses Association (for registered nurses), or through many independent companies. Nursing students must have a valid California driver's license and access to an automobile covered by appropriate automobile insurance. Prior to entering the first clinical lab, students must have a current CPR card, a physical examination including Mantoux skin test or chest x-ray, if indicated, and proof of immunity to rubella and hepatitis B. Additional immunizations may be necessary if required by clinical agencies. Annual renewal of CPR certification, an annual physical examination and Mantoux skin test or chest x-ray, if indicated, will be required. Information about uniforms may be obtained from departmental advisers.

Departmental Regulations

* Students in the Nursing major must maintain good academic standing and attain grades of C or better in all nursing courses and in all natural and social science courses prerequisite

or corequisite to the major. Nursing courses and prerequisite science courses for which the student earns less than a grade of C may be repeated only once, and then with instructor consent. To meet the requirement of continuing satisfactory performance, students on academic probation are not permitted to enroll in a nursing course until the probation has been removed.

- * Students may not enroll in any course that requires other nursing prerequisites unless the prerequisite courses are completed with grades of C or better.
- * Basic nursing students must take the National League for Nursing (NLN) Diagnostic Readiness Test before registering for the senior clinical electives. The test results will be used to determine the appropriate clinical electives.

Requirements for the Major (120-121 units)

A total of 198 units is required for the degree, including 120-121 units in required or selected courses in nursing and related fields.

Required Prerequisites (28 units):

The following courses are prerequisite to the Nursing major.

BIOL	200AB	Human Anatomy and Physiology I, II	(5, 5)
CHEM	151,152	Fundamentals of Chemistry I, II	(5, 5)
ENGL	102*	Composition II	(4)
SPCH	150	Oral Communication	(4)

*Students subject to earlier catalogs satisfy this prerequisite with ENGL 1010r 190.

Required in Related Fields (25 units)

ANTH	444	Medical Anthropology	(4)
** MICR	201	Microbiology for Health Related Sciences	(4)
**MICR	202	Microbiology Laboratory for Health Related Sciences	(2)
*NTRS	317	Fundamentals of Human Nutrition	(3)
PSY	150	Introduction to Psychology	(4)
SOC	201	Principles of Sociology	(4)

Any upper division statistics course of 4 units or more

* Students entering with 3 or more semester units (4 1/2 quarter units) of credit for a course in general nutrition from an accredited college or diploma program satisfy this requirement by transfer credit.

** Students entering with 4 or more semester units (6 or more quarter units) of credit from an accredited college for a course including laboratory satisfy this requirement by transfer credit.

Required in Nursing (95-96 units)

Lower Division Required Courses (4 units):

NURS	101	Clinical Nursing Skills Laboratory	(1)
NURS	192	Introduction to Nursing	(2)
NURS	200	Nursing Care of Adults I	(2)
NURS	201	Adult Clinical Nursing Laboratory I	(4)
NURS	202	Nursing Care of Adults II	(2)
NURS	203	Adult Clinical Nursing Laboratory II	(4)
NURS	204A	Clinical Response to Disease Processes I	(2)
NURS	204B	Clinical Response to Disease Processes II	(2)
NURS	207	Psychiatric Clinical Nursing Laboratory	(2)
NURS	208	Nursing Care of Psychiatric Patients	(2)
NURS	220	Nursing Care of Children	(4)
NURS	221	Nursing Care of Children Clinical Laboratory	(4)
NURS	234	Assessment and Management Maternal-Child Health	(3)
NURS	235	Maternal-Child Clinical Nursing Laboratory	(4)
NURS	240	Introduction to Nursing Process	(2)
NURS	241	Introduction to Clinical Nursing Laboratory	(4)

Students must complete lower division nursing and natural science courses before beginning upper division courses. R.N. students may enroll in NURS 342-343 and/or the last natural science course concurrent with the first quarter of 300-level nursing courses.

Upper Division Required Courses (39-40 units):

NURS 302	Coping with Chronic Illness and Aging	(3)
NURS 303	Nursing Process Laboratory: Chronicity and Aging	(3)
NURS 304	Coping with Selected Problems of Illness and Disability	(3)
* NURS 342	Nursing Process: Self-Care	(2)
* NURS 343	Nursing Process: Serf-Care Laboratory	(1)
NURS 344	Coping with Loss	(3)
NURS 345	Nursing Process Laboratory: Home Health Care	(3)
NURS 372	Physical Assessment	(3)
NURS 373	Physical Assessment Laboratory	(1)
NURS 390	Introduction to Nursing Research	(4)
NURS 470	Family and Community Health Assessment	(4)
NURS 471	Family and Community Health Assessment Laboratory	(3)
NURS 488	Team Dynamics in Nursing	(2)
NURS 489	Nursing Leadership Laboratory	(3)
NURS 492	Problems and Trends in Health Care System	(2)
** UNIV (NURS) 398	Cooperative Education	(2)

* required of all R.N. transfer students

** required of all Basic Nursing students before enrollment in 300-level NURS courses

Clinical electives (12 units):

Select four courses, two lectures with respective concurrent laboratories, from the list of clinical electives below. Prerequisite to any required clinical elective is completion of all required 300-level courses.

NURS 400+401
 NURS 403+404
 NURS 430+431
 NURS 442+443
 NURS 456+457
 NURS 474+475A or 475B

Certificate Program: Adult Nurse Practitioner

The Department of Nursing offers a credit certificate program designed to prepare adult nurse practitioners to meet selected deficits in the health care delivery system. Graduates of the program may be employed by medical groups, colleges and universities, and other health care providers in the private and public sectors of the community.

The program requires completion of 24 units of upper division credit course work. Admission to the program requires formal application to the department; a screening interview with the Admission Committee; academic work and employment experience which must include at least an associate degree in Nursing, a minimum 2.5 grade point average in work completed at all institutions of higher education, current licensure as a registered nurse in the state of California, at least one year of nursing experience or the equivalent; and departmental approval.

In addition to the 24 units of required upper division course work, students must complete 34 units of professional course work through the Department of Nursing's Institute of Nursing to qualify for the certificate. Refer to the *Undergraduate Study* chapter of this catalog for general regulations governing all certificate programs.

Requirements for the Certificate (24 units)

Required Courses (24 units):

NURS 412 Assessment and Management of Acute Health

		Problems	(4)
NURS	413	Acute Health Care Laboratory for Nurse Practitioners	(4)
NURS	416	Assessment and Management of Chronic Health Problems	(4)
NURS	417	Chronic Health Care Laboratory for Nurse Practitioners	(4)
NURS	472	Physical Assessment for Nurse Practitioners	(4)
NURS	473	Physical Assessment Laboratory for Nurse Practitioners	(4)

Required Professional Course Work (34 units)**Certificate Program: Nurse Midwifery Education**

The Department of Nursing offers a credit certificate program designed to prepare registered nurses to expand their practice roles by becoming Certified Nurse Midwives (C.N.M.). to reduce the existing severe obstetrical care provider shortages that exist in the greater Los Angeles area. Admission to the program requires the following: Current RN licensure in California

- * Current enrollment as a B.S.-Nursing major (Track I) or Bachelor of Science degree in Nursing (Track II)
- * Minimum 2.5 grade point average
- * Minimum one year experience in labor and delivery (within last three years)
- * Three letters of recommendation
- * Completion of prerequisite courses in critical thinking, pathophysiology, and physical assessment each with a minimum C grade
- * Malpractice insurance for professional nursing practice
- * A personal interview
- * Current C.P.R (B.C.L.S.) certification
- * Physical examination within past year indicating negative tuberculin test of chest x-ray and evidence of immunity to rubella, rubeola, and hepatitis B.

Obstetrics/gynecological nurse practitioners and R.N. physician assistants with an OB/GYN specialty are eligible, but consideration is given on an individual basis.

The program requires completion of 24 units of upper division course work. Nursing majors may substitute courses required for the certificate for certain courses required for the major. The certificate is awarded upon completion of all requirements for the baccalaureate. Refer to the *Undergraduate Study* chapter of this catalog for general regulations governing all certificate programs.

Requirements for the Certificate 54 units)**Required Courses (54 units):**

NURS	438	Health Assessment of Women	(4)
NURS	439	Health Assessment of Women Laboratory for Nurse Midwives	(2)
NURS	444	Assessment and Management of Family Planning/GYN Problems	(3)
NURS	445	Family Planning/GYN Laboratory for Nurse Midwives	(5)
NURS	446	Assessment and Management of Antepartal Families	(4)
NURS	447	Antepartal Care Laboratory for Nurse Midwives	(8)
NURS	448	Assessment and Management of Intrapartal Families	(4)
NURS	449	Intrapartal Care Laboratory for Nurse Midwives	(8)

NURS 450	Assessment and Management of Postpartal Families	(3)
NURS 451	Postpartal Care Laboratory for Nurse Midwives	(2)
NURS 452	Assessment and Management of Neonates	(2)
NURS 453	Neonatal Care Laboratory for Nurse Midwives	(2)
NURS 458	Professional and Legal Midwifery Practice Issues	(3)
NURS 459	Preceptorship for Nurse Midwives	(4)

Certificate Program: Obstetrics-Gynecology Nurse Practitioner

The Department of Nursing offers a credit certificate program designed to prepare registered nurses to assume expanded roles in the delivery of primary health care to ambulatory women. Emphasis is on the recognition of the normal-and thus the abnormal and the appropriate management of each within a team approach. Graduates of the program may be employed by medical groups, colleges and universities, and other health care providers in the private and public sectors of the community.

The program requires completion of 24 units of upper division credit course work. Admission to the program requires formal application to the department; a screening interview with the Admission Committee; academic work and employment experience, which must at least include an associate degree in Nursing, a minimum 2.5 grade point average in work completed at all institutions of higher education; current licensure as a registered nurse in the state of California; at least one year of nursing experience or the equivalent; and departmental approval.

In addition to the 24 units of required upper division course work, students must complete 26 units of professional course work through the Department of Nursing's Institute of Nursing to qualify for the certificate. Refer to the *Undergraduate Study* chapter of this catalog for general regulations governing all certificate programs.

Requirements for the Certificate (24 units)

Required Credit Courses (24 units):

NU RS 432	Assessment and Management of Obstetric Health	(4)
NURS 433	Obstetric Health Care Laboratory for Nurse Practitioners	(4)
NURS 436	Assessment and Management of Gynecologic Health	(4)
NURS 437	Gynecological Health Care Laboratory for Nurse Practitioners	(4)
NURS 472	Physical Assessment for Nurse Practitioners	(4)
NURS 473	Physical Assessment Laboratory for Nurse Practitioners	(4)

Required Professional Course Work (26 units)

Courses in Nursing (NURS)

Lower Division Courses

101 Clinical Nursing Skills Laboratory (1)

Prerequisites: BIOL 200B, CHEM 152, ENGL 102*, MICR 201, 202, PSY 150, SPCH 150. *Should be taken immediately before NURS 201.* Demonstration and practice of basic clinical skills required to assist patients with health deviation self-care requisites. Emphasis on administration of medications and performance of sterile and non-sterile procedures.

**Students subject to earlier catalogs satisfy this prerequisite with ENGL 1010r 190.*

192 Introduction to Nursing (2)

First nursing course for basic nursing students. Open to students considering nursing as a major. Nurse's role within health care system; introduction to philosophies of nursing education.

200 Nursing Care of Adults I (2)

Prerequisites: NURS 101, 204A, 240, 241; corequisite: NURS 201. Nursing care of hospitalized patients with disruptions of homeostatic, immunologic, and integumentary protective mechanisms, gas transport, and cardiovascular function.

201 Adult Clinical Nursing Laboratory I (4)

Prerequisites: NURS 101,204A, 240, 241, successful completion of medication exam; corequisite: NURS 200. Nursing care of hospitalized adults experiencing health disturbances of cardiovascular, hematologic, respiratory, integumentary, neoplastic, and fluid/electrolyte disorders.

202 Nursing Care of Adults II (2)

Prerequisites: NURS 200, 201,204B; corequisite: NURS 203. Nursing care of adults experiencing health disturbances of the metabolic, renal, neuroendocrine, gastrointestinal, hepatobiliary, reticuloendothelial, and oto-ophthalmic systems.

203 Adult Clinical Nursing Laboratory II (4)

Prerequisites: NURS 200, 201,204B; corequisite: NURS 202. Nursing care of hospitalized adults experiencing health disturbances involving metabolic, renal, neuroendocrine, orthopedic, hepatobiliary, and oto-ophthalmic systems.

204A Clinical Response to Disease Processes I (2)

Prerequisites: BIOL 200B, CHEM 152, ENGL 102', MICR 201, 202, SPCH 150. Clinical nursing care rationale for common health care disturbances including disorders of the immunologic, fluid/electrolyte, acid/base, cardiovascular, respiratory, and hematopoietic systems.

**Students subject to earlier catalogs satisfy this prerequisite with ENGL 1010r 190.*

204B Clinical Response to Disease Processes II (2)

Prerequisites: BIOL 200B, CHEM 152, ENGL 102*, MICR 201, 202, SPCH 150. Clinical nursing care rationale for common health disturbances including renal, genitourinary, musculoskeletal, neuroendocrine, gastrointestinal, hepatobiliary, and oto-ophthalmic systems.

**Students subject to earlier catalogs satisfy this prerequisite with ENGL 1010r 190.*

206 Basic Drug Administration (2)

Prerequisites: BIOL 200AB. Introduction to drug administration, including legal aspects, drug classifications, and dosage calculation; selected specific drug indications, modes of action, usual doses, possible side effects, and routes of administration.

207 Psychiatric Clinical Nursing Laboratory (2)

Prerequisites: NURS 202, 203; corequisite: NURS 208. Clinical experience in implementing the nursing process in the care of adult patients/clients demonstrating self-care deficits in social and psychological functioning.

208 Nursing Care of Psychiatric Patients (2)

Prerequisites: NURS 202, 203; corequisite: NURS 207. Introduction to nursing actions with clients demonstrating self-care deficits in social and psychological functioning.

220 Nursing Care of Children (4)

Prerequisites: NURS 234, 235; corequisite: NURS 221. Care of hospitalized children with emphasis on common health disturbances including normal and abnormal growth and development.

221 Nursing Care of Children Clinical Laboratory (4)

Prerequisite: NURS 234, 235; corequisite: NURS 220. Patient care experiences with hospitalized children encountering common health disturbances.

234 Assessment and Management Maternal-Child Health (3)

Prerequisite: NURS 202, 203; corequisite: NURS 235. Nursing assessment and management of mother and infant during pregnancy, delivery, and neonatal stage; obstetrical complications and gynecological disorders.

235 Maternal-Child Clinical Nursing Laboratory (4)

Prerequisite: NURS 202, 203; corequisite: NURS 234. Nursing care of mother and infant during pregnancy, delivery, and neonatal stage; obstetrical complications and gynecological disorders.

240 Introduction to Nursing Process (2)

Prerequisites: BIOL 200B, CHEM 152, ENGL 102*, MICR 201, 202, PSY 150, SPCH 150; prerequisite or corequisite: NURS 192; corequisite: NURS 241. Introduction to the nursing process with a focus on coping with requirements of daily living during hospitalization.

**Students subject to earlier catalogs satisfy this prerequisite with ENGL 1010r 190.*

241 Introduction to Clinical Nursing Laboratory (4)

Prerequisites: BIOL 200B, CHEM 152, ENGL 102', MICR 201, 202, PSY 150, SPCH 150; prerequisite or corequisite: NURS 192; corequisite: NURS 240. Nursing technologies that support patient self-care requisites utilizing the nursing process including beginning physical assessment skills.

*Students subject to earlier catalogs satisfy this prerequisite with ENGL 1010r 190.

254L,P Selected Topics in Nursing (1-6)

Prerequisites: As needed for specific topic. Current topics of special interest to nursing students, as announced in *Schedule of Classes*. May be repeated for credit.

Upper Division Courses**302 Coping with Chronic Illness and Aging (3)**

Prerequisites or corequisites for Nursing majors: NURS 304, 372, 373; corequisite: NURS 303; prerequisite for other majors: upper division standing. Management of selected self-care limitations associated with aging and chronic illness.

303 Nursing Process Laboratory I: Chronicity and Aging (3)

Prerequisites or corequisites for nursing majors: NURS 304, 372, 373; corequisite: NURS 302. Applying nursing technologies to promote self-care in chronically ill aged; emphasis on limitations resulting from sensory-cognitive changes, pain, and sleep disturbances.

304 Coping with Selected Problems of Illness and Disability (3)

Prerequisites for generic nursing students: NURS 220, 221; prerequisites or corequisites for transfer nursing majors: NURS 342, 343; prerequisite for other majors: upper division standing. Effects of pain and sleep disturbances; nursing technologies with emphasis on educative strategies.

307 Physiology and Psychology of Violence and Aggression (4)

(also listed as PSY307) Prerequisites: PSY 150, GE blocks A and B. Biological and psychobehavioral approaches to violent individuals; analysis of and research support for understanding violence drawn from natural, medical, and behavioral sciences.

342 Nursing Process: Self-Care (2)

Prerequisite: Transfer nursing major; corequisite: NURS 343. Socialization of the transfer student to the professional role; focus on nursing process with assessment for self-care/dependent care requisites, capabilities, and deficits.

343 Nursing Process: Self-Care Laboratory (1)

Prerequisite: Transfer nursing student; corequisite: NURS 342. Nursing process utilizing nursing technologies and ways of assisting patients/clients in achieving health-related goals.

344 Coping with Loss (3)

Prerequisites for nursing majors: NURS 302,303; corequisite for nursing majors: NURS 345; prerequisite for other majors: upper division standing. Theoretical explanations of response to loss related to illness, disability and death; family focused nursing care in home setting.

345 Nursing Process Laboratory: Home Health Care (4)

Prerequisites: NURS 302, 303; prerequisite or corequisite: ANTH 444; corequisite: NURS 344. Nursing assessment, care, teaching of patients and families in the home; emphasis on work with families experiencing psychosocial responses to illness-related losses.

354L,P Selected Topics in Nursing (1-6)

Prerequisites: As needed for specific topic. Current topics of special interest to nursing students, as announced in *Schedule of Classes*. May be repeated for credit.

372 Physical Assessment (3)

Prerequisites for generic nursing students: NURS 220, 221; corequisite: NURS 373. Cognitive, affective, and motor components of physical assessment, including history taking, physical examinations, and diagnostic tests of normal individuals for determining degree to which physical requisites are met.

373 Physical Assessment Laboratory (1)

Prerequisites for generic nursing students: NURS 220, 221; corequisite: NURS 372. Clinical experience in physical assessment of individual patients/clients across the age span; includes data gathering through health histories, physical examinations, and selected diagnostic tests and data analysis.

390 Introduction to Nursing Research (4)

Prerequisites: NURS 221,235, ENGL 102*, passing WPE score; prerequisite or corequisite: EDFN 452. Nursing research process and concepts applicable to clinical practice; reading and analyzing research; developing skill in writing professional nursing papers.

**Students subject to earlier catalogs satisfy this prerequisite with ENGL 1010r 190.*

400 Acute Health Deviations in Cardiorespiratory Function (3)

Prerequisites: NURS 344, 345, 390 (graduate students may take 390 as corequisite); prerequisite or corequisite: 402A or successful completion of arrhythmia placement examination. Nursing management of patients who have health deviation self-care deficits due to critical physiological dysfunction of the cardiorespiratory system.

401 Advanced Clinical Nursing Laboratory (3)

Prerequisites: NURS 344, 345; prerequisite or corequisite: 402A or successful completion of arrhythmia placement examination; corequisite: NURS 400. Direct clinical experience with patient experiencing critical physiological dysfunction of cardiorespiratory system requiring partly or wholly compensatory nursing action.

402A Fundamentals of Electrocardiography (2)

Fundamentals of vector analysis of the 12 lead electrocardiogram and basic arrhythmia detection.

402B Advanced Electrocardiography (2)

Prerequisite: NURS 402A. Advanced electrocardiography including detailed evaluation of 12 lead electrocardiogram in determining axis changes, conduction defect, cardiovascular hypertrophies, location of myocardial infarction, differentiation of complicated arrhythmias, and selected electrolyte and drug effects.

403 Advanced Clinical Nursing Laboratory (3)

Prerequisite or corequisite: NURS 402A or successful completion of arrhythmia placement examination. Direct clinical experience with patient experiencing acute physiological dysfunction of the metabolic, hematologic, or sensorimotor systems requiring partly or wholly compensatory nursing action.

404 Acute Health Deviations in Metabolic, Hematologic, and Sensorimotor Function (3)

Prerequisites: NURS 344, 345, 390; 402A or successful completion of arrhythmia placement examination. Nursing care related to acute health deviations in metabolic, hematologic, and sensorimotor functions with their related pathophysiology and nursing care implications.

412 Assessment and Management of Acute Health Problems (4)

Assessment, differential diagnosis, and management of frequently occurring acute health problems relative to primary care of adolescents, adults, and elderly patients.

413 Acute Health Care Laboratory for Nurse Practitioners (4)

Clinical experience for nurse practitioner students in primary care of adolescents, adults, and elderly patients with acute health problems.

416 Assessment and Management of Chronic Health Problems (4)

Assessment, diagnosis, and management-including therapeutic and educational strategies-of chronic health problems of adolescents, adults, and aging patients.

417 Chronic Health Care Laboratory for Nurse Practitioners (4)

Clinical experience for nurse practitioner students in primary care of adolescents, adults, and elderly patients with chronic health problems.

423 Nursing in School Health Programs Clinical Laboratory (6)

Prerequisites or corequisites: NURS 426, 428; COMD 440; admission to Health Services credential program. Clinical school nursing experience with multicultural and ethnic students in elementary, secondary, and special education settings under direction of credentialed school nurse preceptor.

426 Nursing Management in Public Schools (4)

Prerequisite: Admission into Health Services Credential Program. Introduction to organization and management of school health services through coordination and integration of human and material resources to accomplish health goals in the educational settings.

428 Nursing Assessment in Public Schools (4)

Prerequisites: NURS 372, 373; admission into Health Services Credential Program. Assessment and case management of physical, psychosocial, developmental, and environmental processes and requisites of school students. Includes State mandated screening.

430 Primary Health Care of Women (3)

Prerequisites for students enrolled in B.S. Nursing program: NURS 390, 470, 471; corequisite for students enrolled in B.S. Nursing program: NURS 431. Assessment and management of self-care requisites unique to women in primary health care settings.

431 Primary Health Care of Women Laboratory (3)

Prerequisites: NURS 470, 471; corequisite: NURS 430. Introduction to health assessment and maintenance, diagnosis, and management of health care unique to obstetrics and gynecology.

432 Assessment and Management of Obstetric Health (4)

Prerequisites: NURS 436, 437; corequisite: NURS 433. Assessment and management of normal and selected high risk women during pregnancy; includes fetal evaluation, health teaching, and psychosocial support.

433 Obstetric Health Care Laboratory for Nurse Practitioners (4)

Prerequisites: NURS 436, 437; corequisite: NURS 432. Clinical experience for nurse practitioner students in ambulatory care of pregnant women.

436 Assessment and Management of Gynecologic Health (4)

Prerequisites: NURS 472, 473; corequisite: NURS 437. Assessment and management of gynecologic health of women throughout the life span; includes pelvic and breast screening, health teaching, and care of episodic illnesses.

437 Gynecologic Health Care Laboratory for Nurse Practitioners (4)

Prerequisites: NURS 472, 473; corequisite: NURS 436. Clinical experience for nurse practitioner students in ambulatory gynecologic health care.

438 Health Assessment of Women (4)

Prerequisite: Admission into Nurse Midwifery program; corequisites: NURS 439, 444, 445. Knowledge needed for complete physical and health assessment of women including history, physical examination, collection and analysis of laboratory studies, and development of treatment plan.

439 Health Assessment of Women Laboratory for Nurse Midwives (2)

Prerequisite: Admission into Nurse Midwifery program; corequisites: NURS 438, 444, 445. Clinical experience in obtaining complete histories and performing physical examinations, formulating medical diagnoses, and devising and implementing management plans; emphasis on consultation and collaborative skills.

440 Introduction to Community Mental Health (2)

Prerequisites: For Nursing majors, upper division standing and NURS 488 and 492; for other majors, approval of Nursing adviser. Models for community-based intervention in mental health problems; mental health services; nurses' role in community mental health agencies.

442 Assisting Strategies in Psychosocial Nursing (3)

Prerequisites: NURS 390, 470, 471; corequisite: NURS 443. Exploring concepts and theories from biobehavioral sciences and humanities related to development of self-care nursing actions in psychosocial nursing.

443 Assisting Strategies in Psychosocial Nursing Laboratory (3)

Prerequisites: NURS 470, 471; corequisite: NURS 442. Clinical experience in selected health care settings for clients with disruptions in social and psychological functioning.

444 Assessment and Management of Family Planning and Gynecologic Problems (3)

Prerequisite: Admission into Nurse Midwifery program; corequisites: NURS 438, 439, 445. Utilization of midwifery management process, assessment and management of women's and adolescents' problems regarding family planning and gynecology, including perimenopausal.

445 Family Planning and Gynecologic Problems Laboratory for Nurse Midwives (5)

Prerequisite: Admission into Nurse Midwifery program; corequisites: NURS 438, 439, 444. Clinical experience for nurse midwifery students focusing on assessment and management of women's and adolescents' problems regarding family planning and gynecology,

446 Assessment and Management of Antepartal Families (4)

Prerequisites: NURS444, 445; corequisite: NURS 447. Assessment, diagnosis, and management of women during antepartal phase of pregnancy; emphasis on low-to-moderate risk women.

447 Antepartal Care Laboratory for Nurse Midwives (8)

Prerequisites: NURS 444, 445; corequisite: NURS 446. Antepartal clinical experience for nurse midwifery students utilizing midwifery management principles and process; emphasis on low-to-moderate risk clients.

448 Assessment and Management of Intrapartal Families (4)

Prerequisites: NURS 446, 447; corequisite: NURS 449. Assessment, diagnosis, and management of physiological and psychological aspects of four stages of labor in moderate- and high-risk intrapartal clients.

449 Intrapartal Care Laboratory for Nurse Midwives (8)

Prerequisites: NURS 446, 447; corequisite: NURS 448. Intrapartal clinical experience for nurse midwifery students utilizing management process; emphasis on four stages of labor in moderate to high-risk clients.

450 Assessment and Management of Postpartal Families (3)

Prerequisites: NURS 448, 449; corequisite: NURS 451. Assessment and management of postpartal families from immediate postpartum period through six-week period after childbirth.

451 Postpartal Care Laboratory for Nurse Midwives (2)

Prerequisites: NURS 448, 449; corequisite: NURS 450. Clinical experience for nurse midwifery students focusing on managing postpartal families immediately after birth through six-week postpartal period.

452 Assessment and Management of Neonates (2)

Prerequisites: NURS 450, 451; corequisite: NURS 453. Assessment and management of newborns utilizing midwifery process, principles, and skills; emphasis on emergency resuscitation knowledge and skills.

453 Neonatal Care Laboratory for Nurse Midwives (2)

Prerequisites: NURS 450, 451. Clinical experience for nurse midwifery students in managing newborns in first few days of life.

454L,P Selected Topics in Nursing (1-6)

Prerequisites: As needed for specific topic. Current topics of special interest to nursing students announced in *Schedule of Classes*. May be repeated for credit.

455 Strategies for Preventing and Intervening in Family Violence and Abuse (4)

(also listed as SW455) Major theories used to explain family violence; emphasis on preventing abuse and intervening with victims across the age span; social, policy, and legal issues.

456 Crisis Theory: Mental Health Promotion (3)

Prerequisites: NURS 390, 470, 471. Crisis theory as a basis for identification of maturational and situational high risk events that create an impact on mental health.

457 Mental Health Promotion Nursing Laboratory (3)

Prerequisites: NURS 470, 471; corequisite: NURS 456. Identification of situational and maturational hazards that may impinge on self-care capabilities. Nursing application of crisis model of educative-supportive techniques for promotion of self care.

458 Professional and Legal Midwifery Practice Issues (4)

Prerequisites: NURS 452, 453. Historical and contemporary issues in nurse midwifery practice; emphasis on legal, ethical, moral, and entrepreneurial issues. Grade C/R/NC.

459 Preceptorship for Nurse Midwives (4)

Prerequisite: NURS 458. Synthesis and integration of knowledge and skills learned in Nurse Midwifery program; emphasis on independent function in nurse midwife role under preceptorship of certified nurse midwife.

460 Problems of Parenting (2)

Prerequisites: PSY 150, upper division standing; FSCS 423 recommended. Parent and child health problems created by inadequate parent-child relationships. Health assessment and exploration of nursing intervention techniques.

462 Behavior Modification in Health Care (4)

Prerequisite: Upper division standing. Techniques for behavior modification in variety of health care problems.

464 Family Interaction Problems (2)

Prerequisite: Upper division standing; FSCS 421 recommended. Dysfunctional role and communication patterns in family unit.

466 Nursing Management Systems (2)

Prerequisite: NURS 489. Expands skills and knowledge base of management process utilized in nursing service system, with primary focus on the following subsystems: staffing and scheduling, budget planning and cost containment, quality assurance.

468 Legal Aspects of Health Care Provision in California (3)

Prerequisite: Professional experience or upper division standing in a health related program. Exploration of legal aspects of health care provision: intentional torts, negligence and malpractice, practice acts, ethical-legal conflicts, and litigation procedure.

470 Family and Community Health Assessment (4)

Prerequisites: NURS 344, 345, 492; corequisite: NURS 471. Criteria used in family and community health assessment including discussion of sociocultural variables and roles of community health nurses in working with families and communities.

471 Family and Community Health Assessment Laboratory (3)

Prerequisite: NURS 344, 345; corequisite: NURS 470. Family and community health assessment and intervention in the community setting.

472 Physical Assessment for Nurse Practitioners (4)

Cognitive, effective, and motor components of complete health assessment for nurse practitioner students including history, physical examination, laboratory studies, and formation of diagnostic, treatment, and educational plans of care.

473 Physical Assessment Laboratory for Nurse Practitioners (4)

Clinical experience for nurse practitioner students in obtaining and performing complete histories and physical examinations, formulating diagnoses, developing and implementing plans of care for adolescent, adult, and geriatric patients.

474 Primary Health Care of Children and Adults (3)

Prerequisites: NURS 390, 470, 471. Holistic primary health care of children and adults; emphasis on comprehensive assessment, management, patient education, and research.

475A Primary Health Care of Adults Laboratory (3)

Prerequisite: NURS 470, 471; corequisite: NURS 474. Diagnosis and management of self-care deficits in adult primary care settings; additional focus on patient education and implications of related nursing research.

475B Primary Health Care of Children Laboratory (3)

Prerequisite: NURS 470, 471; corequisite: NURS 474. Eliciting and recording health histories, performing physical examinations, and evaluating developmental status of children, newborn through adolescence.

480 Assessment and Care of Patients' Spiritual Needs (4)

Exploration of individual's spiritual needs in health care, and how spiritual care may be closely integrated with that of body and mind.

482 Health Education in Health Care Setting (4)

(also listed as HS 482) Prerequisite: Professional experience or upper division standing in health-related field. Organization and development of health education programs in health care setting; patient education in acute, ambulatory, and long-term care facilities; methods to finance and evaluate program effectiveness, including cost benefit analysis.

488 Team Dynamics in Nursing (2)

Prerequisites: NURS 302,303. Team dynamics and strategies for change as applied in nursing situations.

489 Nursing Leadership Laboratory (3)

Prerequisites: NURS 344, 345; prerequisite or corequisite: NURS 488 (corequisite only when enrolled in NURS 489 second five weeks of quarter). Clinical experience in organization and delivery of care to groups of hospital patients; emphasis on integrating leadership skills.

492 Problems and Trends in Health Care System (2)

Prerequisite for nursing majors: Upper division standing. Major problems and trends in health care system; effects on nursing.

494 Ethics in Nursing (3)

Lecture-seminar course covering the history and development of ethics in American nursing from 1800s to the present.

499 Undergraduate Directed Study (1.-4)

Prerequisites: Instructor consent to act as sponsor; ability to assume responsibility for independent work and to prepare written and oral reports. Project selected with sponsor before registration; progress meetings held regularly. May be repeated for credit.

PHYSICAL EDUCATION

School of Health and Human Services

DEPARTMENT OFFICE

Physical Education 206

Phone: (213) 343-4650

The Department of Physical Education offers programs leading to the Bachelor of Science and Master of Arts degrees for students interested in teaching, coaching, athletic training, exercise science, adapted physical education, or preparing for advanced study in the foundations of human physical performance. General activity courses are open to all students with requisite proficiency, at a wide range of skill levels and in a variety of activities and sports. Adapted physical education, providing individual programs of corrective exercises and specially designed sports activities, may be taken by students who need such a program. Assignment by a university physician or department adviser is required.

The department's graduate programs are described in the [Graduate Study](#) section.

The Faculty

Emeriti: Leonard L. Adams, Jerry Reed Ball, Cameron Scott Deeds, James G. Dunkelberg, Anita H. Fisher, Reid J. Gumell, John W. Hermann, Jackie Lou Hoyt, Joan Johnson, Marguerite Mochel, Reed E. Nilsen, Dorothy O'Brien, Robert M. Oldham, Marion J. Olson, Warren E. Reeves, Mary L. Schreiber, Burton M. Seidler, Albert A. Tillman, Beverly Warner, Patricia M. White, William E. Wilgus, George W. Willott, Emil Wroblicky.

Professors: Mary Conroy, Patricia A. Delaney, Rod A. Faurot, Karen M. Johnson, Carol G. McKenzie, Robert A. Miller (*Acting Chair*), Ronald H. Morris, Janet A. Seaman, Patricia L. Wagner.

Assistant Professors: Mark Lee Bailey, Dwan M. Bridges, Daniel Frankl, Ron E. Hull, Nazareth Khodiguan, Mary Catherine Marks.

Bachelor of Science Degree in Physical Education

The Bachelor of Science degree program in Physical Education prepares students for careers in educational settings and public and private fitness industries. A minor is available for students majoring in other fields.

Requirements for the Major (80-151 units)

A total of 196 units is required for the Bachelor of Science degree in Physical Education. The Bachelor of Science degree in Physical Education has three options. Exercise Science (option I) and the Single Subject Credential (option II) require 80-82 units, and include a required core of 40 units of lower and upper division physical education courses. The Exercise Science option requires a total of 81-82 units and the Single Subject Credential (teaching) option requires 80 units. The Multiple Subject Credential (option III) requires a minimum of 146 units: 106 units in the breadth area, and 40 units in the physical education major and depth area. *Students must earn minimum C grades in all required major courses.*

Courses in Related Fields

Physical Education majors in Options I and II must include BIOL 200AB or BIOL 201-202 in their program. These courses fulfill general education Block B (Natural Sciences) biological science requirement. Students must also include PSY 150 and SOC 201 in the program. These courses fulfill GE Block D (Social Sciences) requirements. In addition, completion of a GE course in CHEM 158 or 159 or PHYS 150 is recommended.

Required Physical Education Core for Options I and II (40 units):

The core consists of 10 units of professional activities, 10 units of foundations courses, and 20 units of upper division concept courses.

Lower Division

Professional Activities (10 units):

Required Courses (6 units):

PE	283	Aquatics Activities	(2)
PE	286	Square, Folk, and Social Dance	(2)

PE	288	Physical Fitness Activities	(2)
----	-----	-----------------------------	-----

Individual and Dual Sports*(select one from following):*

PE	281A	Archery and Badminton	(2)
PE	281G	Golf and Tennis	(2)
PE	281T	Track and Field	(2)
PE	289	Gymnastics and Tumbling	(2)

Team Sports*(select one from following):*

PE	282C	Contemporary Games and Flag Football	(2)
PE	282S	Softball and Soccer	(2)
PE	282V	Volleyball and Basketball	(2)

Foundations Courses (10 units):

PE	160	Dimensions of Physical Education	(2)
PE	161	Introduction to Movement	(4)
PE	260	Historical and Philosophical Bases of Physical Education	(4)

Upper Division

Successful completion of UNIV 400, the Writing Proficiency Examination (WPE), is prerequisite to enrollment in all upper division major courses.

Concept Courses (20 units):

PE	400A	Kinesiology	(4)
PE	400B	Physiology of Activity	(4)
PE	401	Measurement of Human Performance	(4)
PE	402	Nature of Human Performance	(4)
PE	408	Behavioral Foundations of Physical Education and Sport	(4)

Options (40-42 units)

Select one of the following options and complete the required courses as listed below.

Option I: Exercise Science (41 --42 units)

This option prepares students for careers in fitness and related fields. Students acquire skills and knowledge necessary for employment in health and fitness centers, hospitals, orthopedic centers, sport medicine clinics, and similar health care environments. Students who complete this major will have 42-43 units of free electives which may be used, if desired, for further specialization in courses related to fitness and business management, laboratory technology, and biomechanics. Completion of GE courses in CHEM 151 and PHYS 150 is highly recommended.

Required Courses (35 units):**Lower Division Activity Courses (2 units)**

PE	151C	Beginning Bicycling	(1)
PE	257R	Intermediate Racquetball	(1)

Upper Division Concept Courses (33 units):

PE	470	Statistical Processes and Experimental Design in Physical Education	(3)
PE	471	Computer Applications in Physical Education	(3)
PE	472	Proseminar: Laboratory Assessment Techniques	(3)
PE	474	Proseminar: Field Evaluation Techniques	(4)
PE	475	Proseminar: Exercise Prescription and Implementation	(3)
PE	476	Administration of Fitness Programs	(4)
PE	483	Theory and Analysis of Aquatics	(3)
PE	488	Theory and Analysis of Fitness	(3)

PE 492 Field Experience in Exercise Science (1-4)

Select one from following (3 units):

PE 481 Theory and Analysis of Individual Sports (3)

PE 486 Theory and Analysis of Square, Folk, and Social Dance (3)

PE 489 Theory and Analysis of Gymnastics and Tumbling (3)

Electives (select 6-7 units from following with adviser approval):

PE 405 Water Safety for Instructors (4)

PE 412 Prevention and Care of Injuries (3)

PE 441 Motivation in Athletics (3)

PE 473 Motor Learning (3)

PE 477 Proseminar: Biomechanical Analysis of Human Motion (3)

PE 478 Proseminar: Structural Kinesiology (3)

Option II: Single Subject Credential (40 units)

This option is designed for individuals interested in teaching physical education. Students seeking a teaching credential should see advisers in the department and in the School of Education. Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs.

Lower Division (12 units):

Professional Activity Courses (10 units):

Select five from following with no duplication from the core.

Individual and Dual Sports

PE 281A Archery and Badminton (2)

PE 281G Golf and Tennis (2)

PE 281T Track and Field (2)

PE 289 Gymnastics and Tumbling (2)

Team Sports

PE 282C Contemporary Games and Flag Football (2)

PE 282S Softball and Soccer (2)

PE 282V Volleyball and Basketball (2)

Required Related Course (2 units):

HS 201 Management of Medical Emergencies (2)

Upper Division (28 units):

Professional Preparation Courses (20 units):

PE 410 Program Designs in Physical Education (3)

PE 411 Class Organization and Conduct (4)

PE 450 Dimensions of Physical Education for Exceptional Students (4)

PE 481 Theory and Analysis of Individual Sports (3)

PE 482 Theory and Analysis of Team Sports (3)

PE 488 Theory and Analysis of Fitness (3)

Elective (3 units):

Select one from following:

PE 483 Theory and Analysis of Aquatics (3)

PE 486 Theory and Analysis of Square, Folk, and Social Dance (3)

PE 489 Theory and Analysis of Gymnastics and Tumbling (3)

Required Related Courses (5 units):

HS 301 CPR and Basic Life Support Systems (1)

HS 456 Health Studies on Alcohol, Narcotics, Nutrition,

and Tobacco (4)

Option III: Multiple Subject Teaching (146 units)

Students who select this option complete a separate core which is common to all Multiple Subject teaching options. That common core contains 106-111 units and is described in the *Undergraduate Study chapter*. In addition to the core, the 63-68 units listed below are required in the option. Refer to the undergraduate *School of Education chapter* of this catalog for regulations governing all teaching credential programs.

Required Courses (106-111 units):

Refer to the *Undergraduate Study chapter* of this catalog.

Major Core (20 units)

PE	161	Introduction to Movement	(4)
PE	260	Historical Bases of Physical Education	(4)
PE	286	Professional Activities: Square, Folk, Social Dance	(2)
PE	288	Professional Activities: Physical Fitness	(2)
PE	408	Behavioral Foundations of Physical Education and Sport	(4)
PE	424	Movement and Maturation	(4)

Physical Education Depth Area (20 units)

PE	401	Measurement of Human Performance	(4)
PE	410	Program Designs in Physical Education	(3)
PE	411	Class Organization and Conduct	(4)
PE	450	Dimensions of Physical Education for Exceptional Students	(4)
PE	454	Special Topics in Physical Education (Movement Skill Development)	(2)
PE	488	Theory and Analysis of Fitness	(3)

Electives (28 units)

Professional education courses are recommended. See a credential adviser in the School of Education.

Minor In Physical Education

A minor in Physical Education is available for students majoring in other fields. Prerequisite are BIOL 200AB or 201-202. A total of 34-38 units is required. Students must earn a minimum C grade in all courses included in the minor.

Requirements for the Minor (34-38 units)

Lower Division (16-18 units):

Select two from following (6-8 units):

PE	160	Dimensions of Physical Education	(2)
PE	161	Introduction to Movement	(4)
PE	260	Historical and Philosophical Bases of Physical Education	(4)

Professional Activity Courses (10 units): Select five from following with adviser approval. PE

	281A	Archery and Badminton	(2)
PE	281G	Golf and Tennis	(2)
PE	281T	Track and Field	(2)
PE	282C	Contemporary Games and Flag Football	(2)
PE	282S	Softball and Soccer	(2)
PE	282V	Volleyball and Basketball	(2)
PE	283	Aquatics	(2)
PE	286	Square, Folk, and Social Dance	(2)
PE	288	Professional Activities: Physical Fitness	(2)
PE	289	Gymnastics and Tumbling	(2)

Upper Division (18-20 units):

Successful completion of UNIV 400, the Writing Proficiency Examination, is prerequisite to enrollment in all upper division courses in the minor. Adviser approval is required prior to enrollment in any upper division course,

Required Courses (8 units):

PE	400A	Kinesiology	(4)
PE	400B	Physiology of Activity	(4)

Electives (10-12 units):

Select *one* from following (4 units):

PE 401,402, 408

Select *one* from following(3-4 units):

PE 410, 411,450, 470, 474, 476

Select *one* from following (3-4 units):

PE 471 ,*476, 481,482,483,486, 487, 489

* unless taken above

The Credential Program

Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs.

Single Subject Credential

The B.S. degree program in Physical Education has been approved by the Commission on Teacher Credentialing for examination waiver for the Single Subject credential in Physical Education. Students should consult credential advisers in the department and the School of Education.

Adapted Physical Education Specialist Credential

The program leading to the Adapted Physical Education Specialist credential is a waiver-status program entitling the holder to teach adapted physical education in California to individuals between the ages of 3 and 21 years who have exceptional needs. The 28-unit program is based upon a basic authorization to teach physical education. Candidates must hold (or concurrently complete) a Single Subject credential in Physical Education, a Multiple Subject credential, or an equivalent authorization. They also must maintain a minimum 2.5 grade point average for all courses required in the program, complete directed teaching, and receive departmental recommendation.

Required Courses (24-28 units):

* EDSP	400	Education and Psychology of Exceptional Individuals	(4)
PE	450	Dimensions of Physical Education for Exceptional Students	(4)
PE	452	Physical Education for Severely Handicapped	(4)
PE	453	Physical Education for Learning Handicapped	(4)
PE	455	Motor Assessment of Exceptional Students	(4)
PE	456	Physical Education for Physically Handicapped	(4)
PE	457	Interdisciplinary Approach to Physical Education for Exceptional Students	(4)

* required for students entering the program who already possess a clear credential

Courses in Physical Education (PE)

A student who has completed an intermediate or advanced course may not subsequently receive credit for a lower level course in the same activity.

Lower Division Courses

110 Intramural Sports (1)

Participation in university intramural sports. Elective credit only; may be repeated to maximum of 16 units. Activity 2 hours minimum. Graded CR/NC.

150 Exercise, Fitness, and Sport in Modern Society (4)

Understanding of humans as integrated physiological, psychological, and sociological beings. Importance of physical activity in delaying, alleviating, and rehabilitating degenerative cardiovascular disease and stress-related illness. Lecture 3 hours. laboratory 2 hours.

151 Series: Individual Sports (10r 2 units each)

Individual activities designed to develop skill, knowledge of rules, background and analysis of techniques at beginning level.

151A Beginning Archery

151C Beginning Bicycling

151B Beginning Bowling

151G Beginning Golf

151 H Beginning Horseback Riding

1 511 Beginning Ice Skating

151S Beginning Skiing

51F Beginning Track and Field: Field Events

151 R Beginning Track and Field: Running Events

152 Series: Team Sports (1 each)

Team activities designed to develop skill, knowledge of rules, background and analysis of techniques at beginning level.

152B Beginning Baseball

152D Beginning Basketball

152H Beginning Field Hockey

152F Beginning Football

152R Beginning Soccer

152S Beginning Softball

152T Beginning Team Handball

152U Beginning Ultimate Football

152V Beginning Volleyball

153 Series: Aquatics (1 each)

Aquatic activities designed to develop skill, knowledge of rules, background and analysis of techniques, and safety procedures at beginning level.

153A Aerobic Swimming

153D Beginning Springboard Diving

Prerequisite: PE 153S

153S Beginning Swimming

153W Beginning Water Polo

154 Special Activities in Physical Education (1)

Varied experiences reflecting current interests of students in physical education and related experimental areas, as announced in Schedule of Classes. May be repeated as subject matter changes. Activity 2 hours.

155 Series: Physical Education for the Disabled (1 each)

Prerequisite: Physical disability or assignment by university physician. Theory, analysis, and beginning performance techniques of sports for the disabled. Open to interested physical education and recreation majors as well as disabled students in all majors. Each course may be repeated to maximum of 6 units as emphasis changes.

156 Series: Dance (1 each)

Activities designed to develop beginning skills in various dance forms accompanied by background information relevant to each form.

156F Beginning FolkDance **156S Beginning Social Dance**

156R Beginning Square and Round Dance

157 Series: Dual Sports (1 each)

Dual activities designed to develop skill, knowledge of rules, background and analysis of techniques at beginning level.

157B Beginning Badminton**157F Beginning Fencing****157H Beginning Handball****157J Beginning Judo****157K Beginning Karate****157R Beginning Racquetball****157S Beginning Self Defense****157T Beginning Tennis****157U Beginning Jujitsu****157W Beginning Wrestling****158 Series: Fitness Activities (10r 2 units each)**

Fitness activities designed to develop skill, knowledge of rules, background and analysis of techniques at beginning level.

158A Beginning Aerobics**158B Beginning Body Building****158D Body Dynamics I****158E Beginning Jazz Exercise****158J Beginning Jogging****158P Beginning Physical Conditioning****158R Beginning Rope Jumping****158X Beginning Techniques of Relaxation****158S Beginning Techniques of Stretching****158W Beginning Weight Training****158Y Beginning Hatha Yoga****159 Series: Gymnastics Activities (10r 2 units each)**

Gymnastics activities designed to develop skill, knowledge of rules, background and analysis of techniques at beginning level.

159M Beginning Men's Gymnastic Events**159W Beginning Women's Gymnastic Events****159T Beginning Tumbling and Trampoline****160 Dimensions of Physical Education(2)**

Scope and content of physical education discipline. Lecture 1 hour, supervised field experience 2 hours.

161 Introduction to Movement (4)

Movement experiences applicable to programs of physical education, kindergarten through grade twelve. Individual learning experiences related to motor development and basic movement skills. Lecture 2 hours; demonstration-laboratory 4 hours.

251 Series: Individual Sports (1 each)

Prerequisite: Corresponding PE 151 course. Individual activities designed to develop skill, knowledge of rules, background and analysis of techniques at intermediate level.

251A Intermediate Archery**251 B Intermediate Bowling****251 G Intermediate Golf****251 H Intermediate Horseback Riding****251S Intermediate Skiing****251 F Intermediate Track and Field: Field Events****251 R Intermediate Track and Field: Running Events****252 Series: Team Sports (1 each)**

Prerequisite: Corresponding PE 152 course. Team activities designed to develop skill, knowledge of rules, background and analysis of techniques at intermediate level.

252T Intermediate Team Handball 252V Intermediate Volleyball

253 Series: Aquatics (10r 2 each)

Prerequisite: PE 153S. Water activities designed to develop skill, background and analysis of techniques, and safety procedures at intermediate or advanced levels.

253A Intermediate Aerobic Swimming
253N Snorkeling (Advanced)
253S Intermediate Swimming

254L, P Selected Topics in Physical Education (1-3)

Current activities, new and varied, of interest to general student body, as announced in Schedule of Classes. May be repeated for credit as subject matter changes.

256 Series: Dance (1 each)

Prerequisite: Corresponding PE 156 course. Activities designed to develop intermediate skills in various dance forms accompanied by background information relevant to each form. 256F Intermediate Folk Dance 256S Intermediate Social Dance

257 Series: Dual Sports (1 each)

Prerequisite: Corresponding PE 157 course. Dual activities designed to develop skill, knowledge of rules, background and analysis of techniques at intermediate level.

257B Intermediate Badminton
257F Intermediate Fencing
257H Intermediate Handball
257K Intermediate Karate
257P Intermediate Personal Defense
257R Intermediate Racquetball
257T Intermediate Tennis

258 Series: Fitness Activities (1 each)

Prerequisite: Corresponding PE 158 course. Fitness activities designed to develop skill, knowledge of rules, background and analysis of techniques at intermediate level.

258A Intermediate Aerobics
258B Body Dynamics and Intermediate Techniques of Relaxation
258J Intermediate Jazz Exercise
258P Intermediate Physical Conditioning
258W Intermediate Weight Training

259 Series: Gymnastics Activities (1 each)

Prerequisite: Corresponding PE 159 course. Gymnastics activities designed to develop skill, knowledge of rules, background and analysis of techniques at intermediate level.

259M Intermediate Men's Gymnastic Events
259W Intermediate Women's Gymnastic Events
259T Intermediate Tumbling and Trampoline

260 Historical and Philosophical Bases of Physical Education (4)

Historical and philosophical backgrounds in development of physical education.

281 Series: Professional Activities (2 each)

Development of skill, knowledge of rules, and analysis of techniques at intermediate level. For students majoring or minoring in Physical Education.

281A Archery and Badminton
281G Golf and Tennis
281T Track and Field

282 Series: Professional Activities (2 each)

Development of skill, knowledge of rules, and analysis of techniques at intermediate level. For students majoring or minoring in Physical Education.

282C Contemporary Games and Flag Football
282S Softball and Soccer
282V Volleyball and Basketball

283 Professional Activities: Aquatics (2)

Development of skill, knowledge of safety, and analysis of techniques at intermediate level. For students majoring or minoring in Physical Education.

286 Professional Activities: Square, Folk, and Social Dance (2)

Development of skill, knowledge of dance forms, and analysis of techniques at intermediate level. For students majoring or minoring in Physical Education.

288 Professional Activities: Physical Fitness (2)

Development of fitness, knowledge of principles, analysis of components. For students majoring or minoring in Physical Education.

289 Professional Activities: Gymnastics and Tumbling (2)

Development of skill, knowledge of rules, and analysis of techniques at intermediate level. For students majoring or minoring in Physical Education.

Upper Division Courses

Successful completion of UNIV 400, the Writing Proficiency Examination, is prerequisite to enrollment in all upper division major and minor courses in physical education.

300 Physiological and Nutritional Bases of Fitness (4)

(also listed as NTRS 300) Prerequisite: BIOL 155 or CHEM 158. Analysis of physiological and nutritional bases of fitness, including energy for exercise, body composition, and weight control; methods of altering lifestyles in terms of nutritional and exercise habits.

351 Series: Individual Sports (1 each)

Prerequisite: Corresponding PE 251 course. Individual activities designed to develop skill, knowledge of rules, background and analysis of techniques at advanced level.

351A Advanced Archery**351 F Advanced Fencing****351 G Advanced Golf****351S Advanced Skiing****357W Advanced Wrestling****352 Series: Team Sports (1 each)**

Prerequisite: Corresponding PE 252 course. Team activities designed to develop skill, knowledge of rules, background and analysis of techniques at advanced level.

352B Advanced Baseball**352D Advanced Basketball****352S Advanced Softball****352V Advanced Volleyball****353 Series: Aquatics (1 each)**

Prerequisite: PE 253S. Water activities designed to develop skill, background, analysis of techniques, and safety procedures at advanced levels.

353D Advanced Diving**353L Advanced Life Saving****353S Advanced Swimming****353X Synchronized Swimming****353W Advanced Water Polo****355 Series: Competitive Sports (2 each)**

Introduction to tournament competition; development of advanced skills, knowledge of rules, and officiating as required at tournament level; participation in various types of tournament play.

355B Competitive Baseball

Prerequisite: Previous competitive baseball experience preferred.

355R Competitive Racquetball

Prerequisite: PE 357R.

355T Competitive Tennis

Prerequisite: PE 357T.

355V Competitive Volleyball

Prerequisite: PE 252V.

357 Series: Dual Sports (1 each)

Prerequisite: Corresponding PE 257 course. Dual activities designed to develop skill, knowledge of rules, background and analysis of techniques at advanced level.

357B Advanced Badminton

357H Advanced Handball

357K Advanced Karate

357R Advanced Racquetball

357T Advanced Tennis

357W Advanced Wrestling

390 Written Communication (4)

Prerequisite: Satisfactory completion of the Graduation Writing Assessment Requirement (GWAR). Written communication skills for the physical education major with emphasis on techniques of writing formal reports, public relations information essays.

400A Kinesiology (4)

Prerequisites: PE 161, BIOL 202. Analysis of anatomical and mechanical bases for efficiency of human movement. Lecture 3 hours, laboratory 3 hours.

400B Physiology of Activity (4)

Prerequisite: PE 400A. Analysis of physiological bases of effect of movement and stress on human organism; factors affecting conditioning. Lecture 3 hours, laboratory 3 hours.

401 Measurement of Human Performance (4)

Prerequisite: PE 161; MATH 100 or 102. Analysis, evaluation, interpretation, use of tests and other assessment devices in physical education; application of basic statistical procedures using computer programs. Lecture 3 hours, discussion-laboratory 3 hours.

402 Nature of Human Performance (4)

Prerequisite: PE 401. Physical growth, motor development, and motor learning and control related to skill performance. Lecture 3 hours, laboratory 3 hours.

405 Water Safety for Instructors (4)

Advanced instruction in water safety technique, and teaching techniques used at all levels of swimming. Leads to Red Cross Water Safety Instructor certification and introduction to health service education certification. Lecture 2 hours, laboratory 4 hours.

408 Behavioral Foundations of Physical Education and Sport (4)

Prerequisites: PE 260; PSY 150; SOC 2010r 322A. Psychological and sociological influences on physical education and sport; implications for personal and professional direction.

410 Program Designs in Physical Education (3)

Prerequisite: PE 160. Theory, practice, and development of curricula in physical education for kindergarten through twelfth grade.

411 Class Organization and Conduct (4)

Prerequisite: PE 401,410. Analysis and application of organizational patterns; motivational techniques related to effective conduct of physical education classes for kindergarten through twelfth grade. Lecture 2 hours, demonstration-laboratory 6 hours.

412 Prevention and Care of Injuries (3)

Prerequisites: PE 400A; instructor consent for nonmajors. Common injuries occurring in physical activity and athletics with emphasis on prevention and care. Lecture 2 hours, laboratory 3 hours.

415 Officiating Basketball (2)

Prerequisite: PE 152D or 352D or ATHL 342k. Problems, techniques, and practice in officiating basketball. Lecture 1 hour, activity 2 hours.

416 Officiating Football (2)

Prerequisite: PE 152F. Problems, techniques, and practice in officiating football. Lecture 1 hour, activity 2 hours.

418 Officiating Volleyball (2)

Prerequisite: PE 152V, 252V, 352V, or ATHL 342V (volleyball). Problems, techniques, and practice in officiating volleyball. Lecture

1 hour, activity 2 hours.

419 Officiating Softball (2)

Prerequisite: PE 352S. Problems, techniques, and practice in officiating softball. Lecture 1 hour, activity 2 hours.

420 Movement Experiences in Growth and Development (3)

Movement experiences involving basic locomotor and nonlocomotor patterns and their relationships to time, space, and projectiles as they affect growth and development. Lecture 2 hours, activity 2 hours.

424 Movement and Maturation (4)

Prerequisites: PE 420, ENGL 290, passing WPE score. Integration of theory, research, and practice of maturational factors on motor development from prenatal through later childhood periods; development of portfolio and written research project. Lecture 3 hours, field experience 2 hours per week.

440 Conduct of Athletic Programs (3)

Prerequisite: PE 160. Administrative and organizational principles applicable to athletic coaching.

441 Motivation in Athletics (3)

Personal qualities of coaches and athletes; suggested philosophies, methods, and techniques of communicating with and motivating athletes for consistent, maximal performance.

445 Sports Information and Game Management (3)

Athletic public relations with emphasis on writing publicity, compiling statistics, producing brochures; electronic media, game management.

450 Dimensions of Physical Education for Exceptional Students (4)

Prerequisite: PE 401. Conditions requiring special physical education, including: learning disabilities, retardation, neurological and orthopedic conditions. Lecture 3 hours, practical teaching in programs for exceptional students 2 hours.

452 Physical Education for Severely Handicapped (4)

Prerequisite: PE450. Etiology, movement characteristics, learning problems of severely handicapped individuals (trainable mentally retarded, severely multiple handicapped, seriously emotionally disturbed, and autistic). Lecture 3 hours, practicum 3 hours.

453 Physical Education for Learning Handicapped (4)

Prerequisite: PE 450. Problems of learning handicapped pupils in physical activity context; implications for physical education program development. Lecture 3 hours, practicum 2 hours.

454L, P Special Topics in Physical Education (1-4)

Prerequisite: Varies with topic. Current issues and interests of students in physical education and related experimental areas, as announced in *Schedule of Classes*. May be repeated as subject matter changes. Lecture and activity.

455 Motor Assessment of Exceptional Students (4)

Prerequisite: PE 450. Study of prevalent disabilities, with implications for program development, organization, administration, and evaluation of adapted physical education at elementary and secondary school levels. Evaluation and diagnosis of motor problems; prescription of adapted, developmental, and remedial physical education programs for elementary and secondary school students. Practical experience with assessment required.

456 Physical Education for Physically Handicapped (4)

Prerequisite: PE 450. Study of prevalent disabilities; implications for program development, organization, administration, and evaluation of adapted physical education students in elementary and secondary schools. Lecture 3 hours, practicum 2 hours.

457 Interdisciplinary Approach to Physical Education for Exceptional Students (4)

Roles and responsibilities of recreation, psychology, special education, nursing, physical and occupational therapy, and other professions in physical education of exceptional students.

458 Physical Aspects of Aging (4)

(also listed as NTRS 458) Aging process, fitness, and nutrition; influences on wellness, life styles, and recuperation; strategies for optimizing physical quality of life for elderly.

459ABC Internship in Adapted Physical Education (2, 2, 1)

Prerequisites: Physical education core, 12 units in adapted physical education specialization, minimum B (3.0) grade point average, and recommendation of major adviser. Directed experience with weekly adviser conference. Students must complete minimum of 200 hours of internship experience. Segments A, B, and C need not be taken in sequence.

459A Clinic (80 hours)**459B School/agency/institution (80 hours)****459C Research (40 hours)****460 Outdoor Education (3)**

Aims, organization, administration, and program of the outdoor school.

470 Statistical Processes and Experimental Design in Physical Education (3)

Prerequisite: PE 401. Measurement of kinesiological variables in physical education; application of statistical procedures and experimental design.

471 Computer Applications in Physical Education (3)

Introduction of computer technology in physical education; laboratory equipment interface techniques; software applications in physical education. Lecture 2 hours, laboratory 3 hours.

472 Proseminar: Laboratory Assessment Techniques (3)

Prerequisites: PE 400B, 470. Fitness assessment techniques employed within laboratory environment: electromyography, electrocardiography, electrogoniometry, gas analysis, stress testing, hydrostatic weighing, and respirometry. Lecture 2 hours, laboratory 3 hours.

473 Motor Learning (3)

Prerequisites: PE 402,470. Neurophysiological and psychosocial bases of motor learning in relation to skill acquisition and performance. Lecture 2 hours, laboratory 3 hours.

474 Proseminar: Field Evaluation of Fitness (4)

Prerequisites: PE 400B, 470. Analysis of physical fitness assessment techniques utilized in the field, e.g., field tests for aerobic capacity, pulmonary function, fat estimation, and anthropometry. Lecture 3 hours, activity 3 hours.

475 Proseminar: Exercise Prescription and Implementation (3)

Prerequisites: PE 400B, 470. Development and implementation of exercise prescription for aerobic endurance, anaerobic power, strength, flexibility, and optimal body composition. Lecture 2 hours, laboratory 3 hours.

476 Administration of Fitness Programs (4)

Prerequisites: PE 472, 474, 475. Conducting fitness programs in private and public sectors, implementing exercise prescriptive techniques, feasibility studies, marketing fitness services, staffing, equipment purchasing, structuring the organizations.

477 Proseminar: Biomechanical Analysis of Human Motion (3)

Prerequisites: PE 400A, 470. Kinematic and kinetic bases of human motion; techniques of cinematographic analysis of sports skills and human movement. Lecture 2 hours, laboratory 3 hours.

478 Proseminar: Structural Kinesiology (3)

Prerequisites: PE 400A, 470. Structure of human body in gross motor movement; structural analysis of motor skills and conditioning exercises. Lecture 2 hours, laboratory 3 hours.

481 Theory and Analysis of Individual Sports (3)

Prerequisites: PE 281A, 281G, 281T. Theory, analysis, and advanced performance techniques of individual sports, emphasizing strategy and offensive and defensive systems. Lecture 2 hours, demonstration-laboratory 2 hours.

481 G Golf

Prerequisites: PE 160, 161,251 G for majors; consent of instructor for nonmajors.

481 S Self Defense

Prerequisite: PE 157S.

481T Tennis

Prerequisites: PE 160, 161, 257T for majors; instructor consent for nonmajors.

481 F Track and Field

Prerequisite: PE 151F or 151R.

481W Wrestling

Prerequisite: PE 157W.

482 Series: Theory and Analysis of Team Sports (3 each)

Prerequisite: Appropriate corresponding professional activity courses as indicated. Theory, analysis, and advanced performance techniques of team sports, emphasizing strategy and offensive and defensive systems. Lecture 2 hours, demonstration/laboratory 2 hours.

482B Baseball

Prerequisite: PE 152B.

482D Basketball

Prerequisite: PE 152D.

482F Football

Prerequisite: PE 152F.

482R Soccer

Prerequisites: PE 152R for majors; instructor consent for nonmajors.

482V Volleyball

Prerequisites: PE 152V and 161 for majors; consent of instructor for nonmajors.

482W Water Polo

Prerequisite: PE 153W.

483 Theory and Analysis of Aquatics (3)

Prerequisite: PE 283. Theory and analysis of performance techniques, historical knowledge, safety procedures, and conditioning. Lecture 2 hours, demonstration-laboratory 2 hours.

483D Diving

Prerequisites: PE 161 and 353D for majors; consent of instructor for nonmajors.

483S Swimming

Prerequisites: PE 161; 253S or 353S for majors; instructor consent for nonmajors.

486 Theory and Analysis of Square, Folk, and Social Dance (3)

Prerequisite: PE 286. Theory, analysis of performance techniques, and teaching progressions of square, folk, and social dance. Lecture 2 hours, demonstration-laboratory 2 hours.

488 Theory and Analysis of Fitness (3)

Prerequisite: PE 288. Theory and analysis of performance techniques; emphasis on components of fitness. Lecture 2 hours, demonstration-laboratory 2 hours.

488A Aerobics**488F Fitness****489 Theory and Analysis of Gymnastics and Tumbling (3)**

Prerequisite: PE 289. Theory and analysis of performance techniques, historical knowledge, safety procedures, and conditioning. Lecture 2 hours, demonstration-laboratory 2 hours.

490 Backpacking (3)

Techniques of hiking, planning, understanding, and learning the skills for safe backpacking experiences, including survival skills, ecology, and equipment.

490P Backpacking Practicum (1)

Corequisite: PE 490. Field experiences for backpacking skills. Field trips scheduled for weekends or quarter breaks.

492 Field Experience in Exercise Science(1-4)

Directed practicum or internship in a school, community agency, hospital, athletic club, or corporate business setting. Regular conferences with faculty.

496 Special Projects (1-3)

Prerequisites: Senior or graduate standing, consent of department chair and faculty member. Participation under faculty supervision in planning, preparing, presenting, and coaching Cal State L.A. sponsored intramural, extramural, or intercollegiate athletic activities. May be repeated for credit.

499 Undergraduate Directed Study (1-4)

Prerequisite: Consent of an instructor to act as sponsor. Project selected in conference with sponsor before registration; progress meetings held regularly, and final report submitted. May be repeated for credit.

SOCIAL WORK

School of Health and Human Services

DEPARTMENT OFFICE

King Hall C4069

Phone: (213)343-4680

The Department of Social Work offers the Bachelor of Arts degree in Social Work. Social work is a profession based on a set of values, scientific knowledge, and human relations skills and concerned with helping individuals, groups, and communities interact with and confront their environment. Social workers strive to create the societal conditions necessary to improve social functioning.

The social work program prepares students for careers in corrections, health, mental health, family/children's services, services to the disabled, substance abuse, work with the elderly, public welfare, neighborhood development, community services, probation and parole, residential treatment programs, industrial social work, planning, administration, organizing, and program development.

The Faculty

Emeritus: Phillip L. Carter.

Professors: E. Frederick Anderson (*Chair*), Shirley Jean Better, Nell A. Cohen, Roger Delgado, Airredo G. Gonzalez.

Bachelor of Arts Degree

The Bachelor of Arts degree in Social Work enables students to explore and develop values, knowledge and generalist skills essential to the practice of social work in a multiethnic environment. The goals of the program include: providing continuing education for persons already employed in the field of social work or related human services; preparing students for professional entry level positions in social work; and preparing students for further study in graduate schools of social work or related human services.

Required Advisement

All students desiring to pursue a social work major must confer with a department adviser during their first quarter in the program. During the first quarter of their junior year, students must meet again with an adviser to plan the remainder of their program. Transfer students must see an adviser in their first quarter of enrollment at Cal State L.A. It is strongly recommended that students meet at least once a year with their faculty adviser.

Sequence Recommendations

It is highly recommended that students observed suggested sequences because later course work assumes familiarity with prior course material. The following are strongly recommended or required:

- * Students who transfer without having completed equivalent courses should include PSY 150 or SOC 2010r 202 and SOC 20A or EDFN 452 among their first courses at Cal State L.A.;
- * SW 391 should be taken soon after 210A or EDFN 452;
- * SW 301 should be taken early in the major;
- * SW 370, prerequisite to SW 461, 474, and 475, should be taken early in the major;
- * SW 371 AB is part of the upper division core and should be taken early in the junior year;
- * All social work methods courses, i.e., SW 461, 472, 474, 475, should be taken before, or concurrently with, SW 495.

Requirements for the Major (70-71 units)

Required Courses (62-63 units):

SW 301 Writing for Social Work (4)

SW	370	Field of Social Work	(4)
SW	371AB	Social Work Practice, Human Behavior, and Social Environment	(4, 4)
SW	391	Social Work Research Methods	(4)
SW	461	Social Work Practice in Minority Communities	(4)
SW	472	Community Organization	(4)
SW	474	Casework Methods in Social Services	(4)
SW	475	Social Work with Groups	(4)
SW	478	Social Welfare Policy and Social Services	(4)
SW	495	Directed Field Experience	(4, 4, 4)
SW	496	Integrative Seminar	(1, 1, 1)
EDFN	452	Statistics in Education	(4) or
SOC	210A	Elementary Statistics	(3)
PSY	150	Introductory Psychology	(4) or
SOC	201	Principles of Sociology	(4) or
SOC	202	Society and Individual Development	(4)

Electives in Social Work and other fields (8 units):

Select with prior adviser approval.

Certificate Programs

The *Applied Gerontology credit certificate*, offered by the School of Health and Human Services, contains course work in social work and is available to both Social Work majors and others. The department also offers course work applicable toward the interdisciplinary credit certificate *Child Maltreatment and Family Violence* offered by the School of Health and Human Services.

Courses in Social Work (SW)

Upper Division Courses

PSY 150 or SOC 201 or 202, normally prerequisite to all upper 1 division SW courses, may be waived only with instructor consent.

301 Writing for Social Work (4)

Prerequisite: ENGL 102*. Reasoning and writing skills for comprehending and communicating information in social work.

**Students subject to earlier catalogs satisfy this prerequisite with ENGL 101 or 190.*

370 Field of Social Work (4)

Social welfare: historical development, analysis of structure, policies, and issues; emergence of social work profession; contemporary practices and policies of social welfare agencies.

371AB Social Work Practice, Human Behavior, and Social Environment (4, 4)

Prerequisite: PSY 150. Application of social work practice principles, values, knowledge, and skills in assessment of human behavior within context of social environment.

371 A Prenatal through early adolescence.

371 B Late adolescence through old age.

391 Social Work Research Methods (4)

Prerequisite: SOC 210A or EDFN 452. Scientific, analytic approach to knowledge building and practice in social work; experimental, quasi-experimental, and single subject research designs; sampling, survey methods, case studies, exploratory-descriptive studies, and evaluation research.

411 Computer Applications in Social Work (4)

Computers in field of social work and human service programs; includes use of DOS and major "applications" programs that have specific relevance to field of social work.

450 Crosscultural Practice with Aging Populations (4) Prerequisite: Upper division standing. Ethnic factors in aging; ethnic specific and comparative analysis of ethnicity as it influences sociocultural context of older persons, care giving, and service delivery and utilization.

454 Selected Topics in Social Work (1-6)

Current topics of special interest in social work, as announced in Schedule of Classes. May be repeated for credit.

455 Strategies for Preventing and Intervening in Family Violence and Abuse (4)

(also listed as NURS 455) Major theories used to explain family violence; emphasis on preventing abuse and intervening with victims across the age span; social policy and legal issues.

456 Multidisciplinary Teams, Child Maltreatment, and Family Violence (4)

Prerequisite: PSY 150 or SOC 201. Personal and professional responsibility in reporting, preventing, and treating child maltreatment; a multidisciplinary team approach to problems of child maltreatment and family violence.

461 Social Work Practice in Minority Communities (4)

Prerequisite: SW 370. Social work practice and its relationship to minority group communities; innovative methods of delivery of services; casework approaches, racism, role of social worker.

462 Institutional Racism and Poverty (4)

Prerequisite: SOC 201. Development of institutional racism and poverty; impact on social policy development and social service delivery; methods to reduce racism and poverty in America.

463 Women's Issues in Social Welfare (4)

Prerequisite: SW 370. Women's issues within social work practice areas; analysis of social welfare response to women's special concerns; social policy implications for future directions.

465 Programs and Policies Related to the Elderly (4) Prerequisite: Upper division standing.

Policies, programs, and service delivery systems related to the elderly; descriptive and normative analysis of social problems related to aging with emphasis on ethnic minorities.

472 Community Organization (4)

Examination of social work methods of purposive change in the community including community development, social action, and social planning; emphasis on empowerment, organizational change, and grass roots organizing.

474 Casework Methods in Social Services (4)

Prerequisite: SW 370 or graduate standing. Theories, concepts, and values used by social workers counseling individuals and families in child welfare, mental health, psychiatric, family service, correctional, medical, public assistance, and other agencies.

475 Social Work with Groups (4)

Prerequisite: SW 370. Historical development, empirical and theoretical knowledge underlying content and methods of group social work; role of group social worker in managing stages of group development; use of groups for treatment, prevention, social action; staff and volunteer training in correctional, community, and mental health agencies.

476 Child Welfare (4)

Services to families, children, and youth; the network of preventive and supportive services; child neglect and abuse; children and the legal system; foster care, institutional care, group homes, and adoptions.

478 Social Welfare Policy and Social Services (4)

Identifying, formulating, implementing, and evaluating social welfare policy options including: education, employment, health, mental health, housing, justice, public welfare, and social security; design and implementation of social service delivery systems.

479 Biofeedback and Stress Reduction (4)

Prerequisite: PSY 170 or SW 474 or BIOL 200B. Seminar about biofeedback theory; clinical applications and role in mental health and medical professions; relaxation and autogenic techniques as they augment biofeedback training with EEG, EMG, Temperature, GSR, and other instruments; opportunity to use instruments.

480 Social Work in the Criminal Justice System (4)

Development and application of individual, group, social change methods of social work in criminal justice system. Focus on methods used with victims and communities as well as offenders.

485 The Homeless in Society (4)

Prerequisite: SOC 2010r 202. The homeless and homelessness including cultural, health/mental health, sociopolitical, economic, legal issues, consequences; policy, programs, service delivery responses and options. Lecture 3 hours, laboratory 3 hours.

486 Probation and Parole (4)

(also listed as SOC 486) Prerequisite: SOC 480 or 482. History, philosophy, legal bases, and procedures governing investigation, treatment, and supervision of adjudged juvenile offenders and adult violators placed on probation and parole.

490 Latino Mental Health (4)

Prerequisite: SW 474 or other upper division course in mental health or counseling. Psychosociocultural aspects of mental health problems and issues within Latino community; factors affecting mental health, how professionals address them in social work and other human services; social work and human service implications for practice.

495 Directed Field Experience (4)

Prerequisites or corequisites: SW 472, 474, 475; corequisite: SW 496. Student internship in a social agency; supervised activities in application of theory and skills acquired in foundation courses. Must be repeated to total of 12 units. Graded CR/IVC.

496 Integrative Seminar (1)

Prerequisites or corequisites: SW 472, 474, 475; corequisite: SW 495. Examination of the relationship between social work theory and practice to provide integration of academic and directed social work field experiences. Must be repeated to total of 3 units.

497 Social Work Proseminar (4)

Prerequisite: Sixteen upper division SW units. Comprehensive survey and analysis of selected areas of social work inquiry as announced in Schedule of Classes. May be repeated once for credit.

499 Undergraduate Directed Study (1-4)

Prerequisites: Senior standing, 2.75 overall grade point average, consent of a faculty sponsor, approval of proposed project prior to registration, ability to assume responsibility for independent research and analysis. Regular discussion of progress with sponsor before presentation of final written report.

YOUTH AGENCY ADMINISTRATION

American Humanics, Inc. (AH)

PROGRAM OFFICE

Library North Lobby

Phone: (213) 343-4580

Program Director: Jan Mackay.

American Humanics, Inc. (AH), rounded in 1948 as a nonprofit program dedicated to developing professional leadership for the nation's youth-serving agencies, has established programs in selected colleges and universities throughout the U.S. The primary objective is to present a program that prepares professionals for careers with youth and human service agencies such as Boy Scouts, Girl Scouts, Camp Fire, 4-H, YMCA, YWCA, and others.

AH at Cal State L.A. provides a unique opportunity for students interested in youth agency administration careers to receive a specific, practical, educational emphasis. In addition to the course work and internship required for completion of the Voluntary Youth Agency Administration certificate program (listed below), the program affords participants many other services and opportunities. Among these are the AH Student Association, national conferences and seminars, personal counseling, career placement, an annual retreat, and a student loan and scholarship program.

The Faculty

The faculty for the American Humanics program is interdisciplinary in nature, representing the various departments whose courses comprise the certificate program offered. The program is coordinated by the American Humanics program director.

Certificate Program in Voluntary Youth Agency Administration

This credit certificate program, which is intended to prepare professionals for careers in youth agency administration, requires a minimum of 36 units, selected in consultation with the American Humanics director. The program includes course work in seven major areas and an internship designed specifically for the program. In addition to the requirements listed below, students who have not taken CHS 111, PAS 101, or SOCS 180 as part of their general education program must complete SOC 460.

Students should plan their program with careful attention given to prerequisites for upper division courses. Refer to the Undergraduate Study chapter of this catalog for general regulations governing all certificate programs.

Requirements for the Certificate (36 units)

Accounting and Budgeting (select 4 units from)

ACCT	202	Survey of Accounting	(4)
POLS	466	Public Financial Administration	(4)

Community Organization (select 4 units from)

CRIM	439	Juvenile Law and Procedure	(4)
PSY	445	Community Psychology	(4)
SW	472	Community Organization	(4)

Counseling and Group Work (select 4 units from)

COUN	406	Behavioral Counseling and Self-Management	(4)
PSY	405	Group Methods for Psychological Intervention	(4)
SOC	420	Small Groups	(4)
SW	461	Social Work Practice in Minority Communities	(4)
SW	475	Social Work with Groups	(4)

Personnel Management (select 4 units from)

MGMT	473	Personnel Management	(4)
POLS	463	Public Personnel Administration	(4)
POLS	472	Organization and Management	(4)
PSY	446	Employment and Personnel Psychology	(4)

Public Relations and Communication (select 4 units from)

JOUR	496	Publicity and Public Relations	(4)
POLS	470	Public Relations in Government	(4)
PSY	420	Psychology of Communications	(4)
SOC	424	Mass Communications and Public Opinion	(4)
SPCH	430	Organizational and Professional Communications	(4)
SPCH	489	Intercultural Communication	(4)

Youth Agency Administration (8 units)

SW	476	Child Welfare	(4)
YAA	290	Introduction to Youth Agency Administration	(4)

Fund Raising (4 units)

YAA	490	Volunteer Management and Fund Raising	(4)
-----	-----	---------------------------------------	-----

Internship (4-6 units)

YAA	495	Directed Field Experience	(4-6)
-----	-----	---------------------------	-------

Elective (1-4 units)

YAA	499	Undergraduate Directed Study	(1-4)
-----	-----	------------------------------	-------

Courses in Youth Agency Administration (YAA)**Lower Division Course****290 Introduction to Youth Agency Administration (4)**

History, philosophy, programs, and organization of the major national voluntary youth service agencies from a professional management perspective; role of the professional executive; the nature of volunteerism. Required field visits.

Upper Division Courses**490 Volunteer Management and Fund-Raising (4)**

Prerequisite: YAA 290. Development of executive skills in managing volunteers and raising funds for youth-serving agencies; sources and techniques of financial development for community agencies; management of voluntary staff and directorial boards.

495 Directed Field Experience (4-6)

Prerequisites: YAA 290, instructor consent, agency acceptance. Student placement to provide experience under supervision in a youth agency; individual evaluative conferences. Graded CR/NC.

499 Undergraduate Directed Study (1-4)

Prerequisites: YAA 290, upper division standing, consent of a faculty sponsor, approval of program coordinator, approval of proposed project prior to registration, ability to assume responsibility for independent research and analysis. Project selected in conference with sponsor; progress meetings held regularly and a final report submitted. May be repeated to maximum of 4 units.

SCHOOL OF NATURAL AND SOCIAL SCIENCES

ANTHROPOLOGY
BIOLOGY AND MICROBIOLOGY
CHEMISTRY AND BIOCHEMISTRY
CHICANO STUDIES
GEOGRAPHY AND URBAN ANALYSIS
GEOLOGICAL SCIENCES
HISTORY
LATIN AMERICAN STUDIES
MATHEMATICS AND COMPUTER SCIENCE
PAN-AFRICAN STUDIES
PHYSICAL SCIENCE
PHYSICS AND ASTRONOMY
POLITICAL SCIENCE
PSYCHOLOGY
SOCIAL SCIENCE
SOCIOLOGY
INTERCOLLEGIATE ATHLETICS
UNIVERSITY COURSES

ANTHROPOLOGY

School of Natural and Social Sciences

DEPARTMENT OFFICE

King Hall C4068

Phone: (213) 343-2440

The Department of Anthropology offers a wide range of courses in the biological origins and variation of humankind, the prehistoric record, and particularly, the comparative study of contemporary world cultures. The department offers courses that support programs in the social, behavioral, and life sciences. In addition to preparing students for advanced study or a professional career in anthropology, the degree provides a broad liberal education appropriate to careers in business, law, government service, and teaching. The Bachelor of Arts degree program is described below. The Master of Arts degree program is described in the *Graduate Programs* section.

The Faculty

Emeriti: Robert H. Ewald, Arthur H. Niehoff, Fred M. Reinman, Richard L. Stone, Jeannette R. Witucki.

Professors: Norman Klein (*Chair*), Catherine Martin, Jon L. Olson, Elliott Oring, Mary Elizabeth Shutler.

Assistant Professors: Raquel Ackerman, James R. Bell, Patricia Martz, Chorswang Ngin.

Adjunct Assistant Professor: Maxene Johnston.

Bachelor of Arts Degree.

The Bachelor of Arts degree in Anthropology is available for those who seek a liberal arts education or who wish to prepare for advanced study and research.

Departmental Honors Program

The Department of Anthropology offers an *honors program* for students who have completed at least 16 upper division units in anthropology, who have a minimum 3.25 grade point average in all anthropology courses, and who possess a minimum 3.0 grade point average in all college work. Application to the program is made by written petition.

The program is designed to introduce superior students to intensive research experience in anthropology and related fields, as well as to more sophisticated and thorough study of anthropological theory in relevant subareas of the discipline. Honors students are permitted to depart from the normal major program in various ways to broaden and enrich their curriculum.

Honors students plan their programs in consultation with an honors adviser. Students enroll during each of their final three quarters in ANTH 396, and submit a written thesis to the departmental honors committee. Diplomas and transcripts of honors program graduates are designated: "*Graduated with Departmental Honors in Anthropology.*"

Requirements for the Major (62 units)

The major requires 62 units in anthropology, of which 8 are in lower division and 54 are in upper division courses. In addition, students must include 12 units of a modern foreign language in their lower division program or offer proof of successful completion of three years of modern language study in high school as an acceptable equivalent. An additional acceptable equivalent can be the successful completion of three upper division courses in linguistics, ANTH 470/ENGL 403; ANTH 471/ENGL 400; and ANTH 472.

Lower Division Required Courses (8 units):

ANTH 250 Cultural Anthropology (4)

ANTH 260 Physical Anthropology (4)

Upper Division Required Courses (8 units):

ANTH 430 Social Organization (4)

ANTH 497 History of Ethnological Theory (4)

Electives (34 units):

Select two from following (8 units):

ANTH 401,404, 406-408, 410, 413, 414

Select one from following (4 units):

ANTH 421,423, 425

Select one from following (6 units):

ANTH 424, 464, 480

Select one from following (4 units):

ANTH 432, 434, 437

Select one from following (4 units):

ANTH 435, 444, 445, 462

Select one from following (4 units):

ANTH 460, 461,462

Select one from following (4 units):

ANTH 470/ENGL 403 or

ANTH 471/ENGL 400

Additional Electives (12 units):

Select courses in anthropology to complete upper division minimum of 54 units. Beyond this minimum, students are encouraged to add elective courses from other disciplines, in consultation with major advisers.

Minor in Anthropology

A minor in Anthropology is available for students majoring in other fields. A total of 28 units in anthropology, of which 8 units are in lower division courses and 20 units are in upper division courses, is required.

Requirements for the Minor (28 units)

Lower Division Required Courses (8 units):

ANTH 250 Cultural Anthropology (4)

ANTH 260 Physical Anthropology (4)

Upper Division Electives (20 units):

Select two from following (8 units):

ANTH 401,404, 406, 407, 408, 410, 413,414, 421,425

Select one from following (4 units):

ANTH 430, 497

Select two from following (8 units):

ANTH 432, 435, 437, 443, 444, 445, 460, 461,462, 470, 471

Courses in Anthropology (ANTH)

Lower Division Courses

250 Cultural Anthropology (4)

Exploration of concept of culture, evolution of cultural systems, application of concept of culture to selected anthropological problems, relevance of concept of culture to modern life. **CAN ANTH 4**

260 Physical Anthropology (4)

Origin and antiquity of the human species and its place in nature, fossil evidence for human evolution, varieties of humans, somatological and genetic bases for racial classifications.

CAN ANTH 2

265 The Cultural Animal (4)

Exploration of the human biocultural experience. Perspectives on the human primate inheritance in the formation of cultural behavior and cultural organizations *CAN ANTH 6*

270 Introduction to Archeology (4)

Introduction to world prehistory, examination of basic archaeological concepts, investigation of extinct cultures.

Upper Division Courses**350 Evolution of Culture (4)**

Prerequisite: GE social science requirement. The interrelationships of human biological and cultural evolution, with an emphasis on changing adaptive patterns and sociocultural organization.

396 Honors Thesis (1-3)

Prerequisite: Admission to *honors program* in Anthropology. Preparation of an honors thesis, under supervision of an adviser, acceptable to departmental honors committee. May be repeated to maximum of 6 units.

400 Primate Behavior and Human Emotion (4)

Prerequisite: BIOL 155 *or* PSY 270. Scientific explanations of primate behavior in various ecological settings and of its relationship to human behavior and emotions.

401 Comparative Cultures (4)

Prerequisite: ANTH 250. Principal culture types and their geographical distribution, application of cultural data to ethnological problems.

404 Peoples of South America (4)

Prerequisite: ANTH 250. Prehistoric, historic, and contemporary cultures of South America, with emphasis on sociological and ethnological principles of analysis and comparison.

406 Indians of North America (4)

Prerequisite: ANTH 250. Native peoples of North America north of Mexico, their origins, culture change after contact with Europeans.

407 Indians of California (4)

Prerequisite: ANTH 250. Native peoples of California, their origins, languages, and cultures.

408 Peasant Cultures of Middle America (4)

Prerequisite: ANTH 250. Pre-Spanish civilizations of Mexico and Central America, the conquest and colonial backgrounds of present-day peoples, contemporary societies and cultures of area.

410 Peoples of the Pacific (4)

Prerequisite: ANTH 250. Island peoples of Polynesia, Melanesia, and Micronesia, migration theories, contemporary social and political systems, European contacts and culture change.

413 Peoples of Africa (4)

Prerequisite: ANTH 250. Historical and cultural backgrounds of traditional and contemporary societies of Africa south of the Sahara, Western and Asian influences, problems of social, economic, and political development.

414 Peoples of Asia (4)

Prerequisite: ANTH 250. Peoples and cultures of Asia; interrelationships of contemporary groups and dynamics of culture change. Emphasis alternates among four areas: Japan and Korea; South Asia; Southeast Asia; China. May be repeated until all areas of emphasis are covered.

421 Archeology of North America (4)

Prerequisite: ANTH 250. Early peopling of North America and development of prehistoric cultures in New World north of Mexican high culture area.

423 Primitive Technology (4)

Prerequisite: ANTH 250. Investigation of role of technology in early human culture, materials and use of tools during human evolution, techniques of manufacturing, and influence of early technology in culture.

424 Archaeological Research Techniques (6)

Prerequisites: ANTH 270 or 407 or 421; instructor consent. Instruction in recovery and interpretation of archaeological data. Lecture 4 hours, laboratory and field work 6 hours. May be repeated to maximum of 12 units.

425 Archeology of the Old World (4)

Prerequisite: ANTH 250. Growth of culture from its earliest beginnings to emergence of great civilizations, utilizing concepts, methods, and data of archeology.

430 Social Organization (4)

Prerequisites: ANTH 250 or 4010r SOC 414 or 444; instructor consent. Systems of kinship and marriage, with reference to social control, religion, law, politics, and economic organization.

432 Anthropology of Wealth and Power (4)

Prerequisite: ANTH 250. Theoretical perspectives and comparative ethnographic analyses of political-economic systems of pre-industrial societies ranging from bands through contemporary peasantry.

434 Anthropology in A Changing World (4)

Prerequisite: ANTH 250. Examination of culture change; review of various theoretical positions, and application of anthropological concepts and data to crises facing contemporary societies.

435 Culture and the Individual (4)

Prerequisite: ANTH 250. Exploration of conformity and deviance in society through the comparative study of personality formation in different cultural and subcultural settings.

437 Magic, Witchcraft, and Religion (4)

Prerequisite: ANTH 250. Investigation of the domain of the sacred and supernatural in both technologically primitive and advanced societies. Emphasis on magic, witchcraft, taboo, myth, ritual, belief systems, and religious symbols.

438 Sex Roles in Crosscultural Perspective (4)

Prerequisite: ANTH 250. Evolutionary and comparative approach to study of roles of men and women in societies past and present.

443 Anthropology and Education (4)

Prerequisite: ANTH 250. Education in crosscultural perspective; application of anthropological concepts and knowledge to understanding of educative process.

444 Medical Anthropology (4)

Prerequisite: ANTH 250 or SOC 2010r 202. Medical practice within sociocultural perspective; applying anthropological concepts and knowledge to an understanding of health, illness, and curing.

445 Myth and Folklore (4)

Prerequisite: ANTH 250 or AMER 405. Basic forms of folklore including myth, legend, tale, song, and custom in cultural context, with attention to their origin, transmission, performance, function, and meaning.

446 Anthropological Film (5)

Prerequisite: ANTH 250. Survey of films and approaches to film making in anthropology; methods of presenting data and theoretical analysis in film; practice in using film and videotape in field research. Lecture 3 hours, field activity 4 hours.

450 Culture and Innovation (4)

Prerequisite: GE social science requirement. The creative experience and its cultural parameters; effect of culture in structuring the innovative process; emphasis on forces that initiate, direct, and impede the course of creative effort.

454L, P Special Topics in Anthropology (1-6)

Prerequisites: As needed for specific topic. Topics of special interest in anthropology, as announced in *Schedule of Classes*. May be repeated for credit as subject matter changes.

460 Human Evolution (4)

Prerequisite: ANTH 260. Critical examination of fossil evidence for human evolution considering importance of cultural evolution. Emphasizes recent discoveries and controversial theories surrounding them.

461 Human Variation (4)

Prerequisite: ANTH 260. Evaluation of culture and environmental influences upon composition and distribution of human populations; consideration of genetic basis for human variation and biological validity of race concept.

462 Human Ecology and Adaptation (4)

Prerequisite: ANTH 260. Comparative study of the ecological adaptations of diverse human populations to their environments.

464 Methods and Techniques of Physical Anthropology (6)

Prerequisites: ANTH 260, instructor consent. Methods of data gathering and analysis in physical anthropology, including consideration of practical problems in field research and advantages and limitations of various field and laboratory techniques. Lecture 4 hours, laboratory 6 hours. May be repeated to maximum of 12 units.

470 Language and Culture (4)

(also listed as ENGL 403) Prerequisite: ANTH 250. Nature, origin, and evolution of language; survey of approaches and studies illustrating variations in the relation of habitual thought and behavior to language.

471 Introduction to Linguistics (4)

(also listed as ENGL 400) Prerequisite: Upper division standing. Descriptive and historical study of language; problems of data collection and techniques of analysis, linguistic structure, language classification, language families of the world, language in its sociocultural setting.

472 Linguistic Analysis (3)

Prerequisite: ANTH 471 (may be taken concurrently); 250 recommended. A problems course in anthropological techniques of phonemic and morphemic analysis; close reading of technical, descriptive literature; survey of phonological and grammatical systems of non-Indo-European languages.

480 Anthropological Methods and Techniques (6)

Prerequisites: ANTH 250; instructor consent. Introduction to methodology of anthropological research, including methods of ethnographic investigation, ethnological analysis, and logical processes of problem solving. Lecture 4 hours, laboratory and field work 6 hours.

497 History of Ethnological Theory (4)

Prerequisites: Senior or graduate standing, 16 units of anthropology and/or sociology, as approved by instructor. Historical survey and analysis of major schools of anthropological thought.

499 Undergraduate Directed Study (1-8)

Prerequisite: Instructor consent to act as sponsor. Project selected in conference with sponsor before registration, progress meetings held regularly, and final report submitted. May be repeated to maximum of 8 units.

BIOLOGY AND MICROBIOLOGY

School of Natural and Social Sciences

DEPARTMENT OFFICE

Biological Sciences 142

Phone: (213) 343-2050

The Department of Biology and Microbiology offers programs leading to Bachelor of Science and Master of Science degrees in Biology, a Bachelor of Arts and Master of Science degrees in Microbiology, and a Bachelor of Science degree in Medical Technology. Students pursuing degrees in Microbiology or Medical Technology may qualify for entrance to medical or dental schools by including appropriate elective courses in their program. The department also offers Master of Science degrees in Biology and in Microbiology; these programs are described in the *Graduate Programs* section.

The Faculty

Emeriti: Samuel M. Caplin, Brian Capon, William R. Hanson, James V. Harvey, George Jakway, Donald C. Lowrie, Evan Oyakwa, Mercer Price Russell, Joseph T. Seto, Louis W. Stearns, Richard M. Straw, Velma Vance.

Professors: Wayne Paul Alley, Roger R. Bowers, Theodore J. Crovello, Margaret J. Hartman, James Henrickson, Margaret Jefferson, Genaro A. Lopez, Rosemarie Marshall, Alan E. Muchlinski, David Pearson (*Chair*), Betsy Peitz, Carlos D. Robies, Howard Rosen, Mercer Price Russell, Richard J. Vogl.

Associate Professors: Kenneth L. Anderson, Robert A. Desharnais, Richard W. Fleming, Alan H. Goldstein, Daniel P. Mahoney.

Assistant Professors: Mark Steven Cook, John A. Gamon, Beverly Krilowicz, Nancy L. McQueen, Robert R. Nakamura, Sandra B. Sharp.

Bachelor of Science Degree

The Bachelor of Science degree in Biology provides a balanced blend of traditional and modern biology, incorporating the important generalizations of traditional biology with the more recent advances. The degree may lead to graduate study in biology; entrance into professional schools in medicine, dentistry, or pharmacy; and employment in applied or technical aspects of biology and environmental science. In addition to the usual course offerings, the Department of Biology and Microbiology participates in the Southern California Ocean Studies Institute (SCOSI) and the California Desert Studies Consortium which are explained in detail under *Consortia* in the first chapter of this catalog. Students who complete this program may receive an examination waiver for the Single Subject credential in Life Science for secondary school teaching.

Departmental Honors Program

The Department of Biology and Microbiology offers an *honors program* for upper division Biology students who have completed 94 quarter units, including 40 units in the major, with a minimum B (3.0) grade point average both overall and in the major. Students shall have completed 24 units of the major in residence at Cal State L.A.

"The *honors program* introduces superior students to intensive research experience in biology. Honors students are assisted by an honors adviser and two other committee members. Enrollment in BIOL 396, Honors Study in Biology, for 5 units is required, and enrollment in BIOL 499, Undergraduate Directed Study, for 1-4 units, is optional. A prospectus, a written thesis, and a final oral examination about the thesis, administered by the committee, are required parts of the program. Diplomas and transcripts of *Honors Program* graduates are designated: "*Graduated with Departmental Honors in Biology.*"

Bachelor of Arts Degree in Microbiology

The Bachelor of Arts major in Microbiology provides basic training in microbiology and such related fields as chemistry to qualify students for graduate study in the field or various types of federal employment; civil service employment, particularly as a public health microbiologist; microbiological work in such industrial fields as the pharmaceuticals, brewing, industrial fermentations, and the dairy industry; work as a hospital microbiologist; or research technician positions in various university research projects.

Requirements for the Major (116 units)

A total of 186 units is required, of which 116 units are in the major. Students planning to become public health microbiologists are advised to include BIOL 103 and 485 in their program.

Lower Division Required Courses (58 units):

MICR	200AB	General Microbiology	(5, 3)	
BIOL	101,102	Principles of Biology I, II	(5, 5)	
CHEM	101-103	General Chemistry I-III	(5, 5, 5)	
CHEM	201	Quantitative Analysis	(5)	
MATH	102	College Algebra	(4)	
MATH	103	Algebra and Trigonometry	(4)	
PHYS	101-103	Physics	(4, 4, 4)	

Upper Division Required Courses (58 units):

MICR	301	General Medical Microbiology	(4)	
MICR	302	Pathogenic Bacteriology	(5)	MICR 304
		Immunology and Serology	(5)	MICR 331
		Structure and Function of Bacteria	(3)	
MICR	340	Microbial Genetics	(3)	
MICR	401	General Virology	(3)	
MICR	412	Epidemiology	(4)	
MICR	430	Bacterial Physiology	(3)	
MICR	433	Bacterial Physiology Laboratory	(2)	
CHEM	301ABC	Organic Chemistry	(3, 3, 3)	
CHEM	302AB	Organic Chemistry Laboratory	(2, 2)	
CHEM	431ABC	Biochemistry	(3, 3, 3)	
CHEM	432AB	Biochemistry Laboratory	(2, 2)	

Bachelor of Science Degree in *Biology*

Requirements for the Major (113-118 units)

Of the 198 units required for the Bachelor of Science degree in Biology, the major requires 113-118. Competence in mathematics through MAT 230 is required. *It is recommended that students complete at least one year of a foreign language.*

Successful completion of the major requires a minimum (2.0) overall grade point average in required courses taken in residence and in all required courses (in residence and transferred). At least 16 units of upper division course work that fulfills major requirements must be taken in residence (not to include courses graded CR/NC).

Lower Division Required Courses

(48-53 units):

BIOL	101--103	Principles of Biology I-III	(5, 5, 3)	
CHEM	101	General Chemistry I	(5) plus	
CHEM	122, 123	Principles of Chemistry	(5, 5) or	
CHEM	101-103	General Chemistry I--III	(5, 5, 5) plus	
CHEM	201	Quantitative Analysis	(5)	MATH 206
		Calculus I: Differentiation	(4)	
MATH	230	Calculus for Biologists	(4)	
PHYS	101-103	Physics	(4, 4, 4) or	
PHYS	121-123	Physics (with calculus)	(4, 4, 4)	

Upper Division Required Courses (33 units)

BIOL	302	Biometrics	(4)	
BIOL	315	General Genetics	(4)	
BIOL	330	Cell Biology	(4)	
BIOL	357	Writing for Biologists	(4)	
BIOL	360	General Ecology	(4)	
CHEM	301ABC	Organic Chemistry	(3, 3, 3) and	
CHEM	302AB	Organic Chemistry Lab	(2, 2)	

Electives (32 units):

With prior written approval of their adviser, students must select certain upper division courses in biology and other natural sciences, mathematics, and physical sciences. No upper division course with the suffix N or upper division general education course may be used to fulfill major requirements.

Bachelor of Science Degree in Medical Technology

The Bachelor of Science major in Medical Technology provides opportunities for students to obtain academic instruction needed to qualify graduates for positions as registered medical technologists. The program has been approved for training of medical laboratory technologists. Upon completion of this major, plus the required training in a hospital laboratory, students are eligible to take the examination to become a Registered Medical Technologist. This certification generally is required for employment in hospitals, public health laboratories, and certain private, state, and federal research laboratories.

Requirements for the Major (124-132 units)

A total of 196 units is required for the degree, of which 124--132 units are in the major.

Lower Division Required Courses (61 units):

MICR	200AB	General Microbiology	(5, 3)	
BIOL	101-103	Principles of Biology I-III	(5, 5, 3)	
CHEM	101-103	General Chemistry I-III	(5, 5, 5)	
CHEM	201	Quantitative Analysis	(5) MATH	102
		College Algebra	(4)	
MATH	103	Algebra and Trigonometry	(4)	
PHYS	101-103	Physics	(4, 4, 4)	

Upper Division Required Courses (51 units):

MICR	301	General Medical Microbiology	(4)	
MICR	302	Pathogenic Bacteriology	(5) MICR	304
		Immunology and Serology	(5) MICR	320
		Hematology(3)		
MICR	340	Microbial Genetics	(3)	
BIOL	485	Medical Parasitology	(4)	
CHEM	301ABC	Organic Chemistry	(3, 3, 3)	
CHEM	302AB	Organic Chemistry Laboratory	(2, 2)	
CHEM	431ABC	Biochemistry	(3, 3, 3)	
CHEM	432A	Biochemistry Laboratory	(2)	
CHEM	433	Clinical Biochemistry	(3)	

Electives (select 12-20 units from following with adviser approval):

MICR 203, 331, 401-403, 412, 420, 430, 433, 460

BIOL 200AB, 302, 315

CS 190, 290

Minor in Biology

A Biology minor, which is available for students majoring in other fields, offers a general exposure that is beneficial in some areas of environmental science, recreation, conservation, and comparable fields.

A total of 29-34 units is required, including 18--22 units in lower division courses and 11-12 units in upper division electives.

Successful completion of the minor requires a C (2.0) overall grade point average for required courses taken in residence and for all required courses (in residence and transferred). At least 8 units of upper division course work that fulfills requirements of the minor must be taken in residence (not to include courses graded CR/NC).

Requirements for the Minor (29-34 units)

Lower Division Required Courses (18-22 units)

BIOL 101, 102, 103

CHEM 151

MATH102 (May be met by satisfactory performance on mathematics placement examination or by high school preparation certified as adequate by Department of Mathematics and Computer Science)

Upper Division Electives in Biology (11-12 units):

With adviser approval, choose 3 courses from among upper division courses in biology, excluding 454L,P, 499, and courses with the suffix N.

Minor in Microbiology

The Department of Microbiology offers a minor in *Microbiology* for students majoring in other fields. The minor consists of a 22-unit core and 8 units of electives. The purpose of this minor is to allow students from a variety of related majors the opportunity to focus a portion of their baccalaureate course work on microbiology in order to qualify them for postbaccalaureate positions requiring such knowledge. Chemistry 101,301 AB, and 302AB are prerequisite to several of the courses in the minor. Interested students are urged to consult with a microbiology faculty member for advisement before beginning the minor.

Requirements for the Minor (30 units)

Required Core (22 units)

BIOL	102	Principles of Biology II	(5)
CHEM	102	General Chemistry II	(5)
MICR	200AB	General Microbiology	(5, 3)
MICR	301	General Medical Microbiology	(4)

Electives (select 8 units from following)

MICR 302, 304, 331,340, 401,402, 412, 430, 433

The Credential Program

The Bachelor of Science degree program in Biology has been approved by the Commission on Teacher Credentialing for examination waiver for the Single Subject credential in Life Science. Students should consult advisers in the department and in the School of Education. Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs.

Supplementary Authorization for Single Subject Teaching Credential (30 units)

Holders of a *Single Subject* teaching credential, issued by the state of California in a subject other than Life Sciences may supplement that credential with an authorization in *Biology* for teaching biology at any grade level through grade 12 or in classes organized primarily for adults by completing the following program with a grade of C or higher in each course. For other requirements governing issuance of this authorization, consult the School of Education.

Complete or demonstrate proficiency in each of the following courses(30 units):

BIOL	101-103	Principles of Biology I-III	(5, 5, 3)
BIOL	200A	Human Anatomy and Physiology I	(5)
BIOL	302	Biometrics	(4)
BIOL	315	General Genetics	(4)
BIOL	360	General Ecology	(4)

Courses in Biology (BIOL)

Lower Division Courses

101 Principles of Biology I (5)

Prerequisite: One year of high school biology. Introduction to organismic animal biology, survey of phyla, function and development of organ systems, and adaptation to environment. Recommended for science majors. Lecture 3 hours, laboratory 6 hours. BIOL 101+102+103 = CAN BIOL SEQ A

102 Principles of Biology II (5)

Prerequisite: One year of high school biology. Survey of plant phyla, relationships of structure to function, unique adaptations to environment; evolution and economic roles of plants.

Recommended for science majors. Lecture 3 hours, laboratory 6 hours BIOL 101+102+103 = CAN BIOL SEQ A

103 Principles of Biology III (3)

Prerequisites: Grades of C or higher in BIOL 101 and 102. Corequisite: CHEM 101 or 151. Principles of genetic coding and transfer, ecology, and evolution. BIOL 101+102+103 = CAN BIOL SEQ A

140 Science Orientation (2)

(also listed as CHEM 140) Prerequisite: Instructor consent. Exploration of skills essential for success in the sciences; presentations by professional scientists. No credit toward science majors. Graded CR/NC.

154 Selected Topics in Biology (1-4)

Topics of current interest in biology as announced in *Schedule of Classes*. No credit toward Biology major or minor.

155 Natural History of Animals (4)

Biology of animals with emphasis on their adaptations to the environment and evolution and their importance to humans. Lecture 3 hours, laboratory 3 hours No credit toward biology major or minor.

156 Natural History of Plants (4)

Biology of plants with emphasis on their adaptations to the environment and evolution and their importance to humans. Lecture 3 hours, laboratory 3 hours No credit toward biology major or minor.

165 Humans and the Biological Environment (4)

Biological implications of the effect of humans on the environment. Emphasis on biological problems created by overpopulation and pollution. Designed for students not majoring in sciences. No credit toward Biology major or minor.

168 Marine Biology (4)

Natural history and survey of marine organisms with emphasis on their adaptations to their environments. Effects of human exploitation of marine wildlife No credit toward Biology major or minor.

200A Human Anatomy and Physiology I (5)

Prerequisite or corequisite- CHEM 151. Structure and function of the cell and tissue; anatomy and physiology of the skeletal, muscular, digestive, and urinary systems. Lecture 3 hours, laboratory 6 hours. No credit toward Biology major or minor.

200B Human Anatomy and Physiology II (5)

Prerequisite: BIOL 200A. Anatomy and physiology of the cardiovascular, respiratory, nervous, endocrine, and reproductive systems. Lecture 3 hours, laboratory 6 hours No credit toward Biology major or minor.

201 Structure of Human Body (5)

Human anatomy from cellular to systems level of organization; articulations, skeletal, muscular systems. Lecture 3 hours, laboratory 6 hours No credit toward Biology major or minor or Nursing major.

202 Function of Human Body (5)

Prerequisite: BIOL 201. Functions and control processes of human body; musculoskeletal activity; neural, endocrine integration. Lecture 3 hours, laboratory 6 hours No credit toward Biology major or minor or Nursing major.

Upper Division Courses

302 Biometrics (4)

Prerequisites: Grade of C or higher in BIOL 103; MATH 103. Statistical analysis applied to biological problems, with emphasis on sampling, experimental design, chi-square analysis, t-test, analysis of variance, regression analysis, and correlation analysis. Lecture 3 hours, laboratory 3 hours.

315 General Genetics (4)

Prerequisites: BIOL 302. Principles of classical and molecular genetics as demonstrated in plants, animals, and microorganisms; emphasis on mechanisms of inheritance, structure of genetic material, breeding experiments with suitable organisms, analysis and interpretation of data. Lecture 3 hours, laboratory 3 hours.

319N Human Genetics (4)

Prerequisite: BIOL 155. Basic principles of genetics and their applicability to human heredity; emphasis on race; IQ; diseases; counseling; social, ethical, and legal implications of genetic research; historical misuse of genetic information *No credit toward Biology major or minor.*

321 N Institutional Racism: The Social Darwinian Rationale (4)

Prerequisite: BIOL 155, 156, or 165. Scientific criticism of Social Darwinian precepts of the racial basis of human potential; "Scientific" rationalization of discriminatory social policy *No credit toward Biology major or minor.*

330 Cell Biology (4)

Prerequisites: BIOL 302, CHEM 301A. Structure and function of the cell surface, membranes, organelles, and of the cytosol; control of information flow and of metabolism. Lecture 3 hours, laboratory 3 hours.

350N Evolution of Life (4)

(also listed as CHEM 350N) Prerequisite: GE natural science requirement. Biochemical origins of life from the newly formed planet Earth through the evolution of higher groups of both plants and animals. *No credit toward Biology or Chemistry major or Biology minor.*

357 Writing for Biologists (4)

Prerequisites: BIOL 302, ENGL 102*. Introduction to writing skills and techniques necessary for presentation of biological information; intensive practice in writing abstracts, reports, reviews, and other forms of scientific papers.

**Students subject to earlier catalogs satisfy this prerequisite with ENGL 1010r 190.*

358N Science and Controversy (4)

(also listed as CHEM 358N, CS 358N, and PHYS 358N) Prerequisite: GE natural science requirement. Scientific background of issues that affect public welfare, such as genetic technology, chemical pesticides, and energy production and utilization *No credit toward Biology, Chemistry, Computer Science, or Physics major or Biology minor.*

360 General Ecology (4)

Prerequisite: BIOL 302. Relation of plants and animals to their environment and to each other; environmental complexes, ecological life histories, and relationships among individuals in populations and communities. Lecture 2 hours, laboratory and field work 6 hours.

361 N Ecology of the Urban Environment (4)

Prerequisite: BIOL 155 or 156. Influences of urbanization on natural plant and animal communities with special emphasis on the Los Angeles basin; ecological consideration of effects of agriculture, housing, natural areas, pollution, parks, and recreational areas. Lecture 2 hours, discussion 1 hour, laboratory 3 hours including field trips *No credit toward Biology major or minor.*

396 Honors Thesis (1--5)

Prerequisites: Upper division standing, 40 units in the major, ENGL 102*, admission to Biology Honors Program. Independent research in biology; regular consultations with research adviser; written thesis required. Student must complete 5 units before submitting thesis and receiving grade.

**Students subject to earlier catalogs satisfy this prerequisite with ENGL 1010r 190.*

401 Microtechniques (4)

Prerequisites: CHEM 301 C, upper division standing in a biological science major. Preparative and histochemical study of cells and tissues, including squash, sectioning, and staining methods. Lecture 1 hour, laboratory 9 hours.

402 Electron Microscopy (4)

Prerequisites: Senior standing in a biological or physical science major, instructor consent. Theory of electron microscopy; practical experience in the preparation of biological and physical materials

for examination and operation of transmission and scanning electron microscope. Lecture 1 hour, laboratory 9 hours.

408 Experimental Design and Advanced Biometry (4)

Prerequisite: BIOL 302. Experimental design in statistical procedures, advanced topics in analysis of variance, linear and nonlinear regression analysis, covariance; introduction to multivariate techniques used in biological research. Lecture 3 hours, laboratory 3 hours.

414 Cytogenetics (4)

Prerequisites: BIOL 315, 330. Physical basis of hereditary in plants, animals, and humans; structure, number, and behavior of chromosomes in normal and abnormal conditions, karyotyping. Lecture 3 hours, laboratory 3 hours.

415 Population Genetics (4)

Prerequisite: BIOL 315. Forces that shape the genetic structure of populations; random genetic drift; mutation; natural selection; inbreeding; assortative mating; molecular evolution; quantitative genetics; ecological genetics. Lecture 3 hours, laboratory 3 hours.

416 Molecular Genetics (4)

Prerequisites: BIOL 315, CHEM 301 C. Special topics concerning chemical nature of genes, their replication, and their mode of action at molecular level.

417 Gene Manipulation (4)

Prerequisites: BIOL 315 or MICR 340; BIOL 330 or CHEM 431AB and 432A. Genetic engineering and its application in molecular biology and biotechnology.

418 Evolution (4)

Prerequisite: BIOL 315. Genetic and ecological bases of evolutionary changes in animals and plants; microevolution, speciation, and macroevolution.

422 Vertebrate Structure and Function (5)

Prerequisite: BIOL 103 with grade of C or higher. Evolution of vertebrate structure and functional morphology; evolutionary adaptations of vertebrates presented in a phylogenetic text. Lecture 3 hours, laboratory 6 hours.

424 General Embryology (4)

Prerequisites: Grade of C or higher in BIOL 103; CHEM 301C. Molecular biology of genetic programming, cellular events of early embryo-genesis, mechanisms of differentiation, and elements of organogenesis. Lecture 2 hours, laboratory 6 hours.

425 Plant Anatomy (4)

Prerequisite: Grade of C or higher in BIOL 103. Microscopic structure of vascular plants with emphasis on organization and functioning of meristems; structure, function, and differentiation of cells and tissues; development and comparative anatomy of stem, leaf, and root. Lecture 2 hours, laboratory 6 hours.

427 Fungi (4)

Prerequisite: Grade of C or higher in BIOL 103. Structure, development, physiology, and classification of fungi. Lecture 2 hours, laboratory 6 hours.

429 Animal Histology (5)

Prerequisite: Grade of C or higher in BIOL 103. Basic structural, chemical, and physiological aspects of tissues, recent advances in histological technology; traditional microscopic study of tissues and organs, primarily mammalian. Lecture 3 hours, laboratory 6 hours.

430 Plant Physiology I (4)

Prerequisites: Grade of C or higher in BIOL 103; CHEM 103. Growth and development, growth regulation, plant-water relations, mineral nutrition, photosynthesis and respiration. Lecture 2 hours, laboratory 6 hours.

431 Plant Physiology II (4)

Prerequisite: BIOL 430. Ecological physiology of plants: physiological adaptations to stress, seasonal environmental changes, aquatic and various terrestrial habitats. Lecture 4 hours.

433 Animal Physiology I (4)

Prerequisite: BIOL 330. Physiological phenomena at the organismic level. Muscular, nervous, endocrine, and reproductive systems; laboratory techniques and principles. Lecture 3 hours, laboratory 3 hours.

434 Animal Physiology II (4)

Prerequisite: BIOL 330. Physiological phenomena at organismic level; digestive, respiratory, excretory, and circulatory systems. Laboratory techniques and principles. Lecture 3 hours, laboratory 3 hours.

437 Advanced Cell Physiology (4)

Prerequisite: BIOL 330. A topical course on cellular phenomena such as information flow, bioenergetics, control mechanisms, motility phenomena, and molecular behavior of reactive surfaces. Lecture 3 hours, laboratory 3 hours.

438 Comparative Physiology (4)

Prerequisite: BIOL 330. Physiological principles and adaptations to the environment, with special emphasis on invertebrates; laboratory work includes independent projects. Lecture 3 hours, laboratory 3 hours.

440 Taxonomy of Angiosperms (4)

Prerequisite: Grade of C or higher in BIOL 103. Identification, classification, and nomenclature of angiosperms; speciation and population structure. Lecture 2 hours, laboratory or field work 6 hours; weekend field trips may be required.

442 Marine Botany (4)

Prerequisite: Grade of C or higher in BIOL 103. Taxonomy, morphology, and ecology of marine plants, with emphasis on the seaweeds. Lecture 2 hours, laboratory 6 hours.

444 Freshwater Algae (4)

Prerequisite: Grade of C or higher in BIOL 103. Taxonomy, morphology, and ecology of freshwater algae. Lecture 2 hours, laboratory 6 hours.

451 Ornithology (4)

Prerequisite: Grade of C or higher in BIOL 103. Taxonomy, distribution, physiology, life history, ecology, and behavior of birds. Lecture 2 hours, laboratory and field work 6 hours.

452 Ichthyology (4)

Prerequisite: Grade of C or higher in BIOL 103. Taxonomy, distribution, ecology, and physiology of fishes. Lecture 2 hours, laboratory and field work 6 hours.

453 Herpetology (4)

Prerequisite: Grade of C or higher in BIOL 103. Taxonomy, distribution, ecology, and physiology of amphibians and reptiles. Lecture 2 hours, laboratory and field work 6 hours.

454L, P Special Topics in Biology (1-4)

Prerequisites: Upper division standing, others as needed for specific topic. Topics of current interest in biology as announced in *Schedule of Classes*. May be repeated to maximum of 8 units.

455 Mammalogy (4)

Prerequisite: Grade of C or higher in BIOL 103. Taxonomy, distribution, ecology, and physiology of mammals. Lecture 2 hours, laboratory and field work 6 hours.

457 Marine Invertebrate Zoology (5)

Prerequisite: Grade of C or higher in BIOL 103. Taxonomy, phylogeny, and natural history of major marine invertebrates taxa; laboratory work emphasizes species from local fauna and those of economic importance. Lecture 3 hours, laboratory 6 hours.

458 General Entomology (4)

Prerequisite: Grade of C or higher in BIOL 103. Anatomy, ecology, classification, and habits of insects, with emphasis on western species; techniques for capture, observation, and preservation of specimens. Lecture 2 hours, laboratory 6 hours.

462 Plant Ecology (4)

Prerequisite: BIOL 360. Plants and plant associations in relation to physical and biotic environments, including plant community structure, history, analysis, and developmental processes. Lecture 2 hours, laboratory and/or field work 6 hours.

463 Biogeography (4)

Prerequisite: BIOL 360. Distributional patterns of flora and fauna of the world; emphasis on principles and problems of their development; special consideration given to North American communities.

464 Freshwater Zoology (4)

Prerequisites: BIOL 360; one year of chemistry. Physical, chemical, and geological characteristics of aquatic habitats; characteristics and natural history of common aquatic organisms; emphasis on animals. Lecture 2 hours, laboratory 6 hours.

470 Conservation of Wildlife (4)

Prerequisite: BIOL 360. Main environmental and population principles affecting wildlife food and shelter; predation and disease; major habitats and their conservation; wildlife protection; ecology of selected species. Lecture 3 hours, laboratory/field work 3 hours.

471 Population Ecology (4)

Prerequisite: BIOL 360. Structure and dynamics of animal populations, including density, spatial patterns, growth rates, predation, competition, regulation, and population cycles. Lecture 3 hours, laboratory or field work 3 hours.

472 Marine Ecology (4)

Prerequisite: BIOL 360. Population and community ecology of major habitats in marine environment; lecture emphasizes contemporary theories in marine ecology; laboratory offers practical field experience. Lecture 3 hours, laboratory or field work 3 hours.

475 Animal Behavior (3)

Prerequisite: Grade of C or higher in BIOL 103 or one year of zoology. Natural behavior of animals, with emphasis on mechanism, functions, and evolution of behavior.

476 Physiological Animal Ecology (4)

Prerequisite: BIOL 330. Physiological responses of animals in various environments; emphasis on energetics and thermal relationships of vertebrates. Lecture 2 hours, laboratory and field work 6 hours.

478 Fundamentals of Parasitology (4)

Prerequisite: Grade of C or higher in BIOL 103. Parasitism among protozoa and helminths, emphasizing the biological role of the parasite, its ecology, physiology, and life history. Lecture 3 hours, laboratory 3 hours.

464N Biology of Human Aging (4)

Prerequisite: BIOL 155. Physiological and anatomical age-related changes at the cellular, tissue, organ, organ system and organism levels; relationship of late-onset diseases to the aging process. *No credit toward Biology major or minor.*

485 Medical Parasitology (5)

Prerequisite: Grade of C or higher in BIOL 103. Synopsis of parasitic protozoa and helminths of humans; emphasis on recognition and control. Lecture 3 hours, laboratory 6 hours.

488N Gender Differences (4)

(also listed as PSY488) Prerequisite: BIOL 155. Biological and psychological differences between the sexes; topics include genetic sexual determination, sexual differentiation, role of hormones in physiology and behavior, experimental methodology, psychological differences in ability and personality. *No credit toward Biology major or minor.*

499 Undergraduate Directed Study (1-4)

Prerequisites: Consent of full-time faculty member in consultation with department chair, grade point average of 2.5 or higher. Project must be approved before registration. Student must have ability to assume responsibility for independent research and analysis. Regular discussion of progress with sponsor before presentation of final written report. Graded CR/NC.

**Courses in Microbiology (MICR)
Lower Division Courses****151 Introductory Microbiology (5)**

Concepts stressing microorganisms; topics address medical, environmental, industrial, and public health; laboratory application of selected procedures *No credit if taken after any other college microbiology course.* Lecture 4 hours, laboratory 3 hours.

200AB General Microbiology (5, 3)

Prerequisites: BIOL 102 or 200B; CHEM 102 or 152. Basic principles of microbiology. Emphasizes nature, distribution, physiological activities of microorganisms; applied microbiology; medical aspects. For majors in microbiology and related subjects.

200A: lecture 3 hours, laboratory 6 hours.

200B: lecture 2 hours, laboratory 3 hours.

201 Microbiology for Health Related Sciences (4:)

Prerequisites: BIOL 102 or 200B; CHEM 102 or 152. *Basic function and structure of microorganisms; host-parasite relationships, infectious diseases, immunology and serology, epidemiology, antimicrobial agents, and chemotherapy.* Lecture 4 hours.

202 Microbiology Laboratory for Health Related Sciences (2)

Corequisite: MICR 201. Laboratory methods used in studying microorganisms; aseptic techniques, environmental influences on microorganisms, microbial interrelationships; water microbiology and sanitation; immunology and infectious disease diagnosis. Laboratory 6 hours.

203 Methods in Microbiology (2)

Prerequisite: MICR 200A. Theory of culture media and usage, including sterilization methods, preparation of stains, reagents, buffers, and glassware; practical applications stressed.

Upper Division Courses**301 General Medical Microbiology (4)**

Prerequisite: MICR 200AB with grades of C or higher. Host-parasite-drug interactions; isolation, culture, and identification of human normal flora. Lecture 2 hours, laboratory 6 hours.

302 Pathogenic Bacteriology (5)

Prerequisite: MICR 301 with grade of C or higher. Bacteriology and pathology of infectious bacterial diseases of humans; diagnostic procedures for identification of major pathogens. Lecture 3 hours, laboratory 6 hours.

304 Immunology and Serology (5)

Prerequisites: MICR 302, CHEM 301A, 302A, each with a grade of C or higher. Immune response, cellular and humoral, induction of immunity, detection of antibodies, principal serologic methods evaluation of immune response; three sections: fundamental immunology, serology, and clinical immunology. Lecture 3 hours, laboratory 6 hours.

305 Microbiological Methods for Public Health (3)

Prerequisite: MICR 302. Standard laboratory methods for examination of water, sewage, milk, and foods; air sampling procedures. Lecture 2 hours, laboratory 3 hours.

320 Hematology (3)

Prerequisite: MICR 200AB. Identifying normal and pathological blood cells; experience in doing indices, differentials, and blood groupings. Lecture 2 hours, laboratory 3 hours.

331 Structure and Function of Bacteria (3)

Prerequisites: MICR 200AB; CHEM 301 A; prerequisite or corequisite: 302A. Function of bacteria, emphasis on structure and growth.

340 Microbial Genetics (3)

Prerequisite: Grade of C or higher in MICR 200A. Principles of microbial genetics with emphasis on genetic exchange, genetic manipulation, and applications with environmentally, industrially, and medically significant organisms.

363 Microbiological Detectives (4)

Prerequisite: GE natural science requirement. The creative process in microbiology past and present. Individual microbiological detectives and their discoveries, both experimental and theoretical; current inquiry into the nature of involvement of microorganisms in the human experience.

401 General Virology (3)

Prerequisite: MICR 340 or BIOL 325 *plus* 330. Basic principles of virology; emphasizes properties, classification, multiplication, genetics, and viral-host interactions of bacterial, animal, and plant viruses.

402 Virology Laboratory (2)

Prerequisite: MICR 302. Methods of isolation, cultivation **and** identification of animal and bacterial viruses; introduction to cloning of viral genes. Laboratory 6 hours.

403 Pathogenic Fungi (3)

Prerequisite: MICR 301. Morphology, physiology, and principles of pathogenicity of fungi that cause disease in humans and animals. Lecture 2 hours, laboratory 3 hours.

406 Methods in Clinical Microbiology (3)

Prerequisite: MICR 301. Methods and techniques of clinical microbiology; selection and evaluation of appropriate procedures for specific tests; licensure and regulations requirements. New developments contributing to advances will be stressed. May be repeated to total of 9 units.

407 Laboratory Methods in Clinical Microbiology (2)

Prerequisite: MICR 301. Methods and techniques currently used in clinical laboratories for rapid processing of specimens for microbiology content or evaluation of immunochemical components. Six hours/week. May be repeated to maximum of 6 units.

41 2 Introduction to Epidemiology (4)

Prerequisite: MICR 200AB. Epidemiology of communicable diseases including modes of transportation and methods of control of communicable disease.

420 Immunohematology (4)

Prerequisites: MICR 304, 320. Grouping of red blood cells with applications in clinical forensic medicine; emphasis on basic blood group systems and associated diseases. Practical application of identification of various blood group antigens and antibodies. Lecture 2 hours, laboratory 6 hours.

430 Bacterial Physiology (3)

Prerequisites: MICR 331, CHEM 431A, 432A; corequisites: CHEM 431 B, 432B. Bacterial physiology with emphasis on biochemical events related to cellular differentiation and basic bacterial biochemical pathways.

433 Bacterial Physiology Laboratory (2)

Corequisite: MICR 430. Experimental work to accompany MICR 430. Laboratory 6 hours.

454L Special Topics in Microbiology (1-4 each)

Prerequisites: Upper division standing, others as needed for specific topics. Topics of current interest in microbiology, as announced in *Schedule of Classes*. May be repeated to maximum of 8 units.

460 Immunochemistry (2)

Prerequisites: MICR 304, CHEM 431B. The combining site and forces involved in antigen-antibody interaction, purification of antibodies and antigens, assembling of synthetic antigens; qualitative and quantitative precipitation and complement fixation procedures. Lecture 2 hours.

499 Undergraduate Directed Study (1-4)

Prerequisite: Consent of an instructor to act as sponsor. Project selected in conference with sponsor before registration, progress meetings held regularly, and a final report submitted. May be repeated for credit.

CHEMISTRY AND BIOCHEMISTRY

School of Natural and Social Sciences

DEPARTMENT OFFICE

Physical Sciences 616

Phone: (213) 343-2300

The Department of Chemistry and Biochemistry offers undergraduate programs leading to the Bachelor of Science degrees in Chemistry and Biochemistry and the Bachelor of Arts degree in Chemistry. In addition, the department participates in the interdisciplinary Bachelor of Science degree in Physical Sciences. The Master of Science degree program in Chemistry is described in the *Graduate Programs* section.

The Faculty

Emeriti: Anthony J. Andreoli, Douglas L. Currell, Lloyd N. Ferguson, Sigmund Jaffe, Rashad E. Razouk.

Professors: Joseph Bragin, Costello L. Brown, Joseph Casanova, Jr., Phoebe Dea, Anthony Fratiello, Harold Goldwhite(*Chair*), Carlos G. Gutierrez, Richard T. Keys, Hendrik Keyzer, Thomas P. Onak, Donald R. Paulson, Stanley H. Pine.

Associate Professors: Raymond E. Garcia, Scott D. Grover, Wayne R. Tikkanen, Trina J. Valencich.

Assistant Professors: Laura L. Sweetman, Linda Marie Tunstad-Gutierrez.

Undergraduate Degrees

Students who expect to earn a bachelor's degree in Chemistry in the minimum time should include chemistry, physics, German, geometry, trigonometry, and algebra (two years) in their high school preparation.

It should also be noted that the chemistry programs are tightly structured and that students should begin calculus and physics sequences at the earliest possible time in order to complete the degree in four years.

For Chemistry and Biochemistry majors, only courses with a grade of C or higher in the major program are credited toward the degree. Students who have credit for community college organic chemistry have the option of earning credit by examination in CHEM 301A, 301 B, and/or 301 C. In the programs described below, CHEM 102, 103, and 201 may be substituted for CHEM 122 and 123. *One year of German is recommended for the B.S. degree in Chemistry; one year of French or German is recommended for the B.S. degree in Biochemistry; the B.A. degree in Chemistry has no foreign language recommendation.*

Departmental Honors Program

A Departmental Honors Program in Chemistry is offered for students who possess a minimum B (3.0) grade point average in all college work and in chemistry, averaged separately, and who are recommended in writing by two members of the faculty.

The program is designed to encourage independent study and to provide an introduction to research. The traditional curriculum is enriched by the selection of electives that provide depth in areas outside the field of chemistry.

Honor students are assisted by an honors adviser in planning their programs. Enrollment in CHEM 196 and 396 and a written thesis are required parts of the program. Diplomas and transcripts of Honors Program graduates are designated: *Graduated with Departmental Honors in Chemistry.*"

Bachelor of Arts Degree in Chemistry

The Bachelor of Arts degree, which requires 186 units, is designed for those who want a liberal education with a major in Chemistry. This degree allows students to include a minor in another science, business, economics, or humanities within their degree program. The degree is suitable for students planning careers in government or industry where a physical science background is desirable. It is also appropriate for some preprofessional health science majors but is not recommended for students planning graduate study in a physical science.

Requirements for the Major (74 units)*Lower Division Required Courses (39 units):*

*CHEM 101	General Chemistry I	(5)
*CHEM 122, 123	Principles of Chemistry	(5, 5)
MATH 206-208	Calculus I-III	(4 each)
PHYS 201-203	General Physics	(4 each) or
PHYS 101-103	Physics	(4 each)

* CHEM 101-103 plus 201 may be taken in lieu of 101-122-123

Upper Division Required Courses (28 units):

CHEM 301ABC	Organic Chemistry	(3, 3, 3)
CHEM 302AB	Organic Chemistry Laboratory	(2, 2)
CHEM 360	Writing for Chemists	(3)
CHEM 411	Fundamentals of Physical Chemistry	(4)
CHEM 435	Introduction to Biochemistry	(4)
CHEM 463	Biomedical Microanalysis	(4)

Electives in Chemistry (7 units):

May include a maximum of 3 units of CHEM 499.

Bachelor of Science Degree in Biochemistry

The Bachelor of Science degree in Biochemistry is designed to fit the needs of those who plan to either complete their formal education with the bachelor's degree and obtain positions in scientific and industrial laboratories or do graduate study in biochemistry. A total of 198 units is required for the degree.

Requirements for the Major (118 units)*Lower Division Required Courses (65 units):*

*CHEM 101	General Chemistry I	(5)
*CHEM 122, 123	Principles of Chemistry	(5, 5)
BIOL 101,102	Principles of Biology I, II	(5, 5)
MATH 206-209	Calculus I-IV	(4 each)
MICR 200AB	General Microbiology	(5, 3)
PHYS 201-204	General Physics	(4 each)

*CHEM 101-103 plus 201 may be taken in lieu of 101-122-123

Upper Division Required Courses (42 units):

CHEM 301ABC	Organic Chemistry	(3, 3, 3)
CHEM 302AB	Organic Chemistry Laboratory	(2, 2)
CHEM 360	Writing for Chemists	(3)
CHEM 401	Physical Chemistry I	(4)
CHEM 402 or 403	Physical Chemistry II or III	(4)
CHEM 431ABC	Biochemistry	(3, 3, 3)
CHEM 432AB	Biochemistry Laboratory	(2, 2)
PHYS 443AB	Biophysics	(3, 2)

*Electives in Biology (select 11 units with adviser approval):***Bachelor of Science Degree in Chemistry**

The Bachelor of Science degree in Chemistry, which requires 198 quarter units, is designed to fit the needs of those who plan to do graduate work or complete their formal education with the bachelor's degree, which is accredited by the American Chemical Society.

Requirements for the Major (115-117 units)*Lower Division Required Courses (61-63 units):*

*CHEM 101	General Chemistry I	(5)
*CHEM 122, 123	Principles of Chemistry	(5, 5)
CHEM 170	Microcomputers in Chemistry	(2) or
CS 290	Introduction to FORTRAN Programming	(2) or

MATH 255	Introduction to Matrix Theory	(4)
MATH 206-209	Calculus I-IV	(4 each)
MATH 215	Differential Equations	(4) or
**MATH 401	Differential Equations	(4)
PHYS 201-206	General Physics	(4 each)

*CHEM 101-103 plus 201 may be taken in lieu of 101-122-123
 ** upper division credit

Upper Division Required Courses (54 units):

CHEM 301ABC	Organic Chemistry	(3, 3, 3)
CHEM 302AB	Organic Chemistry Laboratory	(2, 2)
CHEM 318	Introduction to Inorganic Chemistry	(3)
CHEM 327	Advanced Synthetic Methods	(2)
CHEM 360	Writing for Chemists	(3)
CHEM 401-403	Physical Chemistry I-III	(4, 4, 4)
CHEM 412AB	Physical Chemistry Laboratory	(3, 3)
CHEM 418	Inorganic Chemistry	(3)
CHEM 462	Instrumental Analysis	(6)

Electives in Chemistry (select 6 units with adviser approval):

The Credential Program

The Department of Chemistry and Biochemistry participates in the interdisciplinary Bachelor of Science degree program in Physical Science, which has been approved for examination waiver for the Single Subject credential in Physical Science. That program is described later in this chapter of the catalog. In addition, holders of a Single Subject credential issued by the state of California may complete the *supplementary authorization* program described below.

Supplementary Authorization for Single Subject Teaching Credential (31-33 units)

Holders of a *Single Subject teaching* credential issued by the state of California may supplement that credential with an authorization in *Chemistry* for teaching chemistry at any grade level through grade 12 or in classes organized primarily for adults by completing the following program with a grade of C or higher in each course. For other requirements governing issuance of this authorization, consult the School of Education.

Complete or demonstrate proficiency in each of the following Courses (31-33 units):

CHEM 101-103	General Chemistry I-III	(5, 5, 5)
CHEM 201	Quantitative Analysis	(5)
CHEM 301ABC	Organic Chemistry	(3, 3, 3)

Select one from following:

CHEM 302A	Organic Chemistry Laboratory	(2)
CHEM 318	Introduction to Inorganic Chemistry	(3)
CHEM 435	Introduction to Biochemistry	(4)

Courses in Chemistry (CHEM)

+There is a special fee associated with registering for laboratory classes that carry this designation. Details appearing the Schedule of Classes.

Subcollegiate Course

095 Language of Chemistry (4)

Prerequisite: One year of high school algebra. Development of basic skills for further training in chemistry; introduction to stoichiometry; meaning of chemical equations and their algebraic interpretation; physical background of fundamental chemical concepts. Not acceptable as prerequisite for CHEM 102 or 152. Lecture 3 hours, recitation 1 hour. Grade A, B, C/NC. No credit toward baccalaureate.

A grade of C or higher is required in all prerequisite courses.

Lower Division Courses**+101 General Chemistry I (5)**

Prerequisite: High school chemistry and physics; two years of high school algebra; satisfactory performance on mathematics placement examination given during registration period. Physical concepts, stoichiometry, structure of atom, periodic table, chemical bonding. Lecture 3 hours, recitation 1 hour, laboratory 3 hours. CHEM 101+ 102+ 103 = CAN CHEM SEQ A

+102 General Chemistry II (5)

Prerequisite: CHEM 101. Structure of molecules, states of matter, acids and bases, equilibrium, oxidation-reduction, electrochemistry, coordination compounds. Lecture 3 hours, recitation 1 hour, laboratory 3 hours. CHEM 101+102+103 = CAN CHEM SEQ A

+103 General Chemistry III (5)

Prerequisite: CHEM 102. Introduction to science of thermodynamics and its applications in chemistry, chemical kinetics, spectroscopy and special topics in general chemistry. Lecture 3 hours, recitation 1 hour, laboratory 3 hours. CHEM 101+102+103 = CAN CHEM SEQ A

+122, 123 Principles of Chemistry (5, 5)

Prerequisites: Superior performance in CHEM 101; MATH 206. Introduction to fundamental chemical principles, with emphasis in laboratory on quantitative work. Lecture 3 hours, recitation 1 hour, laboratory 3 hours.

140 Science Orientation (2)

(also listed as BIOL 140) Prerequisite: Instructor consent. Exploration of skills essential for success in the sciences; presentations by professional scientists. No credit toward science major or minor. Graded CR/NC.

+151 Fundamentals of Chemistry I (5)

Prerequisites: One year of high school algebra, satisfactory performance on mathematics placement examination given during registration period. Introductory course in fundamental laws and theories of general chemistry. Lecture 3 hours, recitation 1 hour, laboratory 3 hours. *No credit toward Chemistry or Physics major.*

+152 Fundamentals of Chemistry II (Organic) (5)

Prerequisite: CHEM 151. Introduction to organic chemistry. Lecture 3 hours, recitation 1 hour, laboratory 3 hours. *No credit toward Chemistry or Physics major.*

+154L,P Selected Topics in Chemistry (1-4)

Topics of current interest as announced in *Schedule of Classes*. *No credit toward Chemistry or Biochemistry major.*

158 Chemistry and Survival (4)

Chemical dependence of life processes related to human survival.

+159 Chemistry and Survival Laboratory (1)

Corequisite: CHEM 158. Introductory chemistry laboratory course with special emphasis on practical examples using simple natural product starting materials.

160 Maladies and Molecules (4)

Selected aspects of the chemical foundations, molecular transmission, and palliation of infectious, inheritable, and environmental diseases at an introductory level requiring no initial knowledge of chemistry.

170 Microcomputers in Chemistry (2)

Prerequisite or corequisite: CHEM 102 or 122. Use of microcomputer as productivity and computational tool in chemistry and biochemistry; emphasis on application of existing software to chemical/biochemical problems.

196 Honors Proseminar (1)

Prerequisite: Acceptance into department honors program. Study of recent developments in chemistry and biochemistry. May be repeated to maximum of 6 units; only 1 unit may apply on major requirements. Graded CR/NC.

1'201 Quantitative Analysis (5)

Prerequisite: CHEM 103. Principles and techniques of analytical chemistry, including stoichiometry, equilibrium (pH and redox), electrochemistry, spectroscopy, and separations. Lecture 3 hours, laboratory 6 hours.

254L, P Special Topics in Chemistry (1-4)

Prerequisites: As needed for specific topic. Current topics of interest in chemistry and related disciplines, as announced in *Schedule of Classes*. May be repeated to maximum of 8 units.

Upper Division Courses

301ABC Organic Chemistry (3, 3, 3)

Prerequisite: CHEM 123 or 201(201 maybe taken concurrently with 301A); corequisites: for 301 B, CHEM 302A; for 301 C, CHEM 302B. Properties and reactions of aliphatic and aromatic compounds; emphasis on fundamental principles and reaction mechanisms.

302AB Organic Chemistry Laboratory (2, 2)

Prerequisite: CHEM 123 or 201.

302A.

Corequisite: CHEM 301B. Fundamentals of organic laboratory analysis, with emphasis on spectroscopic methods. Recitation-laboratory 6 hours.

302B.

Corequisite: CHEM 301C. Fundamental laboratory techniques of organic chemistry and organic synthesis. Recitation/laboratory 6 hours.

316 Scientific Glass Blowing (2)

Introductory course in glass blowing, including hands-on fabrication and repair of apparatus, theory and science of glass, and principles of laboratory techniques.

318 Introduction to Inorganic Chemistry (3)

Prerequisite: CHEM 123 or 201. Introduction to the study of the elements; atomic structure, bonding, ionic solids, solutions, and nonmetals.

327 Advanced Synthetic Methods (2)

Prerequisites: CHEM 301 C, 302B, 318. Application of advanced synthetic methods to the synthesis of selected organic, organometallic, and inorganic molecules. Recitation-laboratory 6 hours.

350N Evolution of Life (4)

(also listed as BIOL 350N) Prerequisite: GE natural science requirement. Biochemical origins of life from the newly formed planet Earth through the evolution of higher groups of both plants and animals. *No credit toward Biology or Chemistry major.*

+353 Nutritional Aspects of Biochemistry (5)

Prerequisite: CHEM 152. Introduction to biochemistry with particular emphasis on nutrition and its effect on metabolism. Lecture 3 hours, laboratory 3 hours, recitation 1 hour.

354L,P Special Topics in Chemistry (1-5)

Prerequisites: As needed for specific topic. Current topics of special interest in chemistry and related disciplines as announced in *Schedule of Classes*. May be repeated for credit as subject matter changes.

358N Science and Controversy (4)

(also listed as BIOL 358N, CS 358N, and PHYS 358N) Prerequisite: GE natural science requirement. Scientific background of issues that affect public welfare, such as genetic technology, chemical pesticides, and energy production and utilization *No credit toward Biology, Chemistry, Computer Science, or Physics major.*

360 Writing for Chemists (3)

Prerequisites: Passing score on Writing Proficiency Exam; CHEM 123 or 201. Introduction to writing for chemists and biochemists. Intensive practice in writing abstracts, reports, reviews, and other forms of scientific writing.

380N Ancient and Modern Science (4)

(also listed as HIST 380N) Prerequisite: GE natural science requirement. Systematic analysis of ancient scientific thought as science and its relationship to modern science. *No credit toward Biochemistry or Chemistry major.*

396 Honors Studies in Chemistry (1-5)

Prerequisites: Participation in Chemistry Honors Program; CHEM 301 ABC; consent of an instructor to serve as research adviser; and approval of department honors adviser. Independent research in chemistry and biochemistry. Regular consultation with research adviser; written thesis required. Students must enroll for total of 5 units before submitting thesis and receiving grade.

401 Physical Chemistry I (4)

Prerequisites: CHEM 123, MATH 209, PHYS 204. Kinetic theory of gases, thermodynamics, and chemical statistics.

402 Physical Chemistry II (4)

Prerequisite: CHEM 401. Thermodynamics of solutions of nonelectrolytes and electrolytes, phase equilibria, chemical kinetics, surface chemistry, and macromolecules.

403 Physical Chemistry III (4)

Prerequisites: MATH 215 or 401; PHYS 206 recommended (may be taken concurrently). Molecular structure and spectroscopy. Fundamentals of quantum chemistry; applications to the chemical bond, spectroscopy, and the solid state.

411 Fundamentals of Physical Chemistry (4)

Prerequisites: CHEM 123, MATH 208, PHYS 123 or 203. Survey of physical chemistry including thermodynamics, kinetics, quantum chemistry, and spectroscopy. *No credit toward B.S. degree in Chemistry or Biochemistry, no credit if taken after CHEM 401.*

+412AB Physical Chemistry Laboratory (3, 3)

Prerequisite: CHEM 4010r 403. Experiments to illustrate principles and techniques of various subjects of physical chemistry. Lecture 1 hour, laboratory 6 hours.

418 Inorganic Chemistry (3)

Prerequisites: CHEM 318, 402. Selected topics in inorganic chemistry, including physical inorganic chemistry, coordination chemistry, and inorganic polymers.

420 Advanced Organic Chemistry I (4)

Prerequisites: CHEM 301 C; 4010r 403. Theoretical aspects of organic chemistry emphasizing reaction mechanisms.

425 Polymer Chemistry (4)

Prerequisites: CHEM 301 C MATH 209; suggested corequisite: CHEM 401. Preparation, mechanisms, and properties of synthetic macromolecules; step and chain polymerization, copolymerization, kinetics, morphology and physical characterization of polymers.

431ABC Biochemistry (3, 3, 3)

Prerequisites: CHEM 301 C, 302B; Physics majors in the Biophysics option admitted by special permission. Corequisite for 431 B: CHEM 432A. Lectures on chemistry and metabolism of carbohydrates, proteins, lipids, vitamins, hormones, and related phenomena in animals, plants, and microorganisms.

+432AB Biochemistry Laboratory (2, 2)

Prerequisite: 431A; corequisite for 432A: CHEM 431B. Recitation and laboratory experiments designed to illustrate chemical behavior of substances of biochemical importance. Recitation/laboratory 6 hours.

+433 Clinical Biochemistry (3)

Prerequisites: CHEM 431AB, 432A; prerequisite or corequisite: CHEM 431 C. Lecture and laboratory study of chemistry of blood, urine, and other body fluids. Lecture 1 hour, laboratory 6 hours.

435 Introduction to Biochemistry (4)

Prerequisite: CHEM 301 C. Introduction to principles of biochemistry. *No credit if taken after CHEM 431A.*

440 Industrial Chemistry (4)

Prerequisites: CHEM 301C, 402. Survey of major industrial chemical processes.

454L, P Special Topics in Advanced Chemistry (1-4)

Prerequisites: As needed for specific topic. Current topics of special interest in advanced chemistry and related disciplines, as announced in *Schedule of Classes*. May be repeated to maximum of 8 units.

+462 Instrumental Analysis (6)

Prerequisite: CHEM 402. Theories, applications, and recent technological developments of chemical instrumentation with emphasis on electrochemical, spectral, chromatographic, and magnetic resonance methods. Lecture 3 hours, laboratory 9 hours.

463 Biomedical Microanalysis (4)

Prerequisite: CHEM 431 or 435. Theory and practice of instrumental methods for analysis of substances and processes of biomedical importance. Lecture 3 hours, laboratory 3 hours. *No credit toward B.S. degree in Chemistry or Biochemistry.*

480 History of Chemistry (4)

Prerequisites: CHEM 103, 301C. Development of chemical knowledge from chemical arts of antiquity through alchemy to twentieth century, emphasizing contributions to fundamental theory by Lavoisier, Dalton, Kekule, Van't Hoff, Rutherford.

499 Undergraduate Directed Study (1-5)

Prerequisites: 2.5 grade point average in chemistry courses or one advanced laboratory course elective, consent of an instructor to act as sponsor, ability to assume responsibility for independent work and to prepare written and oral reports. Independent research project selected in conference with sponsor before registration; progress meetings held regularly. May be repeated to maximum of 9 units.

CHICANO STUDIES

School of Natural and Social Sciences

DEPARTMENT OFFICE

King Hall C3095

Phone: (213) 343-2190

Chicano Studies is an intensive investigation of the second largest American ethnic group. The department's approach is multidisciplinary with specific offerings in history, culture, language, literature, arts, and politics of the Chicano community. The curriculum seeks not only to acquaint students with a breadth of knowledge about Chicanos, but also to expose them to theoretical perspectives specific to this area of study.

Chicano Studies provides preparation appropriate for careers in teaching, human services, public policy, law, medicine, the business profession, and for graduate study and research.

The vital presence and increasing significance of the Chicano community in Los Angeles and southern California allows unique research opportunities for students of Chicano Studies.

The Faculty

Professors: Francisco E. Balderrama, Roberto Cantu, Louis R. Negrete, Hector Soto-Perez.

Bachelor of Arts Degree in Mexican-American Studies

The program in Chicano Studies includes a Bachelor of Arts degree in Mexican-American Studies and a minor in Mexican-American Studies for students who are majoring in other fields.

The Bachelor of Arts degree is available in two options. Option I, the General Program, is intended for students interested in a liberal arts education; Option II is designed specifically for students who are interested in the Multiple Subject credential.

Requirements for the Major (60-125 units)

Option I, the General Program, requires a total of 60 units, of which 16 are in lower division and 44 are in upper division courses. Option II, for the Multiple Subject credential, consists of a total of 118-125 units that includes courses in general education (lower division), Chicano Studies, and related areas.

* Option I: General Program (60 units)

Lower Division Required Courses (8 units):

CHS	111	Introduction to Chicano Studies	(4)
CHS	205	Composition in Chicano Studies	(4)

Electives (select 8 units from following with adviser approval):

CHS 110, 150, 157, 200ABC, 201,230, 250, 257*, 258*

* maximum 3 units in 257 and/or 258

Upper Division Required Courses (16 units):

CHS	403	Contemporary Chicano Literature	(4)
CHS	410	Chicano Psychology	(4)
CHS	444	History of the Chicano People	(4)
CHS	450	Research on Community Problems	(4)

Electives (select 28 units from following):

Community Dimension (8 units):

CHS 405, 406, 430, 445, 470

Culture Dimension (12 units):

CHS 311,400, 420, 440, 446

Mexican Dimension (8 units):

CHS/HIST 466, 467; CHS 468

*** Option II: Multiple Subject Credential (118-125 units)**

Students who select this option complete a separate core which is common to all Multiple Subject teaching options. That common core contains 106-111 units and is described in the *Undergraduate Study* chapter. In addition to the core, the 68 units listed below are required in the option. Refer to the *undergraduate School of Education* chapter of this catalog for regulations governing all teaching credential programs.

Required Courses (106-111 units):

Refer to *Undergraduate Study* chapter of this catalog.

Major Courses (20 units)

CHS 111	Introduction to Chicano Studies	(4)
CHS 403	Contemporary Chicano Literature	(4)
CHS 410	Chicano Psychology	(4)
CHS 444	History of the Chicano People	(4)
CHS 450	Research about Community Problems	(4)

Social Science (Mexican-American Studies) Depth Area (20 units)

CHS 405	The Mexican People as Immigrants	(4)
CHS 406	Hispanic Communities in U.S. Society	(4)
CHS 430	Chicano Political Behavior	(4)
CHS 445	History of the Chicano in Los Angeles	(4)
CHS 470	Educational Institutions of the Barrios	(4)

Electives (28 units)

Professional education courses are recommended. See a credential adviser in the *School of Education*.

GENERAL EDUCATION UPPER DIVISION THEME

Select one general education upper division theme, in consultation with an adviser, and complete one course in each of three areas within that theme. Theme courses are not part of the major but are included in credential requirements.

Minor in Chicano Studies**Requirements for the Minor (32 units)**

Lower Division Required Courses (16 units):

CHS 110, 111, 201 and lower division Chicano Studies elective course.

Upper Division Required Courses (8 units):

CHS 403, 444

Electives (select 8 upper division units with adviser approval):

The Credential Program

The Bachelor of Arts degree in Mexican-American Studies with Option II is intended for examination waiver for the Multiple Subject credential. The department shares partial responsibility for the Bilingual/Crosscultural Specialist credential. For detailed information about these credentials, consult advisers in the department and

in the School of Education. Refer to the *School of Education* chapters of this catalog for regulations governing all credential programs.

Courses in Chicano Studies (CHS)**Lower Division Courses****100 Introduction to College Environment (4)**

(also listed as PAS 100) Introduction to institution of higher education and its particular relationship to minority/Third World students. Course is designed especially for EOP students. Grade *DR/NC*.

110 Introduction to Pre-Cortesian Cultures of Mexico (4)

Introductory course examining the cultural, economic, and historical development of pre-Cortesian Mexico from the Olmec civilization to the fall of the Aztec empire.

111 Introduction to Chicano Studies (4)

Critical study of disciplines and methodologies of particular significance to Chicano Studies.

150 Chicano and Contemporary Politics (4)

Internal barrio politics and external efforts to manipulate that system, with focus on Chicanos.

157 Beginning Mexican Folk Music (2)

Introduction to traditional Chicano and Mexican folk music. Beginning instruction on culturally traditional musical instruments, including guitar, guitarron, vihuela, violin, and trumpet. May be repeated to maximum of 6 units. Graded *CR/NC*.

200ABC Spanish for Chicanos (4, 4, 4)

Recommended prerequisite: knowledge and use of Spanish as spoken in Southwestern U.S. Phonetics, grammar, and structure of local dialectal forms compared with standard Spanish; cultural and esthetic values of Spanish literature of Southwestern U.S.

201 Mexican Literature in Translation (4)

Selected major works of Mexican literature in translation.

205 Composition in Chicano Studies (4)

Prerequisites: ENGL 102*; CHS 100 recommended. Principles and techniques of effective English composition essential to writing in a Chicano Studies context; emphasis on individual student practice. Graded *CR/NC*.

**Students subject to earlier catalogs satisfy this prerequisite with ENGL 1010r 190.*

230 Latinas in Modern Society (4)

The changing social, economic, and political role of Latina women in the U.S.

250 The Chicano Experience in Film (4)

A survey and critical evaluation of the portrayal in film of Chicano life experiences.

257 Folk Music Ensemble of Mexico (2)

Prerequisites: Knowledge of music preferred but not necessary, instructor consent. Ensemble performance of Mexican folk music, study of techniques and regional styles. Activity 4 hours. May be repeated to maximum of 6 units.

258 Folk Dances of Mexico (1)

Study and practice of step patterns and regional dance styles of Mexico. Activity 3 hours. May be repeated to maximum of 6 units.

Upper Division Courses**311 Chicano Cultural History (4)**

Prerequisite: CHS 111. Development and nature of Mexican and Chicano culture, emphasizing especially significant historical movements and their contribution to understanding current cultural problems.

395 Community Service in Chicano Studies (1-3)

Prerequisites: Eight units of approved CHS courses; approval by departmental faculty adviser in consultation with EPIC director; acceptance by community agency. Participation in work of community agency or activity utilizing professional and/or vocational skills in service to community. Graded *CR/NC*. Credit toward B.A. degree limited to 6 units.

400 Pre-Columbian Literature of Mexico (4)

Prerequisite: CHS 111. Literary works of Mayan, Nahua, and other pre-Columbian peoples of Mexico, with emphasis on structural and esthetic elements, history of thought, and world view.

403 Contemporary Chicano Literature (4)

Prerequisite: CHS 111. Selected literary works by Chicano authors.

405 The Mexican People as Immigrants (4)

Prerequisite: CHS 111. Socioeconomic and political forces that shaped U.S. immigration policies and practices in relation to the Mexican.

406 Hispanic Communities in U.S. Society (4)

Prerequisite: CHS 111. The Chicano experience studied from the comparative perspective of other Latin Americans in the U.S.: Cubans, Puerto Ricans, Central, and South Americans.

410 Chicano Psychology (4)

Prerequisite: PSY 150. Chicano community psychology; focus on relationships among individuals and families, groups, complex organizations; social problems and collective behavior.

420 Mexican and Chicano Folklore (4)

Prerequisite: CHS 111. Mexican and Chicano folklore as a reflection of the cultural, sociopolitical, and historical development of the Chicano community.

430 Chicano Political Behavior (4)

Prerequisite: CHS 111. Socioeconomic and political factors that provide formative framework for unique political behavior patterns characteristically existing in the Chicano community.

440 Development of Spanish Language in Southwestern U.S. (4)

Prerequisite: SPAN 200C. *Conducted in Spanish*. Origin, development, and present characteristics of Spanish language as used in Southwestern U.S.; emphasizes linguistic contributions of various antecedent and contemporary cultures in this area.

444 History of the Chicano People (4)

Prerequisite: HIST 202A or 202B. Historical development of the Chicano people from settlement until the present, with emphasis on period since 1848.

445 History of the Chicano in Los Angeles (4)

Prerequisite: CHS 111. Historical survey of the Los Angeles Chicano community from settlement until the present.

446 Folkloric Dance: Living History of Mexico and the Southwest (4)

Prerequisites: CHS 111. Folkloric dance as it reflects historical and ethnic experiences of people in Mexico and Southwestern U.S.

450 Research on Community Problems (4)

Prerequisites: CHS 111, ENGL 102*, passing WPE score, senior standing. Research that emphasizes special issues of Mexican/Latino communities in Southern California and the nation; includes writing research papers that integrate previous course work in a culminating project.

**Students subject to earlier catalogs satisfy this prerequisite with ENGL 1010r 190,*

466 Mexico (4)

(also listed as HIST466) Prerequisite: Upper division standing. Development of Mexican people and nation since time of aborigines; social, political, and economic development with particular attention to more recent period.

467 Modern Mexico and the Chicano People (4)

(also listed as HIST467) Prerequisites: CHS 111; recommended: CHS/HIST 466. History of modern Mexico and its impact upon the Chicano people from separation from Mexico in 1848 to the present.

468 U.S.-Mexico Borderlands (4)

Prerequisite: CHS 111. Urban and regional development of the U.S.-Mexico border area with particular emphasis on its impact on the Chicano community.

470 Educational Institutions of the Barrios (4)

Prerequisite: Upper division or graduate standing. Analysis and evaluation of typical and special issues in the education of Chicano/Latino students.

490 Special Studies (1-4)

Prerequisites: Upper division or graduate standing, permission of instructor. Intensive study of selected areas in Chicano Studies. May be repeated to maximum of 8 units.

499 Undergraduate Directed Study (1-4)

Prerequisites: Eight units in CHS; 2.75 grade point average, upper division or graduate standing; full-time faculty member to serve as sponsor; recommendation of department chairperson. Project selected in conference with sponsor, progress meetings held regularly, and final report submitted. May be repeated to maximum of 8 units.

GEOGRAPHY AND URBAN ANALYSIS

School of Natural and Social Sciences

DEPARTMENT OFFICE

King Hall C4067

Phone: (213) 343-2220

The Department of Geography and Urban Analysis offers an undergraduate program leading to the Bachelor of Arts degree in Geography, as well as a minor and two certificate programs for students majoring in other fields. The department also offers a graduate program leading to the Master of Arts degree in Geography, described in the *Graduate Programs* section.

The department cooperates in the Latin American Studies, liberal studies, and social science interdisciplinary programs. Its regional courses are of particular value in programs that utilize materials about California, Asia, U.S., Latin America, Europe, and the developing world. The department's systematic courses provide theory and skills useful in applied business and governmental situations. The department also directs the Mexico Field Station program, an intensive field experience in which classes are conducted completely on location in Mexico.

The Faculty

Emeriti: Richard Arvidson, Harry C. Coffin, Midori Nishi, William S. Ting.

Professors: William G. Byron (*Chair*), Sin Fong Han, John A. Kirchner, Vincent G. Mazzucchelli, Clement Padick, John D. Rees.

Associate Professors: Stephen E.G. LaDochy, Killjan P.H. Ying.

Assistant Professors: Linda S. O'Hirok, Ali Modarres.

Bachelor of Arts Degree in Geography

The Bachelor of Arts degree in Geography is designed to provide students with professional insights into the world's physical environment, the conditions of settlement by people of diverse attitudes and objectives, and the technology of making scientific observations relevant to the interpretations of geographic regions. The degree program lays a general and technical foundation for careers in business, government, planning, and teaching.

Requirements for the Major (80-95 units)

The major in Geography requires 80--95 units depending on the option selected.

General Option

Lower Division Required Courses (19 units):

GEOG 150	Human Geography	(4)		
GEOG 160	Physical Geography	(4)		
GEOG 210	Map Reading and Interpretation	(4)		
GEOG 268	Microcomputer Applications in Geography	(4)		
ECON 209	Applied Business and Economic Statistics	(3) or		
SOC 210A	Elementary Statistics	(3)		

Upper Division Required Courses (25 units):

GEOG 405	Cartography	(4)		
GEOG 432	Metropolitan Los Angeles	(4)		
GEOG 453	Locational Analysis	(4)		
GEOG 460	Field Geography	(5)	GEOG 465	Air
Photo Interpretation (4)				
GEOG 495	Senior Thesis	(4)		

Regional Geography

(8 units):

Select *two* from following:

GEOG 370, 421, 423, 424, 425, 427, 428, 430, 431

Systematic Human Geography (12 units):

Select *three* from following:

GEOG 441, 442, 467, 475, 476, 481

Systematic Physical Geography (8 units):

Select two from following:

GEOG 402, 410, 415

Electives in Geography (8 units):

Select additional courses from above groups or from following:

GEOG 358, 433, 446, 466, 468, 469, 471, 477, 496, 497, 499

UNIV 398

*** Urban Analysis Option (95 units)***Lower Division Required Courses**(26 units):*

GEOG 150	Human Geography	(4)
GEOG 160	Physical Geography	(4)
GEOG 210	Map Reading and Interpretation	(4)
GEOG 268	Microcomputer Applications in Geography	(4)
SOC 210AB	Elementary Statistics	(3, 3)
URBA 101	The Urban World	(4)

*Upper Division Required Courses (69 units):**Technical Core (21 units)*

GEOG 405	Cartography	(4)
GEOG 453	Locational Analysis	(4)
GEOG 460	Field Geography	(5)
GEOG 465	Air Photo Interpretation	(4)
GEOG 495	Senior Thesis	(4)

Applied Core (24 units):

GEOG 432, 476, 477, 496 or

URBA 454

UNIV (GEOG)398

URBA 401

Interdisciplinary/Courses (16 units):

Select courses in at least three disciplines:

ACCT 433

ART 485 BIOL 361 N

CIS 301 ECON 440

ENGR 352 FIN 338, 381

HIST 483 POLS 403, 404, 460, 461, 477

SOC 430

SPCH 489

Geography/Urban Analysis Electives (select 8 units from following):

GEOG 358, 415, 421, 433, 441, 442, 446, 466, 468, 469, 475, 481, 496, 499

UNIV (GEOG) 398

URBA 454

*** Multiple Subject Teaching Option (146-151)**

Students who select this option complete a separate core which is common to all Multiple Subject teaching options. The common core contains 106-111 units and is described in the *Undergraduate Study chapter*. In addition to the core, the 68 units listed below are required in the option. Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs.

*Required Course (106-111 units)*Refer to *Undergraduate Study chapter* of this catalog.**Major Courses (20 units)**

GEOG 160	Physical Geography	(4)
GEOG 210	Map Reading and Interpretation	(4)

GEOG 432	Metropolitan Los Angeles	(4)
GEOG 495	Senior Thesis	(4)

Select one from the following:

GEOG 441	World Resources	(4)
GEOG 442	Population	(4)
GEOG 476	Urban Areas	(4)
GEOG 481	Political Geography	(4)

Social Science (Geography) Depth Area (20 units)

GEOG 370	World Regions	(4)
GEOG 415	Perspectives on Environment	(4)
GEOG 421	United States	(4)
GEOG 431	California	(4)
GEOG 446	U.S. Ethnic Communities	(4)

Electives (28 units)

Professional education courses are recommended. See a credential adviser in the School of Education.

Minor in Geography

A minor in Geography is available for students majoring in other fields. A total of 28 units in geography is required, selected in consultation with an adviser in geography and distributed as follows:

Requirements for the Minor (28 units)

Required Courses (8 units):

GEOG 150	Human Geography	(4)
GEOG 160	Physical Geography	(4)

Electives (20 units):

Select a minimum of 20 units in geography with consent of adviser. At least 14 units must be upper division.

Certificate Program in Cartography, Geographic Information Systems and Remote Sensing

The Department of Geography and Urban Analysis offers this credit certificate program which provides a practical approach to the design, layout, and graphics needed in cartographic production. A total of 32 units in the following courses is required for the certificate. Refer to the *Undergraduate Study* chapter of this catalog for general regulations governing all certificate programs.

The prerequisite for Lower Division Geography courses is GEOG150 or 160. Math 103 is a prerequisite for CE 202.

Lower Division (12 units)

CE 202	Plane Surveying	(4)
GEOG 210	Map Reading and Interpretation	(4)
GEOG 268	Microcomputers Applications in Geography	(4)

Upper Division (20 units)

Select any 5 courses from the following:

GEOG 405	Cartography	(4)
GEOG 465	Air Photo interpretation	(4)
GEOG 466	Remote Sensing of Environment	(4)
GEOG 468	Computer Cartography	(4)
GEOG 469	Geographic Information Systems Applications	(4)
GEOG 471	Advanced Cartography	(4)

Certificate Program in Urban Land Use and Property Analysis

The Department of Geography and Urban Analysis, in cooperation with the Department of Finance and Law, offers this credit certificate program which is designed for students and professionals seeking employment with public service or private business in urban communities. The program provides technical and analytical training for evaluating current problems confronting the urban community. A total of 25-28 units in the following courses is required for the certificate. Refer to the *Undergraduate Study* chapter of this catalog for general regulations governing all certificate programs.

Prerequisite Course (4 units):

FIN	338	Real Estate Principles	(4)
-----	-----	------------------------	-----

Requirements for the Certificate (25-28 units)

Required Courses (25-28 units):

GEOG	453	Locational Analysis	(4)
GEOG	476	Urban Areas	(4)
GEOG	499	Undergraduate Directed Study	(1-4)
FIN	432	Real Estate Management	(4)
FIN	438	Real Estate Valuation	(4)
FIN	439	Real Estate Finance	(4)
FIN	493	Real Estate Investment	(4)

The Credential Program

The Bachelor of Arts degree in Social Science with a Geography emphasis has been submitted for approval for examination waiver for the Single Subject Credential in Social Sciences. The anticipated commencement date for this degree is September, 1996. However, holders of a Single Subject credential issued by the state of California may complete the *supplementary authorization* program described below.

Supplementary Authorization for Single Subject Teaching Credential (33 units)

Holders of a *Single Subject teaching* credential issued by the state of California may supplement that credential with an authorization in *Geography* for teaching geography at any grade level through grade 12 or in classes organized primarily for adults by completing the following program with a grade of C or higher in each course. For other requirements governing issuance of this authorization, consult the School of Education.

Complete or demonstrate proficiency in each of the following courses(33 units):

GEOG	150	Human Geography	(4)	
GEOG	160	Physical Geography	(4)	
GEOG	210	Map Reading and Interpretation	(4)	
GEOG	410	Weather and Climate or GEOG	415	Perspectives
		on Environment	(4)	
GEOG	421	United States	(4)	
GEOG	431	California	(4)	
GEOG	441	World Resources	(4) or GEOG	481
		Political Geography	(4)	
GEOG	460	Field Geography	(5)	

Courses in Geography (GEOG)

Lower Division Courses

101 Earth Science (4)

(also listed as GEOL 101) Nature of the earth's land, water, and atmosphere with emphasis on dynamic processes in the earth's crust and atmosphere that have interacted to form the world's physical environments.

150 Human Geography (4)

Areal studies of peoples of world and their settlement characteristics; evaluation of origins, dispersals, and contemporary distributions of representative ways that humans live on earth.
CAN GEOG 4

160 Physical Geography (4)

Natural environment of humans; nature, distribution, and relationships of climate, landforms, vegetation, hydrography, and soils. CAN GEOG 2

210 Map Reading and Interpretation (4)

Prerequisites: GEOG 150, 160. Nature of maps and their interpretation. Lecture 2 hours, laboratory 4 hours.

268 Microcomputer Applications in Geography (4)

Basic PC skills that familiarize students with word processors, spreadsheets, data bases, and geographically-oriented software, including urban analysis, population, climatology, and computer mapping programs. Lecture 2 hours, laboratory 4 hours.

Upper Division Courses

Unless otherwise stated, the prerequisite for all 400-level GEOG I courses is GEOG 150 or 160 or 370.

358 Technology and Environment (4)

(also listed as ENGR 358) Prerequisite: GE natural science requirement. Problems of resource scarcity and environmental impact of technology, past, present, and future; relationships leading to an understanding of an increasingly complex global system.

370 World Regions (4)

Major physical regions of world and their occupational development by humans.

402 Geomorphology (4)

Prerequisites: GEOG 160; 210 or GEOL 150. Identification and interpretation of landforms. Local field trip.

405 Cartography (4)

Prerequisite: GEOG 210. Design and drafting of maps. Lecture 3 hours, laboratory 3 hours.

410 Weather and Climate (4)

Atmospheric behavior and how it produces our day-to-day weather; weather phenomena: severe storms, floods, droughts, atmospheric optics; processes involved in forecasting.

415 Perspectives on Environment (4)

Environmental interactions in subsistence and urban-industrial societies; impact of human activities on environment: modification of vegetation, hydrology, and landforms, accelerated soil erosion, climatic change; environmental perception; awareness of and adjustment to natural hazards.

421 United States (4)

Identification, interpretation, and synthesis of regional phenomena within the U.S. characterizing its physical and cultural landscape.

423 Europe (4)

Analysis of physical and cultural features of Europe.

424 South and Southeast Asia (4)

Analysis of human, cultural, and physical features of South and Southeast Asia; emphasis on roles of Asian nations and peoples in world relationships.

425 Japan (4)

Interpretation of population and economic problems, sociocultural patterns, and physical features of the land.

427 Mexico and Central America (4)

Nature of the land and characteristics of human settlement features in Mexico and Central America.

428 South America (4)

Character of physical and cultural environment in countries of South America.

430 China (4)

Physical and economic regional geography of China and its inner Asian frontiers, including study of its demography, industrial and agricultural development, transportation, and energy infrastructure.

431 California (4)

Physical environments of California and human settlement features, past and present.

432 Metropolitan Los Angeles (4)

Investigation of the physical and cultural geographic characteristics that have contributed to Los Angeles' dynamic urban growth and its dominance as the primate city within the region.

433 Third World Environments and Their Technological Developments (4)

Prerequisite: GE natural science requirement. The physical environments of Third World countries of the Humid Tropics, Wet and Dry Tropics, Hot and Dry Realms, and Highland Tropics and their associated problems of technological development.

434 Pacific Asian Physical Environments and Technological Developments (4)

Physical environments of Pacific Asian countries and their associated problems in technological development and resource utilization.

441 World Resources (4)

Spatial distribution of world's renewable and nonrenewable resources; interrelationships between population growth, resource utilization, and environment.

442 Population (4)

Spatial analysis of demographic variables with emphasis on environmental, social, and economic factors influencing population distribution and mobility; population growth in relation to resource utilization.

446 U.S. Ethnic Communities (4)

Spatial structure and organization of selected ethnic communities in the U.S. and their interrelationships with American composite cultural environment.

453 Locational Analysis (4)

Location and spatial distribution of economic activities; development and applicability of various locational models in geography; agricultural, industrial, central place, intracity, social gravity, and spatial interaction models; emphasis on development of dynamic geographic models pertaining to regional planning. Lecture 3 hours, laboratory 2 hours.

460 Field Geography (5)

Prerequisite: GEOG 150, 160; 210 or 370. Field identification and interpretation of natural and man-made features, and methods used therein. Lecture 2 hours, field work 6 hours. May be repeated once for credit if one enrollment is in program at off-campus field center.

465 Air Photo Interpretation (4)

Prerequisite: GEOG 210. Interpretation of natural and cultural landscapes as revealed in aerial photographs. Lecture 2 hours, laboratory 4 hours.

466 Remote Sensing of Environment (4)

Prerequisite: GEOG 465. Analysis of natural and cultural features of earth's environment using photographic, infrared, and microwave imagery. Lecture 2 hours, laboratory 4 hours.

467 Transportation (4)

Modes of movement of people, products, and ideas; their impacts on spatial patterns and landscapes.

468 Computer Cartography (4)

Prerequisites: GEOG 268, 405. Production of computer maps for students with limited computer background; drawing quality maps on printer, plotters, and graphics terminals using available software. Lecture 2 hours, laboratory 4 hours.

469 Geographic Information Systems Applications (4)

Prerequisite: GEOG 468. Theories and applications of Geographic Information Systems (GIS); use of GIS for planning purposes such as development projects, urban analysis, and environmental planning. Lecture 2 hours, laboratory 4 hours.

471 Advanced Cartography (4)

Prerequisite: GEOG 405. Advanced methods of cartographic rendering, including reproduction, negative scribing, color separation, terrain rendering, and plastic shading. Lecture 3 hours, laboratory 3 hours.

475 Settlement (4)

Human manner of settling new lands and resettling old lands, with special emphasis on form and function of resulting settlements.

476 Urban Areas (4)

Analysis of distribution of world's cities, and investigation of function and form of representative urban areas.

477 Urban Issues (4)

Presentation of issues relating to physical, technological, and economic characteristics and functions of urban areas. Lecture 3 hours, laboratory 3 hours (field trips and directed urban encounter).

481 Political Geography (4)

Physical and cultural phenomena that relate to problems and policies of world's states.

495 Senior Thesis (4)

Prerequisites: ENGL 102*, passing WPE score, senior standing. Advanced principles of geographic writing and research leading to a senior thesis.

**Students subject to earlier catalogs satisfy this prerequisite with ENGL 1010r 190.*

496 Special Topics (1-4)

Prerequisites: As needed for specific topic. May be taken concurrently with GEOG 497. Specialized systematic and regional topics in geography as announced in *Schedule of Classes*. Lecture 1-4 hours. May be repeated as subject matter changes.

497 Special Topics (1-4)

Prerequisites: As needed for specific topic. May be taken concurrently with GEOG 496. Special topics of interest to students in geography as announced in *Schedule of Classes*. Activity 2--8 hours. May be repeated for credit as subject matter changes.

499 Undergraduate Directed Study (1-4)

Prerequisites: Instructor consent to act as sponsor; ability to do independent work and to prepare written and oral reports. Project selected in conference with sponsor before registration; progress meetings held regularly. May be repeated to maximum of 8 units as subject matter changes.

Courses in Urban Analysis (URBA)**Lower Division Course****101 The Urban World (4)**

Worldwide issues relating to the physical, technological, economic, political, and sociological characteristics of urban areas.

Upper Division Courses

400 Proseminar: Urban Analysis (4)

Prerequisite: Completion of all other requirements for Urban Analysis option. Analysis of specific urban problems and potential solutions from an interdisciplinary perspective. May be repeated as subject matter changes.

401 Senior Project (4)

Prerequisites: Completion of all other requirements for Urban Analysis option, prior approval of project by advisory committee. May be taken concurrently with URBA 400. Interdisciplinary group project; identification of specific urban problems, application of special skills in assembling information, proposing and initiating implementation of solution. May be repeated once for credit.

454 Selected Topics in Urban Analysis (1-6)

Current topics of special interest in urban studies and related fields as announced in *Schedule of Classes*. May be repeated for credit as subject matter changes.

499 Undergraduate Directed Study (1-4)

Prerequisites: Consent of an instructor to act as sponsor, approval of coordinator. Project selected in conference with sponsor before registration; progress meetings held regularly; final report submitted. May be repeated for credit.

GEOLOGICAL SCIENCES

School of Natural and Social Sciences

DEPARTMENT OFFICE

Physical Sciences 216

Phone: (213) 343-2400

The Department of Geological Sciences offers the Bachelor of Science degree in Geology, the Bachelor of Arts degree in Earth Sciences, the Master of Science degree, a minor for students majoring in other fields, and Physical Science waiver and supplementary authorization programs for earth and physical science teachers. The Master of Science degree program is described in the *Graduate Programs* section.

Programs in geology develop a comprehensive study of earth materials, structures, and processes. Courses to serve both general and professional interests are offered.

The Faculty

Emeriti: Ivan P. Colburn, Perry L. Ehlig, James F. Richmond, Martin L. Stout.

Professors: Alan Andrew Colville, Terry E. Davis, Richard W. Hurst, Robert F. Meade, Gary A. Novak, Pedro C. Ramirez, Robert J. Stulz (*Chair*).

Assistant Professor: Kim M. Bishop, Emelia Burt.

Undergraduate Degrees

Two baccalaureate programs are offered. The Bachelor of Science degree program provides in-depth study for professional work in engineering geology, hydrogeology, petroleum geology, and environmental and analytical geochemistry or graduate study. The Bachelor of Arts degree program has a liberal arts emphasis for students who are preparing for science teaching or those who wish a liberal arts education. Both degree programs interact with the Southern California Ocean Studies Institute (SCOSI) which is explained in detail under *Consortia* in the first chapter of this catalog.

Bachelor of Arts Degree in Earth Sciences

The Bachelor of Arts degree, which requires 186 units, is designed for students who desire a liberal arts education with a major in Earth Sciences. This degree is not intended for those who are pursuing a professional career in geology, but rather for individuals who wish to be high school earth science teachers, park rangers, environmentalists, or other physical science naturalists. Completion of the B.A. degree in Earth Sciences plus other courses specified below satisfies the state requirement for examination waiver for the Single Subject credential in Physical Sciences. The complete waiver program is listed later in this chapter in the *Physics* section. Refer to the *School of Education* chapters in this catalog and consult the School of Education for additional information about credentials.

Requirements for the Major (115 units)

A total of 115 units in geology, related physical sciences, and mathematics is required for the Bachelor of Arts major in Earth Sciences. Seventy-five units are in lower division and 40 are in upper division courses.

Lower Division Required Courses (61 units):

ASTR 151	Principles of Astronomy	(3)	
ASTR 152	Principles of Astronomy Laboratory	(1)	
CHEM 101, 102, 103	General Chemistry I, II, II	(5, 5, 5)	
GEOL 150	General Geology	(3)	
GEOL 151	General Geology Field Laboratory	(2)	
GEOL 152	General Geology Laboratory	(1)	
GEOL 201	Elementary Mineralogy	(6)	GEOL 203
	Introductory Petrology	(2)	
GEOL 252	Historical Geology	(4)	
GEOL 272	Computers in Geology	(4)	
MATH 103	Algebra and Trigonometry	(4)	
MATH 206	Calculus I	(4)	
PHYS 101--103	Physics	(4, 4, 4) or	

PHYS 201 *, 202*, 203* General Physics (4, 4, 4)

Electives (select at least 14 units from following):

GEOL 155*, 156*, 157, 158*

BIOL 168 CHEM 152*, 201*

MATH 207*, 208*

PHYS 204*, 205*

Upper Division Required Courses (16 units):

GEOL/PHYS350N Evolution of Universe and Earth (4)

GEOL 360 Geological Mapping (4)

GEOL 420N Geology of the National Parks (4)

GEOG 410 Weather and Climate (4)

Select at least 24 units from following:

BIOL 361 N

GEOG 402, 415

GEOL 321,370, 401A, 402, 484, 499*

* Required for Single Subject credential in Physical Science

Earth Science Major

* Multiple Subject Teaching Option (146-151)

Students who select this option complete a separate core which is common to all Multiple Subject teaching options. The common core contains 106-111 units and is described in the *Undergraduate Study* chapter. In addition to the core, the 68 units listed below are required in the option. Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs.

Required Courses (106-111 units)

Refer to *Undergraduate Study* chapter of this catalog.

Major Courses (20 units)

GEOG 160	Physical Geography	(4)	
GEOG 495	Senior Thesis	(4)	
GEOL 158	Environmental Geology	(4) or GEOL	490
	Special Topics in Modern Geology	(4)	
GEOL 252	Historical Geology	(4)	
GEOL 420N	Geology of the National Parks	(4)	

Earth Science Depth Area (20 units)

GEOG 402	Geomorphology	(4)
GEOG 410	Weather and Climate	(4)
GEOG 415	Perspectives on Environment	(4)
GEOL 321	Geology of Southern California	(4)
GEOL/PHYS 350N	Evolution of Universe and Earth	(4)

Electives (28 units)

Professional education courses are recommended. See credential adviser in the *School of Education*.

Bachelor of Science Degree in Geology

The Bachelor of Science degree in Geology requires a total of 192 quarter units and is designed for students who plan a professional geological career in government and industry or graduate study in geology and related fields.

Requirements for the Major (124 units)

A total of 124 units of geology, related physical sciences, and mathematics is required for the Bachelor of Science degree major. Fifty-five units are in lower division courses and 69 are in upper division courses in geology and related fields.

Lower Division Required Courses (55 units):

GEOL 150	General Geology	(3)	
GEOL 152	General Geology Laboratory	(1)	
GEOL 201	Elementary Mineralogy	(6)	GEOL 203
	Introductory Petrology	(2)	
GEOL 252	Historical Geology	(4)	
GEOL 272	Computers in Geology	(4)	
CHEM 101-103	General Chemistry I-III	(5, 5, 5)	MATH 206,207
	Calculus I, II	(4, 4)	PHYS 101-103
	Physics (4, 4, 4)		

Upper Division Required Courses (45 units):

GEOL 360	Geological Mapping	(4)	
GEOL 370	Geochemistry	(4)	
GEOL 400	Optical Mineralogy	(5)	
GEOL 401A	Igneous Petrology	(3)	
GEOL 401 B	Igneous Petrology Laboratory	(2)	
GEOL 402	Sedimentary Petrology	(4)	
GEOL 403	Metamorphic Petrology	(4)	
GEOL 410	Structural Geology	(5)	GEOL 430
	Stratigraphy	(6)	
GEOL 460A	Summer Field Geology I	(5)	
GEOL 460B	Report for Field Geology I	(3)	

Electives (select 24 units from following with adviser approval):

GEOL 321,424-426, 431-434, 451-453, 470-473, 480-485, 490, 491,497, 499

In addition, students may select up to 4 units of upper division biology, chemistry, computer science, engineering, mathematics, and physics courses with adviser approval. Students are advised to consult the *Schedule of Classes* for special topics courses (GEOL 490 and 491) which may be used to satisfy the geology elective requirements.

Minor in Geology

This program is designed for students majoring in other fields who wish to broaden their experience in science or prepare for careers such as teaching, public service, or law. The minor requires 35 units in geology and related fields. Consultation with a department adviser is recommended. Students with majors in related physical sciences may substitute other courses with approval of a Geological Sciences adviser. Completion of the minor in Geological Sciences also satisfies requirements for the Supplementary Authorization in Earth Sciences for holders of a Single Subject teaching credential.

Requirements for the Minor (35 units)

Lower Division Required Courses (23 units):

GEOL 150, 152, 155, 156, 158, 201,252

Upper Division Required Course (12 units):

GEOL 321,420
GEOG 410

The Credential Program

The Bachelor of Arts degree in Earth Sciences has been approved by the Commission on Teacher Credentialing for examination waiver for the Single Subject credential in Physical Science. The Department of Geological Sciences also participates in the Bachelor of Science degree program in Physical Science, described later in this chapter, which is also approved for examination waiver by the commission. An additional supplementary authorization for the Single Subject credential is described just above this paragraph. Interested students should consult advisers in both the Department of Geological Sciences and the School of Education. Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs.

Supplementary Authorization for Single Subject Teaching Credential(39 units)

Holders of a *Single Subject teaching* credential issued by the state of California may supplement that credential with an authorization in Earth Sciences for teaching earth sciences at any grade level through grade 12 or in classes organized primarily for adults by completing the following program with a grade of Cot higher in each course. For other requirements governing issuance of this authorization, consult the School of Education.

Complete or demonstrate proficiency in each of the following courses(39 units).

GEOL	150	General Geology	(3)	
GEOL	152	General Geology Laboratory	(1)	
GEOL	155	Oceanography	(3)	
GEOL	156	Oceanography Field Laboratory	(2)	
GEOL	158	Geology and Society	(4)	
GEOL	201	Mineralogy	(6)	GEOL 252
		Historical Geology	(4)	
GEOL	321	Geology of Southern California	(4)	
GEOL	420	Geology of the National Parks	(4)	
ASTR	151	Principles of Astronomy	(3)	
ASTR	152	Principles of Astronomy: Laboratory	(1)	
GEOG	410	Weather and Climate	(4)	

Courses in Geology (GEOL)

+There is a special fee associated with registering for laboratory classes that carry this designation. Details appear in the Schedule of Classes.

Lower Division Courses

101 Earth Science (4)

(also listed as GEOG 101) Nature of the earth's land, water, and atmosphere with emphasis on dynamic processes in the earth's crust and atmosphere that have interacted to form the world's physical environments.

150 General Geology (3)

Corequisite: GEOL 151 or 152. Earth materials and processes including minerals and rocks, erosion, internal structure, plate tectonics, volcanism, earthquakes, and geologic evolution of the land surface. Lecture 3 hours. *GEOL 150+152 = CAN GEOL 2*

151 General Geology Field Laboratory (2)

Field interpretation of rocks, minerals, and geologic structures of southwestern U.S.; field trips scheduled for weekends or quarter breaks. Proseminar 1 hour, field trips 3 hours. May be repeated once for credit if different areas are studied.

152 General Geology Laboratory (1)

Corequisite: GEOL 150. Earth materials (minerals and rocks), interpretation of geologic features (especially California) on topographic and geologic maps; seismological (earthquake) problems. Laboratory 3 hours. *GEOL 150+152 = CAN GEOL 2*

155 Oceanography (3)

Corequisite: GEOL 156 or 157. Marine geology and oceanography. Physiochemical processes and geological features of oceans; role of oceans in earth history; interactions of oceans, biosphere, and atmosphere; and natural resource potential.

+156 Oceanography Field Laboratory (2)

Field and laboratory interpretation of samples collected by students during cruise on an oceanographic research vessel. Interpretation of shoreline features. Field trips on weekends. Proseminar 1 hour, field trips 3 hours.

157 Oceanography Laboratory (1)

Corequisite: GEOL 155. Laboratory studies of selected topics in oceanography including analysis of maps, seawater and sediment samples, wave and current patterns, and coastal geomorphology. Laboratory 3 hours.

158 Environmental Geology (4)

Social reactions to earthquakes, landslides, subsidence, floods, and volcanism; geological problems in water, mineral, and energy resource development. *No credit toward Geology major.*

201 Elementary Mineralogy (6)

Prerequisites: CHEM 101, MATH 102. Nature of crystalline state, description and projection of crystals, general study of the seven crystal systems; crystal chemistry of nonsilicate minerals. Lecture 3 hours, laboratory 9 hours.

203 Introductory Petrology (2)

Prerequisite: GEOL 201. Elementary methods of rock and rockforming mineral description, identification, and interpretation involving igneous, sedimentary and metamorphic rocks. Lecture 1 hour, laboratory 3 hours.

252 Historical Geology (4)

Prerequisite: GEOL 150, 155, or 158. Plate tectonic evolution of continents, oceans, and mountain systems and geologic history of earth; introduction to stratigraphy and development of ancient life. Lecture 2 hours, laboratory 6 hours. *CAN GEOL 4*

272 Computers in Geology (4)

Prerequisites: GEOL201, MATH 103. Microcomputer applications in geology; geotechnical report writing with a word processor, elementary statistics and spreadsheet techniques, computer-aided drawing of geological maps and diagrams, integration of text and graphics into reports. Lecture 2 hours, laboratory 6 hours.

Upper Division Courses**321 Geology of Southern California (4)**

Prerequisites: GEOL 150; 1510r 152. Geologic provinces of southern California including geologic history, structure, rock types, and landforms. Field laboratory on weekends. Lecture 2 hours, laboratory 6 hours.

350N Evolution of Universe and Earth (4)

(also listed as PHYS 350N) Prerequisite: GE natural science requirement. Origin and evolution of the universe, elements, stars, sun, the Earth, and life upon it.

360 Geological Mapping (4)

Prerequisites: GEOL 203, 252, 272. Topographic map construction and reading; Brunton and tape traverse for construction of cross sections, stratigraphic columns, and geologic maps; methods of field note taking and geologic report writing. Laboratory and field trips 12 hours.

370 Geochemistry (4)

Prerequisites: GEOL202, 272; prerequisite or corequisite: MATH 206. Interpretation of geological phase diagrams, trace element distribution, isotope tracers, radiometric dating systems, light stable isotopes, aqueous solutions in ore deposits, Eh-ph controls on mineral equilibrium during weathering, and diagenesis.

400 Optical Mineralogy (5)

Optical properties of crystals in polarized light, determination of minerals in thin sections, and immersion oils with the petrographic microscope. Lecture 2 hours, laboratory 9 hours.

401 A Igneous Petrology (3)

Prerequisites: GEOL 360, 370. Origin, occurrence, and characterization of igneous rocks; their mineralogy, petrology, geochemistry, and plate tectonics setting.

401 B Igneous Laboratory and Field Methods (2)

Prerequisite: GEOL400; corequisite: GEOL401A. Laboratory and field study of origin and physical character of igneous rocks. Laboratory and field trips 6 hours.

402 Sedimentary Petrology (4)

Prerequisites: GEOL 370, 410. Analysis of sediments and sedimentary rocks involving their description, classification, and origin. Principles of sedimentation, recognition of environments of deposition. Lecture 2 hours, laboratory and field trips 6 hours.

403 Metamorphic Petrology (4)

Prerequisites: GEOL 360, 401AB, 402. Origin, occurrence, characterizations of igneous rocks; laboratory emphasis on petrographic description and field studies. Lecture 2 hours, laboratory and field trips 6 hours.

410 Structural Geology (5)

Prerequisites: GEOL360; MATH 206; prerequisite or corequisite: PHYS 101. Theory of rock deformation, structural features of sedimentary, igneous, and metamorphic rocks; deformation of the earth's crust, applied practice in laboratory methods dealing with geologic problems in three dimensions. Lecture 3 hours, laboratory 6 hours.

420N Geology of the National Parks (4)

Geologic history of the U.S. national parks and monuments, emphasizing the process of rock formation, structure, stratigraphy, geomorphology, and paleogeography.

424 Low Temperature Geochemistry (4)

Prerequisite: GEOL 370. Low temperature minerals and their formation; diagenetic reactions; low grade metamorphism; role of fluids in mineral paragenesis.

425 Isotope Geology (4)

Prerequisite: GEOL 370. Applications of RB/Sr, U/Pb, Sm/Nd isotopes to study of igneous, metamorphic, and sedimentary rocks. Lecture 2 hours, laboratory 6 hours, (arranged).

426 Astrogeology (4)

Prerequisite: GEOL 401. Terrestrial planets; meteorites, the moon, asteroids, comets; remote sensing of the Giant Planets; origin of the solar system.

430 Stratigraphy (6)

Prerequisite: GEOL 402. Paleogeography and reconstruction of ancient environments of sedimentary basins through application of structural, petrologic, stratigraphic, and paleontologic principles; stratigraphic analysis of economic deposits; report writing and field note taking; stratigraphic section measurements and analysis. Lecture 4 hours, laboratory and field trips 6 hours.

431 Invertebrate Paleontology (5)

Prerequisite: GEOL 252. Characteristics and evolution of important fossils in invertebrate animals and fundamentals of stratigraphical paleontology. Lecture 3 hours, laboratory 6 hours.

432 Biostratigraphy (4)

Prerequisite: GEOL 430. Principles of biostratigraphy illustrated through study of important groups of microfossils. Lecture 3 hours, laboratory 3 hours.

433 Quaternary Geology (4)

Prerequisite: GEOL 252. History of the earth during and since Ice Ages; causes, mechanisms, and global physical and biological effects of glaciation.

434 Volcanology (4)

Prerequisites: GEOL 360, 370. Tectonic setting; petrogenesis; interpretation of volcanic rocks.

436 Petroleum Geology (4)

Prerequisites: GEOL 410, 430. Geological occurrence of petroleum including structures, accumulation mechanisms, nature of reservoir rocks, nature of petroleum fluid; evaluation and exploration of methods.

451 Geology of Industrial Rocks and Minerals (4)

Prerequisites: GEOL 360, 370. Sedimentary geochemical cycles and economic aspects of sedimentary deposits and utilization of common rock materials. Lecture 3 hours, laboratory and/or field trips 3 hours.

452 Economic Geology of Metallic Deposits (4)

Prerequisites: GEOL 360, 370. Geochemistry of ore formation occurrence and distribution of metallic deposits, laboratory examination of ore suites. Lecture 3 hours, laboratory and/or field trips 3 hours.

453 Exploration and Mining Geology (4)

Prerequisites: GEOL 401; 451 and 452 recommended. Geologic, economic, and engineering factors; collection and analysis of geological, geochemical, and geophysical data; written and graphic presentations; planning and carrying out mining programs. Lecture 2 hours, laboratory 6 hours.

460A Summer Field Geology I (5)

Prerequisites: GEOL 403, 410, 430; corequisite: GEOL 460B. First seven weeks of quarter: five weeks in a field camp, off campus, investigating area of sedimentary, metamorphic, and igneous rocks and geologic structure; sixth and seventh weeks on campus preparing maps and reports.

460B Report for Field Geology I (3)

Corequisite: GEOL 460A. Preparation of geologic map, cross sections and report about entire area covered by class in GEOL 460A.

470 X-Ray Crystallography (4)

Prerequisite: GEOL 202. Analysis of crystal structure and chemistry by x-ray power diffraction methods; laboratory problems applicable to mineralogy, petrology, metallurgy, and inorganic chemistry; introduction to single crystal methods. Lecture 2 hours, laboratory 6 hours.

471 Analytical Geochemistry (4)

Prerequisite: CHEM 201, GEOL 401, or PHYS 206. Intended for upper division students in chemistry, geology, or physics interested in quantitative x-ray fluorescence spectrographic analysis of rocks and minerals. Laboratory problems include evaluation of samples collected from mapped area and statistical summary of results. Lecture 2 hours, laboratory 6 hours.

472 Data Analysis in Geology (4)

Prerequisites: GEOL 272, MATH 206. Application of timesharing computer systems, BASIC programming combined with statistics and geometric methods for treatment of geologic data and solution of typical problems. Lecture 2 hours, laboratory 6 hours.

473 Clay Mineralogy (4)

Prerequisite: GEOL 370. Crystal structures, classification, origin, occurrence, and physicochemical properties of clay minerals; identification by x-ray diffraction and DTA techniques.

480 Principles of Geophysics (4)

Prerequisites: PHYS 103 or 203; MATH 207; GEOL 150 recommended. Internal physics of the earth, interpretation of data and theories concerning the geodetic, tectonic, isostatic, thermal, seismic, gravity, magnetic, radioactive, and electrical phenomena of the earth.

481 Engineering Geology (4)

Prerequisite: GEOL 460AB. Analysis of geologic factors affecting engineering projects; includes mechanical properties of rocks and soils, landslides, slope stability, subsidence, groundwater, erosion and silting, and earthquake effects.

482 Field Methods in Engineering Geology (2)

Prerequisite or corequisite: GEOL 481. Field application of engineering geologic techniques and methods. Laboratory 6 hours.

483 Photogeology (4)

Prerequisite: GEOL 360. Use of aerial photographs to interpret geological structures and lithologies shown on topographic maps; analysis of photos for engineering projects. Lecture 3 hours, laboratory 3 hours.

484 Hydrogeology (4)

Prerequisites: Senior standing in Geology; MATH 207 recommended. Occurrence, movement, quality of ground-water emphasizing geologic factors; investigation, development, and management. One one-day field trip required.

485 Groundwater Management and Models (4)

Prerequisite: GEOL 484. Mathematical models as tools of groundwater management; case histories of various levels of groundwater management; laboratory includes verification and prediction using finite difference model on computer systems. Lecture 3 hours, laboratory 3 hours including one field trip.

490 Special Topics in Modern Geology (2-4)

Prerequisites: Upper division or graduate standing; other prerequisites may be stated in departmental announcement. Current developments in modern geology, such as volcanology, hydrogeology, clay mineralogy, or plate tectonics. May be repeated as subject matter changes.

491 Special Laboratory Topics in Modern Geology (1-3)

Corequisite: GEOL 490 when appropriate; see *Schedule of Classes for specific requirement*. Experimental techniques in modern geology. May be repeated as subject matter changes.

497 Senior Problem (3)

Prerequisites: Senior standing in Geology, prior instructor consent to act as sponsor. Individual study of an applied geologic field or laboratory problem; progress reports, final oral and written report required.

499 Undergraduate Directed Study (1-3)

Prerequisites: Consent of an instructor to act as sponsor, ability to assume responsibility for independent work and to prepare written and oral reports. Project selected in conference with sponsor before registration; progress meetings held regularly.

HISTORY

School of Natural and Social Sciences

DEPARTMENT OFFICE

King Hall C4066

Phone: (213) 343-2020

The Department of History provides opportunities to study the development and interaction of the world's cultures. In addition to a broad curriculum in local, national, and world history, the department offers a wide variety of special topics courses. The program thus contributes to the attainment of intellectual and cultural objectives of a liberal education appropriate to careers in law, journalism, business, government service, librarianship, and teaching, or to advanced study.

The department offers the Bachelor of Arts and Master of Arts degrees in History, and a minor in History for students majoring in other areas. The undergraduate programs are described below, and the graduate program is described in the *Graduate Programs* section. The department also participates in the interdisciplinary Bachelor of Arts degree program in Social Science. This program is described under the area of Social Science.

The Department of History administers a minor in Religious Studies designed to explore the forms and traditions of religion that have appeared in human culture.

The Faculty

Emeriti: Butrus Abd al-Malik, Louis C. DeArmond, Richard Dean Bums, Emmett A. Greenwalt, Edward O. Guerrant, Milton W. Meyer, Earl H. Phillips, Arnold Pincus, Kenneth J. Pratt, Neil Rabitoy, Arthur L. Smith Jr., Kent L. Steckmesser.

Professors: John M. Allswang (*Chair*), Francisco Balderrama, Hugh S. Bonar, Jr., Stanley M. Burstein, Daniel Crecelius, Donald O. Dewey, Eugene R. Fingerhut, Timothy Fox Harding, Udo Heyn, Vicente F.R. Pilapil, Martin J. Schiesl.

Associate Professors: Carole Srole, Lamont Yeakey, Yuen-Sang (Philip) Leung.

Bachelor of Arts Degree

The Bachelor of Arts degree program in History is designed to provide an understanding of societal development in all aspects of experience and environment and of the relevance of the past to the present. The program permits pursuit of a wide range of interests within the purview of historical methodology. Students should confer in advance with a history adviser to select the courses and program appropriate to their goals.

Requirements for the Major (80 units)

The major requires 80 units, including a required core of 20 lower division and 44 upper division units plus 16 units of electives.

Foreign Language Competence

History majors are urged to develop competence in at least one foreign language.

Lower Division Required Courses (20 units):

HIST	110ABC	World Civilization I-III	(4, 4, 4)
HIST	202AB	United States Civilization	(4, 4)

Upper Division Required Courses (28 units) Required Course (4 units):

HIST	390	History Research and Writing	(4)
------	-----	------------------------------	-----

Select 8 units each from groups A, B, and C for a total of 24 units:

Group A Western Civilization/Europe

History of Science: HIST 380, 400ABC, 402

Ancient: HIST 311, 410-413

Europe (*Chronological*): HIST 421-430

Europe (*Topical*): HIST 350, 431-447

Group B The United States

U.S. (*Chronological*): 470-475

U.S. (*Topical*): 458, 459, 476-489

Group C The Non-Western World

Africa: 414AB-416

Asia: 490AB, 494ABC, 495AB, 496

Latin America: 461-466

Middle East: 419, 420, 491,492

Special Studies (12 units):

Select *three* HIST 450 courses, one appropriate to each group above (A, B, C).

Historiography (4 units):

HIST 493

Electives (16 units):

Select any 400-level courses in history; 451-453 and 499 may be included. With prior departmental approval, a maximum of 8 units may be taken in fields outside history.

* **Multiple Subject Teaching Option**

Students who select this option complete a separate core which is common to all Multiple Subject teaching options. That common core contains 106-111 units and is described in the *Undergraduate Study chapter*. In addition to the core, the 68 units listed below are required in the option. Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs.

Required Courses (106-111):

Refer of *Undergraduate Study* chapter of this catalog.

Major Courses (20 units)

Required Courses (8 units)

HIST 190 Introduction to History (4)

HIST 493 Historiography (4)

History Group A, B, C (12 units):

Select one course each from groups A, B, and C, excluding courses used to meet depth requirements and GE upper division theme courses.

Group A: Western Civilization(*select 4 units from following*)

HIST311,380, 410, 411,412A, 412B, 413, 421,422, 444A

Group B: United States (*select 4 units from following*)

HIST 470, 471,472, 476, 479, 480, 482, 483, 485, 488, 489

Group C: The Non-Western World(*select 4 units from following*)

HIST 414A, 419, 461,494A

Depth Area (20 units)

Select one of the two depth areas listed below.

* **American Civilization (Foundations)**

HIST 450 Special Studies in History (4)

Native Americans: ANTH 406 or HIST 482 (4)(*select one*)

Early America: HIST 470 or 471 (4)(*select one*)

California: HIST 488 or 489 (4)(*select one*)

Topics in U.S. History: HIST 477, 480, or 485 (4)(*select one*)

* **Ancient World**

ANTH 425 Archaeology of the Old World (4)

HIST 410 Ancient Near East: 4000-323 B.C (4)

HIST 450 Special Studies in History (4)

Classical World: HIST 411, 412A, 412B, 413 (4) *(select one)*

Non-Western World HIST 414A, 490A, 494A (4) *(select one)*

Electives (28 units)

Professional education courses are recommended. See a credential adviser in the *School of Education*.

Minor in History

The minor in History is available for students majoring in other fields. The 36-unit program includes a sequence of courses with the same general objectives as the History major, and may be of particular value to students majoring in business, engineering, the sciences, and fine or applied arts.

Requirements for the Minor (36 units)

Lower Division Required Courses (20 units):

HIST 110ABC, 202AB

Upper Division Required Courses (12 units):

Select *one* course each from groups A, B, and C listed under required upper division courses in the Bachelor of Arts degree in History.

Elective (4 units):

Select any 400-level course in history.

Minor in Religious Studies

To complete the minor in Religious Studies, students must complete a total of 32 units from the courses listed below, with adviser approval. Core requirements total four courses (16 units); electives, required in Religious Studies and at least two of the three areas offered, constitute the remainder of the program (16 units). Prior approval must be obtained for enrollment in special topics and directed study courses. Each student will submit a study program for approval to the director of the Religious Studies program. A maximum of eight units from a student's major may be applied on **the** minor.

Requirements for the Minor (32 units) Core requirements (16 units):

RELS 200 Introduction to Religious Studies (4)

PHIL 238 Comparative Religions (4)

RELS 300 Judaism, Christianity, Islam (4)

RELS 350 Religions in the U.S (4)

Electives (16 units):

ART/RELS 450 Art, Religion, and Technology (4)

RELS 410 Asian Religions (4)

RELS 425 Themes of Adult Life in Religions (4)

RELS 435 Religion and Sex Roles (4)

RELS 454 Special Topics in Religious Studies (4)

RELS 461 Religion and the Nuclear Age (4)

RELS 499 Undergraduate Directed Study (4)

Select courses from at least two of the following three areas, with adviser approval.

Area I. Anthropology, Art, Literature, Mythology, Sociology

ANTH 437

ART 406, 416, 450, 454, 499* ENGL 258, 482, 491 *, 499*

SOC 445, 454*, 499*

"when applicable

Area II. History

HIST 401, 419, 450*, 451, 490A, 490A, 495A, 499*

JAPN 310

** when applicable*

Area III. Philosophy

PHIL311,354*, 418, 431,435, 445,452, 495*, 499

* when applicable

Courses in History (HIST)**Lower Division Courses****110ABC World Civilization I, II, III (4, 4, 4)****110A** Comparative examination of the ancient world's classical civilizations from 4500 B.C. to 500 A.D.**110B** Comparative examination of world civilizations from 500 to 1700 A.D. Great Medieval civilizations; interaction of Western civilization with other medieval civilizations.**110C** Dominance of Western civilization since 1700: science, technology, industrialism, urbanization, and nationalism. Resistance and reaction in the 20th century. HIST10ABC = CAN HIST SEQ A**150 Asian-American History (4)**

Asian experience in America from 1850 to present. Emphasis on historical experience of Chinese, Japanese, Filipino, and Korean immigrant groups.

202A United States Civilization (4)

Development of U.S. from earliest colonial settlement through Civil War. HIST 202A = CAN HIST 8

202B United States Civilization (4)

Political, economic, social, and cultural development of U.S. from Civil War to present. HIST 202B = CAN HIST 10

253 Caribbean History (4)

(also listed as PAS 253) Caribbean history and development, including history of indigenous peoples, European colonialism, slavery, resistance, and independence. Includes Spanish-, English-, French-, and Dutch-speaking Caribbean islands.

Upper Division Courses*Upper division standing is prerequisite to all 400-level history J courses, unless otherwise noted.***311 Classical Civilization and the Modern World (4)**

History of classical civilization and its legacy. Origin of the classical tradition, its social, political, and cultural manifestations, and its transmission to the modern world.

350 Evolution and the Modern World (4)

(also listed as ART 350, ENGL 350, and PHIL 350) Prerequisite: GE humanities requirement. History of the idea of evolution from antiquity to the present and its impact on the culture of the 20th century.

380 Ancient and Modern Science (4)

(also listed as CHEM 380N) Prerequisite: GE natural science requirement. Systematic analysis of ancient scientific thought as science and its relationship to modern science.

390 History Research and Writing (4)

Prerequisites: Passing WPE score; strongly recommended: 12 units of lower division history course work. Introduction to historical research and writing; ideas, methods, and practical experience in investigating historical problems.

392 Editing and Publishing Perspectives (1-4)

Prerequisite: instructor consent. Techniques and practice in editing and producing a scholarly journal of research and review. May be repeated to maximum of 6 units.

400A History of Science: Antiquity to Renaissance (4)

Development of science in its relation to main current of Western civilization from classical antiquity to the Renaissance.

400B History of Science: Renaissance to 1800 (4)

Development of science in its relation to main currents of Western civilization from about 1400 to time of French Revolution.

400C History of Science: 19th and 20th Centuries (4)

Development of science in its relation to the main currents of Western civilization since 1800.

401 Science, Religion, and Culture in World History (4)

Prerequisites: GE natural and social science requirements; RELS 200 or PHIL 238. Interaction of science, religion, and culture in several great civilizations during specific periods of history.

402 History of Astronomy (4)

Emergence and development of astronomical concepts and problems from earliest time to present.

410 Ancient Near East: 4000-323 B.C. (4)

Extensive study of earliest civilizations-Egyptian, Mesopotamian, Syrian, Persian, and Hebrew-and their historical legacy to Western world.

411 History of Ancient Greece (4)

Political and cultural study of Ancient Greece from Minoan-Mycenaean period to end of 5th century.

412A Early Rome, The Republic (4)

Internal and external development of the Roman republic from 8th Century B.C. to the death of Julius Caesar, 44 B.C.

412B The Roman Empire (4)

Roman history from the death of Julius Caesar, 44 B.C., to the fall of the city, 410 A.D.

413 Greek History: The Alexandrian Age (4)

Political, social, and religious developments from conquest of Alexander to rule of Islam; a history of Hellenistic, Roman, and early Byzantine rule in Near East.

414A Traditional Sub-Saharan Africa (4)

African continent south of the Sahara, earliest times to latter half of 18th century, with emphasis on political development.

414B Modern Sub-Saharan Africa (4)

Partition of Africa in 19th century, systems of European administration, reaction to colonial rule, birth of nationalism; social, economic, and political changes to 1945.

415 Contemporary Sub-Saharan Africa (4)

Post-World War II independence revolutions in black Africa; resistance to change in southern Africa; contemporary political, social, and economic problems of Africa south of the Sahara.

416 The Republic of South Africa (4)

South Africa, 17th century to present, emphasizing economic growth, development of political and social attitudes, and entrenchment of white rule.

419 Classical Age of Islamic Civilization, 600-1258 (4)

Rise of Islam, the Caliphate, the Crusades, the Turkish and Mongol invasions.

420 Great Medieval Islamic Empires, 1258-1798 (4)

Dissolution of Arab Empire; Mamluk rule in Egypt; Il-Khanid, Timurid and Safavid Persia; rise of Ottoman Empire; Middle East culture and society on the eve of Westernization.

421 The Early Middle Ages (4)

Europe from fall of Roman Empire to 13th century; political, social, economic, and religious development of medieval Europe.

422 The Later Middle Ages (4)

Emergence of modern Europe and the period's cultural contributions to modern era.

423 Renaissance and Reformation (4)

Changes that shaped the course of early modern Europe to 1600, with emphasis on nature of period's leading phenomena, the Renaissance and the Reformation.

424 Seventeenth Century Europe (4)

Culmination of Wars of Religion, beginning of Age of Reason, and nature of absolutism in period from 1600 to 1715.

425 Eighteenth Century Europe (4)

The Ancient Regime and the Enlightenment to the French Revolution.

426 French Revolution and Napoleon (4)

History of Europe during period of French Revolution and Napoleon.

429 Europe: 1914 to Present (4)

Political, economic, cultural, and diplomatic history of Europe, World War I to present.

430 Europe: 1815-1914 (4)

European nationalism, industrial growth, imperialism, and the politics of power.

431 History of Modern Germany (4)

History of modern Germany, with emphasis upon 20th century.

437 Social History of Europe (4)

Changes in social institutions (family, church, polity), relationships (sex, class, race, ethnicity), and processes (mobility, control, disorder) from the Ancient Regime to present.

438 Economic History of Europe (4)

Europe's economic ideologies and institutions, with emphasis on economic problems, development, welfare, and reform, from the Industrial Revolution to present.

439 Intellectual History of Europe (4)

Thought, belief, and opinion in Europe, with emphasis on principal thinkers and ideas as they relate to contemporaneous historical values from the Enlightenment to present.

440 Early Modern England (4)

History of England from 14th century to 1688, with emphasis upon constitutional, social, political, and economic development.

441 British History from 1688 to 1865 (4)

Historical development of Britain from Glorious Revolution to death of Palmerston.

442 Great Britain since 1865 (4)

Historical development of Great Britain from 1865 to present.

443 The British Empire (4)

Political and economic development of British Empire since late 18th century, with major consideration to expansion of colonial empire and evolution of modern empire-commonwealth.

444A Spain and Portugal to 1700 (4)

Political and institutional development of Spain and Portugal from antiquity to War of Spanish Succession.

444B Spain and Portugal since 1700 (4)

Political and institutional development of Spain and Portugal from 1700 to present.

445 Foundations of the Russian Empire (4)

Political, economic, social, and cultural history of Russia from earliest times to accession of Alexander in 1801.

446 Imperial Russia: 1801-1917 (4)

History of Russia from accession of Alexander I to end of Romanov dynasty in 1917.

447 The Soviet Union (4)

Background and history of revolutions of 1917 and subsequent historical development of Soviet Union.

450 Special Studies in History (4)

Different theme or episode in history examined thoroughly each quarter in the manner of an undergraduate seminar. Individual readings, written and oral reports, and discussion. May be repeated for credit as topic changes.

451 Special Lectures in History (2-4)

Lectures on special historical topics not regularly given by department. May be repeated for credit as topic changes.

452 Studies in World at War, 1939-1945 (4)

Selected topics in the history of World War II. May be repeated for credit as topic changes.

453 Studies in War and Peace (4)

Selected topics in history of human conflict, from security and deterrence to arms control, disarmament, pacifism, and other alternatives to war. May be repeated for credit as topic changes.

456 History of Emotions (4)

Prerequisite: GE social science requirement. Analysis of historical changes in emotions: survey of private emotions (e.g., marriage, childbearing, sexuality), institutional emotions (e.g., self-identity), and public emotions (e.g., charisma, patriotism).

458 History of the American Environment (4)

Prerequisite: GE American Institutions requirement. The relationship between people and land in America from colonial times to the present; the evolution of laws, technology, and public attitudes concerning the environment.

459 Society and the Nuclear Genie (4)

(also listed as POLS 459) Prerequisite: GE social science requirement. Development of atomic energy and its consequences for society, from the Manhattan Project to the present. Strategic role of scientists in such development and in public policy making about atomic energy.

461 Latin America: Colonial Period (4)

Prehistory of the Americas south of the U.S.; European background, period of conquest, and colonial development to time of wars for independence.

462 Latin America: 1810-1914 (4)

Struggle for independence and social, political, and economic development of Latin American nations during 19th and early 20th centuries.

463 Latin America: 1914 to Present (4)

Social, political, and economic development of Latin American nations since beginning of World War I.

465 Brazil (4)

Brazilian history from Portuguese occupation of eastern South America through colonial period, independent empire, and the republic to present time.

466 Mexico (4)

(also listed as CHS 466) Development of Mexican people and nation since time of aborigines; social, political, and economic development, with particular attention to more recent period.

467 Modern Mexico and the Chicano People (4)

(also listed as CHS 467) Prerequisites: CHS 111; recommended: CHS/HIST 466. History of modern Mexico and its impact upon the Chicano people from separation from Mexico in 1848 to the present.

470 The Colonial Heritage: The United States, 1607-1763 (4)

Transfer of Old World institutions to British North America. Development of colonial society to end of French and Indian War.

471 Era of Revolution: The United States, 1763-1815 (4)

Causes and nature of American Revolution and development of the new nation through end of War of 1812.

472 Democracy, Dissent, and Disunion: The United States, 1815-1877 (4)

Political democracy; nationalism and sectionalism; slavery and reform; the Civil War and Reconstruction.

474 Industrialism and National Expansion: The United States, 1877-1929 (4)

Industrialization, urbanization, and foreign expansion; the Progressive Era, World War I, the 1920s.

475 National Transformation and International Power: The United States, 1929 to Present (4)

Domestic and international development since 1929; the U.S. as a society and in the greater world in the present day.

476 Economic History of United States (4)

American economic development, industrialization, national legislation in industry and commerce.

477 United States Social History (4)

The social structure; social relations of American individuals, families, and groups; colonial period to the present.

478 United States Diplomatic History (4)

Foreign relations of U.S. with emphasis on 20th century.

479 Constitutional History of United States (4)

U.S. Constitution and American constitutionalism from colonial times to present.

480 Ethnicity and Immigration in American History (4)

Role of national, racial, and religious minority groups, and of immigration, in American history.

481 Special Topics in the U.S. West (4)

Special topics lectures about history of the West, e.g., the Westward Movement, the urban West, Southwestern history, and women in the West. May be repeated for credit as topic changes.

483 Rise of Urban America (4)

Development of the American city from mid-19th century to present.

Process of urban growth, structure of urban institutions, and consequences of industrialization.

484 Civil War and Reconstruction (4)

Forces that split the Union; slavery, war, and the position of blacks; Reconstruction and its failures.

485 U.S. Women to 1877 (4)

Social, intellectual, economic, and political experiences of U.S. women from pre-conquest to 1877.

486 U.S. Women, 1877 to the Present (4)

Social, intellectual, economic, and political experiences of U.S. women, 1877 to present.

487 History of U.S. Work and Working People (4)

Transformation of work and social and political relations of workers in the U.S. from 1600 to the present.

488 California (4)

Political, economic, and cultural history of California from Spanish times to present.

487 History of U.S. Work and Working People (4)

Transformation of work and social and political relations of workers in the U.S. from 1600 to the present.

489 Los Angeles (4)

Development of Los Angeles and its metropolitan areas from pueblo times to present.

490A Traditional India (4)

Indian civilization from earliest times to 1757.

490B Modern India and Pakistan (4)

Rise of British power, its political, economic, and social impact; reaction to British rule; rise of nationalism and reformist movements; social, political, and economic development since 1947.

491 The Middle East and the West, 1768-1919 (4)

Cultural and political impact of West, dissolution of Ottoman Empire, reformist movements and nationalism in Middle East, birth of modern state system.

492 Nationalism, Revolution, and War in Middle East, 1919-Present (4)

Rise of modern independent states in Middle East; survey of political, social, and economic developments in Middle Eastern states, with particular emphasis on attempts to create stable democratic regimes.

493 Historiography (4)

Prerequisites: HIST 390, passing WPE score. Historical writing; practical experience in historical composition.

494A Traditional China (4)

Chinese civilization from earliest times to 1500.

494B Modern China (4)

Social, political, and economic development of mainland China from 1500 to 1949.

494C People's Republic of China (4)

Political, economic, social, and foreign relations issues of Communist China since 1949.

495A Traditional Japan (4)

Japanese civilization from earliest times through traditional eras until 1868.

495B Modern Japan (4)

Social, political, and economic development of Japan since 1868.

496 History of Southeast Asia (4)

History and civilization of Southeast Asia with emphasis on political, social, and economic developments since 1800.

499 Undergraduate Directed Study (1-4)

Prerequisite: Consent of an instructor to act as sponsor. Project selected in conference with sponsor before registration; progress meetings held regularly, and a final report submitted. May be repeated to maximum of 8 units as topic changes.

Courses in Religious Studies (RELS)**Lower Division Course****200 Introduction to Religious Studies (4)**

Methods and concepts in religious studies; multidisciplinary approaches to the study of ancient and contemporary religious phenomena in literate and illiterate cultures.
Upper Division Courses

300 Judaism, Christianity, Islam (4)

Origin and development of Judaism, Christianity, and Islam; comprehensive study of ideas, beliefs, and practices in the three religions.

350 Religions in the United States (4)

Principal figures, groups, issues, and trends in theological-historical perspective in the U.S.

410 Asian Religions (4)

Prerequisite: RELS 200 or PHIL 238. Comparative analysis of Asian religions; history, rituals, religious experiences, beliefs, ethics, religious institutions, and interrelationships with culture.

425 Themes of Adult Life in Religion (4)

Prerequisite: RELS 200 or PHIL 238. The role of religion in different stages and dimensions of adult life in major world religions.

435 Religion and Sex Roles (4)

Prerequisite: RELS 200 or PHIL 238. Images of the roles of men and women and images of God in the major religions of the world; religious views of sexuality and asceticism.

450 Art, Religion, and Technology (4)

(also listed as ART 450) Prerequisite: RELS 200 or PHIL238 or ART 101A, 101B, or 101C. Relations among art, religion, and technology in selected periods of history in major cultures of the world.

454 Special Topics in Religious Studies (4)

Topics of special interest as announced in *Schedule of Classes*. May be repeated for credit as subject matter changes.

461 Religion and the Nuclear Age (4)

Prerequisites: GE natural science requirement; RELS 200 or PHIL 238. Implications and challenges of nuclear weapons, nuclear power, and modern concepts of physics for the religions of the world.

499 Undergraduate Directed Study (1--4)

Prerequisites: RELS 200, instructor consent to act as sponsor. Project selected with instructor before registration; progress meetings held regularly; final report. May be repeated for credit with different topic.

LATIN AMERICAN STUDIES**School of Natural and Social Sciences****PROGRAM OFFICE**

Library North B552

Phone: (213) 343-2180

Latin American Studies is an interdisciplinary program that combines subject matter from several academic disciplines to give the student a broad background encompassing the historical, social, cultural, and geographic aspects of the region. It offers students interested in Latin America the opportunity to pursue a major in this field of study leading to the Bachelor of Arts and Master of Arts degrees. The undergraduate program is described below, and the graduate program is described in the *Graduate Programs* section.

Program Coordinator: Marjorie Bray.

The Faculty

Instruction for the Latin American Studies program is provided by members of the faculty from cooperating disciplines in the schools of Natural and Social Sciences, Arts and Letters, Business and Economics, and Education.

Bachelor of Arts Degree

The Bachelor of Arts degree program in Latin American Studies affords the student a wide range of career opportunities in the U.S. and abroad. The growth of the Latin population in the U.S. has produced an increasing need for trained persons with a knowledge of the region to work in government, teaching, business, and other fields.

Requirements for the Major (72-129 units)

The major requires 72-129 units depending on the option selected. The required language competence may be demonstrated by examination.

*** General Option (72 or 76 units)***Lower Division Required Courses (24 or 32 units)*

ANTH	250	Cultural Anthropology	(4)
GEOG	150	Human Geography	(4)
LAS	150	Latin America in the World Context	(4)
PORT	100AB	Elementary Portuguese (or SPAN 300A or 315 listed below)	(4, 4)
SPAN	200ABC	Intermediate Spanish	(4, 4, 4)

Upper Division Required Courses (24 or 28 units)

ANTH	404	Peoples of South America	(4)
ANTH	408	Peasant Cultures of Middle America	(4)
GEOG	427	Mexico and Central America	(4)
GEOG	428	South America	(4)
LAS	497	Proseminar: Methodology, Research Writing	

Selected Topics about Latin America			(4)
POLS	451	Latin American Politics	(4)
SPAN	300A	Composition and Grammar	(4) or
SPAN	31 5	Spanish-American Civilization (or PORT 100AB listed above)	(4)

Select 8 units in history/:

HIST	461	Latin America: Colonial Period	(4)
HIST	462	Latin America: 1810-1914	(4)
HIST	463	Latin America: 1914-Present	(4)
HIST	465	Brazil	(4)
CHS/HIST	466	Mexico	(4)

Elective Courses (12 units):

Four units may be selected from 499 courses in anthropology, Chicano studies, geography, history, Latin American studies, philosophy, political science, or Spanish. Select from following courses, with adviser approval.

*ANTH 454L

ART 446

BCST/LAS 434

CHS 311,400, 406, 430, 444, 468 CHS/HIST 466,467

ECON 460

GEOG 433, *496, *497

HIST 444AB, *450, *451,461,462, 463,465

LAS 424, 435, 450

LAS/PAS 442,460 MUS 458 PAS 423 PAS/POLS 456

PHIL 433 *POLS 454

SOC 442

SPAN 300AB, 315, 411,413, 417, 419, 421,429, *454, *459, *460, 475, 483, 485

* when topic is Latin America

*** Multiple Subject Credential Option (146-151 units)**

Students who select this option complete a separate core which is common to all Multiple Subject teaching options. That common core contains 106-111 units and is described in the *Undergraduate Study* chapter. In addition to the core, the 68 units listed below are required in the option. Refer to the *undergraduate School of Education* chapter of this catalog for regulations governing all teaching credential programs.

Required Courses (106-111 units)

Refer to *Undergraduate Study* chapter of this catalog.

Major Courses (20 units)

LAS	150	Latin America in the World Context	(4)	
LAS	497	Proseminar: Selected Topics in Latin American Problems	(4)	(4)
SPAN	200BC	Intermediate Spanish	(4, 4)	

Select one from following (4 units)

ART	446	Art of Latin America	(4)	
MUS	458	Music of Latin America	(4)	
PHIL	433	Latin American Philosophy	(4)	
SPAN	300A or 300B	Composition and Grammar	(4)	
SPAN	315	Spanish-American Civilization	(4)	
SPAN	4110r 413	Spanish-American Literature I or II	(4)	

Social Science (Latin America) Depth Area (20 units)

Select one four-unit course each course from areas A - D, representing at least four departments, with no more than four units of LAS 450.

A. The Region

HIST 461,462, 463; LAS 424, 450

B. Chicano Studies and Mexico

CHS 406, 444, 470; CHS/HIST 466, 467; LAS 450

C. Central America and the Caribbean

ANTH 404; GEOG 427; LAS 450; PAS/POLS 456

D. South America

ANTH 404; GEOG 428; HIST 465; LAS 450; POLS 451

E. Select one additional four-unit course from any of the above areas.**Electives (28 units)**

Professional education courses are recommended. See a credential adviser in the *School of Education*.

GENERAL EDUCATION UPPER DIVISION THEME (12 units)

Select one general education upper division theme and complete one course in each of the three areas within that theme. Theme courses are not part of the major but are included in credential requirements.

Minor in Latin American Studies

The minor in Latin American Studies is designed to provide students not majoring in Latin American Studies with a concentration of courses that will impart a knowledge of the field and enhance their career opportunities and general knowledge in a focused manner. The minor requires a total of 32 units, 12 in required courses and 20 in electives.

Requirements for the Minor (32 units)

Required Courses (12 units):

LAS 150	Latin America in the World Context	(4)
LAS 497	Proseminar: Methodology, Research Writing	

Selected Topics about Latin America (4)

SPAN 200C**	Intermediate Spanish	(4)
-------------	----------------------	-----

***requirement may be met by examination and unit requirement met with course selected from elective list*

Electives (select 20 units from following, with courses from at least three fields)

ANTH 404, 408, '454L
 ART 446 BCST/LAS 434
 CHS 311,400, 406, 430, 444, 468 CHS/HIST 466, 467
 ECON 460#
 GEOG 427, 428, 433#, 496', 497*
 HIST 450*, 451*. 461,462, 463, 465
 LAS 424, 435, 450, 499
 LAS/PAS 442#, 460# MUS 458
 PAS 423 PAS/POLS 456
 PHIL 433 POLS 451, *454
 SOC 442
 SPAN 300AB, 315, 411,413, 417, 419, 421,429, 454*, 459*, 460*, 475, 483, 485
 * when topic is Latin America
 # no more than two of these courses

The Credential Program

The B.A. degree in Latin American Studies (credential option) has been approved by the Commission on Teacher Credentialing for examination waiver for the Multiple Subject credential and helps students prepare for the cultural and language examinations for the Multiple Subject credential with Bilingual Emphasis. Interested students should consult advisers in the Latin American Studies office and the School of Education. Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs.

Courses in Latin American Studies (LAS)

Lower Division Courses

150 Latin America In the World Context (4)

An interdisciplinary introductory survey of the history, society, peoples, politics, geography, and artistic culture of Latin America with emphasis on its relation to the rest of the world.

Upper Division Courses

395 Community Service in Latin American Studies (1-4)

Prerequisites: Approval by departmental faculty adviser, acceptance by a community agency. Participation as a volunteer in work of a community agency or activity utilizing professional and/or vocational skills in service to community. Graded CR/NC. May be repeated to maximum of 9 units.

424 The United States and Latin America (4)

Examination and analysis of relations between the U.S. and Latin American nations; the inter-American system.

434 Latin American Radio Documentary Production (4)

(also listed as CST 434) Recommended prerequisites: CST 320 or upper division Latin American content courses in history, political science, or Latin American studies. Analysis of political, economic, and cultural issues in Latin America, utilizing primary sources; production of research in the form of broadcasting tapes.

435 Race and Culture in Latin America (4)

Prerequisite: Upper division standing. The role of race in Latin America as expressed in culture and the arts.

442 Cultural Impact of Third World Development (4)

(also listed as PAS 442) The development process in the Third World as it affects and is affected by art and intellectual life.

450 Special Studies in Latin American Studies (1-4)

Prerequisites: Upper division standing, others as needed for specific topic. Selected topics in Latin American Studies differ each quarter; examined in manner of undergraduate seminar; individual readings, written/oral reports, discussion. Repeatable to maximum of 12 units as subject matter changes.

460 Dynamics of Social Change in the Third World (4)

(also listed as PAS 460) Processes and development of social change in the Third World and their relevance to the U.S.

497 Proseminar: Methodology, Research Writing Selected Topics about Latin America (4)

Prerequisites: LAS 150, ENGL 102*, and satisfactory completion of GVAR requirement. Reading ability in Spanish or Portuguese. Senior Course. Interdisciplinary examination of approaches to Latin American Studies. Preparation of research paper in English on topic selected in consultation with instructor.

**Students subject to earlier catalogs satisfy this prerequisite with ENGL 1010r 190.*

499 Undergraduate Directed Study (1-4)

Prerequisite: Instructor consent to act as sponsor. Project selected in conference with sponsor before registration, progress meetings held regularly, and final report submitted. May be repeated for credit

MATHEMATICS AND COMPUTER SCIENCE

School of Natural and Social Sciences

DEPARTMENT OFFICE

Simpson Tower F206

Phone: (213) 343-2150

The Department of Mathematics and Computer Science offers undergraduate programs leading to the Bachelor of Arts and Bachelor of Science in Mathematics, both with several options, and a Bachelor of Science degree in Computer Science with two options. Programs in the department allow preparation for graduate study and professional careers in a variety of directions.

The Master of Science degree program in Mathematics is described in the *Graduate Programs* section.

The Faculty

Emeriti: Charles L. Clark, Robert J. Diamond, Evelyn B. Granville.

Professors: Russell J. Abbott, Butrus G. Basmaji, Gerald Beer, Wayne W. Bishop, Marshall Cates (*Chair*), Paul L. Chabot, Derek K. Chang, Grant A. Fraser, Carl E. Gordon, Michael J. Hoffman, Richard Katz, Grigori Kolesnik, Rina Ling, Hrushikesh N. Mhaskar, Gordon L. Nipp, Jagdish Prasad, Pudukkottai Subramanian, Stewart M. Venit, Andrei Verona.

Associate Professors: Vladimir N. Akis, Nandial Jhunhunwala, Illias G. Kastanas, Robert L. Meyer, Robert K. Tamaki, Nguyen Uy.

Assistant Professors: Richard W. Chamberlain, Daphne Liu, R. Sekhar Pamula, Behzad Parviz, Rodolfo G. Tamez.

Bachelor's Degrees

Two baccalaureates in mathematics and one in computer science are offered. A major in computer science prepares students for employment in computer-related positions in industry and government. A major in mathematics prepares students to teach in secondary schools, work as research assistants in industry and government, or enter graduate school to prepare for positions in higher education, industry, and government.

The Bachelor of Arts or Bachelor of Science degree may be obtained in four years if adequate preparation has been secured in high school, e.g., algebra (2 years), geometry, trigonometry. Students who have not had this preparation or whose command of these subjects is weak may be advised to strengthen their knowledge before attempting college mathematics.

For each degree a minimum C (2.0) grade point average is required in all upper division courses included in the major.

Bachelor of Science Degree in Computer Science

The objective of the Bachelor of Science degree in Computer Science is to prepare qualified students for employment in industry in the area of computer science, primarily in positions such as applications programmer, systems programmer, and systems analyst. A total of 198 units is required for the degree, including 108 units in the major.

Requirements for the Major (120 units)

Lower Division Required Courses (52 units):

CS	201	Introduction to Programming	(4)
CS	202	Programming with Data Structures	(4)
CS	240	Computer Organization and Assembly Language	(4)
MATH	206-209	Calculus I-IV	(4 each)
MATH	255	Introduction to Matrix Theory	(4)
MATH	274	Introduction to Statistics	(4)
PHIL	250	Introduction to Symbolic Logic	(4)
PHYS	201-203	General Physics	(4, 4, 4)

Upper Division Required Courses (56 units):

CS	312	Data Structures and Algorithms	(4)
CS	340	Assembly Language and Systems Programming	(4)

CS	344	Combinatorial Logic and Design of Sequential Circuits	(4)
CS	350	Object Oriented Programming	(4)
CS	370	Parallel and Distributed Programming	(4)
CS	386	Introduction to Automata Theory	(4)
CS	422	Principles of Data Base Systems	(4)
CS	432	Programming Language Semantics	(4)
CS	434	User Interface Management Systems	(4)
CS	437	Software Engineering	(4)
CS	440	Introduction to Operating Systems	(4)
CS	444	Computer Architecture	(4)
CS	447	Computer Networks	(4)
MATH	470	Numerical Analysis I	(4)

Electives (12 units):

Select three additional 400-level computer science courses. Courses outside computer science may be substituted only with prior approval of the undergraduate Computer Science adviser.

Bachelor of Arts Degree in Mathematics

The Bachelor of Arts degree curriculum of 186 units prepares students for positions in government and for graduate work in mathematics.

Requirements for the Major (78-80 units)*Lower Division Required Courses (30-32 units):*

CS	201	Introduction to Programming	(4) or
CS	290	Introduction to FORTRAN Programming	(2)
MATH	206-209	Calculus I-IV	(4 each)
MATH	255	Introduction to Matrix Theory	(4)
PHYS	201-202	General Physics	(4, 4)

*Electives in Related Areas**(8 units):*

Select from among the following or other appropriate courses with approval of adviser and attention to prerequisites.

BIOL 302,408
 CE 202
 CHEM 122, 123, 401,403, 414
 CIS 294
 ECON 309, 310, 391,403,409, 413, 414
 EE 332
 ENGR 201,204, 209, 490 GEOL 472
 ME 306, 326A, 403, 408 MGMT 306, 496
 PHIL 250, 404, 405
 PHYS 203-205, 41
 OAB, 427, 428, 432A

Upper Division Required Courses (12 units):

MATH	325	Mathematical Notation and Proof	(4)
MATH	455	Modern Algebra I	(4)
MATH	465	Advanced Calculus I	(4)
Electives/Option			

Electives (28 units):

Students may select one of the following 28-unit options. If no option is selected, choose 8 units from MATH 403, 420, 430, 435, 446, 456 or 457, 463, 466 or 467, 470, and 474, and 20 units from upper division CS and MATH courses (excluding MATH 342), including at least 8 units of MATH.

Each option consists of 28 units of related courses selected from upper division electives; however, an option is not required.

*** Option in Pure Mathematics (28 units)**

This option prepares students for graduate work in mathematics.

Required Courses (16 units):

MATH 456	Modern Algebra II	(4)
MATH 463	Introduction to Complex Analysis	(4)
MATH 466	Advanced Calculus II	(4)
MATH 467	Advanced Calculus III	(4)

Electives (12 units):

Select courses in mathematics with adviser approval. The following are strongly recommended:

MATH 435	Topology	(4)
MATH 457	Linear Algebra	(4)

*** Single Subject Teaching Option (28 units)**

This option is intended for students who are interested in teaching mathematics. Students should consult the School of Education for credential requirements. Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs.

Required Courses (16 units):

MATH 320	Selected Topics in History of Mathematics	(4)
MATH 430	Modern Geometry	(4)
MATH 446	Theory of Numbers	(4)
MATH 474	Theory of Probability	(4)

Electives (12 units):

Select computer science and mathematics courses with adviser approval. Students with a strong interest in computer science should consider completing the minor in Computer Science.

Bachelor of Science Degree in Mathematics

The Bachelor of Science degree curriculum of 198 units is designed to prepare students for positions in business, industry, or government, as well as for graduate work in mathematics.

Requirements for the Major (98-100 units)*Lower Division Required Courses (46-48 units):*

CS 201	introduction to Programming	(4) or
CS 290	Introduction to FORTRAN Programming	(2)
MATH 206-209	Calculus I-IV	(4 each)
MATH 215	Differential Equations	(4)
MATH 255	Introduction to Matrix Theory	(4)
PHYS 201-205	General Physics	(4 each)

Electives (8 units):

Select from lower division natural science or engineering courses.

Upper Division Required Courses (12 units):

MATH 325	Mathematical Notation and Proof	(4)
MATH 455	Modern Algebra I	(4)
MATH 465	Advanced Calculus I	(4)

Electives/Options*Electives (32 units):*

Select upper division computer science and mathematics courses excluding MATH 342. With departmental approval, a maximum of 8 units may be replaced by upper division courses in other fields. Students may also select one of the options below. If no option is selected, at least 16 units in mathematics must be included.

At least 8 units from MATH 403, 420, 430, 435, 446, 456 or 457, 463, 466 or 467, 470, and 474 must be included.

Students may select one or more of the following 32-unit options. Each option consists of several related courses selected from upper division electives; however, an option is not required.

*** Option in Applied Mathematics (32 units)**

This option prepares students for graduate work in applied mathematics.

Required Courses (20 units):

MATH 403	Partial Differential Equations	(4)	
MATH 410	Vector Analysis	(4) or MATH	467
	Advanced Calculus III	(4)	
MATH 463	Introduction to Complex Analysis	(4)	
** MATH470	Numerical Analysis I	(4) or	
MATH 472	Linear Programming	(4)	

** CS 291 is prerequisite to this course

Electives (12 units):

Select mathematics or computer science courses with approval of adviser. The following are strongly recommended:

MATH 411	Tensor Analysis	(4)
MATH 457	Linear Algebra	(4)

*** Single Subject Teaching Option (32 units)**

This option is intended for students who are interested in teaching mathematics. Students should consult the School of Education for credential requirements. Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs.

Required Courses (16 units):

MATH 320	Selected Topics in History of Mathematics	(4)
MATH 430	Modern Geometry	(4)
MATH 446	Theory of Numbers	(4)
MATH 474	Theory of Probability	(4)

Electives (16 units):

Select computer science and mathematics courses with approval of adviser. Students with a strong interest in computer science should consider completing the minor in Computer Science.

Minor in Computer Science

A Computer Science minor, available for students majoring in other fields, consists of 36 units; 12 are upper division. Students majoring in fields that require the same courses as those required for the minor in Computer Science must take only those courses in the minor program that are not incorporated into their major.

Requirements for the Minor (36 units)

Required Courses (24 units):

CS 201	Introduction to Programming	(4)
CS 202	Programming with Data Structures	(4)
CS 240	Computer Organization and Assembly Language	(4)
MATH 206	Calculus I: Differentiation	(4)
MATH 207	Calculus II: Integration	(4)
MATH 255	Introduction to Matrix Theory	(4)

Electives (12 units):

Select either 12 units of upper division computer science courses or 8 units of upper division computer science courses and one of MATH 384, 470.

Minor in Mathematics

The Mathematics minor, available for students majoring in other fields, consists of 32 units, of which 12 are upper division. Students majoring in fields that require the same courses as those required for the minor in Mathematics need take only those courses in the minor program that are not incorporated into their major.

Requirements for the Minor (32 units)*Lower Division Required Courses (20 units):*

MATH 206-209	Calculus I-IV	(4 each)
MATH 255	Introduction to Matrix Theory	(4)

Upper Division Electives (12 units)

Select three upper division mathematics courses, other than MATH 455, with adviser approval.

The Credential Program

The Bachelor of Arts and Bachelor of Science degree programs in Mathematics with the credential option have been approved by the Commission on Teacher Credentialing for examination waiver for the Single Subject credential in Mathematics. Students should consult advisers in the department and the School of Education.

Students who are seeking a Single Subject credential in Mathematics must pass the appropriate subject examination (National Teachers Examination) and the requirements for a minor (in Mathematics) or complete an approved waiver program of course work such as that listed below. Those who are majoring in mathematics follow the Single Subject Teaching Option, which incorporates the courses listed below. Others who have earned or are pursuing a baccalaureate in another discipline may qualify for the Single Subject credential in Mathematics by completing the waiver program described below. Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs.

Waiver Program for Single Subject Credential in Mathematics

It is assumed that students entering this program have completed two courses in algebra and one in trigonometry.

Required Courses 46-48 units):

CS 201	Introduction to Programming	(4) or	
CS 290	Introduction to FORTRAN Programming	(2)	
MATH 206-209	Calculus I-IV	(4 each)	
MATH 255	Introduction to Matrix Theory	(4)	
MATH 320	Selected Topics in History of Mathematics	(4)	
MATH 325	Mathematical Notation and Proof	(4)	
MATH 384	Discrete Structures	(4) or MATH	455
	Modern Algebra I	(4)	
MATH 430	Modern Geometry	(4)	
MATH 446	Theory of Numbers	(4)	
MATH 474	Theory of Probability	(4)	

Electives (minimum 15 units):

BIOL 302,315, 408
 CE 202
 CHEM 101,122, 123, 401-403,414
 CIS 228, 283, 294
 CS 202,240, 291,330
 ECON 209, 309, 310, 391,403, 409, 410, 413,414
 EE 244, 345
 ENGR 201,204, 209
 MATH 215,384 or 455 **, 420, 456, 457, 465, 466,470, 472, 475
 ME 306, 326A
 PHIL 250, 404-406
 PHYS 121-123, 201-206, 410AB, 427, 428, 432AB, 488
 ** whichever not included in core requirements above

Supplementary Authorization for Single or Multiple Subject Teaching Credential (30-32 units)

Holders of a *Single Subject* or *Multiple Subject teaching* credential issued by the state of California may supplement that credential with an authorization in Mathematics for teaching

mathematics at any grade level through grade 9 by completing the following program with a grade of C or higher in each course. For other requirements governing issuance of this authorization, consult the School of Education.

Complete or demonstrate proficiency in each of the following courses(30-32 units):

Required Courses (16 units):

MATH 102	College Algebra	(4)
MATH 103	Algebra and Trigonometry	(4)
MATH 206	Calculus I	(4)
MATH 207	Calculus II	(4)

Select three from following (12 units):

MATH 208	Calculus III	(4)
MATH 255	Introduction to Matrix Theory	(4)
MATH 274	Introduction to Statistics	(4)
MATH 320	Selected Topics in History of Mathematics	(4)
MATH 325	Mathematical Notation and Proof	(4)
MATH 384	Discrete Structures	(4)
* MATH 430	Modern Geometry	(4)
** MATH474	Theory of Probability	(4)

Select one from following (2 or 4 units):

CS 190	BASIC Programming	(2)
CS 201	Introduction to Programming	(4)
CS 290	Introduction to FORTRAN Programming	(2)

* *prerequisite: MATH 208*

***prerequisites: MATH 208 and 209*

Courses in Computer Science (CS)

Lower Division Courses

160 Introduction to Computers (3)

Prerequisite: GE mathematics requirement. History of computers; hardware, software including data base systems, word processors, spreadsheets, programming languages; social and ethical implications. Lecture 2 hours, laboratory 3 hours.

190 BASIC Programming (2)

Prerequisite: One year of high school algebra. Introduction to computer programming using BASIC language. Applications will assume a minimal mathematics background. Does not fulfill mathematics major requirement. Lecture 1 hour, laboratory 3 hours.

201 Introduction to Programming (4)

Prerequisite: MATH 103. Algorithm development and computer programming using Pascal; designing, coding, debugging, and documenting programs.

202 Programming with Data Structures (4)

Prerequisite: CS 201. Advanced programming techniques; utilizing Pascal; elementary data structures such as linked lists, stacks, queues, and trees; searching and sorting algorithms.

240 Computer Organization and Assembly Language (4)

Prerequisite: CS 201. Representation of information; introduction to computer organization; assembly language; introduction to system software.

284 Data Structure for Business Applications (4)

Prerequisite: MATH 102. Sets and set operations; relations and functions; data structure and access methods. No credit for computer science majors.

290 Introduction to FORTRAN Programming (2)

Prerequisite: MATH 206. Elementary computer programming using FORTRAN language. Lecture 1 hour, laboratory 3 hours. *Nocredit toward Computer Science major.*

291 FORTRAN Programming (4)

Prerequisite: CS 202; corequisite: MATH 255. Programming in FORTRAN with emphasis on scientific programming applications.

292 C Programming (4)

Prerequisite: CS 202; corequisite: MATH 255. The C programming language; UNIX operating system; scientific programming applications; systems programming.

293 Ada Programming (4)

Prerequisite: CS 202; corequisite: MATH 255. The Ada programming language; scientific applications programming in Ada; using Ada as a program design language.
Upper Division Courses

312 Data Structures and Algorithms (4)

Prerequisites: CS 202. Abstract data types and their use in constructing algorithms for manipulating lists, trees, and graphs; analysis of algorithms for searching, sorting, and data structure manipulation.

340 Assembly Language and Systems Programming (4)

Prerequisite: CS 240. Assembly language; addressing techniques; subroutines; macros; system input/output; interrupts and traps; assemblers; linkers; loaders; macroprocessors.

344 Combinatorial Logic and Design of Sequential Circuits (4)

Prerequisite: CS 201. Boolean algebra and design of combinational circuits; sequential logic and design of finite state machines; introduction to automata theory.

350 Object Oriented Programming (4)

Prerequisite: CS 202. Data abstraction; software development of interacting objects which embody their own operations; inheritance of object types; implementation in current programming languages.

358N Science and Controversy (4)

(also listed as BIOL 358N, CHEM 358N, PHYS 358N) Prerequisite: GE natural science requirement. Scientific background of issues that affect public welfare, such as genetic technology, chemical pesticides, energy production and utilization, and artificial intelligence. *No credit toward Biology, Chemistry, Computer Science, Mathematics, or Physics major.*

370 Parallel and Distributed Programming (4)

Prerequisites: CS 202, 240. Parallel programming techniques; abstract models of hardware and operating systems to support parallel programs.

386 Introduction to Automata Theory (4)

Prerequisites: CS 202, 344, MATH 255, PHIL 250. Formal approach to automata theory; finite state machines, regular expressions, regular languages; develops mathematical foundation for computer science.

422 Principles of Data Base Systems (4)

Prerequisite: CS 312, 350, 370, 386. Data base system architecture; hierarchical, network, and relational data base systems; query facilities; data base security and integrity.

432 Programming Language Semantics (4)

Prerequisites: CS 312, 340, 350, 370, 386. An introduction to the operational semantics of programming languages. An examination of the important capabilities available in selected languages and the mechanisms needed to implement them.

434 User Interface Management System (4)

Prerequisites: CS 312, 350, 370, 386. Introduction to the use of user interface development and management systems in system development. Strategies for building intuitive user interfaces. Internal organization of user interface packages.

437 Software Engineering (4)

Prerequisites: CS 422, 434. Methodologies and tools for the specification, design, development, testing, evaluation, and maintenance of software systems.

440 Introduction to Operating Systems (4)

Prerequisite: CS 312,340,350,370,386. Resource, memory, and process management; concurrent processing; networking; distributed systems.

442 Advanced Operating Systems (4)

Prerequisite: CS 440. Asynchronous concurrent processes; mutual exclusion and deadlocks; virtual storage organization and management; multiprocessing; auxiliary storage management; performance measurement; operating systems security.

444 Computer Architecture (4)

Prerequisites: CS 432, 440. Integrated study of computer hardware, firmware, systems software, and applications software.

447 Computer Networks (4)

Prerequisites: CS 440, MATH 274. Overview of principles and concepts in computer networks and distributed systems; network structures, topology, architecture, and related software.

450 Computer Graphics (4)

Prerequisites: CS 312, MATH 255. Graphic input and display devices; graphics packages; two- and three-dimensional transformations; clipping and windowing; perspective; hidden-line and hidden-surface algorithms.

454 Topics in Advanced Computer Science (1-4)

Prerequisites: As needed for specific topic. Current topics of special interest to students in computer science, as announced in *Schedule of Classes*. May be repeated for credit.

460 Artificial Intelligence (4)

Prerequisite: CS 312. Knowledge representation; problem solving strategies and search algorithms; applications from such areas as theorem proving, expert systems, natural language processing, robotics, and pattern recognition.

461 Machine Learning (4)

Prerequisite: CS 312. Means that enable computers to perform tasks for which they were not explicitly programmed; learning paradigms include inductive generalization for examples, genetic algorithms, and connectionist systems such as neural nets.

486 Grammars, Languages, and Automata (4)

Prerequisites: CS 344, 386. Languages and automata, especially context-free and regular languages and their associated automata; applications to compilers; Turing machines and computability.

488 Compilers (4)

Prerequisites: CS 312, 432, 486. Compiler construction; lexical analysis, including regular languages and finite-state acceptors; syntactic analysis, including parsing techniques and grammars; code generation and optimization.

499 Undergraduate Directed Study (1-4)

Prerequisite: Consent of an instructor to act as sponsor. Project selected in conference with sponsor before registration; progress meetings held regularly, and a final report submitted. May be repeated for credit.

Courses in Mathematics (MATH)

* All prerequisites for the following MATH courses must have been completed within the past year: MATH091, 100, 102, 103, 206, and 242. The ELM requirement must be met before enrollment in MATH 81, 90, 91, 100, 102, 103, 242. The ELM exam scores are good f or one J/ear for placement purposes. Subcollegiate Courses

081 Intensive Learning Experience I (4)

Covers first two-thirds of MATH 090. Properties of ordinary arithmetic, integers, rational numbers, real numbers, linear equations. Graded ABC/NC. Open only to students with ELM score below 360. *No credit toward baccalaureate.*

082 Intensive Learning Experience II (4)

Prerequisite: MATH 081. Covers last third of MATH 090 and first third of MATH 091. Linear equations, inequalities, system of equations, basic geometry, polynomials and functions. Open only to students with ELM score below 360. Graded *A,B,C/NC*. *No credit toward baccalaureate.*

083 Intensive Learning Experience III (4)

Prerequisite: MATH 082. Covers last two-thirds of MATH 091. Fractional expressions and equations, exponents, quadratic equations, exponentials and logarithms. Graded *A,B,C/NC*. Open only to students with ELM score below 360. *No credit toward baccalaureate.*

090 Preparatory Mathematics (4)

Prerequisite: Score of 470 or less on ELM. For students who are not prepared for college level mathematics. Fundamentals of arithmetic including percentages and decimals; introductory algebra including linear equations, quadratic equations, graphing; basic geometric formulas. Graded *A,B,C/NC*. Students with credit or two *NC* grades for this course may not enroll again. *No credit toward baccalaureate.*

091 Intermediate Algebra (4)

* Prerequisite: MATH 090 or score of 480 or more on ELM. Fundamental skills necessary for mathematics beyond arithmetic; basic topics in algebra, including multiplication, division, and factorization of polynomials; solutions of equations and systems of equations, functions, exponents, and logarithms. Graded *A,B,C/NC*. Students with credit or two *NC* grades for this course may not enroll again. *No credit toward baccalaureate.*

Lower Division Courses

100 Introduction to College Mathematics (4)

* Prerequisites: Score of 550 or more on ELM; or MATH 091 with minimum C grade. Introduction to mathematical methods and reasoning, including: logic, combinatorics and probability, modular arithmetic, descriptive statistics, geometric topics, algorithms, elementary number theory, and sequences. *No credit toward mathematics or computer science majors.*

102 College Algebra (4)

* Prerequisites: Score of 550 or more on ELM; or MATH 091 Logarithmic and exponential functions; polynomial equations; permutations, combinations, and probability; sequences and series; matrices and determinants; mathematical induction. CAN MATH 10

103 Algebra and Trigonometry (4)

* Prerequisites: Satisfactory score on (or exemption from) ELM; MATH 102 with minimum C grade or satisfactory score on placement examination. Trigonometric functions, identities, and equations; solution of triangles; inverse trigonometric functions; complex numbers, DeMoivre's Theorem; parametric equations; polar coordinates.

120 Mathematics for Elementary School Teachers (4)

* Prerequisite: MATH 100 with minimum C grade within past 3 years or satisfactory score on placement examination. Selected topics from elementary geometry, units of measurement, areas, volumes, approximate numbers, square roots.

206 Calculus I: Differentiation (4)

* Prerequisites: Satisfactory score on (or exemption from) ELM; MATH 102 and 103, each with a minimum C grade or satisfactory score on placement examination. Functions, graphs, conics, limits, continuity and derivatives, anti-differentiation, and applications. MATH 206+207+208 = CAN MATH SEQ B MATH 206+207+208+209 = CAN MATH SEQ C

207 Calculus II: Integration (4)

Prerequisite: MATH 206 with minimum C grade. The definite integral, Fundamental Theorem of the Calculus, transcendental functions, methods of integration, applications to physics and biology. MATH 206+207+208 = CAN MATH SEQ B MATH 206+207+208+209 = CAN MATH SEQ C

208 Calculus III: Sequences, Series, and Coordinate Systems (4)

Prerequisite: MATH 207 with minimum C grade. Limits of sequences and series, indeterminate forms, Taylor Series, plane coordinate systems, and change of coordinates. MATH 206+207+208 = CAN MATH SEQ B MATH 206+207+208+209 = CAN MATH SEQ C

209 Calculus IV: Several Variables (4)

Prerequisite: MATH 208 with minimum C grade. Three-dimensional analytic geometry, partial differentiation, multiple integration, spherical and cylindrical coordinate systems, improper integrals. MATH 206+207+208+209 = CAN MATH SEQ C

215 Differential Equations (4)

Prerequisite: MATH 209. Ordinary differential equations with concentration on methods of finding solutions; applications in science and engineering. CAN MATH 2

230 Calculus for Biological Sciences (4)

Prerequisite: MATH 206. Integration, ordinary differential equations, difference equations, partial differentiation, applications to problems arising in biological sciences.

242 Mathematics for Business and Economics Majors (4)

*Prerequisites: Satisfactory score on (or exemption from) ELM; MATH 102 with minimum C grade or satisfactory score on placement examination. Differential calculus with applications; introduction to integral calculus.

254 Selected Topics in Mathematics (1-6)

Prerequisites: As needed for specific topic. Current topics of interest to students in mathematics, as announced in *Schedule of Classes*. May be repeated for credit.

255 Introduction to Matrix Theory (4)

Prerequisite: MATH 207. Vector spaces, linear transformations, linear equations, matrices, determinants, eigenvectors and eigenvalues, canonical forms. CANMATH26

274 Introduction to Statistics (4)

Prerequisite: MATH 091. Statistical terms; interpretation of statistical data with and without use of probability, random sampling, confidence limits, and hypothesis tests. CANSTAT2

Upper Division Courses

320 Selected Topics in History of Mathematics (4)

Prerequisite or corequisite: MATH 207. Traces development of fundamental concepts and techniques in fields of algebra, geometry, trigonometry, and calculus.

325 Mathematical Notation and Proof (4)

Prerequisite: MATH 206. Elementary set theory and number theory with emphasis on notation and types of proof. Axiomatic method, equivalence relations, ε - arguments.

342 Advanced Mathematical Analysis for Business and Economics Majors (4)

Prerequisite: MATH 242. Advanced topics from integral and differential calculus; matrix theory; arithmetic and geometric progressions and mathematics of finance; difference equations.

384 Discrete Structures (4)

Prerequisite: MATH 255. Basic definitions and examples in logic, set theory, algebraic structures, and graph theory.

401 Differential Equations (4)

Prerequisites: MATH 209, 255, 325. Ordinary differential equations with concentration on properties of solutions, including existence and uniqueness. Emphasis on theory as opposed to applications.

402A Advanced Mathematics I for Engineers and Physicists (4)

Prerequisite: MATH 215 or 401. Vector analysis to include line and surface integrals, orthogonal curvilinear coordinates, complex variables to include contour integration and conformal mapping. Laplace transformation.

402B Advanced Mathematics II for Engineers and Physicists (4)

Prerequisite: MATH 402A. Implicit functions and Jacobians, infinite series and integrals, differentiation of integrals; Taylor series for several variables; Fourier series and boundary value problems, special functions (Bessel, Legendre, error, elliptic), calculus of variations.

403 Partial Differential Equations (4)

Prerequisite: MATH 215 or 401. Orthogonal sets of functions. Fourier series and integrals, with applications to the equations of mathematical physics; first order equations, Cauchy's method of characteristics.

410 Vector Analysis (4)

Prerequisite: MATH 209. Vector algebra and calculus, vector fields, gradient, divergence, curl, divergence theorem, Stokes' theorem, applications to geometry and mathematical physics.

411 Tensor Analysis (4)

Prerequisite: MATH 410. Contravariant and covariant vectors and tensors, tensor algebra, Riemannian geometry, the metric tensor, geodesics, Christoffel symbols, derivatives of tensors, physical components of tensors. Applications to mechanics and differential geometry.

420 Mathematical Logic (4)

Prerequisite: MATH 325. The statement calculus, the predicate calculus, mathematical structures, and the deduction of valid consequences; the completeness theorem.

430 Modern Geometry (4)

Prerequisite: MATH 208. Topics selected from advanced Euclidean geometry, non-Euclidean geometry, projective geometry. May be repeated once for credit with approval of instructor as subject matter changes.

435 Topology (4)

Prerequisite: MATH 325. Introduction to point set topology, including continuity, product spaces, compactness, Tyconoff theorem, connectedness, metric spaces, and Urysohn lemma.

446 Theory of Numbers (4)

Prerequisites: MATH 325, upper division standing. Divisibility, Euclidean algorithm, prime numbers, fundamental theorem of arithmetic, distribution of primes, congruences, Fermat-Euler and Wilson theorems, residues and quadratic reciprocity law. Bernoulli numbers, quadratic forms, Diophantine equations.

454 Selected Topics in Advanced Mathematics (1-6)

Prerequisites: As needed for specific topic. Current topics of interest to students in mathematics, as announced in *Schedule of Classes*. May be repeated for credit.

455 Modern Algebra I (4)

Prerequisites: MATH 255, 325. Groups and rings, including normal subgroups, quotient groups, ideals, quotient rings, group and ring homomorphisms, and isomorphisms.

456 Modern Algebra II (4)

Prerequisite: MATH 455. Additional topics in groups and rings, field extensions, modules.

457 Linear Algebra (4)

Prerequisite: MATH 455. Vector spaces over arbitrary fields, special types of linear transformations, eigenvalues and eigenvectors, canonical forms, scalar product spaces.

463 Introduction to Complex Analysis (4)

Prerequisite: MATH 465. Complex variables, analytic functions, complex integration, conformal mapping, applications.

465 Advanced Calculus I (4)

Prerequisites: MATH 209, 325. Real number system; topology of \mathbb{R} including compactness and completeness; sequences and series, including limit inferior and limit superior and continuity.

466 Advanced Calculus II (4)

Prerequisite: MATH 465. Differentiation and integration of function of a real variable; sequences of functions.

467 Advanced Calculus III (4)

Prerequisites: MATH 255, 465. Functions of several variables; partial derivatives; generalized chain rule; inverse and implicit function theorems; line and surface integrals.

470 Numerical Analysis I (4)

Prerequisites: CS 291, MATH 208, facility in high-level programming language. Errors in floating point representation, nonlinear equations, systems of linear equations, polynomial interpolation, numerical integration and differentiation.

471 Numerical Analysis II (4)

Prerequisites: MATH 215, 470. Numerical solution of ordinary and partial differential equations, spline and least square approximation, fast Fourier transform.

472 Linear Programming (4)

Prerequisite: MATH 255. Geometric solutions, simplex method, the transportation problem, elementary game theory.

474 Theory of Probability (4)

Prerequisite: MATH 209. General probability spaces, random variables, joint distributions, random sampling, law of large numbers, normal, gamma, and binomial distribution.

475 Introduction to Mathematical Statistics (4)

Prerequisite: MATH 474. Estimation and tests of hypothesis, decision theory and Bayes solutions.

499 Undergraduate Directed Study (1-4)

Prerequisite: Consent of an instructor to act as a sponsor. Project selected in conference with sponsor before registration; progress meetings held regularly, and a final report submitted. May be repeated for credit.

PAN-AFRICAN STUDIES

School of Natural and Social Sciences

DEPARTMENT OFFICE

King Hall C3095

Phone: (213) 343-2290

Pan-African Studies, as an interdisciplinary field of study, encompasses the systematic investigation of the history, culture, political economy, literature, arts, and languages of peoples of African descent and their contribution to world civilization. It reflects the experiences of a significant portion of the world's population and constitutes the cumulative results of several thousand years of intellectual history and development.

Interdisciplinary programs in Pan-African Studies prepare students for professional careers in teaching, public service, international relations, social work, law, and community development. The department has established an internship program that places students in local government offices to increase their exposure to and knowledge of local affairs. The Bachelor of Arts degree in Afro-American Studies is described below. In collaboration with the School of Education, Pan-African Studies shares responsibility for the Afro-American option in the Bilingual/Crosscultural Specialist credential and the Master of Arts degree in Urban Education. Both programs are described in the *Graduate Programs* (School of Education) section.

The Faculty

Professors: Cynthia Hamilton, Aida Takla O'Reilly(*Chair*).

Assistant Professor: Jonathan Nwomonoh.

Bachelor of Arts Degree in Afro-American Studies

Three options are offered in this major. The first two focus on different geographical regions of the world, and the third is designed specifically for students interested in examination waiver for the Multiple Subject credential.

Requirements for the Major (76-123 units)

Options I and II combine core and elective programs of 76 units. *Option I* has a core of 60 units and 16 units of electives; *Option II* has a core of 52 units and 24 units of electives. *Option III* requires 146-151 units in a prescribed pattern of courses in general education and Pan-African Studies and related fields.

* **Option I: Afro-American Studies (76 units)**

Option I provides systematic study and research in Afro-American history, culture, and political economy to prepare students for graduate work and for careers in teaching, social work, law, community development, business, and related public service fields.

Lower Division Required Courses (20 units):

PAS 101, 250AB, 251AB

Upper Division Required Courses (40 units):

PAS 400, 402, 403, 412, 414, 420, 440, 441, 495
ENGL 308 or 406

Electives (select 16 units in PAS and related fields)

(related fields limited to two courses)

PAS 260, 401, 404, 410, 416, 421, 422, 424, 425, 432, 482, 484, 486, 490
CHS 430
GEOG 446
LAS/PAS 460
MUS 452
SOC 460
SPCH 489

* **Option II: African, Caribbean, and Afro/Latin American Studies (76 units)**

This option combines an integrative multidisciplinary course of concentrated study and research focused on the history, cultures, political economy, international relations, and development of Africa, the Caribbean, and Afro/Latin America. Emphasis on the development of research and technical skills is stressed to prepare students for graduate study and for professional careers in public service, international relations and business, overseas employment, and research and technical assistance programs.

Lower Division Required Courses (20 units)

PAS 101,250AB, 251A or 251B
HIST/PAS 253

Upper Division Required Courses (40 units):

ECON 460 or
ECON/POLS 426
ENGL 308 or 406
LAS/PAS 442,460
PAS 403, 414, 416, 480, 495
PAS/POLS 456

Electives (16 units):

Select *four courses* from the following fields:
PAS 260, 402,410, 412,416, 441,432, 482, 484, 486
FIN 431
GEOG 427, 433
HIST 414AB, 415, 416, 463, 465
HS 463
LAS 424
MKT 457
POLS 451,453

Select *one* course from:

ANTH 413
ART 481
LAS 435
MUS 458
PAS 125, 423,428
SPCH 489

*** Option III: Multiple Subject Teaching Option (146-151 units)**

Students who select this option complete a separate core which is common to all Multiple Subject teaching options. That common core contains 106-111 units and is described in the *Undergraduate Study* chapter. In addition to the core, the 68 units listed below are required in the option. Refer to the *undergraduate School of Education* chapter of this catalog for regulations governing all teaching credential programs.

Required Courses (106-111 units):

Refer to *Undergraduate Study* chapter of this catalog.

Major Courses (20)

PAS 101	Introduction to Pan-African Studies	(4)
PAS 251 A or 251 B	Afro-American History	(4)
PAS 403	Afro-American Social Thought	(4)
PAS 414	Geography of Black Community	(4)
PAS 495	Senior Thesis	(4)

Literature (Pan-African Depth Area (20 units))

ENGL 377	Black American Literature	(4)
PAS 422	Themes in Black Literature	(4)
PAS 423	Caribbean Literature	(4)
PAS 426	African Literature	(4)
PAS 427	Institutional Racism: Slack Response in Literature	(4)

Electives (28 units)

Professional education courses are recommended. See a credential adviser in the *School of Education*.

GENERAL EDUCATION UPPER DIVISION THEME (12 units)

Select one general education upper division theme and complete one course in each of the three areas within that theme. Theme courses are not part of the major but are included in credential requirements.

Minor in *Pan-African Studies*

The Department of Pan-African Studies offers a minor with options in *Afro-American Political Economy and Development* and *Pan African Fine Arts*. The minor consists of a combined core and elective program of 24 units.

Requirements for the Minor(24 units) *Lower Division (4 units)*
PAS 101

Upper Division Options (20 units)

In addition to the lower division requirement above, each student must select one of the two option programs below.

* **Option I: Afro-American Political Economy and Development**

Select five courses from following:

PAS 401-403, 410, 412, 416, 440, 441, 480, 482, 484, 486, 490
LAS/PAS 442, 460
PAS/POLS 456

* **Option II: Pan-African Fine Arts**

Select five courses from following:

PAS 410, 420-425, 428, 482, 484, 486, 490

The Credential Program

The Bachelor of Arts degree in Afro-American Studies with the Multiple Subject credential option is intended for examination waiver for the Multiple Subject credential. In addition, the Department of Pan-African Studies shares partial responsibility for the Bilingual/Crosscultural Specialist credential. For detailed information regarding these credentials, students should consult advisers in the department and in the School of Education. Refer to the *School of Education* chapters of this catalog for regulations governing all credential programs.

Courses in *Pan-African Studies* (PAS)**Lower Division Courses****100 Introduction to College Environment (4)**

(also listed as CHS 100) Introduction to institution of higher education and its particular relationship to minority/Third World students. This course is designed especially for EOP students. Graded CR/NC.

101 Introduction to Pan-African Studies (4)

A general overview of Pan-African studies.

125 Elementary Conversational African Language (4)

Methodical presentation of structure of particular African language through hearing, speaking, reading, and writing the language. May be repeated to maximum of 12 units as language offered changes.

250AB African History (4, 4)

Major themes of African history from origin of black peoples and traditional African civilization to institutional realities of Africa today.

251 AB Afro-American History (4, 4)

History of Afro-Americans in the U.S.

253 Caribbean History (4)

(also listed as HIST253) Caribbean history and development including history of indigenous peoples, European colonialism, slavery, resistance, and independence. Includes Spanish-, English-, French-, and Dutch-speaking Caribbean islands.

254 Special Topics in Pan-African Studies (1-4)

Prerequisite: As needed for specific topic. Current topics of special interest to students in Pan-African Studies, as announced in *Schedule of Classes*. May be repeated to maximum of 8 units as subject matter changes.

260 Third World Images in Film (4)

Historical and contemporary portrayals of peoples of African, Asian, and Latin descent in film. Emphasis on foreign and American full-length documentary and story films.

Upper Division Courses

395 Service in Black Community (1-4)

Prerequisites: Approval by department faculty adviser in consultation with EPIC Director, acceptance by community agency. Participation in work of community agency or activity utilizing professional and/or vocational skills in service to community. Grade **CR/NC**. *Credit toward baccalaureate limited to 4 units.*

400 The Social Psychology of Afro-Americans (4)

Prerequisite: PAS 101 or PSY 150. Social and psychological determinants of Afro-American behavior; emphasis on attitude and identity formation and interpersonal/Intercultural relations.

401 Education and Afro-Americans (4)

Prerequisite: PAS 101. Documented studies of the black child in various American school systems; investigation of primary factors in significantly lower performance ratings of black children.

402 Black Political Economy (4)

American capitalism and its formative influence on the life of Afro-Americans; emphasis on the organization of production and distribution, social relations, and economic inequality.

403 Afro-American Social Thought (4)

Recommended prerequisite: SOC 201. Historical and analytical consideration of contributions of Afro-American social thought to development and analysis of the black protest.

404 The Black Family (4)

Structure, functions, lineal analysis of Afro-American family and its African origin; condition of black family during slavery, Reconstruction, post-Reconstruction, wars, the Great Depression, economic boom and recession, and black revolution.

410 Black Political Reality (4)

Prerequisite: PAS 101. U.S. black political development, Reconstruction to present; evolution of U.S. black political activity.

412 Third World Women and Development (4)

Prerequisites: Upper division standing: ANTH 250 recommended. The status and role of Third World women in societal development with primary emphasis on Black women in developing countries.

414 Geography of Black Community (4)

Prerequisite: PAS 101. Locational experience of black people and their environmental relationship to economic and political institutions of the American nation.

416 Pan Africanism and World Politics (4)

Prerequisite: PAS 101. The interplay of Pan-Africanism as a cultural and sociopolitical movement in world politics.

420 Afro-American Culture (4)

Prerequisite: PAS 101. Exploration of existence of Africanisms, retentions, and syncretisms in the New World and their relationship to contemporary events and society.

421 History of Afro-American Music (4)

Prerequisite: PAS 101. Historical and stylistic development of black music from ancient Africa to present. Assessment of black musicians who have shaped musical climate of America.

422 Themes in Black Literature (4)

Prerequisite: PAS 101. Analysis and discussion of representative works of black authors from eighteenth century to present.

423 Caribbean Literature (4)

Early imitative Caribbean literature, its evolution into authentic original and individual expression of self; contemporary Caribbean writers, emphasis upon poetry, novels, and plays of Aime Cesaire.

424 Black Music Industry (4)

Creative and business aspects of black music industry. Role of blacks in creation of original American musical forms, in establishing music publishing industry, and in rounding ASCAP.

425 Black Dialect (4)

Prerequisite: PAS 101. Historical development and understanding of black dialect from its African past to Afro-American idiom.

426 African Literature (4)

(also listed as ENGL 426) Prerequisite: ENGL 250. African literature and its cultural background. Intensive study of writers in English and others in translation. Critical compositions and reports required.

427 Institutional Racism: Black Response in Literature (4)

Prerequisite: ENGL 250. Examination of institutional racism in the U.S. through analysis of folk tales, poetry, prose, short stories, novels, newspapers, and other materials.

428 Proseminar: Influence of Afro-American on Franco-African Literature (4)

Exploration of concept of negritude as authentic original literary movement, factors that influence it, and reactions it created.

432 Comparative Systems of Slavery in Western Hemisphere (4)

Prerequisite: PAS 101. Discussion and study of comparative systems of slavery in the western hemisphere with a critical analysis of effects of European imperialism, reaction to colonial rule, and birth of Nationalism.

440 Community Power Structure Analysis (4)

Prerequisite: PAS 101. Study of the key institutions that compose the power structure in the Afro-American community.

441 Community Power Structure Field Research (4)

Prerequisite: PAS 101; PAS 440 recommended. Supervised intensive study and field research in selected black and other Third World communities.

442 Cultural Impact of Third World Development (4)

(also listed as LAS 442) The development process in the Third World as it affects and is affected by art and intellectual life.

456 Politics of the Caribbean and Central America (4)

(also listed as POLS 456) Prerequisite: POLS 150. Political development and dependency in the Caribbean and Central America.

460 Dynamics of Social Change in the Third World (4)

(also listed as LAS 460) Processes and development of social change in the Third World and their relevance to the U.S.

480 Education and Development in Africa (4)

Prerequisite: Upper division standing. Study of the educational systems in Africa with emphasis on the social, economic, and political factors influencing educational objectives and strategies.

482 Black Participation in Electoral/Arena (4)

Effect of urban restructuring on blacks and other poor minorities in cities and how physical changes transformed political participation.

484 Black Participation: Problems and Cases (4)

Black participation in electoral policies with emphasis on relationship between grass roots activism and public policy development; selected guest speakers constitute the core of this course.

486 Urban Participation: Field and Cases (4)

Prerequisite: PAS 482 or 484. Placement in local government agency or other research facility to correspond with students' PAS 482 and/or 484 research project specified by field supervisor with faculty adviser approval.

490 Special Topics in Pan-African Studies (4)

Prerequisite: Instructor consent. Presentation and discussion of academic papers relating to given topic; lectures aimed at critical analysis and appraisal. May be repeated once for credit.

495 Senior Thesis (4)

Prerequisites: ENGL 102*, LBS 360, passing WPE score, senior standing. Individual project/senior thesis involving research techniques in Pan African Studies, including problem identification, hypothesis formulation, design and data gathering and analysis.

**Students subject to earlier catalogs satisfy this prerequisite with ENGL 1010r 190.*

499 Undergraduate Directed Study (1-4)

Prerequisites: Minimum of 8 units in Pan-African Studies, 3.0 grade point average, senior or graduate standing, consent of full-time faculty member to serve as sponsor, and recommendation of department chairperson. Term project selected in conference with sponsor, progress meetings held regularly, final report required. May be repeated to maximum of 8 units.

PHYSICAL SCIENCE**School of Natural and Social Sciences****PROGRAM OFFICE****Department of Physics and Astronomy**

Physical Sciences 315

(213) 343-2100

The interdisciplinary program in Physical Science offers a bachelor's degree program that includes preparation for the Single Subject credential in Physical Science for teaching in secondary schools and has been approved by the Commission on Teacher Credentialing for examination waiver for that credential.

Program Coordinator: Robert H. Carr.**The Faculty**

Instruction is provided by the faculties of all physical science departments, i.e., Chemistry and Biochemistry, Geological Sciences, and Physics and Astronomy, as well as the Department of Mathematics and Computer Science and the Department of Geography and Urban Analysis. Advisement information is available from the Physical Science Coordinator.

Bachelor of Science Degree in Physical Science

The Bachelor of Science degree in Physical Science, which requires a total of 198 units, is designed primarily for students who are seeking a Single Subject teaching credential in Physical Science. Students may study one of the three subjects beyond the minimal depth of the waiver program or, with appropriate choice of electives, may gain the foundation necessary for direct employment or for graduate study in various interdisciplinary areas or in the health sciences field.

High school preparation is recommended in physics, chemistry, geometry, trigonometry, and algebra (two years).

Students must earn a grade of C or higher in all courses used to meet major requirements. At least one course in each of the three physical sciences must be taken in residence at Cal State L.A.

Requirements for the Major (113-114 units)*Lower Division Required Courses (73 units):*

ASTR 151	Principles of Astronomy	(3)
ASTR 152	Principles of Astronomy Laboratory	(1)
CHEM 101-103	General Chemistry,	(5, 5, 5)
CHEM 201	Quantitative Analysis	(5)
GEOL 150	General Geology	(3)
GEOL 152	General Geology Laboratory	(1)
GEOL 155	Oceanography	(3)
GEOL 158	Environmental Geology	(4)
GEOL 201	Elementary Mineralogy	(6)
MATH 206-208	Calculus I--I11	(4, 4, 4)
PHYS 201-206	General Physics	(4 each)

Upper Division Required Courses (6 units):

GEOL 321	Geology of Southern California	(4)
----------	--------------------------------	-----

Select one from following (2 units):

CHEM 499	Undergraduate Directed Study	(2) or
GEOL 499	Undergraduate Directed Study	(2) or
PHYS 499	Undergraduate Directed Study	(2)

Area of Emphasis/Electives (minimum 34 units):

With adviser approval, select 34 or 35 units of electives. Normally these courses will be taken as an emphasis in one of the following three areas.

Chemistry Emphasis (34 or 35 units)

Required Courses (19 units):

CHEM 301ABC	Organic Chemistry	(3, 3, 3)
CHEM 302A	Organic Chemistry Laboratory	(2)
MATH 209	Calculus IV	(4)
PHYS 206	General Physics	(4)

Select four courses from following (15 or 16 units):

CHEM 318	Introduction to Inorganic Chemistry	(3)
CHEM 411	Fundamentals of Physical Chemistry	(4)
CHEM 435	Introduction to Biochemistry	(4)
CHEM 463	Biomedical Microanalysis	(4)
CHEM 480	History of Chemistry	(4)

Geology Emphasis (35 units)

CHEM 152	Fundamentals of Chemistry (Organic)	(5)
GEOG 402	Geomorphology	(4)
GEOG 410	Weather and Climate	(4)
GEOL 151	Physical Geology Field Laboratory	(2)
GEOL 156	Oceanography Field Laboratory	(2)
GEOL 203	Introductory Petrology	(2)
GEOL 252	Historical Geology	(4)
GEOL 360	Geological Mapping	(4)
GEOL 402	Sedimentary Petrology	(4)
GEOL 420N	Geology of the National Parks	(4)

Physics Emphasis (35 units)*Required Courses (27 units):*

CHEM 301ABC	Organic Chemistry	(3, 3, 3)
CHEM 302A	Organic Chemistry Laboratory	(2)
MATH 209	Calculus IV	(4)
MATH 215	Differential Equations	(4)
PHYS 206	General Physics	(4)
PHYS 427	Thermodynamics	(4)

Select two courses from following (8 units):

ASTR/PHYS 411	Introduction to Astrophysics	(3)
PHYS 312	Basic Electronics	(4)
PHYS 431	Modern Optics	(4)
PHYS 433	Solid State Physics I	(4)
PHYS 444	Nuclear Physics	(4)

The Credential Program

The Bachelor of Science degree in Physical Science has been approved by the Commission on Teacher Credentialing for examination waiver for the Single Subject credential in Physical Science. Interested students should consult advisers in the Department of Physics and Astronomy, which administers the program, and in the School of Education. Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs.

Courses in Physical Science (PSCI)**Lower Division Course****180 Nature of Physical Science (4)**

Interdisciplinary approach to basic concepts in chemistry, geology, and physics as they relate to the earth's physical environment; each topic illustrated by lecture-demonstrations.

PHYSICS AND ASTRONOMY

School of Natural and Social Sciences

DEPARTMENT OFFICE

Physical Sciences 315

Phone: (213)343-2100

The Department of Physics and Astronomy offers undergraduate and graduate programs in physics, with opportunities for professional preparation in a variety of directions, including nuclear physics, condensed matter physics, astronomy, and biophysics.

Undergraduate programs include one leading to the Bachelor of Science degree, and one leading to the Bachelor of Arts degree, and a minor in physics for students majoring in other fields. The Bachelor of Science curricula include the general program without specialization and an option in Biophysics. The department also offers courses in astronomy that may be included as electives in a baccalaureate program and participates in the interdisciplinary Bachelor of Science degree program in Physical Science.

The Master of Science degree is described in the *Graduate Programs* section.

The Faculty

Emeriti: Bruce Dayton, Fernando B. Morinigo, Lester Hirsch, Donald E. Hudson, Frieda Stahl, Ross D.F. Thompson, Hubert C. Winkler.

Professors: Konrad A. Aniol, Roland L. Carpenter, Robert H. Carr, Berken Chang, Harold L. Cohen, Charles C. Coleman, Martin B. Epstein, Perry S. Ganas, David T. Gregorich, Demetrius J. Margaziotis, William A. Taylor, John C. Woolum, Fleu B. Yano (*Chair*).

Associate Professors: Radi A. Al-Jishi, Edward H. Rezayi.

Assistant Professors: Milan B. Mijic, Jose P. Rodriguez.

Departmental Honors Program

The Department of Physics and Astronomy offers an Honors Program for qualified students. Students may apply in their junior year after completing PHYS 201-206. Candidates must maintain a B (3.0) grade point average both in their major and overall. Honors students have the option of taking up to three 500-level courses for undergraduate credit toward the bachelor's degree. They also may substitute major courses for required general education courses. Completion of the honors program requires 3 units of independent, research-oriented study (PHYS 396) and presentation of the work in a colloquium. *Graduation with Honors in Physics* is conferred upon those students whom the faculty of the department deem worthy after presentation of the colloquium. Diplomas and transcripts of Honors Program graduates are designated *Graduated with Departmental Honors in Physics*.

Bachelor of Arts Degree in Physics

The Bachelor of Arts degree in Physics provides a program appropriate for students interested in such careers as teaching, public service, business, or science journalism. This program does not include the advanced study needed by students who wish to prepare for careers as physicists, but provides the breadth needed for many other innovative and challenging occupations.

Requirements for the Major (95 units)

The major includes 95 units, 59 in lower division and 36 in upper division courses, with a total of 186 units required for the degree.

Students must earn a grade of C or higher in all courses used to meet major requirements.

Lower Division Required Courses (59 units):

PHYS	201-206	General Physics	(4 each)
CHEM	101	General Chemistry I	(5)
CHEM	122, 123	Principles of Chemistry	(5, 5)
MATH	206-209	Calculus I-IV	(4 each)
MATH	215	Differential Equations	(4)

Upper Division Electives (select 22-32 units from following):

PHYS 311,312, 410A, 411,427, 431,444, 470, 471,491,492

Additional Electives (select 4-14 units with adviser approval)

Bachelor of Science Degree in Physics

The Bachelor of Science degree, which requires a total of 198 units, may be used as preparation for graduate work or as a qualifying degree for professional employment. Selection of electives in astronomy provides substantial background for students planning graduate study in that field.

Programs in physics are built on a foundation of high school studies in mathematics and physical sciences. For completion of a Bachelor of Science degree program in 12 quarters, high school preparation is recommended in physics, chemistry, geometry, trigonometry, and algebra (two years).

In planning their university programs, students who wish to prepare for graduate study in physics are advised to include 12 units of French, German, or Russian, a portion of which will earn general education credit. Student participation in research is strongly encouraged.

* **General Program**

Requirements for the Major (125 units)

The major consists of 125 units in physics and related fields, of which 59 are in lower division and 66 in upper division courses. Students must earn a grade of C or higher in all courses used to meet major requirements.

Lower Division Required Courses (59 units)

PHYS	201-206	General Physics	(4 each)
CHEM	101	General Chemistry I	(5)
CHEM	122, 123	Principles of Chemistry	(5, 5)
MATH	206-209	Calculus I-IV	(4 each)
MATH	215	Differential Equations	(4)

Upper Division Required Courses (46 units)

PHYS	312	Basic Electronics	(4)
PHYS	313	Digital Electronics	(4)
PHYS	410AB	Mathematical Methods of Physics	(4, 4)
PHYS	425AB	Introduction to Theoretical Physics	(4, 4)
PHYS	426AB	Electricity and Magnetism	(3, 3)
PHYS	427	Thermodynamics	(4)
PHYS	432AB	Introductory Quantum Mechanics	(3, 3)
PHYS	470-471	Advanced Physics Laboratory I, II	(3, 3)

Electives (20 units):

Select with adviser approval; at least 12 units must be in physics.

* **Option in Biophysics**

The Bachelor of Science degree in Physics, Biophysics option, may be used as preparation for graduate work in biophysics or as a degree for professional employment.

Requirements for the Major (122 units)

The major with this option consists of 122 units in physics, biology, and related fields, of which 77 are in lower division and 45 in upper division courses. Students must earn a grade of C or higher in all courses used to meet major and option requirements.

Lower Division Required Courses (77 units)

PHYS	201-206	General Physics	(4 each)
BIOL	101,102	Principles of Biology I, II	(5, 5)
CHEM	101	General Chemistry I	(5)
CHEM	122, 123	Principles of Chemistry	(5, 5)
MATH	206-209	Calculus I-IV	(4 each)
MATH	215	Differential Equations	(4)

MICR 200AB General Microbiology (5, 3)

Upper Division Required Courses (39 units)

PHYS 312	Basic Electronics	(4)
PHYS 410A	Mathematical Methods of Physics	(4)
PHYS 432A	Introductory Quantum Mechanics	(3)
PHYS 443AB	Biophysics	(3, 2)
CHEM 301ABC	Organic Chemistry	(3, 3, 3)
CHEM 401	Physical Chemistry I	(4)
CHEM 402 or 403	Physical Chemistry II or III	(4)
CHEM 431AB	Biochemistry	(3, 3)

Electives (6 units):

Select courses in physics or chemistry, with adviser approval.

Minor in Physics

A Physics minor, available for students majoring in other fields, requires 60 units in physics and mathematics, of which 44 are in lower division and 16 in upper division courses. Students majoring in fields that require the same courses as those required for the Physics minor need take only those courses in the minor that are not incorporated into their major.

Requirements for the Minor (60 units)

<i>Lower Division Required Courses</i>		<i>(44 units):</i>
PHYS 201-206	General Physics	(4 each)
MATH 206-209	Calculus I-IV	(4 each)
MATH 215	Differential Equations	(4)

Upper Division Electives

(16 units):

Select physics courses with adviser approval.

The Credential Program

The Department of Physics and Astronomy administers the interdisciplinary Bachelor of Science degree in Physical Science which is approved by the Commission on Teacher Credentialing for examination waiver for the Single Subject credential in Physical Science. The program is described earlier in this chapter. In addition, the department offers the *supplementary authorization in physics*, described below, for holders of a Single Subject teaching credential in another field. Interested students should contact advisers in both the department and the School of Education. Refer to the undergraduate *School of Education* chapter for regulations governing all credential programs.

Supplementary Authorization for Single Subject Teaching Credential (32 units)

Holders of a *Single Subject teaching* credential issued by the state of California may supplement that credential with an authorization in physics for teaching physics at any grade level through grade 12 or in classes organized primarily for adults by completing the following program with a grade of C or higher in each course. For other requirements governing issuance of this authorization, consult the School of Education.

Complete or demonstrate proficiency in the following (32 units):

PHYS 201-206	General Physics	(4 each)
MATH 206	Calculus I (Calculus and Analytic Geometry)	(4)
MATH 207	Calculus II	(4)

In addition to the above courses, an astronomy course-such as ASTR 1510r 152-is strongly recommended.

Courses in Astronomy (ASTR)
Lower Division Courses

151 Principles of Astronomy (3)

Recommended corequisite: ASTR 152. Non mathematical survey of modern astronomy, primarily for nonmajors in science. Properties and evolution of solar system, stars, and universe.

152 Principles of Astronomy: Laboratory (1)

Prerequisite or corequisite: ASTR 151. Laboratory and field trips designed to complement ASTR 151 lecture. Laboratory 3 hours.

160 Black Holes and the Universe (3)

Prerequisite: ASTR 151. Non mathematical review of black holes and the universe. Concepts of space, time, and gravitation developed. Course develops an intuitive grasp of Einstein's theory of relativity.

Upper Division Courses**311 Elements of Modern Astronomy (3)**

(See PHYS 311 for course description.)

411 Introduction to Astrophysics (3)

(See PHYS 411 for course description.)

488 Modern Topics in General Relativity (3)

(See PHYS 488 for course description.)

Courses in Physics (PHYS)**Lower Division Courses****101-103 Physics (4 each)**

Fundamental treatment of physics without use of calculus. Required for biological science majors; recommended for behavioral science majors. Biologists planning graduate work may find the 201-206 or 121-123 series in physics with calculus better suited to their needs. Lecture 3 hour;;, laboratory 3 hours for each course. PHYS 101-103 = CAN PHYS SEQ A

101: Prerequisite: Knowledge of elementary algebra and trigonometry. Mechanics of particles, rigid bodies; gravity; simple harmonic motion.

102: Prerequisite: PHYS 101. Waves, sound, fluids, thermal physics, kinetic theory, electrostatics.

103: Prerequisite: PHYS 102. Electricity and magnetism, light and optics, relativity, quanta, atoms, nuclei, and fundamental particles.

121-123 Physics (with Calculus) (4 each)

Alternative series to PHYS 101-103; same topics presented with use of calculus. Recommended for biological science majors. Lecture 3 hours, laboratory 3 hours in common sections with 101, 102, 103.

121: Prerequisite: MATH 206. Mechanics of particles, rigid bodies, and fluids; gravity; simple harmonic motion.

122: Prerequisites: PHYS 121, MATH 207. Waves, sound, thermal physics, kinetic theory, electrostatics.

123: Prerequisite: PHYS 122; MATH 208 recommended. Electricity and magnetism; light and optics; relativity; quanta; atoms; nuclei; and fundamental particles.

150 Principles of Physics (4)

Prerequisite: Ability to use simple algebraic equations. introductory course, not for science or engineering majors. Basic concepts of mechanics, sound, heat, electricity, light, relativity, atomic and nuclear structure. Lecture 3 hours, laboratory 3 hours.

154L, P Selected Topics in Physics (1-6)

Prerequisite: Specific prerequisites announced in *Schedule of Classes*. Topics of current interest in physics and astronomy, as announced in *Schedule of Classes*; relevance of physics in solving problems of modern technological society.

155 Nature of Physical World (4)

Primarily for nonmajors in science. Concepts of physics illustrated through everyday phenomena. Topics include mechanical forces, fluids, heat, waves, nuclear theory, radiation, and energy in operation of living and nonliving systems.

201-206 General Physics (4 each)

Two-year sequence for physical science and engineering majors, using calculus. Lecture 3 hours, laboratory 3 hours for each course.

201: Prerequisites: High school physics or permission of department; MATH 206 (may be taken concurrently). Vectors, mechanics of particles and rigid bodies, basic conservation laws of mechanics.

202: Prerequisites: PHYS 201; prerequisite or corequisite: MATH 207. Mechanical vibrations and sound, elementary thermodynamics.

203: Prerequisites: PHYS 202; prerequisite or corequisite: MATH 208. Elementary field theory, basic electricity and magnetism, DC and AC circuits.

204: Prerequisites: PHYS 203; prerequisite or corequisite: MATH 209. Continuation of electricity and magnetism including oscillations and waves; geometrical and physical optics.

205: Prerequisites: PHYS 204; prerequisite or corequisite: MATH 209. Topics in modern physics including special relativity, elementary quantum physics, atomic theory, Schrodinger's equation.

206: Prerequisite: PHYS 205. Continuation of modern physics including optical and x-ray spectra, electron physics, solid-state physics, nuclear and particle physics.

Upper Division Courses

311 Elements of Modern Astronomy (3)

(also listed as ASTR 311) Prerequisite: PHYS 205. Survey of modern astronomy, designed for students majoring in physical sciences, engineering, or mathematics.

312 Basic Electronics (4)

Prerequisite: PHYS 204. AC and DC circuits, solid-state circuits and devices, feedback, operational amplifiers. Lecture 3 hours, laboratory 3 hours.

313 Digital Electronics (4)

Prerequisite: PHYS 312. Design and use of pulse circuits and digital logic circuits. Fundamentals of computer design and computer programming. Lecture 3 hours, laboratory 3 hours.

333 Applied Modern Physics (4)

Prerequisites: MATH 215, PHYS 204. Selected topics in modern physics of solids including special relativity, wave mechanics, photons, phonons, applications to lasers, semiconductors, and other devices.

350N Evolution of Universe and Earth (4)

(also listed as GEOL 350N) Prerequisite: GE natural science requirement. Origin and evolution of the universe, elements, stars, sun, the Earth, and life upon it.

351 N Introductory Medical Physics and Instrumentation (4)

Prerequisite: CHEM 151. Elementary electricity, heat, sound, wave motion, as applied to examples in human physiological phenomena and in biomedical instruments. Physical principles and operation of transducers, amplifiers, recorders, and selected biomedical instruments. Lecture 3 hours, laboratory 3 hours.

358N Science and Controversy (4)

(also listed as BIOL 358N, CS 358N, and CHEM 358N) Prerequisite: GE natural science requirement. Scientific background of issues that affect public welfare, such as genetic technology, chemical pesticides, energy production and utilization, and artificial intelligence. *No credit toward Biology, Chemistry, Computer Science, or Physics major.*

363 The Creative Process in Physics (4)

Prerequisite: GE natural science requirement. The creative process in physics past and present. Individual achievements from Galileo to modern times, both experimental and theoretical; examination of how large scientific groups work; implications for future research.

396 Honors Studies in Physics (3)

Prerequisite: Admission to departmental honors program. Study leading to colloquium presentation required for conferral of Bachelor of Science degree with *Departmental Honors in Physics*.

410AB Mathematical Methods of Physics (4, 4)

Prerequisites: PHYS 204; MATH 215 or 401. Vector calculus, integration, series, complex variables, special functions, boundary value problems, calculus of variations. Emphasis on mathematical solution of problems in physics.

411 Introduction to Astrophysics (3)

(also listed as ASTR 411) Prerequisites: PHYS 206; PHYS 311 recommended. Celestial mechanics, stellar interiors, atmospheres, and evolution; introductory cosmology.

412 Laboratory Applications of Minicomputers and Microcomputers (4)

Prerequisite: PHYS 313 strongly recommended. The use of minicomputers and microcomputers in physics laboratories and research. Fundamentals of data acquisition, interfacing, and data display. Lecture 2 hours, laboratory 6 hours.

425AB Introduction to Theoretical Physics (4, 4)

Prerequisites: PHYS 205, 410A. Application of mathematics to solutions of problems in physics with emphasis on general area of mechanics; Newtonian, Lagrangian, and Hamiltonian mechanics, field theory, special relativity.

426AB Electricity and Magnetism (3, 3)

Prerequisites: PHYS 205, 410A. Theoretical electricity and magnetism; properties of electric and magnetic fields, electromagnetic waves; emphasis on mathematical solution of problems.

427 Thermodynamics (4)

Prerequisites: PHYS 205, MATH 215. Introduction to thermodynamics and statistical physics; emphasis on mathematical solution of problems.

428 Statistical Physics (3)

Prerequisite: PHYS 427. Introduction to statistical mechanics, transport phenomena, fluctuations; emphasis on mathematical solution of problems.

431 Modern Optics (4)

Prerequisites or corequisites: PHYS 205, 410AB; recommended corequisite: PHYS 471. Introduction to modern optics; geometric optics by matrix methods, partial polarization, coherence, diffraction, quantum optics, and developments in laser technology.

432AB Introductory Quantum Mechanics (3, 3)

Prerequisites: PHYS 206, 410A. Introduction to quantum mechanics with applications; emphasis on mathematical solution of problems.

432A: Fundamentals of wave mechanics, wave packets, and the uncertainty principle.

Schrodinger's equation, operators and eigenfunctions, one-dimensional problems.

432B: Central potentials, spectroscopy, spin and angular momentum, symmetry and conservation laws.

433 Solid State Physics I (4)

Prerequisites: PHYS 206; 427 recommended. Crystal structure, thermal and electrical behavior of insulators, metals, and semiconductors; band theory.

434 Solid State Physics II (4)

Prerequisites: PHYS 432A; 427, 433 recommended. Fermi surface, transport theory, superconductivity, magnetic resonance, optical properties, superfluidity, ion implantation.

443AB Biophysics (3, 2)

Prerequisites: Lower division biophysics or biochemistry program; CHEM 4010r PHYS 427.

443A: Physical aspects of living state. Lecture 3 hours.

443B: Theory of physical methods used in measurement of biological processes. Lecture 2 hours.

444 Nuclear Physics (4)

Prerequisite: PHYS 206. Nuclear phenomenology; alpha, beta, and gamma decays; nuclear reactions, nuclear energy, radiation detectors; radioactivity.

470 Advanced Physics Laboratory I (3)

Prerequisites: PHYS 206, 312. Instrumentation, techniques, and analytical evaluation involved in current experimental practice; basic experiments in vacuum techniques, and in classical, solidstate, and nuclear physics. Lecture 1 hour, laboratory 6 hours.

471 Advanced Physics Laboratory II (3)

Prerequisite: PHYS 470. Further advanced laboratory experience in contemporary fields. Experiments in nuclear physics, solid-state physics, cryogenics, optics, laser physics, spectroscopy, and related topics, as selected by instructor. Lecture 1 hour, laboratory 6 hours. May be repeated to maximum of 9 units.

488 Modern Topics in General Relativity (3)

(also listed as ASTR 488) Prerequisites: PHYS 410AB; 425AB strongly recommended.

Introduction to basic ideas of general relativity: physics of spacetime, relativistic stars, gravitational collapse and black holes, gravitational waves, testing of general relativity.

491 Topics in Contemporary Experimental Physics (3)

Prerequisites: Upper division or graduate standing in Physics; others as listed in department announcement. Each section of course is a lecture series designed to present current developments in research; laboratory program may be included. Specific topics listed in *Schedule of Classes* and in department. May be repeated for credit.

492 Topics in Contemporary Theoretical Physics (3)

Prerequisites: Upper division or graduate standing in Physics; others as listed in department announcement. Each section of course is a lecture series designed to present current developments in theory. Specific topic listed in *Schedule of Classes* and in department. May be repeated for credit.

497 Undergraduate Research (1-4)

Prerequisite: Consent of faculty sponsor prior to registration. Laboratory work organized on a project basis open to a limited number of qualified physics majors each year. Emphasis on developing experimental ability and initiative of the student. May be repeated for credit.

499 Undergraduate Directed Study (1-4)

Prerequisites: Consent of faculty sponsor before registration and ability to work independently. Includes regular conferences with sponsor and preparation of a report. May be repeated for credit.

POLITICAL SCIENCE

School of Natural and Social Sciences

DEPARTMENT OFFICE

Engineering and Technology A523

Phone: (213) 343-2230

The Department of Political Science offers undergraduate and graduate degree programs to prepare students for professional careers in public service, law, international relations, and teaching, and for more effective civic participation. The undergraduate program is described below. The Master of Arts degree in Political Science and the Master of Science degree in Public Administration are described in the *Graduate Programs* section.

The Faculty

Emeriti: Robert Bascom Callahan, Eugene P. Dvorin, Harry S. Hall, Stanley D. Hopper, John L. Houk, Thomas McEnroe, Arthur J. Misner, Thomas A. Rusch, Ake Sandler, Robert H. Simmons, Virgil H. Stevens.

Professors: J. Theodore Anagnoson, Donald W. Bray, Naomi Joy Caiden, Edward M. Goldberg, Edward S. Malecki, Jr., (Chair), Benjamin W. Smith, Donald W. Urquidi, Kenneth A. Wagner.

Associate Professor: James A. Regalado.

Assistant Professors: Paula Fleming, Nadine Sue Koch, Stephen K. Ma, Michael J. Slier.

Bachelor of Arts Degree

Five options are offered in the Bachelor of Arts degree in Political Science, each adapted to a different objective as follows:

- * The *American Politics* option provides a focus for students with interests in urban, local, and citizen politics outside the realm of government service and allows development of a theoretical framework for those interests.
- * The *General Political Science Option* is a general program of undergraduate preparation for active participation in public life or for graduate study.
- * The *Prelegal Option* provides undergraduate preparation for entrance into a graduate school of law.
- * The *Public Administration Option* provides undergraduate preparation for career government service or positions in nonprofit organizations. This option may be coordinated with a public service internship (see *Cooperative Education*).
- * The *World Politics Option* prepares students for careers that involve foreign affairs and international relations.

The department also participates in the interdisciplinary Bachelor of Arts degree in Social Science, described under Social Science.

Requirements for the Major (85-101 units)

Major requirements combine a core program of 41 units taken by all students with an elected option program of lower and upper division courses in political science and related fields. Total unit requirements vary with the options.

Core Requirements (41 units):

Lower Division Required Courses (17 units):

POLS 202	Principles of Political Science	(4)
POLS 203	Proseminar: Political Science	(4)
POLS 281	Quantitative Methods in Political Science (5)	
CIS/SOCS280	The Computer World	(4)

Upper Division Required Courses (24 units):

Required Course (4 units):

POLS 490 Special Studies in Political Science (4)

Select one course in five of following fields, with adviser approval, for a total of 20 units:
American Government and Politics POLS 400, 415, 417, 418

Comparative Government POLS 421,450, 451,452, 453, 455
International Relations POLS 425, 427
Political Philosophy. POLS 410, 411,413
Public Administration. POLS 460
Public Law POLS 440-442, 445, 446
Public Policy POLS 430

NOTE: Courses taken to satisfy upper division core requirements may not be used in options unless indicated.

Options

The following courses are required in addition to the core courses described above.

* American Politics Option (44 units)

Lower Division Electives (12 units):

CHS 150	Chicano and Contemporary Politics	(4)
ECON 201,202	Principles of Economics	(4, 4)
HIST 202AB	United States Civilization	(4)

Upper Division Required Courses (32 units):

With adviser approval, select 24 units from following, with at least one course in each group:

Political Behavior and Structure
POLS 415, 418, 483, 485, 487

Public Law
POLS 440, 441,442

Public Policy
POLS 400, 407, 417, 430, 432, 436

State and Local Government
POLS 403, 404, 405, 406

Up to 8 units in above categories may be chosen from the following:

CHS 430
PAS 410, 440, 482

Upper Division Proseminars (8 units)

POLS 491	Proseminar: American Government and Politics	(4)
----------	--	-----

Select one from following with adviser approval.'

POLS492, 494, 496

NOTE: The following courses may be used to satisfy upper division core requirements:

POLS 400, 415, 417, 418 American government and politics
POLS 440, 441,442 public law
POLS 430.public policy

ff so used, each of the above courses will reduce the total units in the option by four.

* General Political Science Option (44 units)

Lower Division Electives (12 units):

Select 12 units of a foreign language or 12 units from following:

ECON 202	Principles of Economics II	(4)
HIST 110ABC	World Civilization I-III	(4 each)

(limit of 8 units from HIST)

Upper Division Proseminars (8 units):

Select two courses from POLS 491,492,494, and 496 with adviser approval.

Electives (24 units):

Select *six courses* in political science or related fields with adviser approval (related fields limited to two courses).

*** Prelegal Option (60 units)**

Required for this option are 20 units of lower division courses and 40 units of upper division courses. Transfer students must have their Prelegal Option program approved before beginning upper division courses; lower division students, as soon as possible after admission.

Lower Division Required Courses (24 units):

ECON 201,202
HIST 202AB
SPCH 176

Upper Division Required Courses (20 units):

POLS 440, 441,442, 494
HIST 479

Select a 4-unit upper division ENGL course, with adviser approval.

Electives (select 16 units with adviser approval):

Select two from following group:

POLS 400, 403-405, 415, 417, 418, 430, 476

Select one from each of following pairs:

POLS 445 or 446
POLS 4910r 496

Note: POLS 440 may be used to satisfy the upper division core requirement in the field of public law, and, if so used, will reduce the total units in this option by four.

*** Public Administration Option(48 units)**

Lower Division Required Course (4 units):

ACCT 202 or
ECON 201

Upper Division Required Courses (36 units):

POLS 403 or 404
POLS 405, 430, 460, 466, 472, 479

One course selected from

POLS 491,492,494
POLS 496

Electives (select 8 units from following with adviser approval)

POLS 416, 417, 439, 461,463, 464, 468, 470, 473-477, 480, 481
ECON 433

Courses in anthropology, biology, Chicano Studies, criminal justice, geography, history, Pan-African Studies, psychology, recreation, and sociology may be selected as electives with adviser

approval. Students with particular interests in international public administration may use the following courses as electives with adviser approval:
 POLS 421,427, one of 451-456.

NOTE: POLS 430 and 460 may be used to satisfy upper division core requirements in public administration and, if so, will reduce the total units in this option by eight.

*** World Politics Option (52 units)**

Lower Division Required Courses (12 units):

International cultural foundations requirement:

Select 12 units, with adviser approval, in the language, geography, anthropology, history, or arts of a specific foreign culture.

Upper Division Required Courses (24 units):

POLS 421,425, 426, 427, 429, 492

Electives (16 units):

Select *three* courses from

POLS 450-456 **

Select *one* proseminar:

POLS 491,494, or 496

***may be repeated to a maximum of 8 units as topic varies.*

NOTE: POLS 425 or 427, as well as one course from POLS 450-456, may be used to satisfy upper division core requirements in the field of world politics and, if so used, will reduce total units in option by eight.

Minors in Political Science

The Department of Political Science offers four minor programs for students majoring in other fields. The *General* minor requires 32 units and may interest to majors in such related fields as history, economics, geography, sociology, anthropology, or English. The *Prelaw* minor, which requires 20 units, is available to students who may be interested in attending law school. The minor in *Public Administration* requires 20 units and is designed for students who may be interested in government service at the local, state, or federal level. The *World Politics* minor requires 20 units and is designed for students whose career or personal interests would be enhanced by a study of international relations and comparative government. All students are expected to complete POLS 150 before beginning one of the minor programs in political science.

General Minor

Requirements for the Minor (32 units)

Lower Division Required Courses (12 units):

POLS 200	California State and Local Government	(4)
or POLS403	State and Local Government	(4)

(upper division credit)

POLS 202	Principles of Political Science (4)	
CIS/SOCS280	The Computer World	(4)

Upper Division Required Courses (20 units):

Select 5 additional POLS courses with adviser approval to fulfill goal for which minor was chosen.

Prelaw Minor

Requirements for the Minor(20 units)

Required Courses (12 units):

POLS 440	Judicial Process	(4)
POLS 441	American Constitutional Law: Federalism	(4)
POLS 494	Proseminar: Legal Process	(4)

Electives (8 units)

POLS 442
 POLS 445 or 446

NOTE: Specific courses should be chosen in consultation with a prelaw adviser.

**Public Administration Minor
 Requirements for the Minor (20 units)**

Required Courses (8 units):

POLS 460	Foundations of Public Administration	(4)
POLS 496	Proseminar: Public Administration	(4)

Electives (12 units):

Select *one* from following:

POLS 403 or 405

Select *two* from following:

POLS 461, 463, 466, 472

NOTE: Specific courses should be chosen in consultation with a public administration adviser.

**World Politics Minor
 Requirements for the Minor (20 units)**

Required Course (4 units):

POLS 250	World Politics	(4)
----------	----------------	-----

Select *two* from following:

POLS425, 426, 427

*Select *two* from following:

POLS 450-456.

* *POLS 450-455 may be repeated to a maximum of 8 units as topic varies*

The Credential Program

The Bachelor of Arts degree in Social Science, administered by the Department of Political Science, has been approved for examination waiver by the Commission on Teacher Credentialing. The program is listed under *Social Science*. In addition, the department offers two supplementary authorizations for persons who hold a Single Subject teaching credential in another field. These programs are described below.

**Supplementary Authorizations for
 Single Subject Teaching Credential**

Comparative Political Systems/international Relations (32 units)

Holders of a *Single Subject teaching credential* issued by the state of California may supplement that credential with an authorization in political science for teaching comparative political systems/international relations at any grade level through grade 12 or in classes organized primarily for adults by completing the following program with a grade of C or higher in each course. For other credential requirements, consult the School of Education.

Complete or demonstrate proficiency in each of the following courses (32 units):

Required Courses (16 units):

POLS 150	Government and American Society	(4)
POLS 155	Critical Analysis of Political Communication	(4)
POLS 202	Principles of Political Science	(4)
POLS 400	Power and Policy in Washington: Congress and the President	(4)

Electives (16 units):

Select two from following (8 units):

POLS 421, 425, 426, 427

Select one from following:

POLS 446, 450, 455

Select one from following:

POLS 451, 452, 453, 456

U.S. Government and Civics (32 units)

Holders of a *Single Subject* teaching credential issued by the state of California may supplement that credential with an authorization in political science for teaching U.S. government and civics at any grade level through grade 12 or in classes organized primarily for adults by completing the following program with a grade of C or higher in each course. For other credential requirements, consult the School of Education.

Complete or demonstrate proficiency in each of the following courses (32 units).

Required Courses (16 units):

POLS 150	Government and American Society	(4)
POLS 155	Critical Analysis of Political Communication	(4)
POLS 200	California State and Local Government	(4)
POLS 400	Power and Policy in Washington: Congress and the President	(4)

Electives (16 units):

Select one from following (4 units):

POLS 405 or 441

Select one from following (4 units):

POLS404, 417, 430

Select one from following (4 units):

POLS 413, 418, 440

Select one from following (4 units):

POLS250 or 425

Courses in Political Science (POLS)

Lower Division Courses

150 Government and American Society (4)

American political system with emphasis on role and function of government in social context of a democratic political system. Satisfies U.S. Constitution and California state and local government requirements. Not open to students who have completed an introductory college course in U.S. government. *CAN GOVT2*

155 Critical Analysis of Political Communication (4)

Critical analysis of ideological messages, political biases, and manipulative devices in newspapers, magazines, television, textbooks, government publications, and scholarly writings; evaluation of credibility of news and information sources.

200 California State and Local Government (4)

Functions and structure of California state and local government units, current aspects of governmental process and problems in State. Satisfies California state and local government requirement.

202 Principles of Political Science (4)

Comparative government and politics, international relations.

203 Proseminar: Political Science (4)

Prerequisites: POLS 150, ENGL 102*. Analysis of oral and written political arguments. Special projects in directed research. May be taken concurrently with POLS 202.

**Students subject to easier catalogs satisfy this prerequisite with ENGL 1010r 190.*

250 World Politics (4)

Theories, principles, and practice of international relations; examination of role of nationalism, diplomacy, war alliances, international law, and organizations in current international problems.

254 Special Topics in Political Science (1-4)

Current topics of special interest in political science and related disciplines, as announced in *Schedule of Classes*. May be repeated to maximum of 8 units.

281 Quantitative Methods in Political Science (5)

Prerequisite: POLS 150; MATH 0910 satisfactory performance on mathematics placement examination given during registration. Descriptive and inferential statistics; emphasis on practical applications in political science. Distributions on a single variable, associations between two variables, tests of hypotheses; bivariate computer analysis, including individual projects. Lecture 4 hours, laboratory 2 hours.

Upper Division Courses

POLS 150 is prerequisite to all upper division POLS courses except J 426, 459, and 474.

395 Community Service in Political Science (1-4)

Prerequisites: prior approval of Political Science adviser in consultation with EPIC director, acceptance by community agency. Participation in work of community agency or activity utilizing professional or vocational skills in service to community. Credit not applicable toward political science major. May be repeated to maximum of 9 units. Grade CR/NC.

400 Power and Policy in Washington: Congress and the President (4)

Structure, functioning, and interaction of Congress and the presidency.

403 State and Local Government (4)

Nature of state politics, analysis of legislative, judicial, and administrative organization and process; local government in metropolitan areas; all with reference to California.

404 Urban Government and Politics (4)

Problems of political influence, public policy, intergovernmental relations, and formal structure in American urban areas.

405 Intergovernmental Relations in the U.S. (4)

Introduction to American intergovernmental relations: American Federalism; national-state, state-state, and state-local relationships; powers and limitations of American governments.

406 Los Angeles City Politics (4)

Los Angeles within federal system; structures and functions; charter examination; policy issues; dominant individuals; social classes; minority influence; political coalitions; public vs. private sector relations and conflict.

407 Community and Citizen Politics (4)

Theories of citizen participation, community politics; grass roots political behavior; community organizing; knowing your community politically; power distribution; interest group and class cleavages; community political representation.

410 Classical Political Theory (4)

Exposition and critical analysis of ideas of major political thinkers from Plato to seventeenth century.

411 Modern Political Theory (4)

Studies in character of contemporary normative political theory; systematic political theories of Liberalism, Conservatism, Nationalism, Marxism, Communism, Fascism, Socialism, Democracy, and Irrationalism.

413 American Political Thought (4)

American political ideas from Puritan period to present.

415 Political Sociology (4)

(also listed as SOC415) Prerequisite: POLS 150 or SOC 201. Social factors underlying democracy and totalitarianism, social movements and revolutions, conflict/conflict resolution, voting behavior, political socialization.

416 Political Chief Executives (4)

The president, the governor, and the mayor; politics of elected and appointed executives.

417 Public Policy and the Economy (4)

Prerequisite: POLS 150; also recommended: ECON202. Interrelationships between public policy and economic affairs.

418 U.S. Political Parties, Campaigns, and Elections (4)

Role of political parties in campaigns and elections; role of the media, consultants, pollsters, and parties in recruiting, nominating, and electing candidates.

421 Comparative Politics (4)

Approaches, theories, and current research in comparative politics.

425 U.S. Foreign Policy in a Changing World (4)

Theory and practice of contemporary American foreign policy.

426 International Political Economy (4)

(also listed as ECON 426) Prerequisites: Four units each in POLS and ECON. Interaction of politics and economics in the international arena.

427 International Relations (4)

Theories and practice of international politics.

429 U.S. National Security Policy (4)

Prerequisite: POLS 150. The nexus between politics and military force in coercive diplomacy and limited war; nuclear weapons, arms control, and proliferation; the budgetary and operational consequences of defense organization.

430 Public Policy Analysis (4)

Public policy analysis: nature of public problems, issue definition, implementation, program impact and evaluation analysis.

432 Minority Politics in the U.S. (4)

Overview of ethnic politics in U.S. from both historical and contemporary perspectives; American Indian, Asian, black, and Hispanic political movements in U.S.

436 The Politics of Organized Labor (4)

Organized labor in American politics; union structures; special interest and class perspectives; political action; current problems; changing needs; labor laws and reforms.

439 Policy Evaluation (4)

Recommended prerequisite: POLS 281. Introduction to policy evaluation including research design, qualitative and quantitative evaluation, and real world problems of goals and "usability."

440 Judicial Process (4)

Judicial process as function of American government; survey of schools of legal thought, role of legal theory in functioning of courts.

441 American Constitutional Law: Federalism (4)

Recommended prerequisites for POLS majors in prelaw option: POLS 440, HIST 479. Role of Supreme Court in American government; judicial review; relationship between national and state governments, especially in areas of commerce and taxation; relationship between executive, legislative, and judicial branches of government.

442 American Constitutional Law: Civil Rights (4)

Recommended prerequisite for POLS majors in prelaw option: POLS 440. The constitutional rights of persons arising from the First and Fourteenth Amendments; freedom of speech, press, religion, assembly, and petition; equal protection of the laws and discrimination.

445 Judicial Behavior (4)

Recommended prerequisite for POLS majors in prelaw option: POLS 440. Contemporary approaches to study of judicial behavior, including judicial role, decision making, small group analysis, socialization, and analysis of judicial voting behavior.

446 Comparative Legal Systems (4)

Recommended prerequisite for POLS majors in prelaw option: POLS 440. Survey and systematic analysis of selected legal systems and functional relationships with social systems; emphasis on social context of legal systems and comparative approach to their study.

450 European Politics (4)

Course content varies, focusing on contemporary politics in selected European countries. May be repeated to maximum of 8 units as topic varies.

451 Latin American Politics (4)

Course content varies, focusing on contemporary politics of selected Latin American countries. May be repeated to maximum of 8 units as topic varies.

452 Politics of Asia (4)

Course content varies, focusing on contemporary politics in selected Asian countries. May be repeated to maximum of 8 units as topic varies.

453 Politics of Africa and the Mid-East (4)

Course content varies, focusing on contemporary politics of selected African and Middle Eastern nations. May be repeated to maximum of 8 units as topic varies.

454 Selected Topics in Comparative Politics (1-4)

Selected topics in comparative government, as announced in *Schedule of Classes*. May be repeated to maximum of 8 units as topic varies.

455 Comparative Communist Political Systems and Movements (4)

Course content varies; politics of selected socialist countries and communist movements. May be repeated to maximum of 8 units as topic varies.

456 Politics of the Caribbean and Central America (4)

(also listed as PAS 456) Political development and dependency in the Caribbean and Central America.

458 Environmental Policy and Politics (4)

Prerequisite: HIST 202A or 202B. Survey of global environmental concerns and public policies; U.S. governmental policies, politics, and policy information process in world perspective.

459 Society and the Nuclear Genie (4)

(also listed as HIST 459) Prerequisites: Upper division standing, GE social science requirement. Development of atomic energy and its consequences for society, from the Manhattan Project to the present. Strategic role of scientists in such development and in public policy making about atomic energy.

460 Foundations of Public Administration (4)

Politics of administrative power; methods of controlling bureaucracy; changing agency environments; dynamics and processes of public management; government as a career.

461 Dynamics of Urban Administration (4)

Politics of governing urban U.S.; problems caused by multiple governmental and administrative bodies, overlapping jurisdictions, tax revolts; existing system's capabilities to respond to those problems.

463 Public Personnel Administration (4)

Recommended prerequisite: POLS 460. Merit system concept growth, civil service development; recruitment procedures and examinations, position classification, salary structures, retirement plans, inservice training, supervision, employee organizations.

464 Public Sector Labor Relations (4)

Recommended prerequisite: POLS 460. Collective bargaining development in governmental jurisdictions, emphasizing California; legal and practical differences between public and private sectors, bargaining legislation, operations, negotiations, and impasse resolution.

466 Public Financial Administration (4)

Recommended prerequisites: courses in accounting and statistics. Role of financial administration and budgeting in determination of governmental policy, administrative planning and management, control of government operations, intergovernmental relations, and relation to private economy.

468 Administration of Human Resource Programs (4)

Recommended prerequisite: POLS 460. Program details and administrative issues of selected income maintenance programs, including Social Security, workers compensation, public assistance, Medicare, Medicaid, food stamps, unemployment insurance, and state disability insurance.

470 Public Relations in Government (4)

Recommended prerequisite: POLS 460. Public relations as a staff function; roles of information officer, public service features, public information counters; agency case histories.

472 Organization and Management (4)

Recommended prerequisite: POLS 460. Organization structure, human factors in organization, dynamics of organizational change, internal adaptability to external environment; problems, limitations, and trends in governmental organization and management.

473 Systems Design in Government (4)

Recommended prerequisites: POLS 460, 472. Conceptualization, design, analysis implementation of man-machine systems in government; information processing automation, retrieval, communication; theories of computers, operations research; related concepts.

474 Organization Behavior and Development (4)

(also listed as PSY 452) Prerequisite: PSY 442. Application of behavioral science findings to organizations; psychological methods used by various change agents; types and uses of organization development practices.

475 Comparative Administrative Systems (4)

Recommended prerequisite: POLS 460. Theories of comparative administrative systems analysis and application to selected administrative systems in U.S. and foreign countries; emphasizes relationships between administrative institutions and environment.

476 Administrative Law (4)

Recommended prerequisites: POLS 440, 460. Process in administrative adjudication, regulation, and rule-making; duties and liabilities of public officers, appeal procedures, trends in regulation.

477 Urban Planning and the Political Process (4)

Recommended prerequisites: POLS 403 or 404; 460. Interrelationship of planning at state and local levels within context of political and legal decisions; economic, social, legal, cultural, and esthetic problems; concepts of physical urban planning.

479 Computers in the Public Sector (4)

Prerequisites: CIS/SOCS 280 or CS 190; also recommended: POLS 460. Public sector computing and applications; governmental issues regarding computing.

480 Advanced Quantitative Methods in Political Science and Public Administration (4)

Prerequisite: POLS 281. Application of quantitative methods to government data, experimental and non-experimental research design, sampling, scale and index construction, multivariate statistics and computer analysis; individual projects.

481 Managerial Computing in the Public Sector (4)

Prerequisite: POLS 479. Managerial computing in the public sector, including project management, data base management systems, budget analysis using spreadsheets and other managerial tools.

483 Public Opinion and Polling (4)

Elections as a means of expressing public opinion; mass media role in forming and reflecting public opinion; modern techniques for measuring public opinion.

485 Politics and the Media (4)

Relationships between government and the media; news-gathering techniques, journalist/government relations, role of media in presidential campaign politics.

487 Political Socialization (4)

How people acquire political information, values, orientations, and behavioral pre-disposition's; the socialization process throughout the individual's life cycle; emphasis on subcultural and gender differences.

490 Special Studies in Political Science (4)

Intensive study of selected areas and special problems in political science. May be repeated as subject matter changes.

491 Proseminar: American Government and Politics (4)

Prerequisite: Passing WPE score; for all POLS majors: POLS

203. Individual and group research and writing projects in American politics and theory.

492 Proseminar: International Relations and Comparative Politics (4)

Prerequisite: Passing WPE score; for all POLS majors: POLS

203. Individual and group research and writing projects in international relations and comparative politics.

494 Proseminar: Legal Process (4)

Prerequisite: Passing WPE score; for POLS majors: POLS 203. Individual and group research and writing projects in public law.

496 Proseminar: Public Administration (4)

Prerequisites: Passing WPE score; for all POLS majors: POLS 203. Individual and group research and writing projects in public administration.

499 Undergraduate Directed Study (1-4)

Prerequisite: Department approval. Project selected in conference with sponsor before registration; progress meetings held regularly. May be repeated to maximum of 8 units.

PSYCHOLOGY

School of Natural and Social Sciences

DEPARTMENT OFFICE

King Hail C3104

Phone: (213)343-2250

Psychology is the scientific study of the behavior and mental and emotional processes, of human beings, as well as the behavior of animals. The field also encompasses the methods, procedures, and instruments necessary for the study of these processes.

Psychology majors do volunteer work or are employed at various levels of the job market, including community organizations, social service agencies, county and state civil service, business and industrial companies, personnel and public relations firms, hospitals, research centers, the professions, and many others.

The Department of Psychology offers programs leading to Bachelor of Arts, Master of Science, and Master of Arts degrees. The graduate degrees are described in the *Graduate Programs* section.

The Faculty

Emeriti: Richard S. Balvin, Richard G. Cannicott, Solomon Diamond, Herbert Goldenberg, Thomas M. Graham, John Haralson, Patricia M. Hodges, R.D. Hutchinson, Vernon Kiker, John Leiman, Seymour Levitan, Robert T. Lewis, Irwin Lublin, Herbert Moskowitz, Joseph Gerard Phelan, Ann M. Richardson, Leonard I. Schneider, Bernard J. Somers, Alice C. Thompson, Howard E. Wilkening.

Professors: Burton L. Alperson, Nancy Cobb, Annette Ehrlich, David Fitzpatrick, Michael G. Gaston, Herbert Goldberg, Harold J. Gottlieb, Estelle H. Gregory, Z. Barry Lowenkron, David R. Perrott, Jean S. Phinney, Michael Roffe, Judith E. Stevens-Long, David J. Weiss.

Associate Professors: Desdemona Cardoza, Stuart P. Fischhoff, Jean P. LaCour, Anson J. Levine, Gloria J. Romero, Sidney Roth, Mary J. Rotheram, Jerry Tate, Michael Louis Wapner (Chair).

Bachelor of Arts Degree

The Bachelor of Arts degree in Psychology is intended to prepare students for graduate professional training as psychologists while offering opportunity for specialized training in such areas as counseling and industrial psychology.

Students are encouraged to consider obtaining a double major to enhance their preparation for employment or graduate work. Interested students should see the department chair.

Advisement

Psychology majors must consult an adviser and file an official psychology program by the end of the first quarter of their junior year.

Requirements for the Major (74- 76 units)

The major requires a core of 56 units in psychology, 14 lower division and 42 upper division, plus 18-20 units of electives, selected with adviser assistance. For Psychology majors, PSY 150, 170, and 202 are prerequisite to enrollment in upper division psychology courses.

Core Requirements (56 units)

Lower Division Required Courses (14 units):

PSY	150	Introductory Psychology	(4)
PSY	170	Introductory Physiological Psychology	(4)
PSY	171	Laboratory Demonstration in Physiological Psychology	(1)
PSY	202	Descriptive Statistics in Psychology	(5)

Psychology majors are urged to develop competence in one modern foreign language.

Upper Division Required Courses (42 units):

PSY	302	Statistical Methods in Psychology	(5)
PSY	304AB	Experimental Psychology	(6, 6)
PSY	308	Theories and Systems in Psychology	(4)
PSY	463	Psychological Research Colloquia	(1)

Select five from following with at least two from each group for a total of 20 units.

Group I

PSY	410A	Abnormal Psychology	(4)
PSY	412A	Psychology of Human Development: Childhood and Adolescence	(4)
PSY	418A	Personality: Theory and Research	(4)
PSY	422	Social Psychology	(4)
PSY	423	Motivation and Emotion	(4)

Group II

PSY	401	Physiological Psychology	(4)
PSY	408	Animal Psychology	(4)
**PSY	421	Psychology of Learning and Behavior	(4)
or PSY	424	Cognitive Psychology	(4)
PSY	425	Sensation and Perception	(4)

***Students who take courses in the behavior analysis elective area must take PSY421 in the core areas an elective*

Electives (18-20 units)

Select 18-20 units of additional courses from upper division PSY course offerings. Students who wish to focus their study in a particular area may wish to select most or all of their electives in one of the following categories.

I. Behavior Analysis

COUN 406
PSY 417, 428

II. Clinical Psychology

PSY 326, 405, 406, 410B, 428, 436A, 438, 445, 464, 485

III. Developmental Psychology

PSY 326, 406, 412B, 433, 462, 485

IV. General Psychology

PSY 416, *463 (*two-unit limit*)
** in addition to one unit taken in the core*

V. Industrial/Organizational Psychology

PSY 431, 440, 442, 446, 485

VI. Social Psychology

PSY 440, 441, 488

VII. Theory and Methods

PSY 404, 409, 411, 414, 417, 429, 431, 440

Minor in Psychology

The Psychology minor, available to students majoring in other fields, requires 39 units of lower and upper division psychology courses.

Requirements for the Minor (39 units)

Lower Division Required Courses (13 units):

PSY	150	introductory Psychology	(4)
PSY	170	Physiological Psychology	(4)
PSY	202	Descriptive Statistics in Psychology	(5)

Upper Division Required Courses (15 units):

PSY	302	Statistical Methods in Psychology	(5)
PSY	304A	Experimental Psychology	(6)
PSY	308	Theories and Systems in Psychology	(4)

Electives (select 11 units with adviser assistance)

Courses in Psychology (PSY)**Lower Division Courses****150 Introductory Psychology (4)**

Psychological perspectives on human behavior; principles and methods of psychology as a science; introduction to major topic areas of psychology CAN PSY2

160 Psychology of Developing Person (4)

Principles of life-span development from psychological perspective. Salient physiological, social, and psychological factors relevant to understanding development of the integrated person.

170 Introductory Physiological Psychology (4)

Relationship between behavior and its physical and biological antecedents; includes biological context of behavior, physiological determinants, sensory activity, perception, learning, arousal, and reaction.

171 Laboratory Demonstration in Physiological Psychology (1)

Prerequisite or corequisite: PSY 170. Laboratory procedures for physiological psychology; introduction to instruments used, organisms studied, and processes investigated. Required of majors; optional for others.

202 Descriptive Statistics in Psychology (5)

Prerequisites: PSY 150, GE critical thinking and math requirements. Basic numerical and graphical methods in psychology; statistical notation, data presentation, measures of central tendency, dispersion and covariation, probability; utilization of personal computers in statistics. Lecture 4 hours, laboratory 3 hours.

270 Introductory Comparative Psychology (4)

Prerequisite: BIOL 155. A comparison across species that traces the development of behavior from an evolutionary standpoint. Learning cognition, social behavior, nervous systems, and hormonal systems are among the topics to be covered.

Upper Division Courses

PS Y 150 and GE blocks A and B are prerequisite to all upper division psychology courses.

302 Statistical Methods in Psychology (5)

Prerequisite: PSY 202. Binomial and other probability distributions; covariance and correlation, regression; confidence intervals and hypotheses testing; t, f, and Chi Square distributions. Lecture 4 hours, laboratory 3 hours.

304AB Experimental Psychology (6, 6)

Prerequisites: ENGL 102*, PSY 302. Introduction to research experimental design, library research, laboratory techniques for gathering/analyzing empirical data, preparing technical manuscripts in (a) psychophysics, scaling and perception, and (b) cognition memory, learning, motivation, and emotion. Lecture 4 hours, recitation 1 hour, laboratory 3 hours.

**Students subject to earlier catalogs satisfy this prerequisite with ENGL 1010r 190.*

307 Physiology and Psychology of Violence and Aggression (4)

(also listed as NURS 307) Prerequisites: PSY 150, GE blocks A and B. Biological and psychobehavioral approaches to violent individuals; analysis of and research support for understanding violence drawn from natural, medical, and behavioral sciences.

308 Theories and Systems in Psychology (4)

Critical survey of "schools" era of psychology: structuralism, functionalism, Gestalt school, behaviorism, psychoanalysis, and others, emphasizing their impact upon contemporary psychology.

323 Psychology of Emotion (4)

Prerequisites: PSY 150; BIOL 155 or 165 or PSY 270. Development of feelings and emotions as viewed from the perspectives of psychology, learning, cognition, psycho-dynamics and ethology; effects of drugs, behavioral, and surgical interventions.

326 Psychological Factors in Marriage (4)

Individual and interpersonal adjustment to marital events and issues in a changing environment, including: courtship, communication, sexual behavior, parenting, postparenting, separation, divorce, remarriage.

354 Selected Topics in Psychology (4)

Prerequisites: As needed for specific topic. Current topics of special interest to students in psychology, as announced in *Schedule of Classes*. May be repeated for credit.

395 Field Experience in Psychology (1-4)

Prerequisite: Department chair approval. Opportunity through observation and participation to study psychological principles in naturally occurring behavioral situations; may involve animals in nonlaboratory situations or human beings in community, clinical, or other institutional settings. May be repeated to maximum of 8 units. Graded CR/NC.

401 Physiological Psychology (4)

Prerequisite: PSY 170. Relationship between integrated behavior and physiological processes; theories that relate psychology and physiology.

402 Media Psychology (4)

Review of theoretical and research literature to determine mass communication impact (e.g., film, television, print) on social and psychological functioning of individuals and societies.

403 The Psychosocial Dynamics of Child Maltreatment and

Family Violence (4)

(also listed as COUN 403) Psychosocial factors in child maltreatment and family violence: developmental considerations, assessment, interventions, legal and ethical issues, research findings, and community resources.

404 Advanced Experimental Psychology (2)

Prerequisite: PSY 304B. Offered in multiple sections with content of each section correlated with content of a specific course in the 400 series; consideration of advanced problems of research design and experimental techniques. Emphasis on individual projects; 6 hours laboratory. May be repeated for credit.

405 Group Methods for Psychological Intervention (4)

Prerequisite: Upper division standing. Traditional and contemporary theories and techniques employing group methods for psychotherapy, facilitation of personal growth, and modification of social systems.

406 Mental Retardation (4)

Nature and causes of mental retardation; physiological and psychological characteristics; problems of social control, including education, social adjustment, institutionalization, and community responsibility.

408 Animal Psychology (4)

Prerequisite: Background in scientific methodology strongly recommended. Natural behaviors and learning in animals, from single cell to apes; emphasis on evolution of behavior and survival in the natural environment. Topics include social behavior, development, mating, and parental behavior.

409 Computer Techniques for Psychology (4)

Prerequisite: PSY 302. Available systems; introduction to programming, use and modification of library programs for analysis of psychological data; special techniques for subject-computer interaction in psychological research. No prior computer experience assumed.

410AB Abnormal Psychology (4, 4)

410A: Definition, history of abnormality; perspectives on maladaptive behavior, research, classification, assessment, diagnosis, legal issues and clinical procedures, coping with maladaptive stress, personality disorders, anxiety disorders, substance abuse and dependence.

410B: Prerequisite: PSY 410A. Clinical perspectives, research and treatment considerations with schizophrenia, affective disorders, psychophysiological disorders, maladaptive behaviors of childhood, organic brain syndromes, and mental retardation.

411 Research Methodology in Psychology (4)

Prerequisite: PSY 302. Logic of research methodology and statistical analysis; evaluation of adequacy of research strategies; interpretation of results.

412AB Psychology of Human Development: Childhood and Adolescence (4, 4)

412A: Theory and empirical literature pertaining to infancy and early childhood.

412B: Theory and empirical literature pertaining to middle and late childhood, adolescence, and young adulthood.

414 Analysis of Variance (4)

Prerequisite: PSY 302. Various analysis-of-variance models in analysis and interpretation of psychological data.

416 History of Psychology (4)

Prerequisites: One year of college psychology; PSY 308 recommended for psychology majors. Consideration of historical development of psychology from its origins in ancient philosophy and science to end of nineteenth century.

417 Single Case Research Design (4)

Prerequisite: PSY 304B. Basic types of single case experimental designs including withdrawal, reversal, multiple baseline, and multielement designs; methods of observation, measurement, recording behavior; assessing reliability of observations.

418AB Personality: Theory and Research (4, 4)

Biological and cultural determinants of personality; dimensions of personality, description and evaluation of major theories, research issues and methods.

419 Psychology of Sex Roles (4)

Prerequisites: GE critical thinking requirement, introductory social science course. Psychological, social, and physiological determinants of sex difference in behavior; emphasis on development of sex role identity and interpersonal interactions.

420 Psychology of Communications (4)

Psychological aspects of interchange of human thoughts and concepts; methods of studying communications; relationships between communications and personal adjustment, industrial problems, leadership, mass media.

421 Psychology of Learning and Behavior (4)

Prerequisites: PSY 304B, upper division standing. Principles of classical and operant (instrumental) conditioning. Emphasis on experimental findings with consideration of both current and historically relevant theories.

422 Social Psychology (4)

Introduction to major theories of social psychology with special emphasis on such topics as aggression, liking and loving, altruism, prejudice, and attitude theory and measurement. *No credit toward Sociology major or minors.*

423 Motivation and Emotion (4)

Prerequisites: PSY 170, 304AB. Critical examination of drives, needs, preferences, desires, feelings and emotions from experimental and theoretical perspectives.

424 Cognitive Psychology (4)

Prerequisite: PSY 304A. Theories and experimental literature with respect to the nature of memory and cognition.

425 Sensation and Perception (4)

Prerequisites: PSY 170, 304AB. Examination of theories and experimental literature with respect to variables that determine the organism's ability to respond differentially to sense data.

426 Family Therapy Dynamics and Perspectives (4)

Prerequisite: PSY 410A or 418A. Historical evolution of concepts and theoretical perspectives in family processes; treatment approaches; significant issues in family life.

427 Family Therapy Techniques: Strategies for Change (4)

Prerequisites: PSY 426, instructor consent. Marital and family transactions in context of structured models of relationship exchanges; general systems theory and analyses applied to marital and family problem-solving.

428 Introduction to Analysis of Behavior (4)

Basic phenomena of behavior analysis; applications for understanding human behavior, therapy, analysis of cognition, and verbal, social, and abnormal behavior; consideration of ethics involved in controlling human behavior.

429 Multiple Regression/Correlation Analysis (MRCA) (5)

Prerequisite: PSY302; also recommended: PSY414. Correlation and partial correlation; regressing a dependent variable on single and multiple variable factors; applications to experimental and nonexperimental research designs.

431 Survey of Psychological Tests (5)

Prerequisite: PSY 202. Theoretical issues in individual differences; introduction to a variety of group and individual psychological tests and assessment techniques; role of tests in clinical evaluation; problems of reliability, validity, and interpretation. Lecture 3 hours, laboratory 3 hours.

433 Psychology of Cognitive Development (4)

Prerequisite: PSY 412A. Evolution of cognitive processes from simple organisms to adult human beings. Piaget's theory; development of dialectic operations; perceptual and language development and apprehension of reality; relationship of social development to cognitive development.

436AB Counseling and Psychotherapy: Theories, Methods, and Issues (4, 4)

436A: Prerequisites: Senior or graduate standing; PSY 410AB or 418AB. Theories of counseling and psychotherapy; systems approaches to individual, marital, and family dynamics; introduction to clinical interviewing techniques.

436B: Prerequisite: PSY 436A. Current issues in counseling and psychotherapy; application of systems/communication models to individual, marital, and family therapy; student participation in intensive evaluation of therapeutic techniques.

438 Introduction to Clinical Psychology (4)

Prerequisite: PSY 410A or 410B. Current trends and methods of clinical psychology; designed primarily for students considering careers in area. Problems of assessment, psychotherapy, research, and community involvement.

440 Theory and Measurement of Attitudes and Opinions (4)

Prerequisite: PSY 422. Conceptualization and measurement of attitudes, beliefs, and opinions. Theories of belief systems, attitude formation and change; implications of research findings. Individual and/or class research projects.

441 Psychology of Small Group Behavior (4)

Prerequisite: PSY 422. Historical development and theoretical implications of research in small group structure and process. Emphasis on cohesiveness, conformity, leadership and power, intergroup and intragroup conflict and cooperation.

442 Industrial and Organizational Psychology (4)

Interaction of employees and their organizations. Individuals and their motivation to work; groups, communication in industrial organizations; human factors research; psychological principles applied to personnel problems; psychology of work.

445 Community Psychology (4)

Principles of social and clinical psychology; role of psychologists in analysis of social systems; community organization, social planning, and community change; methodology and basic concepts of community mental health.

446 Employment and Personnel Psychology (4)

Prerequisite: PSY 302. Psychological principles of individual differences applied to problems of developing recruitment, selection, and testing programs; supervisory training and executive development; measurement of employee attitudes and morale; job evaluation and motivation.

447 Human Performance in Man-Machine Systems (4)

Survey of basic research on human performance; processing of discrete and continuous information; decision-making, vigilance, environmental effects on human performance.

448 Psychology of Labor-Management Relations (4)

Prerequisite: PSY 422 or 442. Perceptual and motivational factors influencing behavior of workers, executives, union officers. Psychological factors in strikes; principles relevant to union-management cooperation.

450 Health Psychology (4)

Psychological principles applied to field of health care; evaluation of research in effectiveness of treatment models and techniques.

452 Organization Behavior and Development (4)

(also listed as POLS 474) Prerequisite: PSY 442. Applying findings of behavioral science to organizations; psychological methods used by various change agents; types and uses of organization development practices.

454 Special Topics in Psychology (1-6)

Prerequisites: As needed for specific topic. Current topics of special interest to students in psychology, as announced in *Schedule of Classes*. May be repeated as subject matter changes.

462 Psychology of Human Development: Maturity and Aging (4)

Prerequisites: Upper division standing; PSY 412AB recommended. Psychological factors in behavior during middle and later years, including physical and mental health problems, role changes, successful adjustment patterns, and family and community relationships in successive adult age groups.

463 Psychological Research Colloquia (1)

Prerequisite: Upper division standing. Presentation of a cross section of current research in the field of psychology. May be repeated to maximum of 3 units. Graded CR/NC.

464 Psychology and the Law (4)

Laws pertaining to psychology; rights and responsibilities of mental health providers; conflicts between legal and ethical practice of psychology; current legislative issues.

485 Directed Field Experience in Community Clinical Psychology (4)

Prerequisites: PSY410A or 410B; 412A or 412B; 422 or 462; agency acceptance. Application of psychological principles (interviewing, counseling) in supervised settings: service agencies, mental health centers, halfway houses, etc. Lecture, problem solving meetings, self and agency evaluation reports. May be repeated to maximum of 8 units. Graded CR/NC.

488 Gender Differences (4)

(also listed as BIOL 488N) Prerequisite: BIOL 155. Biological and psychological differences between the sexes. Topics include genetic sexual determination, sexual differentiation, role of hormones in physiology and behavior, experimental methodology, psychological differences in ability and personality. *No credit toward Biology major.*

499 Undergraduate Directed Study (1-4)

Prerequisite: Instructor consent to act as sponsor. Project selected in conference with sponsor before registration; progress meetings held regularly, and a final report submitted. May be repeated for credit. Graded CR/NC.

SOCIAL SCIENCE**School of Natural and Social Sciences****PROGRAM OFFICE**

King Hall C4066

Phone: (213) 343-2020

The interdisciplinary program in Social Science offers a foundation for general and comparative study of societies and human events.

Program Coordinator: Stanley M. Burstein.

The Faculty

Instruction is provided by the faculties of all social science departments. Advisement information is available from the Social Science Coordinator.

Bachelor of Arts Degree

The Bachelor of Arts degree in Social Science provides the basis for a liberal arts education with major emphasis in social science. Students who graduate with this major will fulfill requirements for examination waiver for the Single Subject credential in Social Science. The major requires completion of 80 units, 32-40 in lower division courses and 40-48 in upper division courses. Early consultation with the Social Science coordinator is advised.

Requirements for the Major (80 units)*REQUIRED CORE (60 units)**Lower Division Required Courses (24 units):*

GEOG 150	Human Geography	(4)
HIST 110C	World Civilization III	(4)
HIST 202AB	United States Civilization	(4, 4)
POLS 150	Government and American Society	(4)
PSY 150	Introductory Psychology	(4)

Upper Division Required Courses (36 units):

U.S. History (4 units)

Select one from following:

HIST 458, 471, 472, 474-484

California History (4 units)

HIST 488

U.S. Government (8 units)

Select two from following:

POLS 403, 405, 413, 418, 425, 441, 442

World History (8 units)

Select one course from each area:

Western Civilization and Europe

HIST 410, 411, 412AB, 423-426, 429, 430, 437-439

The Non-Western World

HIST 414AB, 415, 419, 420, 461-463, 466, 490B, 491, 492, 494ABC, 495AB, 496

World Geography (8 units)*Required course (4 units):*

GEOG 370

Select one from following (4 units):
GEOG 441,442, 475-477, 481

U.S. Government or World Geography (4 units)

Select one additional U.S. government or world geography course from those listed above.

BREADTH REQUIREMENTS (20 units)

Required courses (8 units):

ANTH 250	Cultural Anthropology	(4)
SOCS 180	Race and Ethnicity in American Society	(4)

Electives (12 units):

Select *three* courses from at least two of the following three areas. All are 4-unit courses.

Race, Sex, and Ethnicity

ANTH 438
CHS 444
GEOG 446
PAS 400, 402, 403, 412
PSY 419
SOC 441,460

Politics and Economics

ECON 201,202
PHIL 410
POLS 404, 410, 411,427, 455

Social Structure and Behavior

ANTH 430, 432, 435
POLS/SOC 415
PSY 308, 418A, 420, 422 SOC 422, 430, 442, 445, 448

The Credential Program

The Bachelor of Arts degree in Social Science has been approved by the Commission on Teacher Credentialing for examination waiver for the Single Subject credential in Social Science. Interested students should consult advisers in the Department of Political Science, which administers the program, and in the School of Education. Refer to the undergraduate *School of Education* chapter of this catalog for regulations governing all teaching credential programs.

Courses in Social Science (SOCS)

Lower Division Courses

180 Race and Ethnicity in American Society (4)

An interdisciplinary examination of ethnic and racial groups in the U.S. Emphasis on intergroup relations; social thought, conflict, consensus, and cooperation; group responses to oppression; and dependence and interdependence in intergroup relations.

280 The Computer World (4)

(also listed as CIS 280) Basic information about computers and data base systems; terminology, technology, practical application, social implications.

Upper Division Course

499 Undergraduate Directed Study (1-4)

Prerequisites: Consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare written and oral reports. Project selected in conference with sponsor before registration; progress meetings held regularly.

SOCIOLOGY

School of Natural and Social Sciences

DEPARTMENT OFFICE

King Hall C3093

Phone: (213) 343-2200

FAX (213)343-5155

Sociology is the scientific study of human social relations. It provides a background of understanding and research skills for students interested in a variety of occupations. The department's programs prepare students for advanced professional study in sociology and social work, as well as positions in public and private social service agencies. Sociology will have a particular appeal to students whose intellectual and career interests are broad and unspecialized.

Sociology majors study a variety of subjects which include race relations, marriage, religion, child development, aging, demography, crime, corrections, occupations, mass communication, social deviance, politics, social psychology, and classical and contemporary sociological theories. The primary purpose of the academic program in sociology is to enhance students' analytical abilities and understanding of social phenomena.

Students pursuing legal, educational, and governmental careers may benefit from sociological perspectives on human relations. Students who intend to follow careers in sales, management, marketing, personnel, public relations, advertising, journalism, recreation, home economics, criminal justice, nursing, and comparable areas may find particular value in combining the study of sociology with their professional preparation.

The Bachelor of Arts degree in Sociology, with two options, and minors in Sociology and in Social Gerontology are described below. The Master of Arts degree program is described in the *Graduate Programs* section.

The Faculty

Emeriti: Marion Dearman, Don J. Hager, Esther Penchef, Paul K. Rowan, Fred J. Shanley, Ralph Thomlinson.

Professors: Janicemarie Allard, William D. Darrough, Norman L. Friedman, Steven L. Gordon, Lawrence K. Hong, Terry R. Kandal, Delos H. Kelly (*Chair*), Eleni N. Pitsiou-Darrough, Jon Snodgrass, Ronald T. Tsukashima, Eui-Young Yu (*Associate Professor*), Bernard B. Berk.

Assistant Professors: Timothy Diamond, Janet Lever, Marta C. Lopez-Garza, Yehudi Webster.

Bachelor of Arts Degree

The Department of Sociology offers a Bachelor of Arts degree in Sociology. Also offered are minors in Sociology and in Social Gerontology, for students majoring in other fields.

Required Advisement

All students desiring to undertake a major or minor in sociology must confer with a department adviser during their first quarter in the program. During the first quarter of their junior year, students must meet again with an adviser to plan the remainder of their program. Transfer students must see an adviser in their first quarter of enrollment at Cal State L.A.

Sequence Recommendation

To facilitate scheduling, specific prerequisites have been omitted from most courses. It is highly recommended, however, that suggested sequences be observed, since later course work will assume familiarity with prior course material. The following are strongly recommended or required:

- * Students who transfer without having completed equivalent courses should include SOC 201 and 210AB among their first courses at Cal State L.A.
- * SOC 390 should be taken soon after 210AB.
- * Sociology majors should take SOC 412 before 414; and

* SOC 410 must be taken before 490.

Requirements for the Major (64-84 units)

The Bachelor of Arts degree in Sociology includes 64-84 units, with core requirements of 10 units of lower division sociology courses and 54-74 units of additional required and elective courses depending upon the option selected.

Required Core (10 units)

SOC 201 Principles of Sociology (4)

SOC 210AB Elementary Statistics (3, 3)

In addition to core requirements, students are required to complete one of the two options listed below.

Options

* **General Sociology Option [54 units]**

Required Courses [16 units]:

SOC 301	Writing for Sociology	(4)
SOC 390	Methods of Social Research	(4)
SOC 412	Classical Sociological Theory	(4)
SOC 414	Contemporary Sociological Theory	(4)

Electives [38 units]:

Select courses in sociology and other fields, in consultation with adviser; program may include SOC 499, but no more than 8 units of credit in this course normally may be counted toward major. With prior approval of adviser, up to 8 units may be selected in other fields to complete a comprehensive sociological program with an interdisciplinary emphasis.

* **Human Development and Aging Option [72-74 units]**

Required Courses [52 units]:

SOC 301, 322B, 390, 412, 414, 450
BIOL 484N,
PSY 462

Select at least four from following [16 units]:

SW 474, 476
SOC 322A, 452, 453

Select at least one from following [4 units]:

SW 478 SOC 425, 434, 447, **454
** when topic is gerontology

Electives [20-22 units]:

Select one course from each of following groups [12 units]:

SW 461, 472, 475, 476
SOC 420, 421, 440, 441
SOC 422, 430, 442

In related fields select from following (8-10 units):

BIOL 319N
CHS 311, 410
FSCS 310, 411, 412, 440, 441, 443, 445
NURS 440, 456, 462, 464, 470, 471
PAS 400
POLS 403, 417, 441, 460, 461, 463, 466, 468, 476
PSY 401, 418AB, 419, 436AB, 445

Minor in Social Gerontology

The minor in Social Gerontology is designed to prepare individuals for occupations related to the needs and activities of older persons, and for advanced research in the field of aging. The minor requires completion of 24-28 units.

Requirements for the Minor (24-28 units)

Lower Division Required Course (4 units):

SOC 201 Principles of Sociology (4)

Upper Division Required Courses (8 units):

SOC 322B Human Socialization: The Adult Years (4)
 SOC 450 Sociology of Aging (4)

Electives (select 12-16 units from following):

SW 461,472, 478

SOC 390, 425, 434, 452,453, * **454

* only when topical area is gerontology

* * may be repeated for credit

Minor in Sociology

A minor in Sociology provides valuable preparation for students majoring in business, criminal justice, journalism, recreation, and other fields.

A total of 28 units in required and elective courses comprises the minor in Sociology. Students who have an equivalent research methods course in their major may substitute another four-unit, 400-level sociology course for the SOC 390 requirement below. A statistics course normally is prerequisite to SOC 390.

Requirements for the Minor (28 units)

Lower Division Required Course (4 units):

SOC 201 Principles of Sociology (4)

Upper Division Required Courses (8 units):

SOC 390 Methods of Social Research (4)

SOC 414 Contemporary Sociological Theory (4)

Electives (16 units):

Select additional 400-level SOC courses with adviser approval.

Courses in Sociology (SOC)**Lower Division Courses****101 Social Problems (4)**

Methods that social institutions and interest groups use to define "social problems" including poverty, substance abuse, delinquency, racism, sexism, crises in education and health care, and urban/environmental issues; policy implications.

120 Intimate Relationships (4)

(also listed as FSCS 120) Principles of interaction in intimate relationships; development of knowledge, self awareness, control of choices, family life cycle, roles and interpersonal growth; sexuality, love, parenting, conflict stress, starting and ending relationships.

201 Principles of Sociology (4)

Sociological analysis of development of social institutions and group behavior; processes of social order and change; analysis of cultural differences; sources of cooperation and conflict; deviance and social control. CAN SOC 2

202 Society and Individual Development (4)

Social processes having continuing impact upon individual development; understanding persistent themes relating to family, sexuality, religion, death; impact of war, inequality, economic and technological stress.

209 Microcomputer Applications in Sociology (4)

Prerequisite: SOC 201. Use of microcomputers in sociology; use of software such as word processing, data base, spreadsheet, and statistical packages in sociology.

210AB Elementary Statistics (3, 3)

Recommended prerequisite: Basic college mathematics course. Basic social statistics, covering descriptive statistics, tables, charts, summary measures, regression and correlation, and statistical inference, sampling, predictive models, analysis of variance, nonparametric and parametric tests, and simple multivariate analysis. Lecture 2 hours, laboratory 2 hours.

263 Asian-American Experience (4)

Experiences of the Chinese, Japanese, Korean, Filipino, Pacific Islander, and other Asian immigrant groups in the U.S. Immigration, adaptation, discrimination, identity, alienation, stratification, and other contemporary issues of Asian-Americans.

Upper Division Courses

SOC 201 normally is prerequisite to all upper division courses in sociology and may be waived only with instructor consent.

301 Writing for Sociology (4)

Prerequisite: ENGL 102*. Reasoning and writing skills for comprehending and communicating information in sociology.

**Students subject to easier catalogs satisfy this prerequisite with ENGL 1010r 190.*

322A Human Socialization: Childhood and Adolescence (4)

Social-psychological approaches to socialization, comparing stages of personal growth and development from childhood to adolescence. Emphasis on pertinence of socialization and basic issues of social control and change.

322B Human Socialization: The Adult Years (4)

Social-psychological approaches to socialization, comparing stages of personal growth and development during early, middle, and late adulthood. Emphasis on pertinence of socialization and basic issues of social control and change.

390 Methods of Social Research (4)

Prerequisite: SOC 210AB. Application of scientific method to sociological data; research design, data collection, elementary analysis procedures; survey and experimental designs, measurement, scale, and index construction, and prediction models. With instructor consent, one unit of SOC 499 may be taken concurrently.

400 Emotions in Society (4)

Human emotions as organized within social relationships and institutions of family, religion, education, government, and economy; emotional deviance and control; ethnic, sex, and social class diversity in feeling and expression.

410 Advanced Statistics (4)

Prerequisite: SOC 210AB. Specialized treatment of probability and sampling, prediction and correlation, analysis of variance and covariance, experimental design and probability model construction. Recommended for Sociology majors planning graduate study.

412 Classical Sociological Theory (4)

Historical development of sociological theory with special reference to its European origins; e.g., Comte, Saint-Simon, Marx, Spencer, Durkheim, Simmel, and Weber.

414 Contemporary Sociological Theory (4)

Functionalism, conflict sociology, interactionism, critical-radical sociologies, systems analysis, and phenomenological perspective.

415 Political Sociology (4)

(also listed as POLS 415) Prerequisite: POLS 150r SOC 201. Social factors underlying democracy and totalitarianism, social movements and revolutions, conflict and conflict resolution, voting behavior, and political socialization.

418 Crowd Behavior and Social Movements (4)

Analysis of crowd types, formation, and dynamics, including mobs, riots, panics, mass hysteria, rumors, fads, and fashion. Development, tactics, ideologies, and effects of social movements, cults, and rebellions.

420 Small Groups (4)

Small group processes in industry, the family, schools, peer and colleague groups; reference-group behavior, relation to larger social systems, group structure and communication, development of research techniques.

421 Social Sources of Human Sexuality (4)

Effects of social environment on emergence, justification, and maintenance of sexual attitudes and behavior; social factors influencing sexual behavior; changing sociosexual mores and behavioral patterns, and emerging sexual life styles.

422 Social Psychology (4)

Inquiry into social-psychological dimensions of group behavior, emphasizing interactive processes involved in communication, group behavior, perception, attitude formation, motivation, socialization, and evolution of self-concept.

424 Mass Communications and Public Opinion (4)

Sociological analysis of print and electronic mass media of communications; examination of their functions, sociocultural evolution, organizational/occupational bases, cultural content, audiences; consideration of individual, collective effects on public opinion.

425 Medical Sociology (4)

Role of the hospital and socialization process on professional development of personnel in the healing professions; social epidemiology of physical and mental disorders.

426 Deviant Behavior (4)

Basic theoretical orientations to social and personal disorganization resulting from role conflict, social conflict, normlessness, or alienation; individual and social deviance related to group processes and structures.

427 Society and Mental Illness (4)

Lay and professional ideas about mental illness in historical and crosscultural perspective; organizational treatment of the mentally ill; identity, stigma, and adaptations.

430 Urban Sociology (4)

Urban community and urbanization as contemporary social process; consideration of urban areas, institutions, values, and problems; social and demographic characteristics, urban and suburban change and planning.

432 Science, Technology, and Social Character (4)

Effects of scientific and technological development upon social life and culture, especially family, work and leisure, modes of thinking and feeling. Differences among social classes, ethnic groups, women and men.

434 Social Aspects of Population Trends (4)

Population facts, changes, problems, and policies; population dynamics, especially births, deaths, and migration; national action programs; world coverage, with emphasis on the U.S.

435 Asian Societies (4)

Comparative analysis of Asian societies; population, social thought, institutions, stratification, education, industrialization, and urbanization in Asia focusing on China, Japan, Korea, and southeast Asia.

440 Marriage and the Family (4)

The family as a social institution; historical and crosscultural perspectives, social change as it affects marriage and family life. Analysis of American courtship and marriage patterns, psychodynamics of family life.

441 Sociology of Sex Roles (4)

Institutional analysis of sex role differences; implications of differential socialization of sexes; access to educational and occupational opportunities; differences in legal status; movements for equality.

442 Social Change (4)

Classical and contemporary theories of sources and consequences of social change; revolutions and alternative routes to modern world; issues in historical sociology; change and social contexts of creative achievements in arts and sciences.

443 Alternative Family Life Styles (4)

Social change in man and woman relationships, including single life styles, nontraditional marriage and family forms, communes, and utopian societies; evaluation of benefits and costs to individuals and society.

445 Sociology of Religion (4)

Social bases of religion, religious institutions, and their modern organizational life; comparative analysis and theories of religious behavior; religious institutions, their representatives, religious conflict, and public law.

447 Sociology of Occupations and Professions (4)

Analysis of the social world of work: occupational trends and mobility; occupations, education, and minorities; nature of professions and professional processes and structures; study of selected occupations and professions.

448 Social Class and Inequality (4)

Examination of sociological theory and research bearing on social stratification; social differentiation: class position, class interests, correlates of social class; trends in occupational mobility, comparison of stratification systems.

450 Sociology of Aging (4)

Aging as a social process; emphasis on sociological theories of aging and social problems of the aged; nature of aging process, work, retirement, family relationships, housing, income maintenance; societal response to aged.

452 Life Span Transitions: The Retirement Years (4)

Critical evaluation of issues involved in planning for retirement; changing place of work and retirement in value system; anticipatory behavior, patterns and modes of adjustment, maladjustment; proposals and issues.

453 Social Aspects of Death and Bereavement (4)

Concepts and theories of dying; meaning of death and its implications for dying persons, survivors, and professionals who attend them.

454 Selected Topics in Sociology (1-6)

Current topics of special interest in sociology, as announced in *Schedule of Classes*. May be repeated for credit.

460 Race and Ethnic Relations (4)

Structure and change of minorities in society; theories and research: historical, contemporary, and comparative; processes of adjustment: patterns of immigration, prejudice, discrimination, assimilation, pluralism, conflict, and social movements.

480 Criminology (4)

Criminal law, crime, and deviance. Social and psychological factors in criminal behavior, criminal law, and criminal justice; prevention and control; trends in theory and correctional procedures.

482 Juvenile Delinquency (4)

Extent and distribution of delinquency, with emphasis on the local area; meaning, implications, and treatment of delinquent behavior; personal and environmental conditioning factors; delinquency and the rights of children.

483 Violence in American Society (4)

Forms of violence in American Society (e.g., criminal, domestic, revolutionary, official, sexual)

examined through a critical review of social scientific literature; assessment of causes, consequences, and possibilities for control.

484 Corrections (4)

Survey of procedures used in processing the offender, from arrest, through trial, to prison and probation; contemporary theories of criminality and rehabilitation applied to the social evaluation of these procedures.

485 Conflict and Domestic Violence (4)

Sociological aspects of domestic violence in families (e.g., child, spouse, and elder abuse) examined in relation to ethnic, social, cultural, historical, economic, and political factors that affect individual behavior.

486 Probation and Parole (4)

(also listed as SW 486) Prerequisite: SOC 480 or 482. History, philosophy, legal bases, and procedures governing investigation, treatment, and supervision of adjudged juvenile offenders and adult violators placed on probation and parole.

490 Advanced Research Methods (4)

Prerequisites: SOC 390, 410. Advanced research techniques in sociology, including design of experiments, sample surveys and panel studies, scaling, multivariate and computer data analysis procedures. Individual projects; laboratory. With instructor consent, one unit of SOC 499 may be taken concurrently.

491 Qualitative Research Methods in Sociology (4)

Prerequisite: SOC 390. Qualitative research techniques in sociological research: research in field settings; problems of participant observation and interviewing; document analysis; typology construction; qualitative data interpretation and presentation.

497 Sociology Proseminar (4)

Prerequisite: Sixteen upper division SOC units. Comprehensive survey and analysis of selected areas of sociological and social welfare inquiry, as announced in *Schedule of Classes*. Recommended for majors planning or beginning graduate study. May be repeated once for credit. With instructor consent, one unit of SOC 499 may be taken concurrently.

499 Undergraduate Directed Study (1-4)

Prerequisites: Senior standing, 2.75 overall grade point average, consent of a faculty sponsor, approval of proposed project prior to registration, and ability to assume responsibility for independent research and analysis. Regular discussion of progress with sponsor before presentation of final written report. May be repeated for credit.

INTERCOLLEGIATE ATHLETICS**Division of Intercollegiate Athletics
INTERCOLLEGIATE ATHLETICS OFFICE**

Physical Education 102
Phone: (213) 343-3080

SPORTS INFORMATION OFFICE

Physical Education 212A
Phone: (213) 343-5308
FAX: (213) 343-3199

Director of Intercollegiate Athletics: Carol M. Dunn.

Associate Director: David Thomas.

Intercollegiate Athletics Board Chair: Fleur Yano.

Sports Information Director: Vacant

Coaches

Greg Ryan	Women's Cross Country and Track and Field
Marcia Murota	Women's Basketball
Tina Mochizuki	Men's and Women's Tennis
Leonardo Cuellar	Men's Soccer
Henry Dyer	Men's Basketball
John O. Herbold II	Men's Baseball
Kevin McCarthy	Men's Cross Country and Track and Field
Mark Massey	Women's Volleyball

Intercollegiate athletics constitute an integral part of the total program of activities at Cal State L.A. and involve participation by faculty, students, and administration. Major fiscal support for the athletics program is provided through allocation of student activities fees. Coaching and programming of sports are provided by the Division of Intercollegiate Athletics. In addition to coaching responsibilities, members of the division may also be faculty members in academic departments or divisions within the university. The Intercollegiate Athletics Board (IAB) works closely with the Director of Intercollegiate Athletics. The IAB is comprised of faculty, students, administrators, alumni, and a University Development Board designee.

Cal State L.A. is a member of the National Collegiate Athletic Association (NCAA) and the California Collegiate Athletic Association (CCAA). The intercollegiate athletics program fields teams in men's baseball, basketball, cross country, soccer, tennis, indoor and outdoor track and field. Women's teams compete in basketball, cross country, tennis, indoor and outdoor track and field, and volleyball.

Normal Progress for Student Athletes

Minimum academic progress for student athletes is defined as completion of the minimum 186 quarter units required for a bachelor's degree within five academic years.

In order to be eligible for competition in intercollegiate athletics, student athletes must earn units in courses acceptable toward a specific degree program according to the following schedule:

Year	Quarter	Units Earned				
1	1	12	2	24	3	36
2	4	48	5	60	6	72
3	7	84	8	97	9	110
4	10	122	11	134	12	147
5	13	160	14	173	15	186

This schedule permits the student athlete to enroll on a part-time basis one quarter each academic year to correct unit deficiencies. Student athletes must formally declare a major by the beginning of their seventh quarter of collegiate enrollment.

Student athletes who transfer from other collegiate institutions shall be subject to the above minimum academic progress schedule upon enrollment at Cal State L.A. Such transfer students shall commence their progress in this schedule at the rate equal to the total number of full-time quarters in attendance. *

For freshmen and sophomores, no more than one-third (12) of the yearly minimum number of units (36) between seasons of competition may be electives. At least two-thirds (24) of the units must be in general education or major courses. For juniors and seniors, the quarter units earned must be in major and general education courses unless a student athlete's record clearly indicates that the completion of all required (major and general education) courses plus any previous elective courses will result in the student athlete being short of the required number of units for graduation.

**

**Full-time attendance is defined by the NCAA as any quarter or semester in which a student athlete is enrolled in 12 or more units on the first day of instruction.*

***Although based on the same academic work, the NCAA's units between seasons shall be considered a separate calculation.*

Student athletes must maintain a minimum C (2.0 on a scale in which A = 4.0) grade point average at all times in both their overall collegiate record and their Cal State L.A. work in order to remain eligible for competition.

In the calculation of the required 24 units in major and general education courses, only courses in the primary major and in general education will be included. Although students may elect to take a minor and/or a second major, they are not required to do so. For this reason, courses in the minor and in the second major will be considered electives.

The major code shown on the student athlete's permanent record card (PRC) at Cal State L.A. will be used to determine the student athlete's official major. *** If for some reason that code is incorrect, it is the student athlete's responsibility to correct the code by filing a form 0-2 (*Change of objective*) with the Office of Admissions. The student athlete must give a copy of the form 0-2 to the Faculty Athletics Representative before the initial eligibility check. In the absence of such a form, the major code shown on the student athlete's PRC will be used.

A student athlete must meet normal progress in both the current and proposed new major before changing majors. This means that changing majors is not a reason for failing to meet normal progress.

No seventh quarter athlete will be declared eligible unless the Faculty Athletics Representative has received the following:

1. Evidence of the student athlete's formally declared major.
2. A copy of the student athlete's department advisement form signed by the department adviser.

*** *This meets the specific baccalaureate program requirement as mandated by the NCAA.*

Courses in Athletics (ATHL) Upper Division Courses

341-342 Intercollegiate Athletics (1-2 each)

Prerequisite: Consent of coach. Only NCAA-eligible student athletes may enroll and participate in these courses. Advanced practice in performance techniques in preparation for intercollegiate competition. *A maximum of 10 units of intercollegiate athletic courses may be applied toward a baccalaureate. Graded CR/NC.*

341 Series: Individual or Dual Sports (1-2 each)

341C Cross Country (Men's) (Women's) (1)
341N Tennis (Men's) (1)
341T Tennis (Women's) (2)
341 F Track and Field (Men's) (Women's) (2)

342 Series: Team Sports

342B Baseball (Men's) (2)
342K Basketball (Men's) (Women's) (2)
342S Soccer (Men's) (2)
342V Volleyball (Women's) (2)

UNIVERSITY COURSES

University Courses

Courses that are designed University (UNIV) frequently are interdisciplinary in nature. Some, such as UNIV 396, Honors Program Seminar, are limited to certain categories of students. Cooperative Education (UNIV 298, 398, and 498) and CPEL (UNIV 295) courses appear in this catalog under the title UNIV, but appear in the *Schedule of Classes* with the course abbreviations used by the various departments and divisions that offer them.

Detailed descriptions of the Credit for Prior Experiential learning (CPEL), General Education Honors, and Cooperative Education programs will be found in the *Undergraduate Study* chapter of this catalog. Students should note that a limited amount of unit credit is allowed toward the baccalaureate for each of these programs. Policies and regulations differ among various departments, divisions, and schools. Each student should consult the appropriate major department, division, or school for specific procedures and instructions.

University Courses (UNIV)

Subcollegiate Courses

054 Special Topics (1-4)

Prerequisite: Varies with topic. Topics of special interest to wide university audience as announced in *Schedule of Classes*. May be repeated for credit as topic changes. *No credit toward baccalaureate.*

060 Study Group (1)

Corequisite: Associated course. Lecture methods and study skills development including reading comprehension, critical analysis of course content, time and task management, notetaking, and test preparation.

Lower Division Courses

154 Special Topics (1-4)

Prerequisite: Varies with topic. Topics of special interest to wide university audience as announced in *Schedule of Classes*. May be repeated for credit as topic changes.

254 Special Topics (2)

Prerequisite: Varies with specific topic. Topics of special interest as announced in *Schedule of Classes*. Graded CR/NC.

295 Credit for Prior Experiential Learning (1-4)

Prerequisite: At least 45 units in residence but not more than 165 total units completed. Approval for registration must be obtained through University Undergraduate Studies Office. Preparation of materials and portfolios documenting prior college-level learning acquired in nonacademic settings. Upon successful completion, 1-4 resident units will be awarded. In addition 1-8 units for nongraded, nonresident credit may be awarded for prior learning. These units may be upper or lower division and may apply toward the major with major department approval. Graded CR/NC.

298 Preparation for Cooperative Education (2)

Techniques of relating major to internship (work experience) through discipline-based research; documentation of transferable skills through resumes, interviews, and other reporting techniques appropriate to academic concentration; designed to enhance internship performance. Graded CR/NC.

Upper Division Courses

354 Special Topics (1-4)

Prerequisite: Varies with topic. Topics of special interest to wide university audience as announced in *Schedule of Classes*. May be repeated for credit as topic changes.

396 Honors Program Seminar (2)

Prerequisite: Limited to students in the GE Honors Program. Critical reading of seminal works affecting human thought and achievement. Topic and instructor(s) vary each quarter. May be repeated to maximum of 4 units.

3518 Cooperative Education (1-4)

Prerequisites: Courses appropriate to the work experience; approval by major department Cooperative Education coordinator. Integration of work experience with academic program, individually planned through coordinator. Minimum of 10 hours per week required for each unit. May be repeated to maximum of 12 units; combined units of 398 and 399 may not exceed 12. Graded *CR/NC*.

351 Cooperative Education Honors (1-4)

In addition to prerequisites for UNIV 398, the prerequisites are UNIV 298 and eligibility to participate in a university or departmental honors program. Integration of work experience with academic program, individually planned through coordinator. Minimum of 10 hours per week required for each unit. May be repeated to maximum of 12 units; combined units of 398 and 399 may not exceed 12. Graded *CR/NC*.

401 Writing Proficiency (2)

Prerequisite: ENGL 190 and at least one attempt of the Writing Proficiency Exam (WPE). Development of a writing portfolio required to satisfy Graduate Writing Assessment Requirement (GWAR) NVPE. Instruction to assist student in achieving satisfactory levels of writing performance. Graded *CR/NC*.

454 Special Topics (1--4)

Prerequisite: Varies with topic. Topics of special interest to wide university audience as announced in *Schedule of Classes*. May be repeated for credit as topic changes.

498 Advanced Cooperative Education (1-4)

Prerequisites: Completion of senior level courses appropriate to experience; approval by major department Cooperative Education coordinator. Participation in work experience integrated with academic program; assignments arranged individually in advance through coordinator. Minimum of 10 hours per week required for each unit. Students in departments with graduate Cooperative Education programs may apply maximum of 4 units toward graduate degree program. Graded *CR/NC*.

GRADUATE AND POSTBACCALAUREATE STUDY*Graduate Degrees and Majors***Master of Arts**

Anthropology
Art
Business Education
Child Development
Communicative Disorders
Economics
Education
Educational Administration
English
French
Geography
Health Science
History
Home Economics
Industrial and Technical Studies
Interdisciplinary Studies(*formerly Special Major*)
Latin American Studies
Mexican-American Studies
Music
Philosophy
Physical Education
Political Science
Psychology
Sociology
Spanish
Special Education
Speech Communication
Teaching English to Speakers of Other Languages (TESOL)
Theatre Arts
Urban Education
Vocational Education

Master of Science

Accountancy
Biology
Business Administration
Chemistry
Civil Engineering
Counseling
Criminalistics
Criminal Justice
Electrical Engineering
Geology
Health Care Management
Interdisciplinary Studies(*formerly Special Major*)
Mathematics
Mechanical Engineering
Microbiology
Nursing
Nutritional Science
Physics
Psychology
Public Administration

Master of Business Administration

Master of Fine Arts in Art

Doctor of Philosophy in Special Education

Credentials

Basic Teaching Credentials

MULTIPLE SUBJECT

Currently offered with the following undergraduate degrees:

Afro-American Studies, BA

Child Development, BA, Option II

Earth Sciences, B.A.

English, B.A.

Geography, B.A.

History, B.A.

Latin-American Studies, BA

Liberal Studies, BA

Mexican-American Studies, BA

Philosophy, B.A.

Physical Education, B.S.

SINGLE SUBJECT

The California Commission on Teacher Credentialing is in the process of requiring new Single Subject Credential Programs at the time this catalog is going to press. All new single subject credential students will be required to follow new programs when they are approved by the Commission. Those students enrolled in an existing program before the expiration date will be required to complete the existing program by that date. Students should contact Single Subject Advisers for the latest information.

Authorized Area	Degree Program
Art	Art, BA
Business	Business Education, BS
English	English, BA
English	Speech Communication, BA
Foreign Language	French, BA
Foreign Language	Japanese, BA
Foreign Language	Spanish, BA
Health Science	Health Science, BS
Home Economics	Home Economics, BA
Industrial Arts	Industrial Arts, BA
Life Science	Biology, BS
Mathematics	Mathematics, BA, BS
Music	Music, BA
Physical Education	Physical Education, BS
Physical Science	Earth Sciences, BA
Physical Science	Physical Science, BS
Social Science	Social Science, BA

An internship credential option is available for the Single Subject credential.

SUPPLEMENTARY AUTHORIZATIONS

Holders of a Single Subject or Multiple Subject credential issued by the state of California may add a supplemental authorization to teach in another discipline by completing additional course work. A partial list of supplementary authorizations and the credentials to which they apply are listed below. Course content of these supplementary authorizations is included in the undergraduate academic department and division listings earlier in this catalog. Interested students should consult the appropriate academic departments and the School of Education for further information.

Supplementary Authorization Area	Credential Type
Basic Mathematics	Multiple or Single Subject
Biology	Single Subject

Chemistry	Single Subject	
Comparative Political Systems and International Relations		Single Subject
Earth Sciences	Single Subject	
Geography	Single Subject	
Physics	Single Subject	
U.S. Government and Civics	Single Subject	

Information about other supplementary authorizations is available in the School of Education.

Specialist Instruction Credentials

Special Education Specialist Credentials

The following *Specialist credentials* may be earned in combination with the *Single Subject* and *Multiple Subject* credentials:

Communication Handicapped
 Gifted
 Learning Handicapped (*internship available*)
 Physically Handicapped
 Resource Specialist (*internship available*)
 Severely Handicapped (*internship available*)
 Visually Handicapped (*internship available*)

Other Specialist Credentials

Adapted Physical Education
 Language Development
 Reading/Language Arts
 Designated Subjects
 Adult Education
 Special Subjects
 Vocational Education

Administrative Services

Preliminary Administrative Services
 Professional Administrative Services

Clinical-Rehabilitative Services

Audiology
 Language, Speech, and Hearing
 Language, Speech, and Hearing-Special Class Authorization Orientation and Mobility

Health Services-School Nurse

Library Media Teacher

Pupil Personnel Services

(*includes advanced specializations in School Counseling and in Child Welfare and Attendance Services*)

School Counseling and Child Welfare and Attendance Services
 School Psychology and Child Welfare and Attendance Services
 School Psychology (*internships available*)

Postbaccalaureate Certificate Programs

Accounting
 Advanced Information Systems
 Advanced Study in Central Office Administration
 Applied Behavior Analysis in Educational Settings
 Biotechnology
 Career Counseling
 Computer Applications in Schools
 Developmental Counseling

Early Childhood Special Education: Infancy Emphasis
Early Childhood Special Education: Preschool Emphasis
English as a Second Language (ESL)
Professional Employee Counseling
Rehabilitative/School Audiology
Storytelling
Teaching Critical Thinking

Rules and regulations governing certificate programs and brief descriptions of these programs appear at the end of this chapter. Specific requirements and course listings appear in the individual academic department and division listings following this chapter.

GENERAL INFORMATION

GRADUATE AND POSTBACCALAUREATE STUDY

Graduate study has been a major part of the academic commitment of California State University, Los Angeles since its rounding. Students engaged in graduate and postbaccalaureate study constitute nearly one third of the total student body.

Cal State L.A. offers Master of Arts and Master of Science degrees, with opportunities for specialization through the selection of options or areas of emphasis within degree programs. Also offered are the Master of Business Administration degree, Master of Fine Arts degree in Art, the Master of Arts and Master of Science degrees with an interdisciplinary Studies major, and the Doctor of Philosophy degree in Special Education. The complete list of degrees offered appears at the front of this chapter.

Postbaccalaureate students pursue teaching credentials, certificate programs, and personal enrichment courses.

Objectives of Graduate Study

Cal State L.A.'s graduate programs are coherent patterns of study designed for a level of academic accomplishment substantially beyond that required for the baccalaureate. Graduate programs enable students to progress in their chosen vocations, to assume positions of leadership, and to contribute to the advancement of their professions. Graduate study helps students to develop greater awareness of themselves in relation to other people and cultures, both present and past, and to gain a better understanding of their particular professions. Completion of a master's degree program at Cal State L.A. also prepares students for further graduate study appropriate to their abilities and ambitions.

Desirable Student Qualifications

In order to gain maximum benefit from postbaccalaureate or graduate study students should possess the following:

- * Sufficient knowledge and understanding of their chosen field of study to pursue it effectively at an advanced level.
- * Basic techniques, skills, and methods necessary for research investigation and other practical applications of knowledge.
- * Sufficient maturity and intellectual curiosity to pursue independent study and learning beyond regular assignments.
- * Achievements, aptitudes, and abilities at superior levels to ensure scholarly performance considerably above the average.

Responsibility of the Student

Responsibility for meeting all requirements and following all procedures by the published deadlines rests with the student. In extraordinary circumstances exceptions to requirements for graduate study established by departments/divisions, schools, and the university may be granted.

Graduation Writing Assessment Requirement (GWAR) (Postbaccalaureate Writing Proficiency Requirement)

All CSU students must demonstrate competence in writing skills as a requirement for graduation. All Cal State L.A. postbaccalaureate and graduate students who entered Cal State L.A. summer 1984 or later and who are pursuing a graduate degree or a credential are required to satisfy this requirement in one of the following ways:

- * Pass the Writing Proficiency Examination (WPE) required for the Cal State L.A. baccalaureate. Postbaccalaureate students who select this option must register for the WPE (listed as UNIV 400 in the *Schedule of Classes*) no later than the *add* deadline for the first quarter they are enrolled in a graduate or credential program. Failure to register for the WPE will void enrollment for that quarter.
- * Postbaccalaureate students who hold an earned doctorate from an accredited college or university where the primary language of instruction is English may substitute such a

degree for passing the WPE; or

Postbaccalaureate students who have passed a writing proficiency examination or a graduation writing assessment examination, in English, at any accredited college or university where the primary language of instruction is English may substitute such a result for passing the WPE at Cal State L.A.

Students who receive a No Credit (NC) grade on the WPE must meet with a WPE consultant in the University Writing Center to discuss deficiencies identified by the exam and receive recommendations of activities to correct these deficiencies. Based on the recommendations from the WPE consultant, students may re-take the WPE or enroll in UNIV 401, the upper division writing proficiency course.

Postbaccalaureate students must satisfy this postbaccalaureate requirement *within the first three quarters of their graduate (conditionally classified or classified) or credential program or prior to the completion of 16 units, whichever comes later*. Students must satisfy this postbaccalaureate writing requirement within the required time in order to be eligible for continued registration.

Departments and divisions may require of their majors additional discipline-based course work in writing. See a faculty adviser concerning major department or division requirements.

Petitions for certification of the postbaccalaureate writing requirement shall be made at the school level and reported to the Dean of Graduate Studies and Research. A student who has satisfied the postbaccalaureate writing requirement shall continue to be certified with no time limit on such certification.

Postbaccalaureate unclassified students are not required to satisfy this postbaccalaureate writing requirement.

The School of Natural and Social Sciences has an additional Graduate Writing Skills Requirement policy which appears in the front of the graduate programs chapter for that school.

Additional information about the WPE is available in the *Schedule of Classes* and at the Learning Resource Center.

Graduate Degrees and Postbaccalaureate Study

Characteristics of Master's Degrees

California State University, Los Angeles offers the Master of Arts, Master of Science, Master of Business Administration, and Master of Fine Arts degrees. All four degrees require greater depth of study and increased demands on student intellectual or creative capacity than the baccalaureate. Characteristics of the individual degrees are described below.

Specific information about admission requirements, curriculum, and graduation requirements for these programs is listed alphabetically by school and department in the academic department and division descriptions which follow this chapter.

The *Master of Arts* (M.A.) degree provides a broadened cultural background in a recognized disciplinary field or improvement of professional competence.

The *Master of Science* (M.S.) degree provides the opportunity to improve professional competence in areas and approaches involving intense specialization.

The *Master of Business Administration* (M. B.A.) degree provides a program of professional preparation for management positions in business and industry.

The *Master of Fine Arts* (M.F.A.) degree in Art provides specialized training and education for artists and designers in design, computer graphics, painting and printmaking, sculpture, ceramics, textiles, and metalsmithing.

The *Doctor of Philosophy* (Ph.D.) degree in Special Education, which provides advanced preparation in this diverse professional field, is offered jointly with the University of California, Los Angeles.

Interdisciplinary Studies Master's Degrees

The *Interdisciplinary Studies* Master of Arts or Master of Science degree is a highly restricted interdisciplinary program for students whose professional or academic objectives are unique and cannot be met by existing master's degree offerings. It consists of an individual program of course offerings from at least two departments/divisions in related disciplines and must provide sharp focus and appropriate coherence.

Teaching Credentials

Teaching, specialist, and services credential programs are available to students who hold the baccalaureate. Students who seek teaching credentials must fulfill admission criteria and program requirements established by the School of Education in accordance with the California Commission on Teacher Credentialing. Students who are admitted into a teaching credential program are referred to as *postbaccalaureate classified* students. Description of admission criteria and program requirements appear in the undergraduate and graduate *School of Education* chapters.

Credit Certificate Programs

Students with a baccalaureate may enroll in a certificate program to receive specialized instruction and training within a particular field. Students who pursue a certificate must fulfill admission criteria and program requirements established by the departments, divisions, and schools that offer the programs. Postbaccalaureate students who are admitted into certificate programs are referred to as *postbaccalaureate classified* students.

Descriptions of certificate programs that require the baccalaureate for admission appear later in this chapter. Individual admission and program requirements appear in academic department and division listings in the chapters that follow this chapter.

Enrichment Courses

Persons who hold a bachelors degree may enroll in courses that provide them with personal enrichment. Because such students are not enrolled in specific graduate programs, they are referred to as *postbaccalaureate unclassified* students. They must fulfill all university eligibility requirements for admission and for continuing student academic standing. Because they are not enrolled in graduate programs, they will not receive a masters degree from Cal State L.A.

Organization of Graduate Study

Graduate study at Cal State L.A. is organized and administered by each of the six schools within the university, with coordination provided by the Dean of Graduate Studies and Research.

This *Graduate Programs* section of this catalog describes the requirements, regulations, and procedures for engaging in graduate study. General university regulations and procedures that apply to both undergraduate and postbaccalaureate or graduate students are explained under *Admission* and *Procedures and Regulations* earlier in this catalog.

Requirements for admission, advancement to classified graduate standing and candidacy, and graduation described in this section apply to all advanced degree programs. Any additional requirements are stated in the descriptions of the individual programs.

Graduate Studies Directory

OFFICE OF GRADUATE STUDIES AND RESEARCH

Dean of Graduate Studies

and Research

Administration 714

Theodore J. Crovello

(213) 343-3820

Associate Dean of Graduate Studies

Administration 714

Costello L. Brown

(213) 343-3820

School Graduate Deans
SCHOOL OF ARTS AND LETTERS
Associate Dean
 Music 232

Robert D. Reeser
 (213) 343-4004

SCHOOL OF BUSINESS AND ECONOMICS
Associate Dean for Graduate Programs
 Salazar Hall C256

M. David Oh
 (213) 343-5156

SCHOOL OF EDUCATION
Associate Dean
 King Hall D2070

Evalyn T. Dearmin
 (213) 343-4303

SCHOOL OF ENGINEERING AND TECHNOLOGY
Associate Dean
 Engineering and Technology A237

Don M. Maurizio
 (213) 343-4510

SCHOOL OF HEALTH AND HUMAN SERVICES
Associate Dean
 Fine Arts 132

Karen M. Johnson
 (213) 343-4602

SCHOOL OF NATURAL AND SOCIAL SCIENCES
Associate Dean
 King Hall D1051

Joseph Bragin
 (213) 343-2005

Each department and division that offers graduate degree programs and/or credential programs has a principal graduate adviser as well as credential advisers. The names and phone numbers of these advisers appear each quarter in the *Schedule of Classes*. Appointments to see these advisers can be made in their respective department or division offices.

Admission Requirements

General Requirements

Graduate and postbaccalaureate applicants may apply for a degree objective, a credential or certificate objective, or may have no program objective. Depending on the objective, the CSU will consider an application for admission as follows.

The general requirements for admission to graduate and postbaccalaureate studies at a California State University campus are in accordance with university regulations as well as Title 5, Chapter 1, Subchapter 3 of the *California Code of Regulations*. Specifically, a student shall:

- * 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 the appropriate campus authorities.
- * be in good academic standing at the last college or university attended
- * have attained a grade point average of at least 2.5 (A=4.0) in the last 90 quarter (60 semester) units attempted
- * satisfactorily meet the professional, personal, scholastic, and other standards for graduate study, including qualifying examinations, as appropriate campus authorities may prescribe.

If you meet the general requirements for graduate or postbaccalaureate studies, you will be considered for admission in one of the four following categories:

- * *Postbaccalaureate Unclassified*. To enroll in courses for professional or personal growth, you must be admitted as a postbaccalaureate unclassified student. By meeting the general requirements, you are eligible for admission as a postbaccalaureate unclassified student. Some departments and divisions may restrict enrollment of unclassified students because of heavy enrollment pressure. Admission in this status does not constitute admission to, or

assurance of, consideration for admission to any other graduate degree or credential program; or

- * *Postbaccalaureate Classified.* To enroll in a credential or certificate program, you will be required to satisfy additional professional, personal, scholastic, and other standards, including qualifying examinations, prescribed by the campus.
- * *Graduate Conditionally Classified.* You may be admitted to a graduate degree program in this category if, in the opinion of appropriate campus authority, you can remedy deficiencies by additional preparation.
- * *Graduate Classified.* To pursue a graduate degree, you will be required to fulfill all of the professional, personal, scholastic, and other standards, including qualifying examinations, prescribed by the campus.

Admission to a California State University campus with postbaccalaureate unclassified standing does not constitute admission to graduate degree curricula. Also, individual schools and departments or divisions may have additional requirements which students must fulfill before they may be accepted into degree, credential, and certificate programs at Cal State L.A.

Some applicants are initially admitted to Cal State L.A. in postbaccalaureate unclassified standing. Those who meet all requirements for any other category may achieve such standing prior to their first quarter of enrollment. Applicants not regularly admissible may petition for admission by special action as described later in this chapter.

Additional general procedures and regulations that apply to all applicants, graduate and undergraduate, are described under the *Admission* chapter near the front of this catalog.

Special Action Admission

In unusual circumstances, a campus may make exceptions to admission criteria and grant admission by special action. For special action admission, applicants who were in good standing at the last college attended but who do not meet the mandated admission requirements may petition for admission by *special action* if acceptable alternative evidence exists that they possess sufficient academic, professional, and other potential pertinent to their proposed graduate objective. Special action admission may be granted by the appropriate school graduate dean upon recommendation of both the proposed major department or division and school graduate studies committee for any of the following three reasons:

1. Applicants Lacking Minimum Required Grade Point Average

Students admitted by special action to pursue a masters degree program will be admitted to conditionally classified graduate status and must complete specific prerequisites and a minimum of 14 units of qualifying courses specified by the major department or division

and school graduate dean with a minimum B (3.0 on a scale in which A = 4.0) grade point average, as specified under *Requirements for Classified Graduate Standing* later in this chapter. Students admitted to pursue a nondegree program (e.g., credential, certificate) must complete special requirements as designated by the major department or division and school graduate dean.

2. Graduates of Unaccredited Institutions

A degree from an unaccredited college is not recognized for admission in postbaccalaureate or graduate standing. Graduates of such institutions may be admitted in undergraduate standing if course work completed is deemed acceptable and meets undergraduate admission requirements, and may be granted postbaccalaureate or graduate standing upon satisfaction of the following conditions:

- * Meet the minimum university, school, and department or division requirements for admission to classified graduate standing in a degree program.
- * Complete a minimum of four upper division courses (at least 14 quarter units), specified in advance by the proposed major department or division, with a grade point

average of at least B (3.0). These courses may not be 500-level, nor may they be used for graduate credit on the master's degree program. After they have completed their faculty-approved list of qualifying courses, students may not add any additional courses, nor may they repeat any of the qualifying courses, in order to raise their grade point average.

- * Receive the written recommendation of the department or division in which the degree is sought and of the appropriate school graduate dean.

3. Graduates of Specialized or Professional Schools

Graduates of specialized or professional schools that are professionally accredited are admitted in conditionally classified graduate status. They may be granted classified graduate standing by satisfying the following conditions:

- * Meet the minimum university, school, and department or division requirements for admission to classified graduate standing in a degree program.
- * Complete a minimum of four upper division qualifying courses (at least 14 quarter units), specified in advance by the proposed major department or division, with a grade point average of at least B (3.0). After they have completed their faculty approved list of qualifying courses, students may not add any additional courses, nor may they repeat any of the qualifying courses, in order to raise their grade point average.
- * Receive the written recommendation of the department or division in which the degree is sought and of the appropriate school graduate dean.

Additional Admission Requirements

Interdisciplinary Studies Master's Degree. In addition to meeting minimum university requirements for admission to classified graduate standing, applicants must possess a baccalaureate in an area cognate to the areas of the proposed *Interdisciplinary Studies*, must have a minimum 2.75 grade point average (A=4.0) in the last 90 quarter units attempted, and must meet all school requirements and such department or division requirements as course prerequisites, test scores, and grade point average for the master's degrees of the schools and departments/divisions in which course work for the *Interdisciplinary Studies* is proposed. Approval for an *Interdisciplinary Studies* Master's is based upon individual justification. If course work is to be taken in departments/divisions in more than one school, students must make formal written application to the Dean of Graduate Studies and Research. If a majority of course work is to be taken in departments/divisions within one school, students are required to make formal written application to the school graduate dean. All applications must include:

- * Clear and concisely stated rationale for pursuing an *Interdisciplinary Studies* and an indication of the professional/academic objectives to be achieved. This rationale must include evidence clearly indicating that the *Interdisciplinary Studies* program could not be accommodated within any existing approved master's degree program on this campus.
- * A proposed list of available courses chosen from two or more departments/divisions totaling a minimum of 45 units, of which at least 23 units must be 500 level.
- * An indication of whether a comprehensive examination or thesis or project will be used to complete the graduate program. If a thesis or project is proposed, a preliminary description of the thesis topic or research project is to be included. If a comprehensive examination is proposed, an indication of the areas in which the student will be examined is to be included.
- * Names and areas of specialization of at least two faculty members representative of those who might consent to serve on the advisory committee for such a degree program.

The Dean of Graduate Studies and Research must approve all programs that will include course work from more than one school. The student's program is subject to University graduate procedures and regulations that govern all graduate degree offerings.

International (Visa) Student Admission Requirements

The CSU must assess the academic preparation of international (foreign/visa) students. For this purpose, "foreign students" include those who hold U.S. visas as students, exchange visitors, or in other nonimmigrant classifications.

The CSU uses separate requirements and application filing dates in the admission of international (foreign/visa) students. Verification of English proficiency (see the *Admission* chapter for information about the TOEFL requirement), financial resources, and academic performance are all important considerations for admission. Academic records from foreign institutions must be on file at least eight weeks before registration for the first term and, if not in English, must be accompanied by certified English translations.

California residents receive admission priority. There is little likelihood of nonresident applicants, including international students, being admitted to either impacted majors or to those with limited openings. Consult individual academic departments/divisions for specific program requirements and limitations.

For admission in postbaccalaureate or graduate standing, international applicants must fulfill the following minimum requirements.

- * Possess a baccalaureate, or its equivalent, from an accredited institution.
- * Have a minimum 2.5 grade point average (A=4.0) in the last 90 attempted quarter units equal to that required for admission to classified graduate standing.
- * Have approval of the academic department or division offering the desired degree program.

International students should contact International Student Services for information about housing, financial assistance, and related matters.

Application Procedures

All applicants for any type of postbaccalaureate status (i.e., graduate degree applicants, those seeking credentials or certificates, and those interested in taking courses for personal or professional growth) must file a complete application as described in the CSU admission booklet within the appropriate filing period. A complete application for postbaccalaureate status includes all of the materials required for undergraduate applicants (part A) plus the supplementary graduate admissions application (part B). Postbaccalaureate applicants who completed undergraduate degree requirements and graduated from Cal State L.A. the preceding quarter are also required to complete and submit an application and the nonrefundable application fee. (Second baccalaureate applicants should apply as undergraduate degree applicants.)

Because applicants to postbaccalaureate programs may be limited to the choice of a single campus on each application, redirection to alternative campuses or later changes of campus choice will be minimal. Postbaccalaureate applicants who wish to be assured of initial consideration by more than one campus are required to submit separate applications (with fees) to each. Applications may be obtained in Student Affairs 1010r from the Graduate Studies Office of any California State University campus, in addition to the sources noted for undergraduate applicants.

The CSU uses separate requirements and application filing dates in the admission of international (foreign visa) students. For these purposes, "foreign students" are residents of a country other than the United States or who hold visas as students, exchange visitors, or in other nonimmigrant classifications.

Some academic departments/divisions require applications to their respective graduate programs in addition to the university admission application and may have earlier deadlines than the university admission application deadline. Applicants should contact individual departments/divisions for further information or refer to individual programs later in this catalog.

Students accepted at Cal State L.A. for postbaccalaureate or graduate study must enroll in the quarter for which application was made. Failure to enroll will result in cancellation of admission; see "*Reapplication after Failure to Enroll*" in the *Admission* chapter earlier in this catalog.

APPLICATION RUNG PERIODS

Terms in	Applications	Student
1993-1994 and	First	Notification
1994-1995	Accepted	Begins
Summer Quarter 1993	Feb. 1, 1993	March 1993
Fall Quarter 1993	Nov. 1, 1992	Dec. 1992
Winter Quarter 1994	June 1, 1993	July 1993
Spring Quarter 1994	Aug. 1, 1993	Sept. 1993
Summer Quarter 1994	Feb. 1, 1994	March 1994
Fall Quarter 1994	Nov. 1, 1993	Dec. 1993
Winter Quarter 1995	June 1, 1994	July 1994
Spring Quarter 1995	Aug. 1, 1994	Sept. 1994

Filing Period Duration

Each campus accepts applications until capacities are reached. If applying after the initial filing period, consult the campus Admissions Office for current information.

Application Filing Periods for International (Visa) Applicants

Application filing periods for international (visa) applicants differ from those for domestic applicants because of additional time required in evaluating records and preparing necessary documents for the Immigration and Naturalization Service (INS). The filing periods are established as follows:

Quarter	Application Filing Period
Fall Quarter	November 1--30
Winter Quarter	June 1-30
Spring Quarter	August 1--31

The Admissions Officer may waive this advance application requirement if circumstances warrant. In addition to the academic requirements outlined below, international students must have competence in the English language, financial resources adequate to provide for all expenses during their period of study at Cal State L.A., and must be in good health. Those admitted to this country on the basis of acceptance by another college are expected to complete at least one year at that college before applying for admission to Cal State L.A.

Application Acknowledgement

Normally, you may expect to receive an acknowledgment of your application from your first choice campus within two to four weeks of filing the application. A notice that space has been reserved for you will also include a request that you submit the records (transcripts and test scores) necessary for the campus to evaluate your qualifications. You may be assured of admission if the evaluation of your qualifications indicates that you meet admission requirements. Such a notice is not transferable to another term or to another campus.

Transcript Requirements

Applicants with either a degree or credential objective must request that two copies of official transcripts from each college or university previously attended be sent directly to the Admissions Office. Applicants who are required to have one copy of their transcripts sent to an academic department or division as part of their major program application and those applying without a degree or credential objective are required to have only one copy of each transcript sent to the Admissions Office.

All transcripts become Cal State L.A. property and will not be released or copied except for those that applicants request be redirected to another CSU campus. Processing of applications cannot be guaranteed unless all required documents are received during the designated application period. Individuals who do not file an application for admission are advised that transcripts are retained for one year, after which they are destroyed.

Test of English as a Foreign Language (TOEFL) Requirement

All graduate and postbaccalaureate applicants, regardless of citizenship, whose preparatory education was principally in a language other than English must demonstrate competence in English. Those who do not possess a bachelor's degree from a postsecondary institution where

English is the principal language of instruction must achieve a minimum score of 550 on the Test of English as a Foreign Language (TOEFL).

In exceptional cases, the Director of Admissions and University Outreach may waive the TOEFL score requirement if recommended by the applicant's proposed major department or division and the School Graduate Dean. Variation from the minimum TOEFL score will be considered only for applicants with a B (3.0) grade point average as evaluated by the Admissions Office and whose TOEFL score is not more than ten points below 550.

University Requirements for Master's Degrees

All candidates for master's degrees at Cal State L.A. must complete the following minimum requirements:

Unit Requirement. Completion of at least 45 quarter units in approved courses, of which at least half (23) must be in graduate (500-level) courses. Master's degree programs whose minimum total units are established at more than 45 quarter units must include at least half of those units in courses at the graduate (500) level.

Grade Point Average Requirement. Achievement of a minimum B (3.0) grade point average in all courses on the approved degree program. A grade of CIS allowed on the program; however, any grade *below C* requires that the course be repeated with both grades computed in the grade point average.

Residence Requirement. At least 32 quarter units for the masters degree completed in residence at Cal State L.A.

Postbaccalaureate Writing Proficiency Requirement. Fulfillment of the Postbaccalaureate Writing Proficiency Requirement, as described earlier in this chapter.

Culminating Experience Requirement. A comprehensive examination or a thesis or project as described later in this chapter.

Completion of Program. Completion of the final approved program and any special department or division requirements and the passing of a comprehensive examination within the number of attempts allowed by the department or division and school or the filing of a thesis or project report approved by the candidate's thesis/project committee and cleared by the library.

Time Limitation. No subject, unit, or grade credit will be granted for any course completed more than seven years prior to the date of completion of the masters degree. In extraordinary circumstances students may petition and the school may grant permission to validate such an expired course by an examination given by and with the concurrence of the department or division offering the course. An expired course taken at another institution may not be validated by examination.

Faculty Recommendation. Recommendation for the degree by the faculty.

Advisement. As the first step of registration, all students must obtain department or division approval of the courses selected for each quarter's study program. To assist in the initial advisement and course selection process, newly admitted students need to bring a personal copy of their college transcripts and their evaluation, if received.

Early in their first quarter students should make an appointment with a graduate faculty adviser to plan a complete program of study for the degree, if this cannot be accomplished during the advisement session, preceding the initial registration. The approved master's degree program becomes the basis for evaluating the student's eligibility for receiving the degree. Changes in the program of study may be made only with the approval of the student's academic adviser and school graduate dean. Students who have not declared a degree or credential objective (i.e., undecided majors) should seek advisement in the Academic Advisement Center, Administration 127.

Credit for Transfer Work. To receive credit toward a masters degree for acceptable postbaccalaureate work taken at other colleges or universities, students must have official transcripts forwarded to the Admissions Office, and must file a "Request for Records" (Form GS-1) with their major department or division. Cal State L.A. will allow credit for work taken at another college or university only when it appears on the student's official transcript from that institution, is acceptable for master's degree credit at the offering institution, and is deemed appropriate to the student's masters degree program by the major department or division at Cal State L.A. See "Limitations and Exclusions."

- * No more than 13 quarter units of acceptable transfer, extension, and/or special session courses may be included on a masters degree program.
- * No master's degree credit is allowed for directed teaching, 700- 800-level courses, courses numbered below 400, or courses taken at another accredited institution that would not be accepted toward a masters degree at that institution.
- * Nine quarter units of 500-level or other graduate level courses taken through extension are eligible for master's degree credit.

Classified Graduate Standing Requirements for Classified Graduate Standing

- * All students who have declared a master's degree objective are admitted to and remain in conditionally classified standing until the following conditions are met. Classified graduate standing constitutes admission to an authorized graduate degree curriculum and is granted by the school graduate dean upon completion of all requirements listed below and upon the recommendation of the major department or division.

The requirements enumerated below are minimum university requirements.

Departments/divisions or schools may utilize additional or more restrictive requirements for admission to classified graduate standing in individual master's degree curricula. The minimum university requirements for admission to classified graduate standing are as follows:

- * A minimum 2.5 grade point average computed on the last 90 attempted quarter units of work which shall include all units taken in the quarter in which the 90th unit occurs. This grade point average requirement shall not apply to students who hold an advanced degree from an accredited institution.
- * Certification by the major department/division to the school graduate dean that all department/division admission requirements, procedures, and prerequisites have been completed.
- * Filing of a master's degree program with the school graduate dean during the student's first quarter of graduate enrollment at Cal State L.A. The program must be approved by the principal graduate adviser and the major department/division. Any change in the program must be approved by the principal graduate adviser, the major department/division, and the school graduate dean prior to completion of courses affected by the change. This includes courses in which a grade of "Incomplete" is received.

Special Action Admission Students

- * Except for those who hold an advanced degree from an accredited institution, all students admitted by special action must complete a minimum of 14 quarter units of upper division qualifying courses on a formally approved master's degree program with a minimum B (3.0) grade point average with the following conditions:
- * The principal graduate adviser, major department or division, and school graduate dean must approve qualifying courses prior to their completion. Courses graded CR/NC may not be used on the qualifying program.
- * Upon recommendation of the principal graduate adviser and the major department or division, and with the approval of the school graduate dean, qualifying courses may be waived for students whose postbaccalaureate work demonstrates promise of the scholarly ability required for graduate study. To be eligible for recommendation of such a waiver a student must have completed, with a minimum B (3.0) overall grade point average, 14 or

more quarter units of upper division or graduate level postbaccalaureate work at an accredited institution that is acceptable toward a masters degree at that institution.

- * Failure to achieve a B (3.0) grade point average in qualifying courses will result in termination of the degree program.

Admission to Classified Graduate Standing

When the major department or division provides the school graduate dean with the necessary documentation indicating that all requirements for classified graduate standing have been met, the conditional program, if filed, or the master's degree program then submitted will be approved by the school graduate dean and will become the student's official master's degree program. This graduate program is a statement of academic requirements that students must complete for the master's degree. Students must have an approved master's degree program and must have achieved classified standing before they can be advanced to candidacy.

Other Graduate and Postbaccalaureate Regulations

Admission to 500-Level Courses. With the following exceptions, classified graduate standing or its equivalent is required for admission to all 500-level courses and for receiving credit toward the master's degree for 500-level courses:

- * A classified postbaccalaureate credential candidate may enroll in 500-level courses required in the credential program in which the student has been classified.
- * Undergraduate students may, with prior approval and subject to policies governing graduate credit for undergraduate students, enroll in one 500-level course. See "Graduate Credit for Undergraduate Students."
- * In highly structured programs the required sequence of some course offerings may make it necessary for students to enroll in 500-level courses prior to their attainment of classified graduate standing if timely progress toward the degree is to be made. Students in such highly structured programs may request department or division, school, and university approval to enroll in a maximum of 9 quarter units of 500-level work prior to attainment of classified graduate standing provided they are otherwise eligible and have obtained the approval of the principal graduate adviser and the instructor prior to enrollment.
- * In extraordinary circumstances, and with the prior approval of the principal graduate adviser, the major department or division, and the school graduate dean, conditionally classified students may be given permission to enroll in one 500-level course prior to attainment of classified graduate standing.
- * Matriculated CSLA students may not enroll in a 500-level course for master's degree credit through the Open University (concurrent enrollment) Program administered by the Office of Continuing Education without the prior permission of the department or division offering the course and of the student's major department or division adviser.
- * Students who have been formally enrolled in graduate credit certificate programs may enroll in any 500-level courses specified in their programs for which they have fulfilled all course prerequisites.

Courses Completed in Undergraduate Standing. No courses taken as an undergraduate may be included on a masters degree program except as specifically provided for baccalaureate candidates in their final quarter of undergraduate study.

Undergraduate Preparation. No credit toward a masters degree is allowed for course work taken to meet necessary undergraduate preparation for a master's degree program.

Course Additions/Deletions. A course may not be added to or deleted from a master's degree program after it has been taken. Any change in the master's degree program must be approved in advance by the principal graduate adviser, major department or division, and school graduate dean. When such a change has been approved it becomes part of the master's degree program.

Program Change Limitation. No more than 9 quarter units beyond the total number of units approved at the time a student achieves classified graduate standing may be added to a student's master's degree program.

Course Prerequisites and Corequisites. Students are responsible for fulfilling prerequisites and corequisites. The instructor and department or division have the authority to waive specific prerequisites and/or corequisites for students who have completed equivalent courses at another institution, who have had equivalent experience (such as work experience), or who possess the needed skills to proceed with the work of the course. Students should consult the instructor before registering to determine whether the course(s) or experience will justify waiver of the stated prerequisite(s) and/or corequisite(s).

Qualifying Courses. All qualifying courses that are otherwise eligible may be included in a master's degree program if recommended by the principal graduate adviser and major department or division and approved by the school graduate dean. Approval to include qualifying courses on the master's degree program must be obtained prior to completion of the courses.

Probation and Disqualification

Graduate students are subject to the following probation and disqualification criteria for administrative-academic deficiencies:

Administrative-Academic Probation. Provision has been made by the Office of the Chancellor whereby students may be placed on administrative-academic probation for any of the following reasons:

- * Withdrawal from all or a substantial portion of courses for which they registered in two successive quarters or in any three quarters.
- * Repeated failure to progress toward a stated degree or program objective when such failure is within their control.
- * Failure to comply, after due notice, with a routine academic requirement or regulation.

Notice is given in writing of the conditions for removal from administrative-academic probation, as well as circumstances that would lead to disqualification should probation conditions not be rectified.

Disqualification Regulations

- * Classified graduate students whose grade point average in course work on their master's degree program falls below B (3.0) will be placed on scholastic probation. Classified graduate students whose grade point average falls below B (3.0) in all courses completed subsequent to admission to the program are subject to scholastic probation. If after being placed on scholastic probation they do not raise their average to B (3.0) after completion of 16 units or two quarters in residence, whichever comes later, they will be disqualified from pursuing the masters degree program in which they were classified. Classified graduate students whose grade point average falls more than nine grade points below B (3.0) will be disqualified from pursuing the masters degree program in which they were classified. If disqualified from a master's degree program, students may be admitted to another program only on the recommendation of the new major department or division concerned and with the approval of the appropriate school graduate dean.
- * Conditionally classified graduate students whose grade point average in course work on their masters degree program falls below B (3.0) will be placed on scholastic probation. Conditionally classified graduate students whose grade point average falls below B (3.0) in all units completed subsequent to becoming conditionally classified are subject to scholastic probation. If after being placed on scholastic probation they do not raise their average to B (3.0) after completion of 16 units or two quarters in residence, whichever comes later, or if they fail to achieve a B (3.0) in their qualifying courses, they will be disqualified from the master's degree program in which they were conditionally classified. If disqualified from a masters degree program, conditionally classified students may be admitted to another program only on the recommendation of the new major department or

division concerned, with submission of a new list of qualifying courses and the approval of the appropriate school graduate dean.

- * Postbaccalaureate unclassified and postbaccalaureate classified students whose grade point average falls below 2.5 will be placed on scholastic probation. When, on scholastic probation, they do not raise their average to 2.5 after completion of 16 units or two quarters in residence, whichever comes later, they will be disqualified from pursuing course work at Cal State L.A.
- * All units earned in the quarter in which the sixteenth unit is completed will be used in computing the grade point average.
- * Students disqualified for scholarship deficiency may not enroll in any regular quarter at Cal State L.A. without permission from the appropriate school graduate dean and may be denied admission to other educational programs operated or sponsored by the campus.
- * Students enrolled in graduate degree programs, credential programs, and postbaccalaureate credit certificate programs are not eligible for *Academic Renewal*.
- * Postbaccalaureate students pursuing a second or subsequent baccalaureate are subject to the same probation and disqualification standards as seniors. These are outlined in the *Procedures and Regulations* section near the front of this catalog.

Work Taken Prior to Approval of Program. No more than 13 quarter units of acceptable course work completed prior to approval by the principal graduate adviser, major department or division, and school graduate dean may be included on a masters degree program. This includes acceptable transfer work. Credit for thesis (i.e., 599), research (i.e., 597), or comprehensive examinations (i.e., 596) is not transferable. *All other course work included on the masters degree program must be completed after approval by the principal graduate adviser, major department or division, and school graduate dean.* This policy shall not apply to students admitted to a master's degree program offered jointly with other educational institutions.

Extension Courses. No graduate credit will be allowed for extension courses that would not be accepted toward a master's degree at the offering institution (e.g., University of California extension courses in the X300 or X400 series) unless specifically approved in advance by the major department or division and school concerned.

Advancement to Candidacy

Advancement to candidacy is a part of the continuing process of review of the student's progress and is not automatic. It is granted by the school graduate dean upon completion of the requirements listed below and upon the recommendation of the major department or division. It is the university prerequisite to enrolling for the thesis, project, or comprehensive examination; individual departments/divisions and schools may have additional requirements.

Advancement to candidacy requires:

- * Satisfaction of Graduation Writing Assessment Requirement.
- * Classified graduate standing.
- * An approved masters degree program on file in the school graduate studies office.
- * Completion of a minimum of 16 quarter units of the masters degree program with an overall B (3.0) grade point average or higher.
- * Recommendation of the major department or division.
- * Approval of the school graduate dean.

Only students who are advanced to candidacy are eligible to enroll for comprehensive examinations (course #596 in their major discipline) or for thesis or project units (course #599 in their discipline).

Culminating Experience**Comprehensive Examinations**

Students must fulfill all department or division requirements for the written and/or oral comprehensive examinations. Such requirements include, but are not limited to, the date and time for the comprehensive examinations, length of testing, topics covered, and number of questions for the comprehensive examinations.

Students whose programs require a comprehensive examination must declare to their major department or division, at least one quarter in advance, their intent to take it, obtain department or division permission, and register for the comprehensive examination which carries the course number 596 in their major discipline. Students who are not enrolled in any credit-bearing course during the quarter in which they take the comprehensive examination must pay the comprehensive examination fee (\$10). *Students electing comprehensive examination options are not permitted to enroll in UNIV900.* Payment of State University, student services, facilities, and associated student fees, or any tuition charges, is not required.

Students should expect to take their comprehensive examinations during the quarter in which they complete all course work on their program or shortly thereafter. Those who do not pass the comprehensive examinations must fulfill any department, division, and/or school requirements for subsequent enrollments in these examinations.

Thesis or Project Requirements

Students who choose a thesis or project for their masters degree culminating experience should consult the official campus "Guide to Preparation of Master's Theses and Project Reports," copies of which are available in department offices for reference or in the campus bookstore for purchase. It provides information on the following: procedures, regulations and responsibilities governing the masters thesis or project; general requirements for thesis preparation and acceptance; format requirements for the thesis; and special instructions for projects and project reports. In addition, students must obtain specific department requirements from their adviser.

Graduate students completing research units (597) and thesis or project units (599) required for masters degrees must be regularly enrolled during any quarter in which they use university facilities or consult with faculty.

Students who have exceeded the one calendar year time limitation associated with the ~~SP~~ grading symbol for research units (597) must petition to register in UNIV 900. Petition forms and instructions are available in school graduate studies offices.

Students who have previously enrolled in all allowable research units (597) and are not enrolled in any other credit-bearing courses or thesis or project units (599) but who will use university facilities or consult with faculty must register in UNIV 900.

To maintain residence requirements and continuing student registration privileges, graduate students who are not enrolled in credit bearing course work must register for UNIV 900 two quarters out of four.

Application for Graduation

Application for graduation (*degree check*) is made on a form available at Administration 146 or 409 or any academic department or division office. Permission to apply for graduation must be granted by the candidate's major department or division before the completed application and required fee are submitted to the Cashier's Office for payment of the fee.

Students are required to file an application by the deadline announced in the *Schedule of Classes*. The application is valid only for the stated quarter. A new application is required of students who do not meet requirements for the stated quarter by the completion deadline announced in the *Schedule of Classes*. Further information appears in the *Undergraduate Study* section of this catalog.

No subject, unit, or grade credit will be granted for any course work completed more than seven years prior to the date of issuance of a student's masters degree. Refer to information earlier in

this chapter entitled *Time Limitation* under the heading *University Requirements for Masters Degrees*.

Commencement Exercises

Commencement is held annually at the end of the spring quarter. Students who have completed degree requirements the previous summer, fall, or winter quarter are eligible to participate in the ceremony along with those who complete their work in the spring quarter. Information bulletins about commencement activities are mailed to the home address of those eligible to participate early in the spring and are available on campus at school, department, and division offices and Administration 146 and 409.

During commencement exercises, degrees are conferred on the candidates by the President of the University. Although each candidate receives a diploma cover during the program, the actual diploma is sent several months later. Within a few weeks after graduation, eligible candidates receive a Letter of Congratulations in the mail and degrees are posted on the permanent academic records.

Requirements for Additional Master's Degrees

Students who have earned a masters degree at Cal State L.A. and wish to obtain a subsequent master's degree or to add an additional option to a previously completed master's degree from this University must complete an approved program of at least 45 quarter units. At least half of the units must be new work not included on the previous degree or option. The remainder can be from the previous degree provided that the courses have been completed within seven years of the award date of the degree and are otherwise eligible for inclusion.

Students who are currently enrolled in a master's degree program at Cal State L.A. may concurrently complete an additional option under the same degree if the department/division and school concerned verify that the additional option requires significantly different knowledge, skill and course work. The additional option must include a minimum of 23 quarter units of course work that is specific to the option (not included in the previous option) and an appropriate culminating experience (thesis/project or comprehensive examination). An approved program plan for each option is required. A student may petition with extraordinary justification and with the approval of the department/division and school concerned for an exception provided that the courses have been completed within seven years of the award date of the degree and are otherwise eligible for inclusion.

Students who have earned a masters degree elsewhere are strongly discouraged from applying for an additional identical degree at Cal State L.A. unless it is a substantially different option. A student may petition with extraordinary justification and with approval of the department/division and school concerned for an exception to this policy.

Additional Graduate/Postbaccalaureate Student Information

Use of Social Security Number

Applicants are required to include their Social Security account number in designated places on CSU applications for admission pursuant to the authority contained in Title 5 *California Code of Regulations*, Section 41201. The Social Security account number is used as a means of identifying records pertaining to the student, as well as identifying the student for purposes of financial aid eligibility and disbursement and the repayment of financial aid and other debts payable to the institution. Cal State L.A. uses the student's Social Security number as the official means of student identification and refers to the number as the student's Student Identification Number. On most student forms, the name is abbreviated as *SID*.

Study Load

For full-time enrollment certification by the university, graduate students must carry a study load of 12 weighted units of approved prerequisite, corequisite, or graduate program courses (graduate level courses have a weighted factor of 1.5). Upon recommendation of a student's major department or division and approval by the school graduate dean, a student enrolled in any of the following courses may be certified as full-time with a study load of fewer than 12 weighted units: 596, 597, 598, 599, 699, and 900. The maximum study load for students working toward a graduate degree is 16 units per quarter.

The U.S. Immigration and Naturalization Service (INS) requires an F-1 international (visa) graduate student to carry a minimum study load of 8 quarter units of 500-level courses or 12 units of 400-level courses. International students must comply with all university and INS regulations.

Credit by Examination

Graduate students who are in good standing and are enrolled in one or more residence courses may request permission to receive credit for courses by examination. Graduate credit by examination is restricted to eligible 400- and 500-level courses listed in this catalog. It is without unit limit, but does not count as residence credit. Total credit earned for courses and examinations taken in Special Sessions may not exceed the limit established for Special Session study. See "*University Requirements for Masters Degrees.*"

Graduate and Postbaccalaureate Grading System Grading System Graduate

TRADITIONAL.

A, B, C, D, F.

Letters A, B, and C indicate passing grades; letters D and F indicate failure.

NONTRADITIONAL.

CR/NC.

CR, indicating passed with credit, is given for work taken by graduate and postbaccalaureate students, including 400-level courses, that is equivalent to B or better. *NC*, indicating no credit, is given for work equivalent to C, D, or F, for postbaccalaureate and graduate students. A course in which a postbaccalaureate or graduate student earns a grade below C must be repeated; grades from both the original course and the repeated course are used in computing the grade point average.

Definitions of Administrative Grading Symbols

Marks other than letter grades used to indicate status in courses undertaken have the following meanings:

CR, used to denote *passed with credit* when no letter grade is given, is assigned to a grade of B or better for graduate students. *CR* grades are not included in the calculation of the grade point average.

NC is used to denote *no credit when* no letter grade is given. *NC* grades are not included in the calculation of the grade point average.

SP (Satisfactory Progress) is used for courses that extend beyond one academic quarter-and may include enrollment in more than one quarter-to indicate that the student's work in progress has been evaluated as satisfactory to date but that the assignment of a final grade must await the completion of additional work. An *SP* does not add earned units and does not affect grade point average calculations. Successive enrollments in the course must not exceed the total number of units applicable to the student's educational objective. All work for the course must be completed within one calendar year of the date of first enrollment, except for courses associated with the master's degree thesis (597, 598, 599, 900) and doctoral dissertation (698, 699) in which case the time limit shall be five years, and a final grade is assigned to all segments of the course on the basis of overall quality. An *SP* that has not been replaced by a final grade within the time limit for the course shall be changed to *NC*. In extraordinary circumstances, extensions of time to remove *SP* grades may be granted by the appropriate school graduate dean (for graduate courses).

W (Withdrawal) indicates that a student was permitted to drop a course after the sixth day of instruction with the approval of the instructor and the department/division chair. The *W* carries no connotation of quality of student performance and is not used in calculating grade point averages.

RD (Report Delayed) may be used when a delay in the reporting of a grade is due to circumstances beyond the control of the student. The symbol will be replaced by a more appropriate grading symbol as soon as possible. *ArRD* is not included in calculations of grade point average.

IN (Incomplete). An *Incomplete* grade is in appropriate for failing students. It is an interim grade designed for students who are passing but who through extenuating circumstances have not been able to complete all or part of the work of the last four weeks of the course. *Atmcomplete* grade may be removed by completing the outstanding work within one calendar year following the end of the quarter in which it was assigned unless the time has been extended by the school graduate studies committee for contingencies such as military service or health problems of an incapacitating nature verified by a physician's statement. Any petition for extension of time to remove an incomplete must be filed within one calendar year immediately following the end of the quarter in which it was assigned. When the outstanding work has been completed during the time period allowed, the final grade will be reported to the Records Office. The time limitation prevails whether or not the student maintains continuous attendance. An Incomplete that is not removed during the time period allowed will remain on the student's permanent academic record as an I and will be charged as an F in grade point average computations.

U (Unauthorized incomplete) indicates that an enrolled student did not withdraw from the course but 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. For purposes of grade point average this symbol is equivalent to an F.

Foreign Language Reading Examination Fee

Specific academic department and division policies require that graduate students pass the foreign language reading examination. Graduate students who are not registered for courses carrying academic credit during the quarter in which they take the Foreign Language Reading Examination (FL g01) are charged a nonrefundable \$10 fee for taking the examination. Payment of State University, student services, facilities, and associated student fees, or any tuition charges, is not required.

International Programs

Graduate students may be eligible for study abroad under The California State University International Programs. Information about cooperating universities abroad, eligibility requirements, and application procedures appears under *International Programs* in the opening chapter of this catalog.

Scholarships

Scholarships are available for qualified graduate students during the academic year. Most scholarships are awarded to students already in attendance at Cal State L.A., on the basis of academic achievement, campus or community participation, and/or financial need. Some are unique to specific degree programs and are awarded directly by the academic departments/divisions concerned. Students should consult both their academic department or division and the Center for Student Financial Services regarding scholarships. In addition, the Associated Students sponsor graduate research scholarships for which application forms are available in University-Student Union 422. A complete list of currently available scholarships appears in the *Undergraduate Study* chapter of this catalog.

Leaves of Absence

Students may petition for a leave of absence for such reasons as *professional or academic opportunities*, like travel or study abroad, employment related to educational goals and major fields of study, or participation in field study or research projects; *medical reasons*, including pregnancy, major surgery, or other health-related circumstances; and *financial reasons*, such as the necessity to work for a specified period in order to resume study with adequate resources. Petition forms are available at Administration 146.

Evaluation of petitions for leaves of absence takes into account the student's stated plans and the extent to which a leave would contribute to educational objectives. Students are expected to plan

their time of return and their activities during the leave. They must also state why it is critical to remain in continuous residence. In the case of medical or financial leaves, they must state how they plan to remain current with or advance in their academic field.

Graduate students are granted a maximum of 4 quarters, subject to renewal. Continuing students' allowed absence of 2 quarters is included in these maximums.

Petitions must be filed at Administration 146 after action by the department/division chair and school graduate dean no later than 3 weeks before the end of the quarter preceding the proposed leave. Approval entitles students to continuing status for registration purposes provided they return no later than the quarter specified in their petitions. Continuing students returning from leaves are entitled to priority registration privileges and are not required to file an application for readmission.

Classified postbaccalaureate and graduate students retain classified standing. Unclassified postbaccalaureate and conditionally classified graduate students who have approved programs on file in their school graduate studies office are subject to the conditions of those programs. All others are subject to the requirements in effect when they return.

Doctor of Philosophy Degree in Special Education

A doctoral program in Special Education, offered jointly by the University of California, Los Angeles and California State University, Los Angeles, combines the unique resources of the two institutions. The program provides preparation for leadership positions in higher education and the public schools, as well as preparation for a career in scholarly research,

Refer to the graduate *School of Education* chapter for complete information about the doctoral program.

Credential Programs

University programs have been approved for the following credentials and areas of specialization. Complete information appears in the undergraduate and graduate *School of Education* chapters.

Teaching Credentials: Multiple Subject, Multiple Subject/Bilingual Emphasis, Single Subject (preliminary, professional clear internship), Designated Subjects.

Specialist Credentials: Adapted Physical Education, Language Development, Reading, Special Education.

Services Credentials: Preliminary Administrative, Professional Administrative, Administrative Internship, Pupil Personnel, Clinical-Rehabilitative Services, Library Media Teacher, Health Services-School Nurse.

Postbaccalaureate Certificate Programs

Certificate programs are designed to augment university curricula by providing specialized instruction and training within a field. These programs usually require significantly fewer units than a degree major. A graduate level certificate program must contain a minimum of 16 units. Normally, courses in certificate programs will be upper division or graduate level, except for prerequisites. Students may transfer from another institution no more than one quarter of the total units required for a certificate (75% of the course work must be completed at Cal State L.A.). A maximum of one quarter (25%) of the total units required for a certificate may be devoted to internships or independent study, or a combination of both. The minimum grade point average required for completion of a postbaccalaureate certificate program is B (3.0). These grade point average requirements do not pertain to noncredit certificate programs. A *Certificate of Completion* is awarded upon successful completion of the program requirements. Some certificates are offered within degree majors and can be applied toward a baccalaureate or a master's degree; others are offered through the Office of Continuing Education with the certificate being the main goal.

Cal State L.A. offers credit certificate programs at both undergraduate and postbaccalaureate levels. Listed below are postbaccalaureate certificate programs. Individual program and course requirements appear in academic department and division listings in the chapters that follow.

Accounting

Offered by the Department of Accounting, (213) 343-2830, the program is designed to provide an organized series of courses in accounting for students in other majors who wish to qualify to take a professional accounting examination, to meet civil service educational requirements for employment as a professional accountant or auditor, or to acquire the skills needed for employment as a professional accountant in private industry.

Advanced Information Systems

Offered by the Department of Information Systems, (213) 3432910, the program is designed to give individuals who are pursuing or have earned a degree in business administration (or have equivalent experience) an introduction to the techniques of information systems design, planning, and management. Applicable toward degrees in business administration.

Advanced Study In Central Office Administration

Offered by the Division of Administration and Counseling in the School of Education, (213) 343-4300, the program is designed to certify competence in central office administration. Applicable toward Administrative Services credentials and master's degree program in educational administration.

Applied Behavior Analysis In Educational Settings

Offered by the Division of Administration and Counseling in the School of Education (213) 343-4250, the program provides practitioners an opportunity to develop skills for implementing and evaluating applied behavior analysis programs in behavior management, motivation, consultation, and teaching.

Biotechnology

Offered by the Department of Biology and Microbiology, (213) 343-2050, the program is designed to give graduate biology students the practical knowledge and laboratory skills needed for the application of modern molecular genetic approaches to research problems and for work in the biotechnology industry or in research laboratories that utilize the techniques of gene manipulation. Applicable toward the master's degree in biology.

Career counseling

Offered by the Division of Administration and Counseling, (213) 343-4250, this program is designed for postbaccalaureate students who wish to acquire competencies in the field of career counseling. Applicable toward the Master of Science degree in Counseling.

Computer Applications in Schools

Offered by the Division of Educational Foundations and Interdivisional Studies in the School of Education, (213) 343-4330, the program is designed to prepare teachers to use computers in their classrooms and to take leadership roles in their schools: teaching computer programming/problem solving; selecting and modifying instructional software; evaluating and selecting hardware; and using computers to manage classrooms and schools. Open to graduate students with K-12 teaching experience only. Applicable toward master's degree programs in education.

Developmental Counseling

Offered by the Division of Administration and Counseling in the School of Education, (213) 343-4250, the program provides practitioners experience in developing and implementing programs of psychological education.

Early Childhood Special Education: Infancy Emphasis

Offered by the Division of Special Education, (213) 343-4400, this program prepares students to provide educational intervention to handicapped and high-risk (including medically fragile) infants and preschoolers and their families. Applicable toward Master of Arts degree in Special Education.

Early Childhood Special Education: Preschool Emphasis

Offered by the Division of Special Education, (213) 343-4400, this program is designed for a wide range of individuals who wish to acquire the highly specialized skills necessary to provide educational services to handicapped and high risk infants and preschoolers and their families. Applicable toward Master of Arts degree in Special Education.

English as a Second Language (ESL)

Offered by the Division of Educational Foundations and Interdivisional Studies in the School of Education, (213) 343-4330, the program prepares and qualifies teachers to work in classrooms or other educational settings where students are learning to speak, read, and write English as a second language.

Professional Employee Counseling

Offered by the Division of Administration and Counseling in the School of Education, (213) 343-4250, the program is designed to supplement the training of professional counselors by providing specialized information and skills specific to counseling and related programs offered by employers and unions for employees in business, industry, and government. A master's or higher degree in counseling or a related discipline, or progress toward such a degree, is required for admission to the program.

Rehabilitative/School Audiology

Offered by the Department of Communication Disorders, (213) 343-4690, the program prepares rehabilitative/school audiologists who do not seek the California credential. For graduate students only, this program is comprised of course work that parallels the Clinical-Rehabilitative Services credential in Audiology.

Storytelling

Offered by the Division of Curriculum and Instruction in the School of Education, (213) 343-4350, the program is designed for persons with an interest in the techniques, theories, and literature associated with the ancient and modern art of storytelling. Especially valuable for teacher use in language arts instruction and for improving communications skills; can also be used effectively by librarians and recreation leaders. Open to all postbaccalaureate students who meet the university requirements for admission to postbaccalaureate standing. Applicable toward some master's degree programs in education and other fields.

Teaching Critical Thinking

Offered by the Department of Philosophy (213) 343-4180, the program is designed for those with an interest in the theory and techniques of teaching critical thinking at college or secondary school levels and is available to students with any major. Open to holders of the baccalaureate who meet the university requirements for admission to postbaccalaureate standing.

UNIVERSITY PROGRAMS

UNIVERSITY COURSES (UNIV)

Graduate Course

599 Thesis or Project for *Interdisciplinary Studies* Master's (1-8)

Prerequisites: Advancement to candidacy, formal approval of topic by advisory committee.

Independent study resulting in a thesis or project. Oral examination on thesis required. Open to *Interdisciplinary/Studies* Master's students only.

SCHOOL OF ARTS AND LETTERS**ART****School of Arts and Letters****DEPARTMENT OFFICE**

Fine Arts 326

Phone: (213) 343-4010

FAX: (213) 343-4045

The Master of Arts degree program in Art is designed to produce graduates with advanced professional competence in a specialized area of the visual arts. The degree is intended to prepare teachers for the public schools, community colleges, and four-year institutions; and to train art historians, professional artists, and commercial artists. The program requires that students select and strengthen an area of specialization. The overall objective is to elevate students' ability to conceptualize on a significant level.

The Master of Fine Arts degree program in Art is designed to provide, on a highly selective basis, specialized training and education for artists and designers in design, computer graphics, painting, photography, printmaking, sculpture, ceramics, textiles, and metalsmithing. Career-related training is provided through internships, required field work, and the integration of instruction with professional work experience which is enhanced by the campus' proximity to media and industries, as well as prominent local art museums. The two-year MFA program allows students a chance to work with faculty professionals who help them focus on theoretical, critical, and practical aspects of their area of specialization.

Master of Arts *Degree***Admission to the Program**

In addition to university requirements for admission to graduate study, applicants must have a baccalaureate in art from an accredited college or university or complete Cal State L.A.'s lower and upper division art major core program or its equivalent.

Art History students must successfully complete 12 units of first year French or German prior to achieving classified standing.

Classified Graduate Standing

Students must apply to the desired area of specialization—Art Education, Art History, Art Therapy, Design, or Studio Arts.

Approval by a graduate screening committee established by the faculty of the student's option area and completion of any qualifying courses are required for classified graduate standing.

Requirements for the Degree (45 units)

A total of 45 units is required, with 33 units in art and at least 23 in 500-level courses. Consultation with an adviser is essential for program submission and approval.

Required Course (4 units)

ART	531	Research Methodology in Art	(4)
-----	-----	-----------------------------	-----

Area of Specialization (6-8 units)

Select 6-8 units from *one* of following areas:

*** Art Education**

** ART	500	Seminar: Art Education	(3)
ART	505	Research in Art Education	(3)

*** Art History**

** ART	501	Seminar: Art History	(4)
--------	-----	----------------------	-----

*** Art Therapy**

** ART	520	Seminar: Art Therapy	(4)
--------	-----	----------------------	-----

* **Design**

** ART 503	Graduate Problems in Design	(3)
** ART 512	Graduate Photography	(3)

* **Studio Arts**

** ART 504	Graduate Problems in Painting, Sculpture, and Graphic Arts	(3)
** ART 512	Graduate Photography	(3)
** ART 544	Graduate Painting and Drawing	(3)
** ART 574	Graduate Printmaking	(3)
** ART 584	Graduate Sculpture	(3)

** *Repeatable course*

Electives (7-12 units)

Select 500-level art courses from any area.

Additional Electives (10- 17 units)

Select 400- or 500-level art courses from any area.

Electives Outside Art (0-12 units)

Select 400- or 500-level courses from any department.

Comprehensive Examination or Thesis or Project (0, 6 units)

+ART 596	Comprehensive Examination	(0) or
ART 599	Thesis, Project, or Combination Written Report and Project	(6)

+*Open to Art History students only*

Only Art History students may take the comprehensive examination (ART 596). These students should expect to take the examination no earlier than the quarter they complete all course work on their program and must comply with school and departmental requirements. In addition to the examination, they must complete an additional six units in art.

Art History students who do not select the comprehensive examination and students in all other specializations in the major must enroll in ART 599 and successfully complete either a thesis or a project.

Master of Fine Arts Degree**Admission to the Program**

In addition to university requirements for admission to graduate study, applicants must have a baccalaureate in art from an accredited college or university or preparation equivalent to the core courses in Cal State L.A.'s baccalaureate in art. Candidates must also have completed 24 quarter units of upper division course work in the area of specialization proposed for the MFA degree and must have a B (3.0) or higher grade point average in all upper division art courses. The Department of Art has MFA application periods, during which each applicant's performance is evaluated through personal interview and portfolio presentation. Selection of MFA candidates is based on faculty assessment of their demonstrated talents and on their personal attitudes, commitment, and potential for career success.

Requirements for the Degree (90 units)

The MFA degree in Art requires a minimum of 90 units of approved course work when starting with a baccalaureate, or 45 units when starting after completion of a Master of Arts degree in Art.

Ninety Unit Program

Required General MFA Subjects (13 units)

ART 502M	MFA Seminar: Visual Arts	(3)
**ART 504M	MFA Seminar: Studio Art	(3)
**ART 508M	MFA Seminar: Design	(3)
ART 531	Research Methodology in Art	(4)

** May be repeated to total of 6 units

Required Art History (12 units)

Select from following.

ART 406, 411,416, 421,431,436, 441,446, 451, 461,466, 471,476, 477, 481,486, 491,501

Required Area of Specialization (45 units)

The following repeatable courses must be taken for a total of 27 units.

ART 595M, 598M, 599M (3 units each)

Select 18 units from one of following areas:

* **Design**

ART 503, 508M, 512

* **Studio Arts**

ART 504, 504M, 512, 544, 574, 584

Electives (12 units)

Select 400-level courses from the Art Education, Art Therapy, Design, and Studio Arts specializations with adviser assistance.

Electives Outside Art (8 units)

Select 8 units of related upper division or graduate level course work with adviser approval.

*It There is a special fee associated with registering for this class. I
Details appear in the Schedule of Classes.*

400-level Courses

All 400-level courses may be applied toward masters degree requirements except the following, subject to limits established by the department and approval of the graduate adviser.' ART 401, 426, 499

Graduate Courses

Classified graduate standing is required for admission to all 500- J level courses.

500 Seminar: Art Education (3)

Prerequisites: Teaching experience, 20 units in art. Opportunities for teachers to evaluate their experiences in light of new techniques and concepts; problems resolved through group interaction; background in subject matter increased through research and experimentation. May be repeated to maximum of 6 units.

501 Seminar: Art History (4)

Prerequisite: Eight units of upper division art history. Research into pertinent topic in art history. Presentation and discussion of research papers. May be repeated to maximum of 8 units.

502 Graduate Problems in Ceramics, Metals, and Textiles (3)

Prerequisite: Eight units of crafts, including 6 in specific area. Individual investigation in specific area of crafts; advanced work in laboratory and research under specialist in field. May be repeated to maximum of 9 units.

502M MFA Seminar: Visual Arts (3)

Prerequisite: Classified standing in MFA program. Critical approach to the visual arts through examination of the roles and works of artists in society. May be repeated to maximum of 9 units.

503 Graduate Problems in Design (3)

Prerequisite: Six units of design. Independent and interdependent library and laboratory research into problems of contemporary design permitting students to pursue special interests in advanced areas. May be repeated to maximum of 9 units.

504 Graduate Problems in Painting, Sculpture, and Graphic Arts (3)

Prerequisite: Eight units in painting, sculpture, and graphic arts option. Independent laboratory development in given approach to painting, sculpture, and graphic arts. Development of individuality and depth in work encouraged; periodic group analysis. May be repeated to maximum of 9 units.

504M MFA Seminar: Studio Art (3)

Prerequisite: Classified standing in MFA program. Philosophical, conceptual, and practical aspects of professional studio arts. May be repeated to maximum of 9 units.

505 Research in Art Education (3)

Prerequisite: ART 415, instructor consent. Investigation of both conceptual and procedural aspects of historical, descriptive, and experimental research relevant to practice of art education.

508M MFA Seminar: Design (3)

Prerequisite: Classified standing in MFA program. Aesthetic, functional, and technical aspects of professional design. May be repeated to maximum of 9 units.

510 Art History in Art Education (3)

Prerequisites: Teaching experience, 20 units of art. Theories and methods for investigation of history of art forms.

+ 512 Graduate Photography (3)

Prerequisite: Three upper division photography courses. Intensive study and production work in contemporary photography, current theories, concepts, and techniques. May be repeated to maximum of 12 units.

515 Art Criticism in Art Education (3)

Prerequisites: Teaching experience, 20 units of art including ART 401. Theories and methods for investigation of critical analysis of art forms.

517 Graduate Ceramics (3)

Prerequisite: ART 417. Individual studio work in ceramics stressing advanced competence in technique and concepts. Periodic group presentations and critical analysis. May be repeated to maximum of 18 units.

520 Seminar: Art Therapy (4)

Prerequisites: ART 445,465. Exploration of current practices and issues in art therapy. May be repeated to maximum of 8 units as instructor changes.

530 The Arts in Aesthetic Education (4)

Prerequisite: Nine units of art, instructor consent for nonmajors. Bases of aesthetic responses to visual, literary, performing arts.

531 Research Methodology in Art (4)

Research methodology and requirements related to thesis, project report, and exhibition statement in Department of Art. Required of all master's degree candidates.

540 Case Study and Presentation (4)

Prerequisites: ART 445, 465, PSY 436B. Analysis and application of principles and techniques for evaluating client condition and presenting reports for related mental health professionals.

544 Graduate Painting and Drawing (3)

Prerequisite: Six units of upper division painting and drawing. Studio work in various media, stressing professional competence in techniques and concepts of art. May be repeated to maximum of 9 units. Activity 6 hours.

550 Problems in Clinical Art Therapy (4)

Prerequisites: ART 445, 465; PSY 431,436B, 438. Current issues and concerns in clinical art therapy practice.

554L Special Topics in Art (1-4)

Prerequisite: Instructor consent (specific prerequisite subject to change, depending upon topic of emphasis or content requirements of the course). Selected topics reflecting current issues, problems, and interests in art. May be repeated for credit to maximum of 9 units as subject matter changes.

554P Special Topics in Art (1-4)

Prerequisite: Instructor consent (specific prerequisite subject to change, depending upon topic of emphasis or content requirements of the course). Selected topics reflecting current issues, problems, and interests in art. May be repeated for credit to maximum of 9 units as subject matter changes.

560 Family Art Therapy (4)

Prerequisites: ART 445, 465, PSY 426,431,438, 536. Emphasis on utilization of art therapy theory and techniques especially suited for family groups.

570 Experimental Art Therapy (4)

Prerequisites: ART 445, 465, 470. Research in art therapy leading to new approaches based on principles of concern for creativity and knowledge.

+ 574 Graduate Printmaking (3)

Prerequisite: Six units of ART 424 or 474. Work in selection of printmaking media stressing professional competence in techniques and art concepts. May be repeated to maximum of 9 units. Activity 6 hours.

584 Graduate Sculpture (3)

Prerequisite: ART 484. Individual studio work in sculpture building upon undergraduate sculpture experiences. Periodic group presentations and critical analysis. May be repeated to maximum of 18 units. Activity 6 hours.

595 Directed Field Work in Art/Art Therapy (1-4)

Prerequisites: ART 470 plus undergraduate Art major. Supervised experience in art therapy situations. May be repeated to maximum of 8 units.

595M MFA Professional Field Work in Art (1-9)

Prerequisite: Classified standing in MFA program. Supervised field work experience in professional art industry: museums, publications, design, and business. May be repeated to maximum of 9 units.

598 Graduate Directed Study (1-3)

Prerequisite: Instructor consent to act as sponsor. Independent study of advanced topics in the field; regular conferences with sponsor. May be repeated to maximum of 9 units.

598M MFA Directed Study (1-12)

Prerequisite: Instructor consent to act as sponsor. Independent directed study of advanced topics in professional art fields. Regular conferences with sponsor. May be repeated to maximum of 12 units.

599 Thesis, Project, or Combination Written Report and Project (1-6)

Prerequisites: Advancement to candidacy, instructor consent to act as sponsor, departmental approval of topic prior to registration. Independent research resulting in a thesis, project, or combination written report and project. Must be repeated to maximum of 6 units. Grade@R/NC.

599M MFA Project (1-12)

Prerequisite: Advancement to candidacy, instructor consent to act as sponsor, departmental approval of project prior to registration. Independent research resulting in MFA project accompanied by a written abstract. May be repeated to maximum of 12 units. Grade@R/NC.

599T Art Therapy Thesis (1-6)

Prerequisites: Advancement to candidacy, instructor consent to act as sponsor, departmental approval of topic prior to registration. Independent research resulting in thesis. May be repeated to maximum of 12 units. GradedCR/NC.

COMMUNICATION STUDIES_**School of Arts and Letters****DEPARTMENT OFFICE**

Music 104

Phone: (213) 343-4200

Master of Arts Degree in Speech Communication

Prerequisite to admission are 30 units of undergraduate work in speech communication and related fields, as approved by the department, of which a minimum of 20 units must be in speech communication. A formal conference with an assigned adviser is required for formulation of the master's degree program.

Admission to the Program

In addition to university requirements for admission to graduate study, applicants must have a 2.75 grade point average in the last 90 quarter units.

Graduate students must have appropriate undergraduate preparation, as described above, for the master's degree program. Students are assigned a departmental adviser to assist them in designing a program suited to their individual interests and goals.

Requirements for the Degree (45 units)

A total of 45 units is required, with at least 24 in 500-level courses.

Required Courses (24 units)

Select a minimum of 24 units in 500-level speech communication seminars, with adviser approval.

Electives (17-21 units)

Select 400- or 500-level SPCH courses with adviser approval; a maximum of 8 of these units may be in related fields with approval of adviser and department chair.

Comprehensive Examination or Thesis (0, 4 units)

SPCH 596	Comprehensive Examination	(0) or
SPCH 599	Thesis	(4)

Students should expect to take the comprehensive examination (SPCH 596) the quarter they complete all course work on their program and must comply with school and departmental requirements. Students will be allowed a maximum of two attempts to complete the comprehensive examinations successfully. Failure to pass the comprehensive examinations, or any portion thereof, will result in disqualification from the program.

A thesis may be substituted for the comprehensive examination, with prior approval of adviser and department chair. Students authorized to submit a thesis must enroll in SPCH 599 for a minimum of 4 units.

Courses in Speech Communication (SPCH)**400-Level Courses**

All 400-level courses may be applied toward master's degree I requirements except the following, subject to limits established by department and approval of a graduate adviser.' SPCH 431,499

Graduate Courses

Classified graduate standing is required for admission.

530 Seminar: Organizational Communication (4)

Prerequisite: SPCH 430, 350, 450, 463, or 478. Contemporary theoretical and methodological issues or constructs in organizational or interpersonal communication. May be repeated to maximum of 8 units with adviser approval.

540 Seminar: Interpersonal Communication (4)

Prerequisite: SPCH 350, 450, 478, or 487. Contemporary theoretical and methodological issues and constructs in interpersonal communication. May be repeated to maximum of 8 units with adviser approval.

550 Seminar: Communication Theory (4)

Prerequisite: SPCH 450 or 487. Examination of theoretical perspectives, principles of theory building, and new developments in communication research. May be repeated to maximum of 8 units with adviser approval.

560 Seminar: Language and Communication Behavior (4)

Prerequisite: SPCH 450, 461, 463, or 494. Contemporary theories, research perspectives, and subject areas in language and communication behavior. May be repeated to maximum of 8 units with adviser approval.

562 Seminar: Theories of Mass Media (4)

Prerequisite: SPCH 450 or 470 or 482 or MSCM 460. Research and theory in mass media since television; analysis of media situations; messages and ideological effects. May be repeated once with adviser approval.

567 Seminar: Theories of Oral Interpretation (4)

Prerequisite: SPCH 367. Analysis of main theories of art of interpretation, with special emphasis on their bearing on contemporary theory and practice. May be repeated once for credit with adviser approval.

572 Seminar: International Public Discourse (4)

Prerequisites: SPCH 472, 485. Intensive study of major international orators, their ideas, style, rhetorical strategies and roles in social and aesthetic movements and in world history. May be repeated once for credit with adviser approval.

573 Seminar: American Public Address (4)

Prerequisites: SPCH 473A or 473B; 485. Examination and analysis of speeches and debates about selected major issues in American affairs. May be repeated once for credit with adviser approval.

576 Seminar: Argumentation, Discussion, and Debate (4)

Prerequisite: One upper division course in rhetorical theory. Analysis of significant literature, major trends, and theories of argumentation, discussion, and debate; intensive study of relationship of those areas to each other. May be repeated once for credit with adviser approval.

580 Seminar: Rhetorical Theory (4)

Prerequisite: At least one upper division course in rhetoric. Selected studies in philosophy of speech rhetoric and influence of rhetoric on historic and contemporary movements. May be repeated once for credit with adviser approval.

589 Seminar: Intercultural Communication (4)

Prerequisite: SPCH 489. Contemporary theories, research perspectives and significant cultural influences relating to communication between cultures. May be repeated once for credit with adviser approval.

590 Seminar: History of Speech Communication in America (4)

Prerequisite: Instructor consent. Historical movements, contemporary theories, and development of speech communication as a discipline of study; examination of significant literature, scholars, and leaders in the field. May be repeated to maximum of 8 units with adviser approval.

595 Graduate Performance (1-4)

Prerequisite: Consent of graduate adviser. Demonstration of graduate level proficiency in a major performance situation: research or analytical written project directly related to performance. May be repeated to maximum of 4 units.

598 Graduate Directed Study (1-4)

Prerequisite: instructor consent to act as sponsor. Independent study of advanced topics in the field; regular conferences with sponsor. May be repeated for credit.

599 Thesis (1-4)

Prerequisites: Advancement to candidacy, instructor consent to act as sponsor, departmental approval of topic prior to registration. Independent research resulting in a thesis. May be repeated to maximum of 6 units. GradedCR/NC.

ENGLISH_**School of Arts and Letters****DEPARTMENT OFFICE**

Engineering and Technology A605

Phone: (213) 343-4140

The Master of Arts degree in English provides opportunities for advanced study in literature, criticism, language, creative writing, and composition and rhetoric. The program is offered with three options. The General Option is designed for students planning to teach in a community college or to enter a doctoral program. The Creative Writing Option is designed for students seeking to develop their skills as creative writers, to teach creative writing, or to pursue careers in the media or other areas where a combination of creative ability, communication skills, and critical faculty may be particularly valuable. The Composition, Rhetoric, and Language Option is designed for students planning to teach writing at the school, community college, or university level, to work as professional writing consultants, or to enter doctoral programs.

Master of Arts Degree

Admission to the Program

Applicants must have a baccalaureate in English and a 2.75 grade point average in the last 90 quarter units. Students whose major was not English should consult the principal graduate adviser about prerequisites or their equivalents. They must complete a 36-unit program of upper division prerequisites (which may include courses previously taken) prior to beginning their graduate work.

Requirements for the Degree (45 units)

A minimum of 45 units is required, with at least 23 in 500-level courses. Students must have completed course work, at either the undergraduate or graduate level, in major periods of British and American literature. Consult the Department of English for specific requirements and period descriptions.

Applicants for the Creative Writing Option must submit a portfolio of writing for review by a department admissions committee.

Students preparing for the M.A. degree in English must complete ENGL 500 prior to enrolling in ENGL 510, 530, 541, 560, 570, 580, 590, and 598. It may be taken concurrently with 510 and 541.

Required Core (12 units)

ENGL 500	Methodology of Graduate Research in English	(4)
ENGL 510	Seminar: Historical Criticism	(4)
ENGL 541	Seminar: Contemporary Critical Approaches	(4)

*** Option in Composition, Rhetoric, and Language**

Required Composition-Rhetoric Core (12 units):

ENGL 504 Seminar: Theories of Composition and Rhetoric (4) ENGL 505 Seminar: Language and Literacy (4)

ENGL 550	Seminar: Topics in Composition, Rhetoric, and Language	(4)
----------	--	-----

Electives (16 units)

8 units of electives must be fulfilled by graduate seminars in literature. The remaining units of electives may be fulfilled by courses in composition-rhetoric, linguistics, literature, or creative writing. A maximum of 4 units of ENGL 598 may also be included.

Thesis (5 units)

The thesis entails writing a master's degree essay about a subject in the field of language, composition and rhetoric. These may be of two kinds, a critical essay or an empirical study. A critical essay might, for example, critique or reanalyze a particular body of research or the work of a single researcher, or present a rhetorical analysis of text. A theory-based empirical approach might test new hypotheses or replicate earlier studies with a different population.

*** Option in Creative Writing**

With advisor approval select 12 additional units from creative writing courses, at least 4 units being from ENGL 507. The remaining 8 units may derive from some combination of the following courses: ENGL 406, 407, 408, 507. ENGL 507 may be taken concurrently with ENGL 500.

Electives (16 units)

Select 400- or 500-level courses with advisor approval. Students are to select courses in literature with particular relevance to the focus of their creative work. A maximum of 4 units of ENGL 598 may also be included.

Thesis (5 units)

Students selecting the Creative Writing Option must write a creative thesis typically consisting of three or so short stories of 3,000-5,000 words or a novella or a substantial portion of a novel, or two one-act plays, or a full-length play, or between 12 and 20 short poems. The thesis is to include a brief preface, stating the literary, ethical, or social concerns that have informed the student's work.

To begin work on the thesis the student must have been advanced to candidacy and must have formal approval of the thesis proposal by a thesis director and by the Graduate Studies Committee. Student must complete 5 units of ENGL 599. (One unit of ENGL 599 is to be devoted to preparation of the thesis proposal. A student may not enroll in the remaining 4 units of ENGL 599 until the proposal has been approved.) The student will be required to defend the thesis before a committee of three, one member being the student's thesis director and one member being a member of the faculty from outside the creative writing area. The third member may be either from the creative writing area or from a different area.

* **Option in Literature**

With adviser approval, students select 12 additional units from 500-level ENGL courses. At least one course must be in the area of specialization selected for the comprehensive examination or thesis. A detailed listing of areas of specialization is available in the department office.

Electives (16-21 units)

Select from 400- or 500-level ENGL courses with adviser approval;

8 units may be in a related field. A maximum of 5 units in ENGL 598 is applicable toward the degree.

Comprehensive Examination or Thesis (0, 5 units)

ENGL 596	Comprehensive Examination	(0) or
ENGL 599	Thesis	(5)

Students must successfully complete either the comprehensive examination or a master's degree thesis as the culmination of their program.

Students are expected to have selected an area of specialization (see list available in department office) as reflected in course work in preparation for either the examination or the thesis.

Comprehensive Examination (0 units)

One section of the comprehensive examination will focus specifically on the student's chosen area of specialization and the other portion of the examination will assess the student's general critical skills and ability to elucidate and interpret a designated text.

The comprehensive examination (ENGL 596) may be taken no earlier than the quarter in which all course work for the degree is completed. Students must notify the department one quarter before they intend to take the examination. Advancement to candidacy and approval of the department's graduate studies committee are required prior to taking the examination.

Thesis (5 units)

The thesis option entails writing a masters degree essay about a subject in the student's area of specialization. Students who choose to do a thesis are subject to the following requirements: advancement to candidacy, formal approval of the thesis proposal by a thesis director and by the graduate studies committee, enrollment in 5 units of ENGL 599, and an oral defense of the thesis.

(One unit of ENGL 599 is to be devoted to preparation of the thesis proposal. A student may not enroll in the remaining 4 units of ENGL 599 until the proposal has been approved.)

Courses in *American Studies (AMER)* 400-level Courses

All 400-level courses may be applied toward master's degree requirements except the following, subject to limits established by the department and approval of the graduate adviser:
AMER 499

Graduate Courses

Classified graduate standing is required for admission.

501 Seminar: Selected Problems in American Civilization (4)

Prerequisite: One course from AMER 401--404 sequence. Selected problems of both historical and contemporary significance whose ramifications in American life merit interdisciplinary considerations. May be repeated to maximum of 12 units.

598 Graduate Directed Study (1-4)

Prerequisites: Instructor consent to act as sponsor, departmental approval. Independent study of advanced topics; regular conferences with sponsor. May be repeated for credit; maximum of 6 units may be applied to master's program.

599 Thesis (1-4)

Prerequisite: Advancement to candidacy, minimum 3.5 grade point average in courses on the master's degree program at the time of advancement to candidacy, departmental approval of thesis proposal. Independent research resulting in a thesis; oral examination about completed thesis may be required. Must be repeated to maximum of 4 units. Grade CR/NC.

Courses in *English (ENGL)*

400-level Courses

All 400-level ENGL courses may be applied toward masters degree requirements, subject to limits established by the department and approval of the graduate adviser.
Graduate Courses

Classified graduate standing is required for admission.

500 Methodology of Graduate Research in English (4)

Prerequisite or corequisite: ENGL 441. Introduction to bibliography, research techniques, professional essay style, and basic critical approaches.

504 Seminar: Theories of Composition and Rhetoric (4)

Prerequisite or corequisite: ENGL 401. Theory and research in composition and rhetoric.

505 Seminar: Language and Literacy (4)

Prerequisite: ENGL 401. Theories of language structure as they apply to contemporary usage.

506 Seminar: The Writing Process (4)

Writing and editing instructional, administrative, and professional materials. Emphasis on developing English skills needed to teach writing at secondary school or community college level or to perform as staff writer or editor.

507 Seminar: Creative Writing (4)

Prerequisites: ENGL 407 or 408; instructor consent. Creative writing workshop with advanced instruction in composing in specified genre; in-class critiques by students and instructor. May be repeated for credit.

510 Seminar: Historical Criticism (4)

Prerequisite or corequisite: ENGL 500. Variable topic seminar focusing on historical criticism of selected works from periods in British or American literature. May be repeated as subject matter changes.

530 Seminar: Children's Literature and Folk Literature (4)

Prerequisite: ENGL 500. Selected topics in children's literature and folk literature, as announced in *Schedule of Classes*. May be repeated as subject matter changes.

541 Seminar: Contemporary Critical Approaches (4)

Prerequisite or corequisite: ENGL 500. Variable topic seminar focusing on selected contemporary critical approaches to study of English language and literature. May be repeated as subject matter changes.

550 Seminar: Topics in Composition, Rhetoric, and Language (4)

Prerequisite: ENGL 504 or 505. Variable topics seminar focusing on selected issues in composition, rhetoric, and language, as announced in *Schedule of Classes*. May be repeated as subject matter changes.

560 Seminar: British Literature (4)

Prerequisite: ENGL 500. Study of one or more major writers or of selected works in British literature, as announced in *Schedule of Classes*. May be repeated as subject matter changes.

570 Seminar: American Literature (4)

Prerequisite: ENGL 500. Study of one or more major writers or of selected significant works in American literature, as announced in *Schedule of Classes*. May be repeated as subject matter changes.

580 Seminar: World Literature (4)

Prerequisite: ENGL 500. Study of one or more major writers or of selected significant works in world literature, as announced in *Schedule of Classes*. May be repeated as subject matter changes.

590 Seminar: Special Studies in Language in Literature (4)

Prerequisite: ENGL 500. Study of selected genres, intellectual movements, or literary ideas in representative works, as announced in *Schedule of Classes*. May be repeated as subject matter changes.

598 Graduate Directed Study (1-4)

Prerequisites: ENGL 500 (may be taken concurrently), instructor consent to act as sponsor, approval of principal graduate adviser. Independent study of advanced topics in field; regular conferences with sponsor. May be repeated to maximum of 5 units with maximum of 4 units allowed in any quarter. Graded CR/NC.

599 Thesis (1-5)

Prerequisites: Advancement to candidacy, formal approval by department. Independent study resulting in a critical essay. Oral examination about master's essay required. Must be repeated to total of 5 units. Graded CR/NC.

FOREIGN LANGUAGES AND LITERATURES_**School of Arts and Letters****DEPARTMENT OFFICE**

King Hall D1054

Phone: (213) 343-4230

The Department of Foreign Languages and Literatures offers programs leading to Master of Arts degrees in French and Spanish.

Proficiency Examinations

Foreign language proficiency examinations are administered by the Department of Foreign Languages and Literatures. Students in programs requiring proficiency in a foreign language must enroll in FL 9010r 902, as applicable, in the quarter in which any such examination is to be taken.

Master of Arts Degree in French

The Master of Arts degree in French is designed to enable students to attain a high level of proficiency in the French language and its literature and to employ it skillfully in such pursuits as teaching, writing, translating and communications or as preparation for undertaking doctoral study.

Admission to the Program

In addition to applying to the university, applicants must file a departmental application for admission along with official transcripts of all previous college work. These documents must reach the department early in the quarter preceding that in which course work for the degree is to begin. Applicants who hold a baccalaureate from Cal State L.A. and have not attended another college since graduation must also file a departmental application early in the quarter preceding graduate enrollment. No transcripts are required.

In addition to university requirements for admission to graduate study, applicants must have a Bachelor of Arts degree in French, or equivalent, and a minimum B (3.0) grade point average in upper division French courses. Applicants must also satisfy the department Graduate Admissions Committee standards for oral proficiency in French. In addition, beginning Latin is recommended prior to enrollment in FREN 501.

Requirements for the Degree (48 units)

A total of 48 units is required, with at least 24 in 500-level courses.

Required Courses (28 units)

Language and Linguistics (8 units)

FREN 501	Development of French Language	(4)
FREN 509	Analytical and Interpretive Writing in French	(4)

Literature (16 units)

FREN 450	Selected Topics in French Literary Prose	(4) or
FREN 451	Selected Topics in French Dramatic Literature	(4)
FREN 535	Seminar: French Literary Prose since World War II	(4)
FREN 575	Seminar: French Literature	(4, 4)

Culture (4 units)

FREN 510	Seminar: French Culture	(4)
----------	-------------------------	-----

Electives (20 units)

Select French courses below that have not been taken previously.

FREN *401, *403, 405, *412, 450, 451, 461, 471, 575, 598

* *Must be taken if not completed in undergraduate status*

Comprehensive Examination (0 units)

Students should expect to take the comprehensive examination (FREN 596) the quarter they complete all course work on their program and must comply with school and departmental requirements.

Master of Arts Degree in Spanish

The Master of Arts degree in Spanish is designed to enable students to attain a high level of proficiency in the Spanish language and its literature, and to employ it skillfully in such pursuits as teaching, writing, translating, and communications, or as preparation for doctoral study.

Admission to the Program

In addition to applying to the university, applicants must file a departmental application for admission along with official transcripts of all previous college work. These documents must reach the department early in the quarter preceding that in which course work for the degree is to begin. Applicants who hold a baccalaureate from Cal State L.A. and have not attended another college since graduation must also file a departmental application early in the quarter preceding graduate enrollment. No transcripts are required.

Upon admission to the program, students must designate either a literature or linguistics emphasis.

In addition to university requirements for admission to graduate study, applicants must have a Bachelor of Arts degree in Spanish or equivalent, including SPAN 401, a minimum 2.75 grade point average in the last 90 quarter units, and either a minimum score of 500 on the GRE subject exam in Spanish or a B (3.0) grade point average in upper division Spanish courses. Applicants

are required to demonstrate proficiency in oral and written Spanish in accordance with criteria established by the department.

Requirements for the Degree (48 units)

A total of 48 units is required, with at least 28 in 500-level courses.

Required Courses (28 units)

SPAN 501	Development of Spanish Language	(4)
SPAN 504	Studies in Medieval Literature	(4)
SPAN 510	Sociolinguistic Patterns in Spanish	(4)
SPAN 540	Seminar: Contemporary Spanish Poetry	(4)
SPAN 545	Seminar: Contemporary Spanish-American Poetry	(4)
SPAN 575	Seminar: Hispanic Literature	(4)
**SPAN 583	Seminar: Contemporary Hispanic Prose	(4)

**course must focus on Spanish-American topic

Electives (select 20 units from following)

SPAN 414, 417, 418, 419, 421,424, 426, 428, 429, 460, 475,483, 485, 499, 505, 506, 575, 583, 598

In extraordinary circumstances and with graduate adviser approval, students may select up to 8 units of electives from one or more related fields.

Comprehensive Examination (0 units)

The comprehensive examination in Spanish is structured to reflect the two emphases within the masters degree program: literature and linguistics. The format of the comprehensive examination follows:

Spanish Literature: Beginnings to 1800
 Spanish Literature: 1800-Present
 Spanish-American Literature: Beginnings to 1910
 Spanish-American Literature: 1910-Present
 Historical Linguistics
 Synchronic Linguistics

The comprehensive examination will reflect the emphasis chosen in the following manner:

- * *Literature Emphasis:* Each of the four literature examinations will be 90 minutes in duration; each of the two linguistics examinations will be 60 minutes in duration.
- * *Linguistics Emphasis:* Each of the four literature examinations will be 75 minutes in duration; each of the two linguistics examinations will be 90 minutes in duration.

The comprehensive examination is regularly scheduled for the Fridays of the sixth and seventh weeks of instruction in the fall and spring quarters. Students should expect to take the comprehensive examination (SPAN 596) as soon as practicable after completing all course work on their program, but no earlier than the quarter in which they complete all course work on their program, and must comply with school and departmental requirements.

Courses in French (FREN)

400-level Courses

All 400-level courses may be applied toward requirements for the masters degree, subject to limits established by the department and approval of the graduate adviser.

Graduate Courses

Classified graduate standing is required for admission.

501 Development of French Language (4)

Prerequisites: FREN 305, 401; beginning Latin strongly recommended. Scientific analysis of written and spoken French from its inception through its current use in French-speaking world.

509 Analytical and Interpretive Writing in French (4)

Prerequisite: FREN 450 or 451. Original analysis and interpretation of literary or nonliterary texts as well as independent research resulting in report; emphasis on scholarly writing skills.

510 Seminar: French Culture (4)

Prerequisite: FREN 310AB. In-Depth study of specific cultural developments including historical events and social, intellectual, and artistic movements in Francophone societies; includes lectures and student research projects.

515 Seminar: Voltaire and Rousseau (4)

Prerequisite: FREN 410. Selected studies in sources, character, and influence of two most prominent figures of French Enlightenment.

535 Seminar: French Literary Prose since World War II (4)

Prerequisites: FREN 411. Studies in outstanding French prose writing and literary movements since World War II.

540 Seminar: French Post-Symbolist Poetry (4)

Prerequisite: FREN 412. Recent French poetic movements such as *avantgarde*, cubism, surrealism; metaphysical and religious poets; traditional poets, revolutionaries, and poets of other French-speaking countries.

575 Seminar: French Literature (4)

Prerequisite: Undergraduate course(s) relevant to topic being studied. Intensive study of significant works of particular period, genre, or literary tendency from Middle Ages to present. May be repeated, as subject matter changes, to maximum of 12 units.

598 Graduate Directed Study (1-4)

Prerequisite: Instructor consent to act as sponsor. Independent study of advanced topics in field; regular conferences with sponsor. May be repeated for credit.

Courses in Spanish (SPAN)**400-level Courses**

All 400-level courses may be applied toward master's degree requirements except the following, subject to limits established by the department and approval of the graduate adviser.' SPAN 400, 401, 408, 410, 413, 454, 459

Graduate Courses

Classified graduate standing is required for admission.

501 Development of Spanish Language (4)

Prerequisites: SPAN 320, 400A. Scientific analysis of written and spoken Spanish from its inception through its current use in Hispanic world.

504 Studies in Medieval Literature (4)

Prerequisites: SPAN 408, 410. Principal Spanish literary works dating from twelfth to sixteenth century; their significance in historical development of various genres; their influence on subsequent literary history.

505 Studies in El Modernismo in Spanish America (4)

Prerequisites: SPAN 411, 413. Analysis of representative works of modernist movement writers in Spanish America; their influence on literature of contemporary period. Lectures and reports in Spanish.

506 Semantics and Pragmatics (4)

Prerequisite: SPAN 400B. Analysis of meaning in sentences in Spanish and of main features of Spanish lexicon; selected problems of discourse pragmatics; functional meaning of the sentence in context.

510 Sociolinguistic Patterns in Spanish (4)

Prerequisite: SPAN 305. Principles of sociolinguistics and dialectology; sociolinguistic patterns in Hispanic languages; social and geographic language varieties including main features of Spanish in U.S.

540 Seminar: Contemporary Spanish Poetry (4)

Prerequisites: SPAN 408, 410. Intensive study of Spanish poetry of past thirty years.

545 Seminar: Contemporary Spanish-American Poetry (4)

Prerequisites: SPAN 411,413. Intensive study of Spanish-American poetry of past thirty years.

575 Seminar: Hispanic Literature (4)

Prerequisites: SPAN 408 and 410 or 411 and 413. Intensive study of significant works of selected period in Spanish or Spanish-American literature. May be repeated as subject matter changes.

583 Seminar: Contemporary Hispanic Prose (4)

Prerequisites: SPAN 408 plus 410 or 411 plus 413. Recent Hispanic prose (novel, short story, essay); focus on Spanish or Spanish-American authors in alternate years. May be repeated once for credit as subject matter changes.

598 Graduate Directed Study (1-4)

Prerequisite: Instructor consent to act as sponsor. Independent study of advanced topics in field; regular conferences with sponsor. May be repeated for credit.

MUSIC_**School of Arts and Letters****DEPARTMENT OFFICE**

Music 145

Phone: (213) 343-4060

The Master of Arts degree in Music is offered with two options. One is designed for students seeking a concentration in music composition, musicology, or performance; the other focuses upon music education. Adjustments in either option to meet specific interests and abilities may be made in consultation with graduate advisers.

Master of Arts Degree**Admission to the Program**

In addition to university requirements for admission to graduate study, applicants must have a baccalaureate in Music from an accredited college or university. For option II (Music Education), a valid teaching credential or concurrent enrollment in a credential program is required, also.

Requirements for the Degree (45 units)

A total of 45 units is required, with at least 23 in 500-level music courses. Students may choose between two options: *Option 1*, Music Composition, Musicology, or Performance, and *Option II*, Music Education.

Six elective units in performance may be applied toward the degree; a maximum of 3 of these units may be in 400-level performance areas. The program concludes with comprehensive examination or a thesis.

Comprehensive Examination or Thesis or Project (0, 4 units)

MUS	596	Comprehensive Examination	(0) or
MUS	599	Thesis or Project	(4)

Students may take the comprehensive examination (MUS 596) no earlier than the quarter in which all course work is completed, but may take it subsequently. In addition to the examination, students must complete an additional 4 units in music.

An alternative to the comprehensive examination requirement is enrollment in MUS 599, Thesis or Project (4).

Option I: Music Composition, Musicology, or Performance**Required Courses (10 units)**

MUS	465	Contemporary Techniques	(4)
MUS	497	Research Techniques in Music	(2)

Select *one* from following:

MUS	507	Seminar: Vocal Techniques	(4)
MUS	569	Seminar: Composition	(4)
MUS	579	Seminar: Musicology	(4)

History and Literature (select 12 units from following):

MUS 470--477, 571-575

Performance (select 3 units from following):

MUS 410, 415-426, 435, 445-447, 519, 539, 549

Electives (16 units)

Select 7-12 units in theory, conducting, or psychology of music from following:

MUS 460-462, 466A-469, 483, 501,560, 580, 581,598

Select 4-9 units from 400- or 500-level courses in music or other fields, with adviser approval.

Option II: Music Education

Required Courses (14 units)

MUS	465	Contemporary Techniques	(4)
MUS	497	Research Techniques in Music	(2)
MUS	501	Psychology of Music	(4)
MUS	502	Seminar: Music Education	(4)

Select *one* from following (*4 units*):

MUS	507	Seminar: Vocal Techniques	(4)
MUS	508	Seminar: Choral Music	(4)
MUS	509	Seminar: Instrumental Music Education	(4)

History and Literature (select 12 units from following):

MUS 470-477, 571-575

Advanced Conducting (4 units)

MUS 580 or 581

Performance (select 3 units from following):

MUS 410, 415-426, 435, 445-447, 519, 539, 549

Electives (select 8 units from following):

MUS 403--406, 408, 409, 436, 451-464, 466A-469, 482, 483, 490, 598

Courses from other fields may be included with adviser approval.

Courses in Music (MUS)

400-level Courses

All 400-level courses may be applied toward master's degree requirements except the following, subject to limits established by the department and approval of the graduate adviser, MUS 400, 401

Graduate Courses

Classified graduate standing in Music or equivalent music background is required for admission.

501 Psychology of Music (4)

Prerequisites: MUS 497, introductory course in psychology or educational psychology, at least 30 units in music. Musical personality, perception of musical characteristics, musical taste, and theories of learning applied to music; survey of standardized tests of musical aptitude and achievement.

502 Seminar: Music Education (4)

Prerequisites: MUS 497, baccalaureate with major in music education, at least one year of teaching experience. Evaluation of research and various philosophies, methods, and trends in music education.

507 Seminar: Vocal Techniques (4)

Prerequisite: MUS 406. Seminar and critique on psychophysiological approach to vocal techniques. Designed for experienced teachers, soloists, and choir directors. Individual research and class demonstration.

508 Seminar: Choral Music (4)

Prerequisites: MUS 408, 497. Survey of choral literature with emphasis on stylistic and performance practice considerations.

509 Seminar: Instrumental Music Education (4)

Prerequisites: MUS 407 or 409; 497. Survey and criteria for selection and interpretation of instrumental music.

519 Applied Music: Orchestral Instruments (1)

Prerequisite: Instructor consent. Lessons on campus with approved instructors. May be repeated to maximum of 6 units.

520 Applied Music: Conducting (1)

Prerequisite: Instructor consent. Private instruction in score preparation and conducting technique as applied to specific literature for band, orchestra, choir, or other selected ensembles. May be repeated to maximum of 3 units.

530AB Advanced Style Analysis (4, 4)

Prerequisites: MUS 430, 465. Advanced analytical techniques applied to study of musical styles as related to period, genre, nationalist. and individual composers.

539 Applied Music: Voice (1)

Prerequisite: Instructor consent. Lessons on campus with approved instructors. May be repeated to maximum of 6 units.

545 The Business of Music (3)

Contracts, copyright, licensing, unions, and basic business practices used in the commercial music industry.

546AB Seminar: Commercial Music (2, 2)

Prerequisite: MUS 545. Practical, theoretical, and philosophical approaches for achieving success as a professional musician in the commercial music industry; emphasis on discourse with professionals in Los Angeles.

547ABC Advanced Orchestration and Arranging for Contemporary Media (4, 4, 4)

547A: Small Sized Combinations

Prerequisites: MUS 462, 466B, 467. Advanced techniques in arranging and orchestrating music for film (narrative, documentary, commercials), radio commercials, and records; emphasis on writing for small (2-10) instrumental ensembles with MIDI instruments available.

547B: Medium Sized Combinations Prerequisite: MUS 547A. Advanced techniques in arranging and orchestrating music for film, radio commercials, and records; emphasis on writing for medium-sized (9-24) instrumental and vocal ensembles with MIDI instruments included.

547C: Large Sized Combinations Prerequisite: MUS 547B. Advanced techniques in arranging and orchestrating music for film, radio commercials, and records; emphasis on writing for large studio orchestras.

549 Applied Music, Keyboard Instruments (1)

Prerequisite: Instructor consent. Lessons on campus with approved instructors. May be repeated to maximum of 6 units.

560 Advanced Composition (4)

Prerequisite: MUS 460. Free composition in selected vocal and instrumental forms. May be repeated to maximum of 12 units.

568 Seminar: Performance (4)

Prerequisite: 400-level applied music course. Student performance with critiques highlighting stylistic, aesthetic, and practical components that influence musical performance; artist performances (taped or live) and critiques; preparation of graduate recital.

569 Seminar: Composition (4)

Prerequisites: MUS 497, 560. Philosophies and aesthetic theories involved in contemporary music; compositional problems and projects of an advanced nature intended to synthesize previous creative skills and techniques. May be repeated to maximum of 8 units.

570 Music of the Medieval Period (4)

Characteristics of medieval period; analysis of representative works; music in relation to other arts and medieval society.

571 Music of Renaissance Period (4)

Discussion of stylistic characteristics of music of Renaissance; formal, technical, and thematic score analysis of representative works, accompanied by live or recorded performance.

572 Music of Baroque Period (4)

Characteristics of Baroque music; analysis of representative works and performance practices; music in relation to Baroque arts and society.

573 Music of Classic Period (4)

Characteristics of Classic Period; analysis of representative works; music in relation to 18th century arts and society.

574 Music of Romantic Period (4)

Characteristics of Romantic Period; analysis of representative works; music in relation to 19th century arts and society.

575 20th Century Music to 1945 (4)

Characteristics of 20th century music from 1900 to 1945; analysis of representative works; music in relation to early 20th century arts and society.

576 20th Century Music Since 1945 (4)

Characteristics of 20th century music from 1945 to present; analysis of representative works; music in relation to avant-garde arts and society.

579 Seminar: Musicology (4)

Prerequisite: MUS 497. Specific musicological problems reported by students and discussed by class. May be repeated to maximum of 12 units.

580 Advanced Choral Conducting (4)

Prerequisite: MUS 480. Analysis of conducting problems of standing choral literature, including both accompanied and unaccompanied music; study of metric relationships, less frequently used conducting patterns, and survey of literature. May be repeated to maximum of 8 units.

581 Advanced Instrumental Conducting (4)

Prerequisite: MUS 481. Analysis and preparation for conducting major works for symphonic band and orchestra. Opportunity to conduct university orchestra or band. May be repeated to maximum of 8 units.

583 Seminar: Conducting (4)

Prerequisites: MUS 480 or 481; 580 or 581; 508; 509; 497. Conducting topics; study of literature, analytical procedures, and rehearsal techniques applicable to choral and instrumental conducting. May be repeated to maximum of 12 units.

598 Graduate Directed Study (1..4)

Prerequisite: Instructor consent to act as sponsor. Independent study of advanced topics in field; regular conferences with sponsor. May be repeated to maximum of 12 units.

599 Thesis or Project (1-4)

Prerequisites: MUS 497, instructor consent to act as sponsor, departmental approval of topic prior to registration. Independent research resulting in a thesis or project. Must be repeated to maximum of 4 units. Graded *CR/NC*.

PHILOSOPHY_**School of Arts and Letters****DEPARTMENT OFFICE**

Engineering and Technology A429

Phone: (213) 343-4180

The Master of Arts degree in Philosophy is designed to enrich intellectual development and to prepare students for community college teaching and for further graduate study. In some specific areas of philosophy, opportunities are also available in institutions engaged in basic research.

Master of Arts Degree**Admission to the Program**

In addition to university requirements for admission to graduate study, applicants must possess a baccalaureate in philosophy or a baccalaureate with a major in a field other than philosophy supplemented by appropriate preparation in philosophy.

Applicants must consult an adviser in philosophy to determine whether any academic deficiencies exist before admission to the program can be granted.

Requirements for the Degree (45 units)

A total of 45 units is required, with at least 36 in philosophy and 23 in 500-level courses.

Students are required to include the following philosophy courses in their program, if not completed prior to admission to the program.

PHIL	405	Symbolic Logic	(4)
PHIL	460	Metaphysics	(4)
PHIL	470	Theory of Knowledge	(4)

Comprehensive Examinations or Thesis (0, 6 units)

PHIL	596	Comprehensive Examination	(0) or
PHIL	599	Thesis (6)

Comprehensive Examinations

Students should expect to take the comprehensive examinations (PHIL 596) the quarter they complete all course work on their program and must comply with school and departmental requirements. Students are required to pass comprehensive examinations in three of the following four areas: History of philosophy (ancient, modern, and either medieval or recent); metaphysics and theory of knowledge; logic and either philosophy of science or philosophy of language; and ethics and either aesthetics or social and political philosophy.

Students should be guided in selection of courses by their specific needs in preparing for the comprehensive examinations. Electives taken outside philosophy, if any, must be relevant to one of the three areas in which students elect to be examined.

Students who fail to pass one area of the comprehensive examinations will be permitted to take that specific examination again. Students who fail two areas of the comprehensive examinations must take all three examinations again. Students who fail a comprehensive examination in the same area a second time will be disqualified from the program.

Thesis

Completion of the first 24 units of the master's degree program with a minimum 3.6 grade point average, approval of the thesis proposal by the department, enrollment in 6 units of PHIL 599, and an oral examination about the thesis are required for the thesis option. Students who have at any time attempted the comprehensive examination (PHIL 596) are ineligible for this option.

Students who select the thesis option must include seminars in at least three of the four major comprehensive examination areas in their master's degree program.

Certificate Program in Teaching Critical Thinking

The credit certificate program in Teaching Critical Thinking is designed for those with an interest in the theory and techniques of teaching critical thinking at either the college or secondary school level.

In addition to university requirements for admission to graduate study, applicants must have some background in philosophy or another humanistic discipline. In particular, students must be familiar with both sentential and predicate logic. Interested students should consult the program coordinator in the Department of Philosophy. Deficiencies in preparation may be remedied during the first quarters of enrollment in the program.

This certificate program is not equivalent to any program that leads to a teaching credential. A total of 24 units is required, including 16 units in the required core and 8 in electives, with a minimum B (3.0) grade point average. Refer to the *Graduate Study chapter* of this catalog for general regulations governing all certificate programs.

Requirements for the Certificate (24 units)

Required Core Courses (16 units)

PHIL	480	Philosophy of Language	(4)
PHIL	485	Philosophy of Science	(4)
PHIL	580	Seminar: Critical Thinking-Models and Strategies	(4)
PHIL	581	Projects in Teaching Philosophy	(4)

Electives (8 units)

In consultation with an adviser, select two 400- or 500-level philosophy courses or seminars or

**SPCH 576 Seminar: Argumentation, Discussion, and Debate (4)

***may be repeated to a total of 8 units*

Students who are interested in teaching critical thinking courses in areas other than philosophy may substitute appropriate courses with adviser approval.

Courses in Philosophy (PHIL)

400-level Courses

All 400-level courses may be applied toward master's degree requirements, subject to limits established by the department and approval of the graduate adviser.

Graduate Courses

Classified graduate standing is required for admission.

510 Seminar: History of Philosophy (4)

Advanced study of selected figures and problems in history of philosophy. May be repeated as subject matter changes.

521 Seminar: Logic (4)

Advanced study of selected problems in deductive or inductive logic. May be repeated as subject matter changes.

523 Seminar: Philosophy of Language (4)

Advanced study of selected problems in philosophy of language. May be repeated as subject matter changes.

525 Seminar: Philosophy of Science (4)

Advanced study of selected problems in philosophy of the sciences, including mathematics, natural sciences, psychology, and social sciences. May be repeated as subject matter changes.

531 Seminar: Metaphysics (4)

Advanced study of selected problems in metaphysics. May be repeated as subject matter changes.

532 Seminar: Theory of Knowledge (4)

Advanced study of selected problems in theory of knowledge. May be repeated as subject matter changes.

541 Seminar: Value Theory (4)

Advanced study of selected problems in value theory; may include issues in ethics, social and political philosophy, aesthetics. May be repeated to maximum of 12 units as subject matter changes.

580 Seminar: Critical Thinking-Models and Strategies (4)

Prerequisites: PHIL 480,485. Theoretical models of critical thinking and pedagogical strategies and materials for teaching different kinds of students.

581 Projects in Teaching Philosophy (4)

Prerequisite: PHIL 580. Planned preparation and critical evaluation of undergraduate philosophy classes, especially critical thinking.

598 Graduate Directed Study (1-4)

Prerequisite: Consent of faculty sponsor before registration. Independent study of advanced topics in field; regular conferences with sponsor. May be repeated for credit.

599 Thesis (1-6)

Prerequisites: minimum 3.6 grade point average in first 24 units of MA program, formal approval by department. Independent research resulting in a thesis. May be repeated to maximum of 6 units. Graded *CR/NC*. Not open to students with prior enrollment in comprehensive examinations (PHIL 596).

THEATRE ARTS AND DANCE_

School of Arts and Letters

DEPARTMENT OFFICE

Theatre 110

Phone: (213) 343-4110

Master of Arts Degree in Theatre Arts

Admission to the Program

In addition to university requirements for admission to graduate study, applicants must hold an acceptable baccalaureate and have a 2.5 grade point average in the last 90 quarter units attempted.

Thirty units of approved undergraduate course work in theatre arts, dance, speech communication, dramatic literature, cinema, or broadcasting, including TA 311,312, 313, and six units of upper division work in technical theatre, are prerequisite to this program.

Requirements for the Degree (45 units)

All students are required to serve in at least one of the following capacities during their graduate study: as an actor in two or more substantial acting roles; as director of a one-act play or a full-length play; as scenic, lighting, or costume designer of a production; or as assistant to the faculty director for one production. This requirement must be met within framework of regularly sponsored department productions.

A total of 45 units is required, with at least 23 in 500-level courses.

Required Core (20 units)

TA	511	Seminar: Special Studies in Theatre History	(4, 4)
TA	541	Seminar: Theories of Acting	(4)
TA	566	Seminar: Dramatic Theory	(4)
TA	570	Seminar: Experimental Theatre	(4)

Electives (14-17 units)

Select 3 units in one of following:

TA	595	Graduate Performance	(3) or
TA	598	Graduate Directed Study	(3)

(for students who select comprehensive examination)

Select 8 units from following:

TA 439, 441,442,443, 445, 446, 454L,P, 460, 461,462, 463, 471,472,476

Select 6 units from following:

TA 422,426, 427,431,432,434, 435

Additional electives (8 units)

Select with adviser approval.

Comprehensive Examination or Thesis or Project (0, 3 units)

**TA 596 Comprehensive Examination (0) or

TA 599 Thesis or Project (3)

The choice of comprehensive examination or thesis or project is to be made with adviser approval.

** *in combination with 3 units of TA 595 and/or 598*

Students should expect to take the comprehensive examination (TA 596) the quarter they complete all course work on their program and must comply with school and departmental requirements.

Courses in Theatre Arts (TA)

400-level Courses

All 400-level courses may be applied toward masters degree requirements except the following, subject to limits established by the department and approval of the graduate adviser: TA 499.

Graduate Courses

Classified graduate standing is required for admission.

511 Seminar: Special Studies in Theatre History (4)

Prerequisites: TA 311-313. Significant era or movement in theatre history. Specific subject announced in *Schedule of Classes*. May be repeated once for credit.

541 Seminar: Theories of Acting (4)

Prerequisite: At least one upper division course in acting or directing. Major theories of acting from Diderot to present with special emphasis on origins, esthetics, and psychology of acting.

566 Seminar: Dramatic Theory (4)

Prerequisite: At least one upper division course in dramatic theory or dramatic literature. Backgrounds in theatrical art, analysis of aesthetic principles and content of theatre; selected problems in philosophy of dramatic art.

570 Seminar: Experimental Theatre (4)

Prerequisites: TA 471 plus an upper division course in dramatic literature and/or dramatic theory. Significant theatrical and dramatic theories and developments that have contributed specifically to experimental search for 20th century forms in theatre arts.

572 Seminar: Research in Dance Literature (3)

Research in dance literature; survey of scope of writings in various areas of dance and creative movement; emphasis on current publications. Individual research projects.

577 Seminar: Drama Therapy Techniques (4)

Prerequisite: TA 478. Advanced psychodramatic and projective drama therapy techniques exploring video, photography, puppetry, face-painting, sand play, masks, and other creative media. May be repeated to maximum of 8 units.

578 Seminar: Drama Therapy Assessment and Treatment (4)

Theories of drama therapy, research, assessment, diagnosis, and treatment interventions. May be repeated to maximum of 8 units.

579 Seminar: Case Studies in Drama Therapy (4)

Prerequisites: TA 478, 479. Advanced theories and techniques of drama therapy applied to individual case work. May be repeated to maximum of 8 units.

594 Field Work/Internship Drama Therapy (1-4)

Prerequisite: TA 478. Independent supervised field experience in drama therapy internships with individuals, groups, and families. May be repeated to maximum of 16 units.

595 Graduate Performance (1-4)

Prerequisite: Consent of graduate adviser. Demonstration of graduate level proficiency in a major performance situation; research or analytical written project directly related to performance. May be repeated to maximum of 4 units.

598 Graduate Directed Study (1-4)

Prerequisite: Instructor consent to act as sponsor. Independent study of advanced topics in field; regular conferences with sponsor. May be repeated for credit.

599 Thesis or Project (1-6)

Prerequisites: Advancement to candidacy, instructor consent to act as sponsor, departmental approval of topic prior to registration. Independent research resulting in a thesis or project. May be repeated to maximum of 6 units. Graded CR/NC.

- * Department of Accounting
- * Department of Economics and. Statistics
- * Department of Management
- * Department of. Marketing

SCHOOL OF BUSINESS AND ECONOMICS

OFFICE OF THE DEAN

Simpson Tower F124
Phone: (213) 343-2800

GRADUATE PROGRAMS OFFICE

Salazar Hall C256
Phone: (213) 343-2808

DEPARTMENTS WITHIN THE SCHOOL:

Department of Accounting

DEPARTMENT OFFICE

Simpson Tower F517
Phone: (213)343-2830

Department of Economics and Statistics

DEPARTMENT OFFICE

Simpson Tower F917

Department of Finance and Law

DEPARTMENT OFFICE

Simpson Tower F717
Phone: (213) 343-2870

Department of Information Systems

DEPARTMENT OFFICE

Simpson Tower F603
Phone: (213) 343-2983

Department of Management

DEPARTMENT OFFICE

Simpson Tower F717
Phone: (213) 343-2890

Department of Marketing

DEPARTMENT OFFICE

Simpson Tower F917
Phone: (213) 343-2960

Department of Office Systems and Business Education

DEPARTMENT OFFICE

Simpson Tower F517
Phone: (213)343-2860

The major objective of the School of Business and Economics is to equip men and women with the intellectual tools needed to assume responsible positions in business, industry, education, government, and the managerial aspects of social service organizations. Preparation includes both a basic understanding of the entire social and physical environment of the urban community, of which business and economics are an integral part, and a substantial background in the underlying fields of knowledge dealing specifically with business and economics.

Accreditation

The School of Business and Economics is nationally accredited on both the graduate and undergraduate levels by the American Assembly of Collegiate Schools of Business.

Degrees Offered

The school offers programs leading to master's degrees in six fields.

The Master of Science degree in Accountancy, for holders of a baccalaureate, is designed to provide specific professional preparation in the options of Business Taxation, Financial Accounting, Information Systems, and Management Accounting.

The Master of Science degree in Business Administration, primarily for holders of a baccalaureate in business, provides options designed to meet specific professional objectives in Business Economics, Finance, International Business, Management, Management Information Systems, and Marketing.

The Master of Business Administration (M.B.A.) degree offers professional preparation for management positions in business and industry. It is designed for holders of a baccalaureate in other academic fields as well as in business.

The Master of Arts degree in Business Education has been established to meet the needs of business teachers who wish to extend their formal education for teaching in secondary schools, community colleges, or private business schools.

The Master of Arts degree in Economics provides students the opportunity for advanced study of economic theory and research, in preparation for careers in industry, government, and education, or for further graduate study.

The interdisciplinary *Master of Science degree in Health Care Management* is designed to prepare people in the health care industry to meet the increasing demands placed on middle- and upper-level managers in large metropolitan health care facilities. The program goal is achieved through interdisciplinary courses primarily in the School of Health and Human Services and the School of Business and Economics.

Credit Certificate Programs Offered

In addition to graduate degree programs, the school also offers several credit certificate programs which, although available for undergraduate students, may also be of interest to graduate and postbaccalaureate students. These programs are included in the undergraduate *School of Business and Economics* chapter. General regulations governing all credit certificate programs are found in the *Undergraduate Study* and *Graduate and Postbaccalaureate Study* chapters.

Admission to Master's Degree Programs in Business Administration

The school admits graduate students to the MBA, MS in Business Administration, MS in Accountancy, and MA in Business Education degree programs in conditionally classified standing and classifies them when eligible. In addition to university admission requirements, applicants to graduate programs in the School of Business and Economics must satisfy criteria outlined below. The School of Business and Economics examines the academic ability and managerial potential of each candidate, taking into consideration all academic work, Graduate Management Admission Test (GMAT) scores, letters of recommendation, work experience, level of job responsibility, and other relevant factors. Applicants are evaluated on the merits of their own application in comparison with all applicants for the quarter.

Application Procedure for School of Business and Economics

Applicants must submit the following information by the deadlines listed:

- (1) Application to the University for desired quarter of admission;
- (2) Official transcripts, as indicated on application, sent directly to the Office of Admissions (*must include verification of bachelor's degree*);
- (3) Separate graduate program application sent directly to the School of Business and Economics;
- (4) Scores for Graduate Management Admission Test (GMAT) taken within five years of application date and sent directly to School of Business and Economics; and
- (5) Three letters of recommendation sent directly to School of Business and Economics. References from employers and/or academicians are acceptable.

Application and Supporting Document Deadlines Domestic (Non-visa)

Quarter	Deadline
Fall (September)	June 30
Winter(January)	September 30
Spring (March)	November 30
Summer (June)	March 1

VISA

Quarter	Deadline
Fail (September)	November 30
Winter (January)	June 30
Spring (March)	August 31
Summer (June)	Not open to visa applicants

Classified Graduate Standing

Classified graduate students are those officially admitted to master's degree programs. Students who hold a baccalaureate in business and who have completed preparatory courses listed below with a minimum C (2.0) grade in each course will be admitted to the program in classified graduate standing. Those without a baccalaureate in business or who have otherwise not fulfilled preparatory course requirements will be admitted in conditionally classified standing.

Students are required to complete the following 52 units of preparatory business and related courses for admission to classified graduate standing for the M.S. degree in Accountancy, the M.S. degree in Business Administration, and the M.B.A. degree.

ACCT 260R, 360R*
 CIS 262R
 ECON 311 R, 369R
 FIN 261 R, 363R
 MATH 242
 MGMT 366R, 367R, 368R
 MKT 364R
 OSBE 361 R

* Accounting students substitute ACCT 322 for 360R

Master of Science Degree In Accountancy

The M.S. degree in Accountancy prepares students for a wide range of employment opportunities in public accounting, industry and finance, government and nonprofit organizations, and taxation. The program is designed to produce individuals who are qualified with knowledge and techniques in one or more accounting areas: financial accounting, including auditing; management accounting; business taxation; and information systems; prepared to successfully challenge a professional examination for entry into the selected area; committed to professional and career development beyond their formal education into the highest executive levels of the selected area; capable of becoming leaders exhibiting high standards of ethical conduct within the profession; or prepared for doctoral study or research positions.

Admission to the Program

In addition to completing the basic preparatory business and related courses listed above, applicants must complete 28 quarter units in accounting (320ABC, 321,322, 420, 424A) and have an approved graduate degree program on file in the Graduate Programs Office.

Requirements for the Degree (45 units)

A total of 45 units is required, with at least 33 in 500-level courses. All programs must be approved by the department.

Required core (27 units):

ACCT 503	Quantitative Approach to Managerial Decisions	(4)
ACCT 520	Seminar: Management Accounting Theory	(3)
*ACCT 598	Graduate Directed Study	(4)

CIS	504	Management Information Systems	(4)
ECON	502	Economic Analysis and Business Operations	(4)
MGMT	501	Administrative Behavior and Systems Management	(4)
MGMT	594	Policy Integration and Strategy	(3)
MGMT	598	Graduate Directed Study	(1)

*Students in Information Systems option substitute 4 units of CIS 598

Options (19 units)

Select one of the four options listed below. Elective courses are determined in conference with graduate adviser to meet professional objectives.

* **Business Taxation Option (19 units)**

Required Courses (12 units):

ACCT	521	Seminar: Financial Accounting Theory	(3)
ACCT	585	Seminar: Tax Theory and Business Applications	(3)
ACCT	586	Seminar: Tax Research and Practice	(3)
ACCT	587	Seminar: Taxation of Corporations and Shareholders	(3)

Electives (select 7 units with at least one 500-level seminar)

* **Financial Accounting Option (19 units)**

Required Courses (12 units):

ACCT	521	Seminar: Financial Accounting Theory	(3)
ACCT	522	Seminar: Current Topics in Financial Reporting	(3)
ACCT	523	Seminar: Public Accounting	(3)
ACCT	525	Seminar: International Accounting	(3)

Electives (select 7 units with at least one 500-level seminar)

* **Information Systems Option (19 units)**

Required Courses (12 units):

ACCT	524	Seminar: Advanced Cost and Managerial Accounting	(3)
CIS	527	Seminar: Computerized Decision Analysis	(3)
CIS	528	Seminar: Current Problems in Business Information Systems	(3)
CIS	584	Seminar: Controlling and Auditing Computer Systems	(3)

Electives (select 7 units with at least one 500-level seminar)

* **Management Accounting Option (19 units)**

Required Courses (12 units)

ACCT	521	Seminar: Financial Accounting Theory	(3)
ACCT	524	Seminar: Advanced Cost and Managerial Accounting	(3)
ACCT	585	Seminar: Tax Theory and Business Applications	(3)
CIS	527	Seminar: Computerized Decision Analysis	(3)

Electives (select 7 units with at least one 500-level seminar) Comprehensive Examination (written):

Students should expect to take the comprehensive examination (BUS 596) the quarter they complete all course work on their program and must comply with school and departmental requirements.

Master of Science Degree in Business Administration

This is a specialized degree program permitting concentration and research in one of the following options: Business Economics, Finance, international Business, Management, Management Information Systems, and Marketing.

Admission to the Program

In addition to completing the 52 quarter units of acceptable basic business courses listed above, applicants must have an approved graduate degree program on file in the Graduate Programs Office.

Requirements for the Degree (45 units)

A total of 45 units is required, with at least 41 500-level courses.

Required Core (23--26 units):

ACCT	503	Quantitative Approach to Managerial Decisions	(4)
CIS	504	Management Information Systems	(4)
ECON	502	Economic Analysis and Business Operations	(4)
MGMT	501	Administrative Behavior and Systems Management	(4)
MGMT	594	Policy Integration and Strategy	(3)
MGMT	598	Graduate Directed Study	(1)

A 598 course, for 4-7 units, chosen from ECON, FIN, MGMT, or MKT, depending on option chosen.

Thesis (5 units):

BUS	599AB	Thesis	(2, 3)
-----	-------	--------	--------

Options (14-17 units)

Select one of the following options; electives are selected in conference with a graduate adviser to meet professional objectives.

* Business Economics Option (14-17 units)

Required Courses (9 units):

ECON	510	Seminar: Advanced Microeconomic Theory I	(3)
ECON	511	Seminar: Advanced Microeconomic Theory II	(3) or
ECON	520	Seminar: National Income and Employment Theory	(3)
ECON	521	Seminar: Monetary Theory and Policy	(3)

Electives (4--7 units)

Students who have not taken ECON409 for undergraduate credit must include it in their electives.

* Finance Option (14--17 units)

Required Courses (9 units):

FIN	530	Seminar: Business Finance	(3)
FIN	531	Seminar: Financial Institutions	(3)
FIN	532	Seminar: Estate Planning	(3)

Electives (4-7 units)

* International Business Option (14-17 units)

Required Courses (select 9 units from following):

ACCT	525	Seminar: International Accounting	(3)
ECON	561	Seminar: International Economics	(3)
FIN	533	Seminar: International Finance	(3)
MGMT	577	Seminar: International Business Management	(3)
MKT	543	Seminar: International Marketing	(3)

Electives (4--7 units)

In addition, intermediate level proficiency in an appropriate foreign language is recommended.

* Management Option (14-17 units)

Required Courses (9 units):

MGMT	560	Seminar: Strategic Planning	(3)
MGMT	561	Seminar: Organizing	(3)
MGMT	562	Seminar: Control	(3)

Electives (4-7 units)

* **Management Information Systems Option (14-17 units)****Required Courses (9 units):**

CIS	527	Seminar: Computerized Decision Analysis	(3)
CIS	528	Seminar: Current Problems in Business Information Systems	(3)
CIS	584	Seminar: Controlling and Auditing Computer Systems	(3)

Electives (4-7 units)

* **Marketing Option (14--17 units)****Required Courses (9 units):**

MKT	542	Seminar: Marketing Management	(3)
MKT	543	Seminar: International Marketing	(3)
MKT	544	Seminar: Consumer Behavior	(3)

Electives (4-7 units)

Master of Business Administration Degree

This is a broad, management-oriented degree providing for only limited concentration in one of the following options: accounting, business economics, business information systems, finance, international business, management, marketing, office systems.

Admission to the Program

In addition to completing the 52 quarter units of acceptable preparatory business and related courses listed under *Classified Graduate Standing* earlier in this chapter and, for students concentrating in accounting, 20 quarter units in accounting (320ABC, 321, and 420), applicants must have an approved graduate program on file in the Graduate Programs Office.

Requirements for the Degree (52 units)

A total of 52 units is required, with at least 48 in 500-level courses.

Required Core (32 units):

ACCT	503	Quantitative Approach to Managerial Decisions	(4)
ACCT	520	Seminar: Management Accounting Theory	(3)
ACCT	598	Graduate Directed Study	(1)
CIS	504	Management Information Systems	(4)
ECON	502	Economic Analysis and Business Operations	(4)
FIN	530	Seminar: Business Finance	(3)
FIN	598	Graduate Directed Study	(1)
MGMT	501	Administrative Behavior and Systems Management	(4)
MGMT	594	Policy Integration and Strategy	(3)
MGMT	598	Graduate Directed Study	(1)
MKT	542	Seminar: Marketing Management	(3)
MKT	598	Graduate Directed Study	(1)

Additional Courses (21 units):

Select 400- or 500-level courses with adviser approval. A maximum of 16 units may be taken in one field, chosen from accounting, business information systems, finance, international business, management, marketing, office systems, or business economics. Each 3-unit, 500-level seminar included must be accompanied by a 1-unit 598 course from the same department. A minimum of 16 units must be 500 level.

Comprehensive Examination (written) (0 units):

Students should expect to take the comprehensive examination (BUS 596) the quarter they complete all course work on their program and must comply with school and departmental requirements.

Master of Arts Degree in Business Education

This program is designed to meet the needs of business education teachers primarily at the secondary school and community college levels. Students select one of two options: *Community College* or *Secondary School*

Admission to the Program

In addition to university requirements for admission to graduate study, applicants must complete the 40 units of preparatory courses in business and related fields listed below and must have an approved graduate program on file in the Graduate Programs Office.

Preparatory Courses (40 units):

ACCT 202
 CIS 262R
 ECON 201,202, 369R
 FIN 261 R, 363R
 MGMT 308
 MKT 364R
 OSBE 361 R

Additional prerequisites for the Community College Option are listed by specialization within the option as follows:

- * **Accounting**-- 16 units of 400- or 500-level accounting courses
- * **Banking and Finance**--16 units of 400- or 500-level finance or banking courses
- * **Business and Industrial Management** --16 units of 400- or 500-level management courses
- * **Computer and Related Technologies**-- 16 units of 400- or 500-level computer information systems courses.
- * **Economics**--16 units of 400- or 500-level economics courses
- * **Marketing and Distribution**-16 units or 400- or 500-level marketing courses
- * **Office Systems**-- 16 units of 400- or 500-level office systems or business education courses

Suitable credit will be given for any equivalent courses taken either as an undergraduate or graduate prior to matriculation at Cal State L.A., provided the student supplies acceptable proof of course equivalency. All courses taken subsequently to matriculation must be taken at Cal State L.A. A minimum B (3.0) grade point average is required in all basic business core courses taken subsequent to the baccalaureate.

Requirements for the Degree (45units)

A total of 45 units is required, with 23 in 500-level courses. A comprehensive examination is required.

Required Courses (16 units):

OBSESS 510	Seminar: Contemporary Issues and Trends in Business Education	(3)
OSBE 511	Seminar: Administration and Supervision in Business Education	(3)
OSBE 512	Seminar: Research in Business Education	(3)
OSBE 514	Seminar: Evaluation of Student Performance in Business Education	(3)
OSBE 598	Graduate Directed Study	(4)

Options

- * **Community College Option (29 units)**

Select one specialization listed below. Accounting**Required Courses (10 units)**

ACCT	503	Quantitative Approaches to Managerial Decisions	(4)
ACCT	520	Seminar: Management Accounting Theory	(3)
ACCT	598	Graduate Directed Study	(3)

Electives (19 units):

With graduate adviser approval, select six or more units from 500-level ACCT courses plus nine or more units from

EDSE 421A,
EDSE 581,
OSBE 410AB.

Banking and Finance**Required Courses (7 units)**

FIN	530	Seminar: Business Finance	(3)
FIN	598	Graduate Directed Study	(4)

Electives (22 units)

With graduate adviser approval, select nine or more units from 500-level FIN courses plus nine or more units from

EDSE 421G,
EDSE 581,
OSBE 410AB.

Business and Industrial Management**Required Courses (6 units)**

MGMT	501	Administrative Behavior and Systems Management	(4)
MGMT	598	Graduate Directed Study	(2)

Electives (23 units)

With graduate adviser approval, select 10 or more units from 500-level MGMT courses or OSBE 517 (which requires a corequisite of OSBE 598 for one unit) plus nine or more units from EDSE 421G,

EDSE 581,
OSBE 410AB.

Computer and Related Technologies**Required Courses (6 units)**

CIS	504	Management Information Systems	(4)
CIS	598	Graduate Directed Study	(2)

With graduate adviser approval, select 10 or more units from 500-level CIS courses, OSBE 515, or OSBE 517 (which requires a corequisite of OSBE 598 for one unit) plus nine or more units from

EDSE 421A,
EDSE 581,
OSBE 410AB.

Economics**Required Course (4)**

ECON	502	Economic Analysis and Business Operations	(4)
------	-----	---	-----

Electives (25 units)

With graduate adviser approval, select 12 or more units from 500-level ECON courses plus nine or more units from

EDSE 421 G,
EDSE 581,
OSBE 410AB.

Marketing and Distribution**Required Courses (7 units)**

MKT	542	Seminar: Marketing Communication	(3)
MKT	598	Graduate Directed Study	(4)

Electives (22 units)

With graduate adviser approval, select 12 or more units from 500-level MKT courses plus nine or more units from

EDSE 421 G,
EDSE 581,
OSBE 410AB.

Office Systems**Required Courses (12 units)**

OSBE	515	Information Processing in Business Education	(4)
OSBE	516	Seminar: Advanced Business Communication	(3)
OSBE	517	Seminar: Administrative Office Systems	(3)
OSBE	598	Graduate Directed Study	(2)

Electives (17 units)

Select eight units with graduate adviser approval; select nine units from

EDSE 421A,
EDSE 421K,
EDSE 581,
OSBE 410AB.

*** Secondary School Option (29 units)***Prerequisites:*

OSBE 313, 420

Required Course (4 units)

OSBE	515	Information Processing in Business Education	(4)
------	-----	--	-----

Electives (25 units)

Select from 400- or 500-level courses with adviser approval; include 8-12 units in business or economics, 6-8 units in education, and a 3-4. unit business education methods course. Students who have not successfully completed OSBE 410AB (or equivalent) previously *must* include it on their program.

Comprehensive Examination (0 units)

Students should expect to take the comprehensive examination (BUS 596) the quarter they complete all course work on their program and must comply with school and departmental requirements.

Master of Arts Degree in Economics

The *General Option* is intended for persons in industry, government, and education who need to develop an understanding of contemporary economic analysis.

The *Analytic-Quantitative Option* is intended for individuals seeking an emphasis on applied quantitative analysis or planning to enter a doctoral program in Economics.

Admission to the Program

In addition to university requirements for admission to graduate study with conditionally classified standing, the following are prerequisite to admission as a classified graduate student in Economics: equivalent of the baccalaureate in Economics at Cal State L.A. or completion with a B (3.0) average of a set of prerequisite courses selected by an Economics adviser at Cal State L.A.; filing of a program, including electives, with the School of Business and Economics.

If qualifying courses are required, they must be so designated in advance. They may include upper division and prerequisite courses.

Requirements for the Degree (45 units)

The 45-unit program consists of core requirements which are to be taken together with either the General Option or the Analytic-Quantitative Option. A minimum of 23 units must be 500 level.

Required Courses (12 units):

** ECON 510	Seminar: Advanced Microeconomic Theory I	(3)
** ECON 520	Seminar: National Income and Employment Theory	(3) and
** ECON 511	Seminar: Advanced Microeconomic Theory II	(3) or
** ECON 521	Seminar: Monetary Theory and Policy	(3)
ECON 598	Graduate Directed Study	(1, 1, 1)

** Concurrent enrollment in ECON 598 for 1 unit required with each of these seminars.

Options

Select one of the following options for 28-33 units. Electives are determined in conference with a graduate adviser to meet the professional objectives of students.

*** General Option (23-33 units)****Required Courses (8 units):**

ECON 413	Mathematical Economics	(4)
ECON 414	Econometrics	(4)

Electives(20-25 units):

Select 400- and 500-level courses in economics, social and behavioral sciences, business, or mathematics, in consultation with graduate adviser. A sufficient number must be at the 500 level to bring the total 500-level units for core and electives to at least 23. The electives shall include a field of concentration for those electing the comprehensive examination.

*** Analytic-Quantitative Option (28-33 units)****Required Courses (16 units):**

ECON 409	Advanced Applied Business and Economic Statistics III	(4) or
ECON 491	Sampling Theory and Techniques in Research	(4) or
MATH 475	Introduction to Mathematical Statistics	(4)
ECON 413	Mathematical Economics	(4)
ECON 414	Econometrics	(4)
ECON 514	Seminar: Econometrics	(3)
ECON 598	Graduate Directed Study	(1)

Electives (12-17 units):

Select 400- and 500-level courses in economics, social and behavioral sciences, business, or mathematics in consultation with a graduate adviser. A sufficient number must be at the 500 level to bring total 500-level units for core and electives to at least 23. The electives shall include a field of concentration for those electing the comprehensive examination.

Comprehensive Examination or Thesis (0, 5 units)

BUS 596	Comprehensive Examination	(0) or
ECON 599AB	Thesis	(2, 3)

Students who select the comprehensive examination option must take examinations in macroeconomic and microeconomic theory and in a third field of economics chosen by the student. Students should expect to take the comprehensive examination (BUS 596) the quarter they complete all course work on their program and must comply with school and departmental requirements.

Master of Science Degree in Health Care Management

The Master of Science degree in Health Care Management assists people presently or previously employed in health care settings to develop the necessary managerial skills and awareness of the most recent innovations in health care delivery systems to fulfill the responsibilities of management positions in the industry.

The program's unique interdisciplinary character permits students to take courses in many disciplines, including psychology, nursing, computer information systems, finance, and labor relations.

Admission to the Program

In addition to university requirements for admission to graduate study, applicants must meet the following requirements:

- * A 2.75 grade point average or above in the last 90 quarter units. * A resume that documents a minimum of one year recent full-time work experience or equivalent in a health care setting.

Two recommendations from persons who have supervised the applicant's work in a health care setting (send to Health Care Management Advisory Committee, Department of Management, School of Business and Economics, prior to May 15 for admission to summer quarter, August 1 for fall quarter, November 15 for winter quarter, and February 15 for spring quarter).

Requirements for the Degree (45 units)

A total of 45 units is required, with at least 23 in 500-level courses.

Required Courses (28 units):

MGMT 461	Management Theory and Practice	(4)
MGMT 470	Managerial Leadership and Motivation	(4)
MGMT 478	Financial Management of Health Care Institutions	(4)
MGMT 501	Administrative Behavior and Systems Management	(4)
MGMT 564	Labor Relations Aspects of Health Care Delivery	(2)
MGMT 576	Seminar: Managing Health Care Organizations	(3)
MGMT 598	Graduate Directed Study	(1)
NURS 562	Human Resource Utilization in Health Care Organizations	(2)
NURS 564	Seminar: Health Care Administration	(2)
MGMT 595	Advanced Field Study	(2) or
NURS 595	Advanced Field Study	(2)

Electives (select 17 units of 400- or 500-level courses with prior adviser approval).

Comprehensive Examination (0 units)

Students should expect to take the comprehensive examination (BUS 596) the quarter they complete all required courses and the quarter they complete all work on the program and must comply with school and departmental regulations.

COURSES IN BUSINESS AND ECONOMICS

Courses in Business and Economics-Interdepartmental (BUS)

400-level Courses

All 400-level courses may be applied toward master's degree requirements, subject to limits established by the department and approval of the graduate adviser.

Graduate Courses

Classified graduate standing and approval by the School of Business and Economics Graduate Programs Office are required for admission to all 500-level courses.

597 Graduate Research (1-4)

Prerequisites: Instructor consent to act as sponsor, approval of graduate associate dean prior to registration. Independent research under guidance of faculty member. Acceptable final written report required. May be repeated for credit to maximum of 8 units. Grade CR/NC.

599A Thesis (2)

Prerequisites: Written approval of graduate adviser;. for M.S. Business Administration candidates, completion of at least one of ACCT 503, ECON 502, or MGMT 501 and concurrent registration in at least one of the remaining two courses. Formal course in research methodology conducted at option of individual departments. Prior to completion, students will have: completed a tentative outline of thesis, petitioned graduate adviser for appointment of a thesis committee, and submitted tentative outline to thesis committee. GradedCR/NC.

599B Thesis (3)

Prerequisites: BUS 599A, written approval of thesis committee chair. Completion of thesis under direct supervision of thesis committee. GradedCR/NC.

Courses in Accounting (ACCT)**Undergraduate Courses**

The following undergraduate courses are restricted to conditionally I classified graduate students. They do not yield credit toward advanced degrees.

260R Accounting Principles (4)

Fundamentals of accounting theory and practice; how accounting serves the business entity.

360R Management Accounting and Analysis (4)

Prerequisite: ACCT 202 or 260R. Use of accounting data for cost control and decision-making. Topics include cost accounting, cost volume profit analysis, relevant costs, profit planning, capital budgeting, and tax considerations.

400-level Courses

All 400-level courses except those followed by the suffix R may be applied toward master's degree requirements, subject to limits established by the department and approval of the graduate adviser.

Graduate Courses

Classified graduate standing and approval by the School of Business and Economics Graduate Programs Office are required for admission to all 500-level courses.

503 Quantitative Approach to Managerial Decisions (4)

Use of quantitative information provided from accounting and statistical sources in arriving at solutions to complex business problems.

520 Seminar: Management Accounting Theory (3)

Corequisite: ACCT 598. Advanced accounting theory as applied to modern business practice; background and place of accounting in society and the economy; current development in accounting theory.

521 Seminar: Financial Accounting Theory (3)

Corequisite: ACCT 598. Advanced analytical concepts implicit in contemporary accounting practice; current developments in accounting techniques; specific applications to major aspects of financial statements.

522 Seminar: Current Topics in Financial Reporting (3)

Corequisite: ACCT 598. Objectives of financial statements, efficient capital markets, setting accounting policy, using accounting data, processing human information.

523 Seminar: Public Accounting (3)

Corequisite: ACCT 598. Historical development of professions, audit function in relation to ethical and legal considerations, trends in new services for clients, the CPA firm, multinational practice, signposts of the future.

524 Seminar: Advanced Cost and Managerial Accounting (3)

Prerequisite: ACCT 422; corequisite: ACCT 598. Selected analytical and policy issues underlying current developments in standards and techniques; application of advanced concepts to profit and nonprofit organizations.

525 Seminar: International Accounting (3)

Corequisite: ACCT 598. Selected analytical and policy issues underlying current developments in international accounting.

585 Seminar: Tax Theory and Business Applications (3)

Prerequisite: ACCT 421 A; corequisite: ACCT 598. Tax concepts and judicial doctrines inherent in federal tax law; effects of taxation of business organization, capital structure, policies, and operation.

586 Seminar: Tax Research and Practice (3)

Prerequisite: ACCT421A; corequisite: ACCT 598. Methodology of researching complex tax problems; tax planning; scope of activity, responsibility, and ethics of accountant in tax field.

587 Seminar: Taxation of Corporations and Shareholders (3)

Prerequisite: ACCT 421A; corequisite: ACCT 598. Statutory, regulatory, and case material applicable to corporation tax including formation, stock redemptions, and liquidations; stock dividends and preferred stock bail outs; elections under subchapter S; personal holding companies, accumulated earning tax; collapsible corporations.

598 Graduate Directed Study (1)

Investigation of an approved project leading to written report; project selected in conference with seminar professor, and arrangements made for regular meetings during quarter. May be repeated for credit.

Courses in Computer Information Systems (CIS)**Undergraduate Course**

The following undergraduate course is restricted to conditionally I classified graduate students. It does not yield credit toward advanced degrees.

262R Business Information Processing (4)

Fundamentals of computer hardware, software, and communication subsystems; business modeling in IFPS: programming in BASIC: use of time-sharing terminals for interactive data processing.

400-level Courses

All 400-level courses may be applied toward master's degree requirements, subject to limits established by the department and approval of the graduate adviser.

Graduate Courses

Classified graduate standing and approval by the School of Business and Economics Graduate Programs Office are required for admission to all 500-level courses.

504 Management Information Systems (4)

Teleprocessing, data management, and computing systems and their applications to business administration and management.

527 Seminar: Computerized Decision Analysis (3)

Corequisite: CIS 598. Analysis, design, management, and use of a business information system, concentrating on participation of top and middle managers in these functions.

528 Seminar: Current Problems in Computer Information Systems (3)

Prerequisite: CIS 527; corequisite: CIS 598. Latest research projects in computer information systems; application of research techniques and results to specific problems.

543 Seminar: Data Base Planning (3)

Prerequisite: CIS 504; corequisite: CIS 598. Management responsibilities in data base planning; methods of planning for data bases; case studies in data base development.

560 Seminar: Microcomputer Networks (3)

Prerequisites: CIS 262R, 504; corequisite: CIS 598. Advanced technology concepts and developments seminar; trends in hardware and associated operating systems and architecture; Distributed Information Systems (distributed data processing), networking, data communications related to networks.

567 Seminar: Business Expert Systems (3)

Prerequisites: CIS 262R, 504; corequisite: CIS 598. Business expert systems and their role in reshaping traditional concepts of what organizations are, how they are managed, and how decisions are made.

581 Seminar: Health Care Information (3)

Prerequisite: HS 540; corequisite: CIS 598. Introduction to computer hardware, software, telecommunications, and information systems management; emphasizes medical informatics and health care applications; includes advanced seminar presentations about current professional issues. Open only to MS--Health Care Management students.

584 Seminar: Controlling and Auditing Computer Systems (3)

Corequisite: CIS 598. Controlling on-line interactive computed data communication systems as a challenge to management and to internal and external auditors.

585 Large Scale Computer Networks, Telecommunications, and Information Services (3)

Prerequisite: CIS 504; corequisite: CIS 598. Interdisciplinary survey of computer networks, supporting telecommunications, and network information services; international open system interconnection standards, global information services regulatory/legal infrastructure, and strategic network management. *Not open to students in: MS Accountancy (IS option); MBA (BIS option); MS Business Administration (MIS option).*

598 Graduate Directed Study (1)

Investigation of an approved project leading to written report; project selected in conference with seminar professor, and arrangements made for regular meetings during quarter. May be repeated for credit.

Courses in Economics (ECON)**Undergraduate Courses**

The following undergraduate courses are restricted to conditionally I classified graduate students. They do not yield credit toward advanced degrees.

311R Managerial Economics (4)

Prerequisites: ECON 201, 369R. Managerial application of economic theory; optimization techniques applied to consumer choice, firm behavior, pricing, and the study of market structure.

369R Statistics for Business Administration (4)

Prerequisite: MATH 242. Linear statistical models and nonparametric methods emphasizing business applications, linear regression, and correlation; analysis of variance; index numbers, time series and enumerative data analysis; nonparametric statistics. Five hours per week.

400-level Courses

All 400-level courses may be applied toward master's degree {requirements except the following, subject to limits established by the department and approval of the graduate adviser.} ECON 403, 410, 499

Graduate Courses

Classified graduate standing and approval by the School of Business and Economics Graduate Programs Office are required for admission to all 500-level courses.

502 Economic Analysis and Business Operations (4)

Tools, concepts, and factual data of the economist in solving specific business problems; case method applications of principles, analytical tools, and sources of economic information to practical business situations.

510 Seminar: Advanced Microeconomic Theory I (3--4)

Prerequisite: ECON 410; corequisite: ECON 598. Advanced treatment of theories of household choice, production and cost, and output and input markets. Emphasis on static, partial-equilibrium analysis.

511 Seminar: Advanced Microeconomic Theory II (3)

Prerequisite: ECON 510; corequisite: ECON 598. Continuation of ECON 510 with emphasis on general equilibrium analysis, capital theory, and intertemporal resource allocation.

514 Seminar: Econometrics (3)

Prerequisite: ECON 414; corequisite: ECON 598. Advanced treatment of statistics to analyze economic systems and test economic theories; emphasis on simultaneous equation models and time series models and their applications using econometric computer software.

520 Seminar: National Income and Employment Theory (3-4)

Prerequisite: ECON 403; corequisite: ECON 598. Seminar in aggregate income and employment theory; analysis of national income measurement and concepts, macroeconomic theory, fiscal policy.

521 Seminar: Monetary Theory and Policy (3-4)

Prerequisite: ECON 520; corequisite: ECON 598. Seminar in aggregate income and employment theory; monetary theory, role of money in macroeconomic theory, monetary policy.

526 Seminar: International Political Economy (4)

(also listed as POLS 526) Prerequisite: ECON/POLS 426 or ECON 461 plus POLS 427. Research and analysis of the interactions of politics and economics in the international arena.

540 Seminar: Urban Economics (3)

Prerequisite: ECON 440; corequisite: ECON 598. Advanced treatment of economic models for analyzing urban-regional problems, including growth, land use, housing, transportation, income distribution. Emphasis on construction and use of models in policy evaluation.

560 Seminar: Economic Growth in Underdeveloped Areas (3)

Prerequisite: ECON 460; corequisite: ECON 598. Advanced treatment of theory and practice of national development from an economic perspective. Major theories of economic development; role of labor, capital, technology, foreign trade, and government policy.

561 Seminar: International Economics (3)

Prerequisite: ECON 461; corequisite: ECON 598. Advanced study and analysis of theories concerning economics of international exchange of goods, services, capital and government transfers; discussion of international institutions regulating trade and payments among nations.

571 Seminar: Economic History of U.S. (3)

Prerequisite: ECON 471; corequisite: ECON 598. Critical examination of selected topics in American economic history with emphasis on the empirical application of economic analysis.

590 Seminar: Contemporary Economic Analysis and Policy (3)

Corequisite: ECON 598. Selected analytical and policy issues underlying current developments in theoretical, empirical, and policy research; topics will reflect student interest and faculty specialty. May be repeated once as subject matter changes, with instructor consent.

598 Graduate Directed Study (1-4)

Investigation of an approved project leading to an oral and/or written report; project selected in conference with seminar professor before registration, and arrangements made for regular meetings during quarter. May be repeated for credit.

599A Thesis (2)

Prerequisite: Completion of required core courses, written approval of graduate adviser. Prior to completion, students will have completed a tentative outline of thesis, petitioned graduate adviser for appointment of a thesis committee, and submitted a tentative outline to thesis committee. Graded CR/NC.

599B Thesis (3)

Prerequisites: ECON 599A, written approval of thesis committee chair. Completion of thesis under direct supervision of thesis committee. Graded CR/NC.

Courses in Finance (FIN)

Undergraduate Courses

The following undergraduate courses are restricted to conditionally classified graduate students. They do not yield credit toward advanced degrees.

261 R Law for the Business Manager (4)

Law of contracts, agency, business organizations, sales, negotiable instruments, antitrust, and administrative agencies.

363R Managerial Finance (4)

Prerequisites: ACCT 360R, ECON 369R. Analysis of the financial management function; development of tools, procedures, and theories used in analyzing the investment decision, the financing decision, the dividend decision, and the management of working capital.

400-level Courses

All 400-level courses may be applied toward master's degree requirements, subject to limits established by the department and approval of the graduate adviser.

Graduate Courses

Classified graduate standing and approval by the School of Business and Economics Graduate Programs Office are required for admission to all 500-level courses

530 Seminar: Business Finance (3)

Prerequisites: ACCT 503, 520, ECON 502; corequisite: FIN 598. Analysis of acquisition and administration of assets by the business corporation; analysis of interrelationships between business financial decisions and national economy; and development of theories of financial management.

531 Seminar: Financial Institutions (3)

Prerequisite: FIN 530; corequisite: FIN 598. Role of financial institutions in U.S.; financial management of various types of financial institutions against a background of national income, national policies, and flow of funds.

532 Seminar: Estate Planning (3)

Corequisite: FIN 598. Advanced planning for individual financial management; consideration given to legal, financial, and taxation problems, including insurance, investments, trusts, real estate, wills, and related laws.

533 Seminar: International Finance (3)

Prerequisite: FIN 530; corequisite: FIN 598. Analysis of institutions, instruments, and procedures used in financing exports and imports, international investments, and multinational business operations.

534 Seminar: Portfolio Management (3)

Prerequisite: FIN 530; corequisite: FIN 598. Application of modern capital market theory to portfolio management; determination of market risk and return measures; development of portfolio preference models to cover range of investors from pension funds and institutional investors to individual investor.

535 Seminar: Speculative Securities and Markets (3)

Prerequisite: FIN 534; corequisite: FIN 598. Economics and pricing of options and futures contracts and their applications to portfolio management; how proliferation of speculative markets affects efficiency and stability of financial system.

598 Graduate Directed Study (1)

Investigation of an approved project leading to written report; project selected in conference with seminar professor, and arrangements made for regular meetings during quarter. May be repeated for credit.

Courses in Management (MGMT)**Undergraduate Courses**

The following undergraduate courses are restricted to conditionally classified graduate students. They do not yield credit toward advanced degrees.

366R Managing Production Operations (4)

Prerequisite: ECON 369R. Problems, techniques of analysis, and recent developments that relate to production of goods and services. Analysis of problems in production control, demand forecasting, quality control, scheduling, and logistics.

367R Managing Organizational Behavior (4)

Analysis of manager and employee behavior in work situations. Managing interpersonal and intergroup processes and relationships in organizations.

368R Managing Modern Organizations (4)

Analysis of management principles and functions in complex organizations, utilizing organizational resources efficiently and effectively, understanding and interacting meaningfully with the external environment.

400-Level Courses

All 400-level courses may be applied toward master's degree I requirements, subject to limits established by the department and approval of the graduate adviser.

Graduate Courses

Classified graduate standing and approval by the School of Business and Economics Graduate Programs Office are required for admission to all 500-level courses.

501 Administrative Behavior and Systems Management (4)

Analysis of concepts and cases of managerial action in organizations, including decision making processes; organizations as open systems; methods for strategically aligning an organization's capabilities, structure, and environment.

560 Seminar: Strategic Planning (3)

Corequisite: MGMT 598. Development of comprehensive business strategy and long range plans with consideration for the social, economic, political, and technological environments; current strategic principles and practices; analysis of planning processes and systems.

561 Seminar: Organizing (3)

Corequisite: MGMT 598. Continued development of a management philosophy, with emphasis upon process of organization, allocation of responsibility and authority, and formation and behavior of industrial work groups. Critical analysis through case materials.

562 Seminar: Control (3)

Corequisite: MGMT 598. Continued development of a management philosophy with emphasis on procedure analysis automation, operations research, control of operations, and morale. Case materials, searching analysis of company operations.

564 Labor Relations Aspects of Health Care Delivery (2)

Prerequisite: NURS 562. Formal and informal relationships between health care facilities management and labor organizations; development of unions in health care industry; changing role of management; professional organizations; collective bargaining.

571 Seminar: Cases in Managing Health Care Policy (3)

Prerequisite: MGMT 501; corequisite: MGMT 598. Cases involving payment systems, regulation, competition, organizational integration, legal precedents, legislation, health insurance, prevention, managing for ethical response.

572 Seminar: Power and Politics in Organizations (3)

Corequisite: MGMT 598. Analysis of power and politics in organizations; sources determinants, strategies, impact on organizational decision making and effectiveness; implications for management. Case material and selected readings.

573 Seminar: Personnel Management (3)

Prerequisite: MGMT 473; corequisite: MGMT 598. Selected problem areas focusing on policies, techniques, and legal and social restrictions in areas of recruitment, selection, training, compensation, and occupational health and safety.

574 Seminar: Managing Employee Motivation and Work Behavior (3)

Corequisite: MGMT 598. Manager's function in leading, directing, motivating work behavior; research of cases of management processes relating to organizational behavior, growth, effectiveness.

575 Seminar: Managing the Management Career (3)

Corequisite: MGMT 598. Cases, principles, and practices for developing individual career models, directing organizational management resource and utilization activities, and serving as mentor/coach for maximum management utilization with organizations.

576 Seminar: Managing Health Care Organizations (3)

Corequisite: MGMT 598. Analysis of management processes and concepts as applied in health care organizations. Practical issues in organizing, controlling, and changing health care programs and services.

577 Seminar: International Business Management (3)

Corequisite: MGMT 598. Nature, environment, resources, strategies, and models of international business organization; analysis of managerial functions performed by international business managers; case studies pertaining to management in an international context.

578 Seminar: Operations Research Topics (3)

Corequisite: MGMT 598. Modern management techniques utilizing management science methods, including traditional manufacturing applications and contemporary extensions such as transportation and logistics, communication systems, service systems, health services, education, energy, urban affairs; review of recent literature.

580 Seminar: Operations Management in Health Care Settings (3)

Corequisite: MGMT 598. Theory, design, and audit of systems of scheduling, quality assessment, capacity, location, and other operations in medium size and large health care settings.

590 Seminar: Productivity Management (3)

Prerequisite: MGMT 501; corequisite: MGMT 598. Productivity perspectives, productivity measurement and evaluation methods, productivity improvement approaches, designing and executing successful productivity management program; cases in manufacturing and services sectors.

594 Policy Integration and Strategy (3)

Prerequisite: Business core requirements; corequisite: MGMT 598. Applying knowledge, theories, and techniques derived from previous courses, using integrative cases to formulate policies under conditions of uncertainty. *Course must be taken in final quarter of student's program.*

595 Advanced Field Study (1-6)

Independent, supervised field experience in an applied area of business or health care management. Weekly tutorial sessions required for student-teacher synthesis of learning from course work and field experience.

598 Graduate Directed Study (1)

Investigation of an approved project leading to written report; project selected in conference with seminar professor, and arrangements made for regular meetings during quarter. May be repeated for credit.

Courses in Marketing (MKT)

Undergraduate Course

The following undergraduate course is restricted to conditionally classified graduate students. It does not yield credit toward advanced degrees.

364R Managerial Marketing (4)

Prerequisites: CIS 262R, ECON 369R. Marketing role in business and economy; changing customer wants and social needs; product/service development; distribution, promotion, and pricing strategies; managerial approach in planning, execution, and control of marketing programs.

400-level Courses

All 400-level courses may be applied toward master's degree I requirements, subject to limits established by the department and approval of the graduate adviser.

Graduate Courses

Classified graduate standing and approval by the School of Business and Economics Graduate Programs Office are required for admission to all 500-level courses.

540 Seminar: Marketing Communication (3)

Corequisite: MKT 598. Strategic promotional variables considered individually and in combination to communicate want-satisfying attributes of products and services in the most effective and efficient manner.

542 Seminar: Marketing Management (3)

Corequisite: MKT 598. Analysis of management of the enterprise, operating under conditions of uncertainty and designed to distribute want-satisfying goods and services.

543 Seminar: International Marketing (3)

Corequisite: MKT 598. Planning and implementing international marketing programs including those of multinational corporations; micro and macro marketing implications of economic development; consumer behavior, market research and strategy in other cultures.

544 Seminar: Consumer Behavior (3)

Corequisite: MKT 598. An interdisciplinary study that concentrates on how consumers behave in the marketplace; the objective is to understand, explain, and predict consumers' actions under a variety of market conditions.

545 Seminar: New Venture Marketing (3)

Corequisite: MKT 598. Strategies for introducing new ventures, products, services, and businesses from conception of the idea through market testing to introducing the product/service successfully into the marketplace.

546 Seminar: Marketing Research (3)

Prerequisites: ECON 309; MKT 304; OSBE 361 R. Role of marketing research in making marketing decisions and planning and implementing marketing research projects; state-of-the-art marketing research tools and techniques and their applications.

547 Seminar: Retail Management (3)

Corequisite: MKT 598. Policies, problems, and opportunities in today's complex and dynamic retail environment; procedures for interrelating, planning, and implementing retail strategy involving marketing, management, and financial tools and theory.

550 Seminar: Transportation and Physical Distribution (3)

Corequisite: MKT 598. Role of transportation and distribution manager in reducing inventory control risks by planning, selecting, and supervising forms of transportation; current developments in handling and storage facilities and other distribution services.

598 Graduate Directed Study (1)

Investigation of an approved project leading to written report; project selected in conference with seminar professor, and arrangements made for regular meetings during quarter. May be repeated for credit.

**Courses in Office Systems and Business Education (OSBE)
Undergraduate Course**

The following undergraduate course is restricted to conditionally classified graduate students. It does not yield credit toward advanced degrees.

361 R Techniques of Managerial Communication (4)

Prerequisite: Passing WPE score. Principles of report preparation. Techniques of collecting and interpreting data and writing reports. Discussion and application of letters, memos, and managerial communications.

400-level Courses

All 400-level courses may be applied toward master's degree I requirements, subject to limits established by the department and approval of the graduate adviser.

Graduate Courses

Classified graduate standing and approval by the School of Business and Economics Graduate Programs Office are required for admission to all 500-level courses.

510 Seminar: Contemporary Issues and Trends in Business Education (3)

Prerequisite: OSBE 410B; corequisite: OSBE 598. Identification and analysis of significant current issues, trends, and problems affecting business education.

511 Seminar: Administration and Supervision in Business Education (3)

Prerequisite: OSBE 410B; corequisite: OSBE 598. Problems of administration and supervision of Business Education and Office Systems programs at various educational levels; development and

supervision of training programs in business; program evaluation; student recruitment and retention; effective resource utilization.

512 Seminar: Research in Business Education (3)

Prerequisites: OSBE 401,514; corequisite: OSBE 598. Study of research in business education; selection of a business education research problem; development, design, and completion of individual research study.

514 Seminar: Evaluation of Student Performance in Business Education (3)

Prerequisite: OSBE 410A; corequisite: OSBE 598. Principles of testing and evaluation; prognosis, aptitude, and achievement tests for specialized business careers; interpretation of business education tests; grading and evaluating business subjects; standardized tests and their construction.

515 Information Processing in Business Education (4)

Integrating information processing applications throughout the business curricula at secondary and community college levels; planning, purchasing, and evaluating microcomputer hardware and software in business education.

516 Seminar: Advanced Business Communication (3)

Prerequisite: OSBE3010 361R; corequisite: OSBE 598. Business administration aspects of communication; emphasis on written business communication in the environment of word processing systems and records systems administration; communication patterns in business organizations research.

517 Seminar: Administrative Office Systems (3)

Prerequisite: OSBE 4010 361 R; corequisite: OSBE 598. Theories, policies, and models of office administration; research and evaluation of current problems.

598 Graduate Directed Study (1)

Investigation of an approved project leading to written report; project selected in conference with seminar professor, and arrangements made for regular meetings during quarter. May be repeated for credit.

SCHOOL OF EDUCATION

Divisions 'within the School

Division of Administration and Counseling
 Division of Curriculum and Instruction
 Division of Educational Foundations and Interdivisional Studies
 Division of Special Education

SCHOOL OF EDUCATION

Office of the Dean

King Hall D2069
 Phone: (213) 343-4300

Office of the Associate Dean for Instruction and Graduate Studies

King Hall D2070
 Phone: (213) 343-4303

Office of the Associate Dean for Student Services

King Hall D2078
 Phone: (213) 343-4322

Accreditation

The School of Education is nationally accredited by the National Council for Accreditation of Teacher Education (NCATE). All credential programs are approved by the California Commission on Teacher Credentialing. The school offers programs leading to advanced degrees and to certification for specified fields of professional development in California public schools and other public and private agencies. Because the campus is located in the heart of metropolitan Los Angeles, School of Education programs reflect concern with the problems and challenges of urban education with particular emphasis on bilingual/crosscultural issues.

Degrees Offered

The School of Education offers the following Doctor of Philosophy, Master of Arts, and Master of Science degrees.

Doctor of Philosophy degree in Special Education, offered jointly with the University of California, Los Angeles, provides preparation for leadership positions in higher education and the public schools as well as preparation for a career in scholarly research.

Master of Arts degree in Education with the following options:

- * *Area of Special Interest option*, designed for students with special needs not covered by other M.A. degree options, permits flexibility and an opportunity to concentrate course work in a particular research interest or a problem of immediate professional concern.
- * *Adult and Continuing Education option*, designed for teachers in this field who serve the community in myriad settings, e.g., secondary adult education programs, community colleges, technical schools, health agencies, libraries and museums, occupational and professional associations, state and federal educational agencies, the armed forces, correctional institutions, parks and recreation departments, four-year college continuing education programs, community-based organizations, cooperative extension programs, religious organizations, and more.
- * *Computer Education option*, prepares computer education specialists to direct school computer laboratories; select, design, and evaluate instructional software; teach computer programming/problem solving to children; and fill leadership roles in school districts in computer applications in education.
- * *Educational Foundations option*, with concentrations in social and psychological foundations, for educators interested in the theoretical bases of education.
- * *Elementary Teaching option*, designed to improve elementary teaching competence, with several areas of concentration, and to develop skills for continuing self-directed study.

- * *Instructional Technology option*, prepares specialists for elementary and secondary institutions who combine skills in computer technology application with advanced video and multimedia techniques to enhance the learning experience of students at all levels.
- * *Library Science option*, designed to prepare school library media specialists for library media centers at all educational levels, with emphasis on development of critical skills in this growing, rapidly changing and expanding field. Teachers study various aspects of the field which vary from research to one-on-one student contact to budget and purchasing to management, and more.
- * *Reading option*, designed to provide proficiency in the specialized teaching of reading.
- * *Secondary Teaching option*, designed to meet the challenge of educational excellence through the development of instructional leadership skills for secondary and postsecondary educators.

The *Master of Arts degree in Educational Administration*, with a choice among several areas of specialization, prepares educators with an understanding of American urban life, provides them with the research skills needed to direct, conduct, analyze, and evaluate research projects, and presents opportunities for in-depth study of administering, managing, supervising, coordinating, and directing public, private, and parochial schools.

The *Master of Arts degree in Special Education* is designed to prepare personnel to provide educational services to individuals who, because of physical, behavioral, and/or mental characteristics, require special instruction or services. Specialized preparation is offered for teachers of these exceptional individuals and for administrators and supervisors of special education programs.

The *Master of Arts degree in Teaching English to Speakers of Other Languages (TESOL)* is intended to prepare students for teaching in a variety of situations, kindergarten through adult level, both in the U.S. and abroad. The program emphasizes language acquisition processes and the implications for second language teaching in preparing students for many teaching situations: English as a second language, as a foreign language, and for special purposes.

The *Master of Arts degree in Urban Education* is intended for students interested in the problems and challenge of providing education in metropolitan schools, and offers a number of options.

Master of Science degree in Counseling, with options in Applied Behavior Analysis; Higher Education Counseling; Marriage, Family, and Child Counseling; Rehabilitation Counseling; School Counseling; School Counseling and Principalship; and School Psychology, designed to prepare graduates to function as professionals in these areas.

Students entering graduate education programs must meet specific requirements set forth for each program in addition to university requirements for admission to graduate study.

Admission to Master's Degree and Credential Programs in Education

Students entering graduate programs in education must meet university requirements for admission to graduate study and additional requirements set forth for each program. Admission to the university does not automatically admit students to credential or postbaccalaureate programs in the School of Education. Formal application is required for admission to a specific degree or credential program. Teaching credential application procedures are described in the undergraduate School of Education chapter.

Postbaccalaureate Year

State of California credential requirements include a fifth year of study completed after the baccalaureate. Students may elect to complete all or part of their professional requirements in the fifth year, pursue a master's degree, or follow a planned course of study approved by their adviser. All students must plan an approved program with an adviser.

General Information About Teaching Credentials

All students who desire university recommendation for completion of the professional clear credential must be admitted to Cal State L.A. and must satisfy any writing or speech requirements required of all postbaccalaureate students. They must also apply for admission to the credential program. Students who completed directed teaching at Cal State L.A. and are eligible for the university recommended preliminary credential and transfer students who possess a preliminary teaching credential will be admitted upon successful completion of application procedures to fifth year programs. In addition, transfer students who have not completed directed teaching will be required to complete admission procedures listed in the *Undergraduate Programs* section under *Admission to Credential Programs*.

Definition of the Fifth Year for Professional Clear Teaching Credentials

The fifth year, comprised of a minimum of 45 postbaccalaureate quarter units selected with adviser assistance, may consist of:

- * completion of requirements for the preliminary credential,
- * work toward another baccalaureate, or
- * an advanced credential, or
- * a master's degree, or
- * a program of courses designed to improve the applicant's teaching competencies.

Residence requirement

Applicants who possess a master's degree from an accredited institution outside California or an advanced credential based on a full fifth year of postbaccalaureate study (45 quarter units) are not subject to residence requirements for university recommendation. Applicants with a master's degree or an advanced credential from a California institution are referred to their parent institution for recommendation. All other applicants must complete a minimum of 16 quarter units in residence at Cal State L.A.

Criteria for University Recommendation for Professional Clear Credential

- * Completion of application procedures for admission to the university and to fifth year credential program.
- * Completion of an approved fifth year program.
- * Satisfaction of all legal and university credential requirements.

Procedures

- * Apply for admission to Cal State L.A. and to the School of Education credential programs
- * Plan a fifth year program with an adviser.

The program is checked by a credential analyst for satisfaction of criteria, applicability of transfer work, etc. The program plan is filed and used for verification of credential requirements.

Students receive university recommendation following application and verification of completion of all requirements for the clear credential.

Restriction on Credit Earned in Variable Unit Courses

All School of Education master's degree programs are subject to the following credit restrictions:

- * Limit of 12 units from 499, 597, and 598 on programs without a thesis or project.
- * Limit of 15 units from 499, 597, 598, and 599 on programs with a thesis or project.

INTERDISCIPLINARY PROGRAM

Office of the Associate Dean for Instruction and Graduate Studies

King Hall D2070

Phone: (213)343-4303

Master of Arts Degree in Education: Option in Area of Special Interest

The Master of Arts degree in Education with an Option in *Area of Special Interest* provides breadth and flexibility in program planning for students who wish to study an area of education not specifically covered in one of the existing degree options. Students select appropriate School of

Education courses and others in any department that develops knowledge related to their interests. Illustrative areas include educational media, early childhood education, teaching English as a second language, and adult education. Additional information and advisement are available from the associate dean, School of Education, King Hall D2070. The faculty for this program is provided by the entire School of Education.

Admission to the Program

In addition to university requirements for admission to graduate study, applicants must have two years of teaching experience or 33 units of approved upper division courses in education and related areas plus a minimum 2.75 grade point average in the last 90 quarter units attempted and must meet school-established proficiency standards and receive the associate dean's approval.

Requirements for the Degree (45 units)

A total of 45 units is required, with at least 23 in 500-level courses. All students must complete a 7-unit thesis or project structured around the area of special interest. There is a limit on credit that may be earned in variable-unit courses. See School of Education course offerings at the end of this chapter.

Required Course (4 units):

EDFN 500	Evaluation of Educational Research	(4) or
EDFN 509	Methods of Research in Education	(4)

Electives (12-25 units):

Select education courses with adviser approval to meet individual needs. Courses used to satisfy teaching credential requirements may not be used to satisfy this requirement.

Electives Outside Education (9-22 units):

Select courses outside the field of education, with adviser approval.

Thesis or Project (7 units):

EDFN 599A	Thesis or Project Planning	(2) plus
EDFN 599B	Thesis or Project	(5)

ADMINISTRATION AND COUNSELING

School of Education

DIVISION OFFICE

King Hall C1065

Phone: (213) 343-4250

Program advisement provided for:

- * Administration and supervision programs for master's degrees and credential
- * Counseling programs for master's degree, credentials, and state licenses

Courses offered in:

- * Counseling (COUN)
- * Educational Administration (EDAD)

Master of Arts Degree in Educational Administration Admission to the Program

- * In addition to general university requirements for admission to graduate study, applicants to a master's degree or credential program must meet the following requirements:
 - * Completion of application to the division and assignment of permanent adviser.
 - * A 2.75 grade point average in the last 90 quarter units attempted.
 - * Completion of writing examinations and required inventories.
 - * Meeting of admission standards developed by the division.

- * Counseling interviews with division chair and permanent adviser.
- * A program of study approved by the permanent adviser and division chair.

Requirements for the Degree (45--52 units)

A minimum of 45 units is required, including at least 23 units in 500-level courses and a comprehensive examination. There is a limit on credit that may be earned in variable-unit courses. See *Restrictions on Credit Earned in Variable Unit Courses* earlier in this chapter.

Required Core (31 units):

EDAD 506	Leadership in Education	(3)
EDAD 507	Educational Planning and Decision Making Models	(3)
EDAD 509	Basic School Law	(3)
EDAD 510	School Finance	(3)
EDAD 515	Social and Political Forces Affecting Education	(3)
EDAD 517	Educational Staff Development and Evaluation	(3)
EDAD 518	Program Management, Development and Evaluation	(3)
* EDAD 554	Seminar: Research and Development in Educational Administration	(3)
* EDAD 567	Seminar: Current Issues in Educational Administration	(3)
EDFN 553	Educational Research and Decision Making	(4)

**to be taken after completion of all other core courses*

Areas of Specialization (minimum 14 units)

Select one of following specializations:

*** Administration of Special Education (14 units)**

Prerequisite to this specialization is completion of a teaching credential authorizing service in one or more special education programs.

Required Courses (7 units):

EDAD 548
EDSP 585

Electives (7 units):

*** School Business Administration (15-21 units)**

Required Courses (12-18 units):

EDAD 533, 543, 584ABCD

Electives (select 0-4 units from following):

ACCT 520, 521, 524
CIS 527
EDAD 526, 527, 539
EDIT 553
MGMT 573
POLS 563

*** Supervisor of Instructional Programs (14 units)**

Required Course (3 units):

EDAD 548

Electives (11 units)

*** The Principalship (14 units)**

Required Courses (6 units):

EDAD 527

Select one from following:

EDAD 572, 575, 578

Electives (8 units)

Comprehensive Examination (0 units)

EDAD 596 Comprehensive Examination (0)

Students should expect to take the comprehensive examination (EDAD 596) the quarter they complete all course work on their program and must comply with division and requirements.

Master of Science Degree in Counseling

The Master of Science degree in Counseling includes the following options:

- * Applied Behavior Analysis
- * Higher Education Counseling
- * Marriage, Family, and Child Counseling
- * Rehabilitation Counseling
- * School Counseling
- * School Counseling and Principalship (pilot program)
- * School Psychology

Admission to the Program

In addition to university requirements for admission to graduate study, students must have a 2.75 grade point average in the last 90 quarter units attempted, submit the divisional application form, take additional examinations required by the division, and be interviewed by the divisional screening committee. Students should plan to take COUN 505 in the first quarter following their successful admission interview. Receipt of a grade of "CR" in this class, and a "B" or better in COUN 405A completed the formal admission requirements.

Applications are considered for admission beginning with either the Spring or Fall Quarter each year. Students should inquire at the division office for specific schedules. Application deadline for submission of complete file to Division office is January 15 for Spring Quarter and May 15 for Fall Quarter.

Prior to admission to the program, graduate students are encouraged to obtain preliminary advisement and begin taking courses, not to exceed 13 units. Upon acceptance, each student is assigned a faculty adviser. Each student's degree program is planned with sufficient flexibility to permit consideration of individual needs and interests.

Requirements for the Degree (55-112 units)

A total of 55-112 units is required, depending on option selected and prior coursework completed, with at least half in 500-level courses. The School Psychology Option requires at least two-thirds of courses to be at the 500-level. The program consists of a required core, an option, related field and clinical study, and a comprehensive examination or thesis. Students must demonstrate proficiency in statistics and may do so by completing EDFN 452. There is a limit on credit that may be earned in variable-unit courses. See *Restriction on Credit Earned in Variable Unit Courses* earlier in this chapter.

Before students may take courses to meet the field work requirement, they must be approved candidates and must be recommended by their adviser. Written applications for fieldwork must be submitted to the Division Office during the fifth week of the quarter *prior to* the quarter in which the student desire a fieldwork placement. Fieldwork application forms are available in the Division Office for an option.

Comprehensive Examination, or Thesis or Project (0, 7 units):

COUN 596	Comprehensive Examination	(0) or
EDFN 599A	Thesis or Project Planning	(2) and
EDFN 599B	Thesis or Project	(5)

Students who select the comprehensive examination (COUN 596) must be advanced to candidacy and must comply with school and division requirements before enrolling to take the examination.

These requirements include a formal application no later than March 1 st for the Spring Quarter examination which is offered on the second Saturday of May, or October 1 st for the Fall Quarter examination which is offered on the second Saturday of November. This application is available in the Division Office.

Most students select the comprehensive examination (COUN 596) option. Selecting the thesis/project option may increase the number of units required for completion of the program.

Dual Option Requirements

Students may complete the requirements for two options of the M.S. Degree. In such a case, both options may be pursued either simultaneously or sequentially. Some courses can count toward both options, but by University policy the second option must include at least 23 new units. In actual practice, the second option involves more than 23 units. Students should see advisers in both options to plan dual option requirements.

Required Core (29 units for all options):

COUN 405A	Theoretical and Developmental Aspects of Behavior	(4)
COUN 406	Behavioral Counseling and Self-Management	(4) or
COUN 501	Behavior Analysis in School, Home, and Agency Settings	(4)
COUN 428	Measurement Issues in Counseling	(4)
COUN 503	Sociological and Cultural Factors in Counseling (4)
COUN 505	Practicum: Counseling	(3)
COUN 529	Principles of Research and Program Evaluation in Counseling	(4)

Self-Development and Special Interest (6 units):

Select six units of electives related to your program with adviser approval.

Appropriate substitutions may be made in special instances with adviser recommendation and division chair approval.

Options

Select one of following options.

* **Option in Applied Behavior Analysis [41 units plus core, to total 55 to 70 units depending upon prior coursework]**

This program prepares students for the qualifying examination for national certification in behavior analysis, administered by the Association for Behavior Analysis (ABA). The program is designed, also, for graduate students who plan to work as behavior analysts, specialists, or consultants, and for those who elect to specialize in the behavioral area for doctoral training.

Required courses [41 units]:

COUN 406 or 501 (whichever is not taken to meet the core requirement), 502, 504, 591,593 PSY 417, 421,428, 500, 528

* **Option in Higher Education Counseling [45-51 units plus core, to total 55 to 80 units depending upon prior coursework]**

The Higher Education Counseling option is designed to train students to work as student personnel specialists. This program is accredited by the Council on Counseling and Related Educational Programs (CACREP) and prepares students for the certification examination administered by the National Board of Certified Counselors. Although emphasis is placed on the counseling function, attention is given also to other student services customarily offered in two- and four-year colleges and universities.

Required courses (45-51 units)

COUN 405B, 448, 506, 507, 510, 516, 517, 532,581, 586C (for 7-13 units), 587 *

Option in Marriage, Family, and Child Counseling (55--61 units plus core, to total 72 to 90 units depending upon prior coursework)

This option is designed to fulfill recently-enacted state requirements for licensure in Marriage, Family, and Child Counseling as outlined in the Business and Professions Code, Section 4980.37. Students fulfill degree requirements by completing the required 29-unit core, plus option requirements of 55-61 units, followed by a thesis or comprehensive examination.

Prerequisites:

Demonstrated proficiency in statistics, abnormal psychology and introductory counseling theories. May be met by courses EDFN 452, PSY 410B and COUN 450 respectively, or other current or prior course work with adviser approval.

Required Courses (55-61 units):

COUN 403	The Psychosocial Dynamics of Child Maltreatment and Family Violence	(4)
COUN 405B	Theoretical and Developmental Aspects of Behavior	(4)
COUN 450	Counseling Theories	(3) or
HS 456	Health Studies on Alcohol, Narcotics, Nutrition, and Tobacco	(4) or
PSY 436B	Counseling and Psychotherapy: Theories, Methods, and Issues	(4)
COUN 460	Laws Relating to the Child and Family	(4) or
PSY 464	Psychology and the Law	(4)
COUN 501	Behavior Analysis in School, Home, and Agency Settings	(4)
COUN 506	Individual Counseling Strategies	(4)
COUN 507	Individual Clinical Counseling	(3)
COUN 520	Introduction to Family Evaluation and Counseling	(4)
COUN 521	Advanced Family and Marriage Counseling	(4)
COUN 522	Family Counseling with Children	(4)
COUN 523	Family Counseling Laboratory	(3)
COUN 538	Seminar: Assessment in Counseling	(4)
COUN 552	Counseling and Human Sexuality	(4) or
PSY 542	Human Sexuality: Dysfunction and Treatment	(4)
COUN 589	Site Practicum in Marriage, Family, and Child Counseling	(9-15)

*COUN 507 and 523 may be repeated once for credit as an elective or substitute for other required courses. See adviser.

An extensive MFCC Handbook, containing detailed description of the program, required forms for registering with the Board of Behavioral Science Examiners, and the Site Practicum Manual is on sale in the student bookstore.

*** Option In Rehabilitation Counseling (50 units plus core, to total 63 to 79 units depending upon prior course work)**

Rehabilitation counselors are concerned with the vocational and personal potentialities of individuals with disabilities (psychological, social, medical, and/or vocational) and the problems involved in adjusting to them. Counselors must be knowledgeable in each of these areas in order to carry on their main function of helping their clients achieve a satisfactory work adjustment. The program is accredited by the Council on Rehabilitation Education.

Required courses (50 units):

COUN 405B, 442, 448, 449, 506, 540AB, 541, 542AB, 588 (for 15 units)

*** Option In School Counseling (44-50 units plus core, to total 55-79 units depending upon prior course work)**

This option is designed for those who plan to perform pupil personnel services in elementary or secondary schools. Students who earn the master's degree with this option also qualify for the Pupil Personnel Services credential with advanced specialization in School Counseling and Child Welfare and Attendance Services. The program is accredited by the Council on Counseling and

Related Educational Programs (CACREP) and prepares students for the certification exam administered by the National Board of Certified Counselors.

Prerequisites (8 units):

EDFN 452,
EDSP 400

Required Courses (44-50 units):

COUN 406 or 501 (*whichever one of these is not taken to meet the core requirement*), 447, 460, 502, 506 or 522, 516, 517, 581, 583, 586S

Candidates with three years of public school counseling or teaching experience are required to complete 360 clock hours (9 units) of COUN 586. Other candidates are required to complete 600 clock hours (15 units). Students may obtain an elementary or secondary school emphasis for the option with careful course selection and planning with their university advisers.

* **Option In School Psychology (83 units plus core, to total 72 to 112 units depending upon prior coursework)**

School psychologists focus on the psychoeducational development of individuals from birth to age 21, their abilities and potentialities, and emotional, behavioral and cultural factors that influence the learning process. Students who earn the master's degree with this option also qualify for the Pupil Personnel Services credential with advanced specializations in School Psychology and advanced specialization in Child Welfare and Attendance Services. Students in this option should see information below regarding the School Psychology Internship Credential.

Prerequisites (12 units):

EDFN 452,
EDSP 400,
PSY 410A

Required Courses (83 units):

COUN 406 or 501 (*whichever is not taken to meet the core requirement*), 450, 460, 502, 522, 531AB, 532, 533, 534, 535, 581, 585, 586P (for 30 units), 593

An internship manual, which contains guidelines, procedures, and other information, is available for purchase at the campus bookstore.

PILOT PROGRAM COMBINING:

Master of Science Degree in Counseling:

Option in School Counseling and Principalship,

Pupil Personnel Services Credential with Advanced Specialization in School

Counseling, and

Preliminary Administrative Services Credential

This combined program is designed for school counselors and other individuals who wish to earn the Master of Science degree in Counseling (with an option in School Counseling and Principalship), along with the Pupil Personnel Services credential with Advanced Specializations in School Counseling and Child Welfare and Attendance Services and the Preliminary Administrative Services credential. Students who select this program complete a core separate from that followed for the other five options in the M.S. degree in Counseling. The complete combined program appears below.

Requirements for the Degree and Credentials (55 to 85 units depending upon prior course work)

COUN 405	A Theoretical and Developmental Aspects of Behavior	(4)
COUN 406	Behavioral Counseling and Self-Management	(4)
COUN 428	Measurement Issues in Counseling	(4)
COUN 447	Career Education and Guidance in Schools	(4)
COUN 501	Behavior Analysis in School, Home, and Agency Settings	(4)

COUN 502	Advanced Behavioral Contingency Management in Schools	(4)
COUN 503	Sociological and Cultural Factors in Counseling	(4)
COUN 505	Practicum: Counseling	(3)
COUN 506	Individual Counseling Strategies	(4)
COUN 516	Group Counseling	(4)
COUN 517	Group Counseling Practicum	(3)
COUN 529	Principles of Research and Program Evaluation in Counseling	(4)
COUN 586S	Supervised Field Experience in School Counseling	(6)
EDAD 506	Leadership in Education	(3)
EDAD 507	Educational Planning and Decision Making Models	(3)
EDAD 509	Basic School Law	(3)
EDAD 510	School Finance	(3)
EDAD 518	Program Management, Development, and Evaluation	(3)
EDAD 527	Advanced Educational Management and Evaluation	(3)
EDAD 567	Seminar: Current Issues in Educational Administration	(3)
EDAD 575	Simulation Seminar: Junior High and Middle School Administration	(3)
EDAD 581	Field Work in Educational Administration	(2, 2, 2)
EDSP 501	Problems and Practices in Special Education	(3)

Preliminary Administrative Services Credential

Regulations, policies, and procedures governing the program for the Preliminary Administrative Services credential, available from the division office, were developed in accordance with guidelines developed by the Commission on Teacher Credentialing. The program is based on a set of competencies necessary for successful performance as a California school administrator. The credential licenses students for all administrative and supervisory services, prekindergarten through grade 12, in California public schools. This credential is valid for 5 years or for 3 years after the candidate's first employment under the credential, whichever comes last.

Minimum Credential Requirements (45 units)

The following requirements are subject to change without notice. Students should consult the division for current requirements. Minimum requirements for issuance of the Preliminary Administrative Services credential include:

- * Forty-five units of acceptable postbaccalaureate course work as listed below.
- * A master's degree.
- * Completion of the required core and an area of specialization.
- * Satisfaction of the California state requirement of training in special education (mainstreaming) (EDSP 501).
- * A passing score on the California Basic Educational Skills Test (CBEST).
- * Three years of successful classroom teaching experience.
- * Completion of writing examinations and inventories required by the division.

Required Core (28-29 units):

EDAD 506	Leadership in Education	(3)
EDAD 507	Educational Planning and Decision Making Models	(3)
EDAD 509	Basic School Law	(3)
EDAD 510	School Finance	(3)

EDAD 515	Social and Political Forces Affecting Education	(3) or
EDFN 537	Educational Issues in Metropolitan Areas	(4)
EDAD 517	Educational Staff Development and Evaluation	(3)
EDAD 518	Program Management, Development and Evaluation	(3)
EDFN 553	Educational Research and Decision Making	(4)
EDSP 501	Problems and Practices in Special Educatio	(3)

Areas of Specialization (17 units)

Select one of the following specializations:

*** Administration of Special Education (17 units)**

Prerequisite to this specialization is completion of a teaching credential authorizing service in one or more special education programs.

Required Courses (14 units):

EDAD 548 (3)
EDAD 581ABCD (2, 2, 2) 503, 585 (3, 4)

Electives (3 units):

*** Supervisor of Instructional Programs (17 units)****Required Courses (9 units):**

EDAD 548 (3)
EDAD 581ABCD (2, 2, 2)

Electives (8 units):

*** The Principalship (17 units)****Required Courses (12 units):**

EDAD 527 (3)
EDAD 581ABCD (2, 2, 2)

one from following:

EDAD 572, 575, 578 (for 3 units)

Electives (5 units)

Professional Administrative Services Credential

The purpose of the program is to provide education and training for new and aspiring administrators. The program is based on a set of competencies considered necessary for successful performance as a California school administrator. The credential licenses holders to perform all administrative and supervisory services in grades prekindergarten-12 in California public or private schools.

Prerequisites:

- * A master's degree;
- * A Preliminary or Clear Administrative Services credential issued under present or prior regulations;
- * Passing score on UNIV 400, the Writing Proficiency Examination (WPE);
- * Passing score on California Basic Educational Skills Test (CBEST); and
- * Completion of written examinations and inventories required by the division.

Minimum Credential Requirements (36 units)

- * Thirty-six units of postbaccalaureate course work as listed below, not more than 18 units of which is devoted to practicum courses;
- * Satisfaction of all program competencies;

- * Completion of written examinations and inventories required by the division;
- * A minimum of two years of successful, full-time school administrative experience in the public schools or in private schools of equivalent status;
- * Completion of at least one-half of the program while employed in a full-time school administrative position; and
- * Written verification from your employing school district, or an official of the appropriate county office of education, of successful completion of your program plan.

Required core (6 units):

EDAD 552	Instructional Leadership in Socioculturally Diverse Schools	(3) and/or
EDAD 552P	Practicum: Instructional Leadership	(3)
EDAD 567	Seminar: Current Issues in Educational Administration	(3) and/or
EDAD 567P	Practicum: Current Issues in Educational Administration	(3)

Electives (30 units)

EDAD 533	Legal Research in Educational Administration	(3) and/or
EDAD 533P	Practicum: Legal Research in Educational Administration	(3)
EDAD 539P	Educational Personnel Administration Practicum: Educational Personnel Administration	(3) and/or (3)
EDAD 542	Collective Bargaining in Education	(3) and/or
EDAD 542P	Practicum: Collective Bargaining in Education	(3)
EDAD 543	Seminar: School Business and Facility Management	(3) and/or
EDAD 543P	Practicum: School Business and Facility Management	(3)
EDAD 545	Management Information Systems in Educational Administration	(3) and/or
EDAD 545P	Practicum: Management information Systems in Educational Administration	(3)
EDAD 555	Advanced Organizational Theory and Development of Schools	(3) and/or
EDAD 555P	Practicum: Advanced Organizational Theory and Development of Schools	(3)
EDAD 595	Professional Development in Educational Administration	(3)

Pupil Personnel Services Credential*(Advanced Specializations in School Counseling and Child Welfare and Attendance Services)*

The requirements for the Pupil Personnel Services credential with Advanced Specializations in School Counseling and Child Welfare and Attendance Services may be completed as part of the M.S. degree in Counseling, option in School Counseling or School Psychology. Students may be recommended for the credential upon the completion of the following program with grades of A or B in all courses.

Prerequisites (8 units):

EDFN 452	Statistics in Education	(4)
EDSP 400	Education and Psychology of Exceptional Individuals	(4)

Course Work with Competencies Met (63-69 units)

COUN 405A	Theoretical and Developmental Aspects of Behavior	(4)
-----------	---	-----

COUN 406	Behavioral Counseling and Self-Management	(4)
COUN 428	Measurement Issues in Counseling	(4)
COUN 447	Career Education and Guidance in Schools	(4)
COUN 460	Laws Relating to Children and Child Welfare	(4)
COUN 501	Behavior Analysis in School, Home, and Agency Settings	(4)
COUN 502	Advanced Behavioral Contingency Management in Schools	(4)
COUN 503	Sociological and Cultural Factors in Counseling	(4)
COUN 505	Practicum: Counseling	(3)
COUN 506	Individual Counseling Strategies	(4) or
COUN 522	Family Counseling with Children	(4)
COUN 516	Group Counseling	(4)
COUN 517	Group Counseling Practicum	(3)
COUN 581	Seminar: Pupil Personnel Services	(4)
COUN 583	Preventive Counseling	(4)
COUN 586S	Supervised Field Experience in School Counseling	(9-15)

In addition to demonstrating competence in course work and internship, students are required to pass the California Basic Educational Skills Test (CBEST) and either pass an oral examination covering the *School Counseling competencies* or complete requirements for the master's degree in Counseling.

Advanced Specializations in School Psychology and Child Welfare and Attendance Services

Course requirements for this Credential are identical with those listed above for the M.S. in Counseling: Option in School Psychology.

School Psychology Internship Credential

This credential allows a student to accept employment as a School Psychology Intern while completing advanced coursework toward the School Psychology option of the M.S. Degree in Counseling. Students are not admitted to the School Psychology Internship unless they have met *all requirements* for the M.S. Degree in Counseling: Option in School Psychology *except* for the courses COUN 533, 534, 585 and 586P, in addition to the requirements described in their School Psychology Internship Manual. Once these requirements are met, the student is eligible for the School Psychology Internship Credential. These remaining courses are taken concurrently with internship (or before) along with regular supervisory meetings with the student's university supervisor.

Continued Professional Development

Competence in the helping professions requires continuous efforts at self improvement and development of skills. To assist practicing counselors, school psychologists, and other educators in improving their professional skills, the Counselor Education faculty has developed the following programs of continued professional development leading toward certificates.

The programs provide an opportunity for educational practitioners to meet with their colleagues to keep abreast of innovative professional developments and to experience stimuli for continued personal and professional growth.

Certificate Program in Advanced Study in Central Office Administration

A minimum of 30 units of acceptable graduate course work with a minimum B (3.0) grade point average is required for this credit certificate program. Prerequisite to admission to the program is demonstrated required competence in one of the 45-unit specializations. Refer to the *Graduate and Postbaccalaureate Study* chapter of this catalog for general regulations governing all certificate programs.

Requirements for the Certificate (30 units)

Required Courses (24 units):

EDAD 526	Principles and Practices of Leadership	(3)
----------	--	-----

EDAD 533	Legal Research in Educational Administration	(3)
EDAD 539	Educational Personnel Administration	(3)
EDAD 542	Collective Bargaining in Education	(3)
EDAD 543	Seminar: School Business and Facility Management	(3)
EDAD 545	Management Information Systems in Educational Administration	(3)
EDAD 548	Seminar: Supervision of Instructional Programs	(3)
EDAD 584A, C, or D	Field Work in Central Office Administration and Supervision	(3)

Electives (6 units):

Certificate Program in Applied Behavior Analysis in Educational Settings

This credit certificate program is designed to prepare Behavioral Intervention Specialists, and provides practitioners an opportunity to develop skills for implementing and evaluating management, motivation, consultation, and teaching. The certificate is awarded upon the completion of the following courses in counselor education (16 units) with a minimum B (3.0) average. Refer to the *Graduate and Postbaccalaureate Study* chapter of this catalog for general regulations governing all certificate programs.

Requirements for the Certificate (16 units)

COUN 406	Behavioral Counseling and Self Management	(4)
COUN 501	Behavior Analysis in School, Home, and Agency Settings	(4)
COUN 502	Advanced Behavioral Contingency Management in Schools	(4)
COUN 504	Advanced Topical Study in Application of Behavior Analysis to Education	(4)

Certificate Program in Career Counseling

This program provides postbaccalaureate students the competencies needed to succeed in the field of career counseling. In addition to general individual and group counseling skills, students will acquire competencies in the areas of theories of career development, assessment of interests, values, and aptitudes, occupational information, decision-making, placement, and career counseling for special populations.

The certificate requires completion of 29-31 units, including 23 units of required courses and 6-8 units of electives, with a minimum B (3.0) average. Refer to the *Graduate and Postbaccalaureate Study* chapter of this catalog for general regulations governing all certificate programs.

Requirements for the Certificate (29-31 units)

Prerequisites (7 units):

COUN 428	Measurement Issues in Counseling	(4)
COUN 505	Practicum: Counseling	(3)

Required Courses (23 units):

COUN 447	Career Education and Guidance in Schools	(4)
COUN 448	Career Counseling for Adults	(4)
COUN 475A	Counseling in the Work Place	(3)
COUN 506	Individual Counseling Strategies	(4)
COUN 516	Group Counseling	(4)
SOC 447	Sociology of Occupations and Professions	(4)

Electives (6-8 units):

Select from following with adviser approval. Other courses may be substituted with adviser approval.

COUN 449, 475B, 507
 MGMT 469
 EDSP 405
 PSY 446

Certificate Program in Developmental Counseling

The program provides practitioners experience in developing and implementing programs of psychological education. The certificate is awarded upon completion of the following courses (16 units) with a minimum B (3.0) average. Refer to the *Graduate and Postbaccalaureate Study* chapter of this catalog for general regulations governing all certificate programs.

Requirements for the Certificate (16 units)

COUN 492	Future Studies: Educational Implications of the Future	(4)
COUN 582	Seminar: Counseling	(4)
EDCI 526	Principles and Practices of Leadership	(4)
COUN/EDCI 528	Creative Behavior: Development and Facilitation	(4)

Certificate Program in Professional Employee Counseling

This credit certificate program is designed to supplement the training of professional counselors by providing specialized information and skills specific to counseling and related programs offered by employers and unions for employees in business, industry, and government.

Admission to the Program

Applicants must have a qualifying degree (or be working toward one) which is a master's or higher degree in Counseling or a related discipline.** This degree must either be awarded by a campus whose program is accredited by the Council on the Accreditation of Counseling and Related Educational Programs (CACREP), the Council on Rehabilitation Education (CORE), or the Academy of Certified Social Workers or based on a program of study including or supplemented by all of the following:

- * Supervised practice of at least 600 clock hours.
- * Course work in human psychological development in late adolescence and adulthood, basic helping relationship skills, the world of work, intervention strategies in helping relationships, and basic principles of behavioral research.

** *Examples of related disciplines include clinical, counseling, industrial, and school psychology and social work.*

Students who do not hold a qualifying degree may be admitted to the program while pursuing such a degree. These students will receive the certificate when they have completed requirements for both the degree and the certificate with a minimum B (3.0) grade point average in each program.

The faculty committee established to oversee this certificate program will evaluate all applicants on the basis of their academic preparation, employment experience, a written application, official transcripts of transferred course work, letters of reference, and an individual interview.

Requirements for the Certificate (35-36 units)

The program consists of 35-36 units of course work, 28 in required courses and 7-8 in electives. Completion of all course work with a minimum B (3.0) grade point average is required. Refer to the *Graduate and Postbaccalaureate Study* chapter of this catalog for general regulations governing all graduate level certificate programs.

Required Courses (28 units):

COUN 475AB	Counseling in the Work Place	(3, 3)
COUN 503	Sociological and Cultural Factors in Counseling	(4)
COUN 505	Practicum: Counseling	(3)
COUN 588	Supervised Practice in Rehabilitation Counseling	(8)
HS 466	Strategies for Substance Abuse Programs	(2)
HS 467	Drinking Problems and Alcoholism	(3)
HS 468	Problems in Controlled Substances	(3)

Electives (select 7-8 units from following):

HS 469

MGMT 469, 473**, 501, 573**

MKT 443**

*** consult catalog course listings for course prerequisites*

Relevant special topics courses may be substituted with approval of certificate program faculty committee.

The Counseling and Assessment Clinic

The Counseling and Assessment Clinic is operated by the Division of Administration and Counseling, and is located in King Hall C1067. It is an instructional laboratory that provides both training for counselors and counseling services to the community. Students working toward a master's degree or credential in counseling serve as student clinicians under direct faculty supervision.

Internship Program

This program provides opportunities for school districts to cooperate with the division in providing internship experiences for selected individuals, under the provisions of the Ryan Act (Education Code, beginning with Section 13101), or independently.

The program offers opportunities for high potential individuals to perform administrative/supervisory functions under close university supervision while completing course requirements for the Preliminary Administrative Services credential. Persons interested in specific details of the program should contact the division office.

CURRICULUM AND INSTRUCTION

School of Education

DIVISION OFFICE

King Hall C2097

Phone: (213) 343-4350

Program advisement provided for:

- * M.A. degree options:
- * Elementary Teaching
- * Reading
- * Secondary teaching
- * Multiple Subject Credential(*including bilingual emphasis and internship option*)
- * Reading/Language Arts Specialist
- * Single Subject Credential(*including internship option*)

Courses offered in:

- * Curriculum and Instruction (EDCI) * Elementary Education (EDEL)
- * Secondary Education (EDSE)

Master of Arts Degree in Education: Option in Elementary Teaching Admission to the Program

In addition to university requirements for admission to graduate study, applicants must have a California credential or a general elementary or kindergarten-primary credential issued by any state.

Requirements for the Degree (45 units)

A total of 45 units is required, with at least 23 in 500-level courses. A comprehensive examination is required. Students who intend to register in courses they wish to apply on a master's degree should consult an adviser prior to registration. There is a limit on credit that may be earned in variable-unit courses. See *Restrictions on Credit Earned in Variable Unit Courses* earlier in this chapter.

Required Core (12 units):

EDCI	560	Principles and Practices of Curriculum Development	(4)
EDEL	589	Seminar: Elementary Education	(4)
EDFN	500	Evaluation of Educational Research	(4)

Area of Concentration (33 units)

Select one area of concentration.

*** Bilingual/Multicultural Education in the Elementary Classroom (33 units)**

Select 4 units from following:

EDEL 411,421,431,434AB, 441,451
EDFN 562

Select 8 units from following:

EDEL 511,521,531,541,551

Select 12 units from following:

EDCI 412, 453, 455, 549
EDEL 413, 423 EDFN 536, 539, 560

Electives (select 9 units with adviser approval)

*** Curriculum and Instruction in the Urban Elementary School (33 units)**

Required (8 units):

EDEL 466, 590

Select 8 units from following:

EDEL 511,521,531,541,551

Select 8 units from following:

EDCI 412, 536, 549
EDEL 423
EDFN 525, 537

Electives (select 9 units with adviser approval)

*** Early Childhood Education (33 units)**

Select 16 units from following:

EDEL 511,521,531,541,560, 563
EDFN 530
CHDV 505

Select 11 units from following:

EDCI 412
EDEL 423, 424, 432, 461-464, 466
EDFN 562

Electives (select 6 units with adviser approval)

*** Elementary Curriculum and Instruction (33 units)**

Select 12 units from following:

EDCI 412
EDEL 411,421,423, 431,441,451
EDFN 562

Select 8 units from following (Research):

EDEL 511,521,531,541,551

Select 4 units from following:

EDFN 510, 525

Electives (select 9 units with adviser approval)

*** Humanistic Education in the Elementary School (33 units)**

Required (4 units):

EDEL 592

Select 8 units from following:

COUN/EDCI 528

EDCI 526

EDEL 590

Select 7-8 units from following:

EDEL 421,424, 441,451,495

Select 4 units from following:

EDEL 521,531,541,551

Electives (select 9-10 units with adviser approval)

*** Mainstreaming in the Elementary Classroom (33 units)**

Required (23 units):

COUN 501

EDEL 406, 407, 408, 434AB, 590

EDSP 400, 550

Electives (10 units):

The following are recommended:

EDAD 509

EDCI 412, 522,526

EDEL 511,521,531,541,551,590

EDIT 450AB. 451

EDSP 401,402, 540

*** Mathematics Education (33 units)**

Required (12 units):

EDEL 431,432, 531

Select 13 units from following:

EDEL 433ABCD, 435, 480, 535, 580

EDIT 481

Suggested Electives (8 units):

EDCI 526

EDEL 451,551,590

Other electives: Select with adviser approval.

*** Reading and Language Arts in the Elementary Classroom (33 units)**

Required Core (16-17 units):

Language Arts (8 units):

EDEL 421,521

Reading (8-9 units):

EDCI 522

EDEL411, 511

Select 8-12 units from following:

EDCI 412,455, 549

DEL 423, 434A
EDFN 562

Electives (4--9 units): Select with adviser approval.

Comprehensive Examination (0 units)

EDEL 596 Comprehensive Examination (0)

Students should expect to take the comprehensive examination (EDEL 596) the quarter they complete all course work on their program and must comply with school and division requirements.

Master of Arts Degree in Education:

Option in Reading

The Master of Arts degree in Education, option in Reading, satisfies content requirements established by the International Reading Association for reading specialists.

Admission to the Program

In addition to university requirements for admission to classified graduate standing, students must have a 2.75 grade point average in their last 90 quarter units attempted, must have a teaching credential, and must have completed a basic course in reading instruction (EDEL 400 or EDSE 423 or equivalent).

Two years of teaching experience are recommended for degree candidates; credential candidates must verify completion of intensive (minimum two years by the time the credential is granted) and extensive (minimum of two different levels with two different socioeconomic/ethnic groups) classroom teaching experience.

Requirements for the Degree (45 units)

A minimum of 45 units is required, including at least 23 in 500-level courses. All students must pass a comprehensive examination or submit a thesis or project. There is a limit on credit that may be earned in variable unit courses. See *Restriction on Credit Earned in Variable Unit Courses* earlier in this chapter.

Required Courses (29-31 units):

EDCI 513	Reading as a Cognitive Process	(4)
EDCI 522	Diagnosis and Remedial Reading/Language Arts Procedures	(4)
EDCI 524	Diagnostic Procedures for Reading/Language Arts Clinicians	(5)
#EDCI 540	Application of Therapeutic Procedures in Reading/Language Arts	(2)
EDCI 541	Field Work in Reading/Language Arts	(4)
EDEL 511	Seminar: Research in Teaching Elementary School Reading	(4) or
EDEL 521	Seminar: Research in Teaching Elementary School Language Arts	(4)
EDFN 500	Evaluation of Educational Research	(4)

repeat to total of 4--6 units

Electives (select 3--4 units from following):

COMD 400
COUN 532
EDCI 527
EDEL 427, 525
EDSP 400, 420, 462, 465, 524

Additional Electives (select 3-13 units from following with adviser approval):

COMD 450, 456, 461
COUN 405AB, 501
EDCI 538, 539

EDFN 409, 452, 510, 530, 560
 ENGL 400 or 401, 406, 430, 432
 PSY 412AB, 418AB, 420, 422
 SPCH 494

Comprehensive Examination or Thesis or Project (0, 7 units):

EDCI 596	Comprehensive Examination	(0) or
EDFN 599A	Thesis or Project Planning	(2) <i>plus</i>
EDFN 599B	Thesis or Project	(5)

Students who select the comprehensive examination (EDCI 596) should expect to take it in the quarter in which they complete all course work on their program and must comply with school and division requirements. With careful planning, students can earn the Reading/Language Arts Specialist credential concurrently with the M.A. degree in Education, Reading option. Consult the Reading Program coordinator for more information.

Master of Arts Degree in Education: *Option in Secondary Teaching*

The Master of Arts degree: Option in Secondary Teaching is designed to provide a comprehensive background in the basic educational and educationally related fields.

Admission to the Program

In addition to university requirements for admission to graduate study, applicants must possess a 2.75 grade point average in the last 90 quarter units attempted.

Requirements for the Degree (4.5 units)

A total of 45 units is required, with at least 23 in 500-level courses. A comprehensive examination, or a thesis or project, pertaining to the area of concentration is required. Before receiving the M.A. degree, students must have earned a credential and possess teaching experience approved by the Division of Curriculum and Instruction. There is a limit on credit that may be earned in variable-unit courses. See *Restriction on Credit Earned in Variable Unit Courses* earlier in this chapter.

Required Courses (16 units):

EDCI 560	Principles and Practices of Curriculum Development	(4)
EDFN 500	Evaluation of Educational Research	(4) or
EDFN 509	Methods of Research in Education	(4)
EDIT 453	Instructional Technology and Programmed Instruction	(4)
EDSE 521	Teaching Effectiveness: Research and Application	(4)

Area of Concentration: Curriculum and Instruction (29 or 30 units)

Select one of following areas.

Emphasis I

Required Courses (16 units):

EDCI 504
 EDSE 520, 591, 595

Electives-select at least 13 units from following:

EDAC 507
 EDCI 510, 522
 EDIT 456, 525
 EDSE 491, 524

Emphasis II

Required Courses (30 units):

EDCI 450, 535
 EDIT 430
 EDSE 415, 423, 520, 595

EDSP 400

Comprehensive Examination or Thesis or Project (0, 7 units)

EDSE 596	Comprehensive Examination	(0) or
EDFN 599A	Thesis or Project Planning	(2) <i>plus</i>
EDSE 599B	Thesis or Project	(5)

Students should expect to take the comprehensive examination (EDSE 596) the quarter they complete all course work on their program and must comply with school and division requirements.

Reading/Language Arts Specialist Credential

The Reading/Language Arts Specialist credential program satisfies the current requirements established by the Commission on Teacher Credentialing.

Admission to the Program

In addition to university requirements for admission to graduate study, applicants must meet the conditions for classified graduate standing and satisfy the following criteria:

- * complete EDEL 400 or EDSE 423, or an equivalent course in reading instruction;
- * complete as prerequisite ENGL 400 or 4010r equivalent;
- * have verified completion of intensive and extensive successful teaching experience in the classroom through recommendation from school administrators;
- * possess a California Multiple Subject or Single Subject teaching credential or its equivalent; and
- * pass the comprehensive examination for the M.A. degree in Education, Option in Reading.

Requirements for the Credential (45 units)

A total of 45 units of course work is required. With careful planning, students may earn the Master of Arts degree in Education: Option in Reading concurrently.

Required Courses [45 units]:

EDCI 513	Reading as a Cognitive Process	(4)
EDCI 522	Diagnosis and Remedial Reading/Language Arts Procedures	(4)
EDCI 524	Diagnostic Procedures for Reading/Language Arts Clinicians	(5)
EDCI 527	Seminar: Issues and Trends in Using Children's Literature	(4) or
EDEL 525	Whole Language Across the Curriculum	(4)
EDCI 538	Advanced Design and Evaluation of Reading/Language Arts Programs	(4)
EDCI 540	Application of Therapeutic Procedures in Reading/Language Arts	(2, 2)
EDCI 541	Field Work in Reading/Language Arts	(4)
EDCI 549	Developing English Reading/Language Arts Skills in Bilingual/Crosscultural Individuals	(4)
EDEL 511	Seminar: Research in Teaching Elementary School Reading	(4) or
EDFN 521	Seminar: Research in Teaching Elementary School Language Arts	(4)
EDFN 500	Evaluation of Educational Research	(4)
EDFN 510	Advanced Study: learning Theory and Education	(4)

Certificate Program in Storytelling

The certificate program in Storytelling is designed for persons with an interest in the techniques, theories, and literature associated with the ancient and modern art of storytelling. The certificate is

especially valuable for teacher use in language arts instruction and for improving communications skills; it can also be used effectively by librarians and recreation leaders. This program is open to all postbaccalaureate students who meet the university requirements for admission to postbaccalaureate standing. It is applicable toward some master's degree programs in education and other fields.

Completion of this credit certificate program requires 31 units in core and elective courses. Refer to the *Graduate and Postbaccalaureate Study chapter* of this catalog for general regulations governing all certificate programs.

Requirements for the Certificate (31 units)

Required courses (15 units):

EDEL 424	Methods of Using Creative Dramatics with Children	(3)
EDEL 473	Storytelling for Teachers	(4)
ENGL 430	Children's Literature	(4)
SPCH 490	Studies in Children's Speech Arts	(4)

Field work (4 units):

EDEL 598	Graduate Directed Study	(1-4) and/or
SPCH 595	Graduate Performance	(1-4)

Electives-select 12 units from following:

ANTH 445
CHS 420
EDEI 413, 427
TA401

With adviser approval, students may include courses in the folklore of an ethnic culture.

EDUCATIONAL FOUNDATIONS AND INTERDIVISIONAL STUDIES

School of Education

DIVISION OFFICE

KH C2098

Phone: (213) 343-4330

Program advisement provided for:

- * Adult and Continuing Education (Designated Subjects Credential)
- * Bilingual Specialist
- * Community College
- * Computer Education
- * Educational Foundations
- * Instructional Technology
- * Language Development Specialist
- * Library Services
- * Teaching English to Speakers of Other Languages
- * Urban Education

Courses offered in:

- * Adult and Continuing Education (EDAC)
- * Educational Foundations (EDFN)
- * Instructional Technology (EDIT)
- * Library Science (LIBR)

Master of Arts Degree in Education:

Option in Adult and Continuing Education

The option in Adult and Continuing Education is designed for teachers in this field who serve the community in myriad settings, e.g., secondary schools with adult education programs, community colleges, technical schools, health agencies, libraries and museums, occupational and professional associations, state and federal educational agencies, the armed forces, correctional institutions,

local parks and recreation organizations, four-year institutions with continuing education programs, community-based organizations, cooperative extension programs, religious organizations, and more. All students complete a common core; concentration in either adult or continuing education is accomplished through elective courses.

Admission to the Program

In addition to university requirements for admission to graduate study, applicants must possess a 2.75 grade point average in the last 90 quarter units attempted.

Requirements for the Degree (45 units)

A total of 45 units is required, with at least 23 in 500-level courses. A comprehensive examination, or a thesis or project, pertaining to the option is required. There is a limit on credit that may be earned in variable-unit courses. See *Restrictions on Credit Earned in Variable Unit Courses* earlier in this chapter.

Required Courses (28 units):

EDAC 471	Methods and Materials of Adult Education	(4)
EDAC 472	Principles of Adult and Occupational Education	(3)
EDAC 473X or 473Y	Supervised Field Experiences in Adult and Occupational Education	(2)
EDAC 476	Curriculum Development in Adult and Occupational Education	(4)
EDAC 477	Counseling in Adult and Occupational Education	(3)
EDCI 560	Principles and Practices of Curriculum Development	(4)
EDFN 500	Evaluation of Educational Research	(4) or
EDFN 509	Methods of Research in Education	(4)
EDFN 510	Advanced Study: Learning Theory and Education	(4)

Area Elective (4 units)

Select one from following:

EDAC 507	Adult Illiteracy	(4) or
EDAC 578	Organization, Administration, and Supervision of Adult Education	(4)

Additional electives (6 or 13 units): Select with adviser approval.

Comprehensive Examination or Thesis or Project (0, 7 units)

EDFN 596	Comprehensive Examination	(0) or
EDFN 599A	Thesis or Project Planning	(2) plus
EDFN 599B	Thesis or Project	(5)

Students should expect to take the comprehensive examination (EDFN 596) the quarter they complete all course work on their program and must comply with school and division requirements.

Master of Arts Degree in Education: Option in Computer Education

This option prepares educators to assume leadership roles in the field of computer education. In particular, the program is designed to introduce teachers, trainers, and other leaders to the areas of teaching programming/problem solving; evaluation, selection, and design of instructional software; development, teaching, and direction of computer literacy programs; incorporation of computers into the curriculum; and development and management of instructional microcomputing facilities in the schools. Additional information and advisement are available in the division office.

Admission to the Program

In addition to university requirements for admission to graduate study, applicants must have a minimum 2.75 grade point average in the last 90 quarter units attempted, teaching experience, must have completed courses covering computer literacy and applications in education (e.g., EDIT 430 or CS 160 plus EDIT 447 meets both requirements) as well as introductory computer programming (e.g., EDIT 481). Students must make written application to the School of Education and to the Division of Educational Foundations and Interdivisional Studies.

Requirements for the Degree (45 units)

A total of 45 units is required, with at least 23 in 500-level courses. A comprehensive examination or a thesis or project is required. There is a limit on credit that may be earned in variable-unit courses. See *Restriction on Credit Earned in Variable Unit Courses* earlier in this chapter.

Required Courses (32 units):

EDCI	560	Principles and Practices of Curriculum Development	(4)
EDEL	480	Teaching Microcomputing in Schools	(4)
EDFN	500	Evaluation of Educational Research	(4)
EDFN	510	Advanced Study: Learning Theories	(4)
EDIT	482	Microcomputing in Schools: BASIC II	(4)
EDIT	484	Authoring Tools in Education	(4)
EDIT	556	Role of the Computer Specialist in Education	(4)
EDIT	557	Computer Assisted and Managed Instruction	(4)

Electives (6 or 13 units):

Select from following or other courses about computer applications in schools, including enough 500-level courses to bring the total units in 500-level courses in the program to at least 23.

EDAD 545
EDEL 580, 581
EDIT 483, 555, 570
LIBR 501
EDSP 508

Other electives may be included with adviser approval. Especially encouraged are upper division courses in computer science provided students have met prerequisite requirements.

Comprehensive Examination or Thesis or Project (0, 7 units)

EDFN	596	Comprehensive Examination	(0) or
EDFN	599A	Thesis or Project Planning	(2) plus
EDFN	599B	Thesis or Project	(5)

Students should expect to take the comprehensive examination (EDFN 596) the quarter they complete all course work on their program and must comply with school and division requirements.

Master of Arts Degree in Education: *Option in Educational Foundations*

The Master of Arts degree in Education, option in Educational Foundations, offers concentrations in social and psychological foundations and is intended for educators interested in the theoretical bases of education.

Admission to the Program

In addition to university requirements for admission to graduate study, applicants must have a 2.75 grade point average in the last 90 quarter units attempted a teaching credential and an appropriate undergraduate major.

Requirements for the Degree (45 units)

A minimum of 23 of the 45 units must be in 500-level courses and at least 23 units must consist of education courses. See *Restrictions on Credit Earned, in Variable Unit Courses* earlier in this chapter.

Required Course (12 units):

EDFN	500	Evaluation of Educational Research	(4) or
EDFN	507	History of Education	(4)
EDFN	508	Philosophy of Education	(4)

Required in Cognate Area (12 units):

Select with adviser approval.

Area of Concentration (8 units)

Select one of following areas:

*** Psychological Foundations**

EDFN	510	Advanced Study: Learning Theory and Education	(4)
EDFN	530	Advanced Study in Child Development	(4)

*** Social Foundations**

EDFN	506	Comparative Education	(4)
EDFN	525	Educational Sociology	(4)

Electives (4-13 units):

Select courses in education with adviser approval.

Electives in Cognate Area (0-10 units):

Select with adviser approval.

Comprehensive Examination or Thesis or Project (0, 7 units)

EDFN	596	Comprehensive Examination	(0) or
EDFN	599B	Thesis or Project Planning	(2) plus
EDFN	599B	Thesis or Project	(5)

Students should expect to take the comprehensive examination (EDFN 596) the quarter they complete all course work on their program and must comply with school and division requirements.

Master of Arts Degree in Education: Option in Instructional Technology

The Instructional Technology option prepares elementary and secondary level specialists who combine skills in applying computer technology with advanced video and multimedia techniques to enhance the learning experience of students at all levels.

Admission to the Program

In addition to university requirements for admission to graduate study, applicants must possess a 2.75 grade point average in the last 90 quarter units attempted.

Requirements for the Degree (45units)

A total of 45 units is required, with at least 23 in 500-level courses. A comprehensive examination, or a thesis or project, pertaining to the option is required. There is a limit on credit that may be earned in variable-unit courses. See *Restrictions on Credit Earned in Variable Unit Courses* earlier in this chapter.

Required Courses (29 units):

EDCI	560	Principles and Practices of Curriculum Development	(4)
EDFN	500	Evaluation of Educational Research	(4) or
EDFN	509	Methods of Research in Education	(4)
EDIT	450B	Instructional Materials Preparation Lab	(1)
EDIT	451	Instructional Media Techniques	(4)
EDIT	453	Instructional Technology and Programmed Instruction	(4)
EDIT	456	Computer Applications in Schools	(4)
EDIT	553	Administration of Instructional Media Services	(4)
EDSE	521	Teaching Effectiveness: Research and Application	(4)

Select four from following with adviser approval (9-14 units):

EDIT	551	Advanced Multimedia Techniques	(3)
EDIT	552	Instructional Media Design	(3)

EDIT	554A	Video Technology in Education I	(4)
EDIT	555	Simulation and Gaming	(3)
EDIT	557	Computer Assisted and Managed Instruction	(4)

Approved Electives (0-7 units):
Select with adviser approval.

Comprehensive Examination or Thesis or Project (0, 7 units)

EDFN	596	Comprehensive Examination	(0) or
EDFN	599A	Thesis or Project Planning	(2) <i>plus</i>
EDFN	599B	Thesis or Project	(5)

Students should expect to take the comprehensive examination (EDFN 596) the quarter they complete all course work on their program and must comply with school and division requirements.

Master of Arts Degree in Education: Option in Library Science

The Library Science option prepares school library media specialists for library media centers at all educational levels, emphasizing development of critical skills in this growing, rapidly changing and expanding field. Credentialed teachers study various aspects which vary from research to one-on-one contact with students to budget and purchasing to management, and more.

Admission to the Program

In addition to university requirements for admission to graduate study, applicants must possess a 2.75 grade point average in the last 90 quarter units attempted and a Multiple Subject or Single Subject teaching credential issued by the state of California.

Requirements for the Degree (45 units)

A total of 45 units is required, with at least 23 in 500-level courses. A comprehensive examination, or a thesis or project, pertaining to the option is required. There is a limit on credit that may be earned in variable-unit courses. See *Restrictions on Credit Earned in Variable Unit Courses* earlier in this chapter.

Required Courses (12 units):

EDCI	560	Principles and Practices of Curriculum Development	(4)
EDFN	500	Evaluation of Educational Research	(4) or
EDFN	509	Methods of Research in Education	(4)
EDFN	510	Advanced Study: Learning Theory and Education	(4)

Select five from following (20 units):

LIBR	401	Management of School Library Media Programs	(4)
LIBR	403	The School Library Media Program and the Curriculum	(3)
LIBR	406AB	Information Services in School Library Media Programs I, II	(4, 4)
LIBR	407	Selection, Acquisition, and Utilization of Instructional Materials	(4)
LIBR	409	Cataloging and Classification of Instructional Materials	(4)

Approved Electives (select 6-13 units with adviser approval)

Comprehensive Examination or Thesis or Project (0, 7 units)

EDFN	596	Comprehensive Examination	(0) or
EDFN	599A	Thesis or Project Planning	(2) <i>plus</i>
EDFN	599B	Thesis or Project	(5)

Students should expect to take the comprehensive examination (EDFN596) the quarter they complete all course work on their program and must comply with school and division requirements.

Master of Arts Degree in Teaching English to Speakers of Other Languages (TESOL)

The Master of Arts Degree in Teaching English to Speakers of Other Languages (TESOL) prepares teachers for a wide variety of positions both in the U.S. and abroad. The program emphasizes language acquisition processes, teaching methodology, linguistics, language testing, research, and sociocultural influences.

Admission to the Program

In addition to university requirements for admission to graduate study, applicants must have a 2.75 grade point average in the last 90 quarter units attempted. They must make formal application to the School of Education and must consult a faculty adviser for program planning. A teaching credential and/or two years of teaching experience prior to entering the program are desirable.

Prerequisites

*+ENGL 401 English Language in America (4)

*One year of college level study in a foreign language

*Minimum 550 score on TOEFL (*visa students only*)

+ *Minimum B grade required*

Requirements for the Degree (45 units)

A total of 45 units is required, with at least 23 in 500-level courses. A comprehensive examination, or a thesis or project, is required. There is a limit on credit that may be earned in variable-unit courses. See *Restrictions on Credit Earned in Variable Unit Courses* earlier in this chapter.

Required Core (36 units):

Courses are listed in the recommended sequence.

ANTH 470/ENGL 403 Language and Culture (4)

ENGL 405 Modern English Grammar (4)

#EDCI 453 Teaching in Bilingual/Crosscultural Schools (4)

COMD 455 Natural Processes of First Language Acquisition (4)

EDFN 500 Evaluation of Educational Research (4)

EDFN 560 Theories of Teaching and learning Second Languages (4)

EDFN 562 Methods for Teaching Second Languages I (4)

EDFN 563 Methods for Teaching Second Languages II (4) or

EDFN 564 Teaching ESL for Academic Purposes (4)

EDFN 567 Language Testing (4)

#International (visa) students may select an appropriate alternative with adviser approval

Electives (select 2-9 units from following with advisor approval):

ANTH 472, 501

EDCI 549

EDFN 570, 571, 573, 597, 598

EDIT 456

ENGL 505, 506

Comprehensive Examination or Thesis or Project (0, 7 units)

EDFN 596 Comprehensive Examination (0) or

EDFN 599A Thesis or Project Planning (2) *plus*

EDFN 599B Thesis or Project (5)

Students should expect to take the comprehensive examination (EDFN 596) during the Fall or Spring Quarter and must comply with school and division requirements.

Selection of an appropriate thesis or project topic may allow students to substitute thesis or project units for other course work in the program, with advisor approval.

Master of Arts Degree in Urban Education

The Master of Arts degree in Urban Education is intended for individuals interested in the problems and challenge of providing education in metropolitan schools, and offers a number of options.

Admission to the Program

In addition to university requirements for admission to graduate study, applicants must have a 2.75 grade point average in the last 90 quarter units attempted and a teaching credential or be closely associated with some aspect of the provision of education in an urban setting.

Requirements for the Degree (45 units)

A total of 45 units is required. At least 23 units must be in 500-level courses and at least 23 must be in education courses. In addition, a comprehensive examination or a thesis or project pertaining to the option is required. Course work beyond that designated as the required core will be determined in consultation with a faculty adviser. Students who plan to register in 500-level courses should consult an adviser prior to registration. There is a limit on credit that may be earned in variable-unit courses. See *Restrictions on Credit Earned in Variable Unit Courses* earlier in this chapter.

***Required Core (20 units)**

EDCI	560	Principles and Procedures of Curriculum Development	(4)
EDFN	437	Education and Intergroup Relations	(4)
EDFN	500	Evaluation of Educational Research	(4)
EDFN	510	Advanced Study: Learning Theory and Education	(4)
EDFN	537	Educational Issues in Metropolitan Areas	(4)

** except for the Bilingual/Crosscultural Education and Preliminary Administrative Services Credential option which has a separate core*

Options (18-25 units)

Select one of the following options:

*** Afro-American Students in Urban Schools (18-25 units)**

Required Courses (18 units):

PAS 401, 420, 425, 440, 499 (for 2 units)

(Substitutions will be made for these required courses if taken to meet baccalaureate requirements. Consult a Pan-African Studies Department adviser.)

Electives--Select 0--7 units with approval of adviser and division chair; include sufficient 500-level courses to ensure a minimum of 23 units on the program.

*** Asian-American Students in Urban Schools (18--25 units)**

Required Courses (18 units)

EDCI 536

EDFN 438

GEOG 446

GEOG/SOC 530 or

SOC 560

HIST 598 (for 2 units)

Electives-select 0-7 units with adviser approval.

*** Bilingual/Crosscultural Education (18--25 units)**

Required Courses (8 units)

EDFN 540 and 560

Electives-select 8-15 units with adviser approval.

EDCI 450, 453, 455, 510, 535, 536, 549

EDFN 438, 506--508, 531, 562, 563, 567, 570, 581

*** Chicano Students in Urban Schools (18--25 units)**

Required Courses (16 units)
 CHS410, 444,470, 506

Electives-Select 2-9 units with adviser approval.

* Teaching in **the Urban Classroom** (18--25 units)

Required Courses (18 units)

EDCI 526, 535, 539

EDFN 531,598 (for 2 units)

Electives-select 0-7 units with adviser approval.

CHS 410, 470

EDFN 438, 540, 560, 598

EDAC 507

PAS 401,420, 425

EDCI 452, 510, 536

Comprehensive Examination or Thesis or Project (0, 7 units)

EDFN 596 Comprehensive Examination (0) or

EDFN 599A Thesis or Project Planning (2) plus

EDFN 599B Thesis or Project (5)

Students should expect to take the comprehensive examination (EDFN 596) the quarter they complete all course work on their program and must comply with school and division requirements.

* **Bilingual/Crosscultural Education and Preliminary Administrative Services Credential (51-59 units)**

This option does not utilize the core used in the other options. All requirements appear below. Students who complete this option will have a Preliminary Administrative Services credential authorizing service in any public school administrative position and an M.A. degree in Urban Education: Option in Bilingual/Crosscultural Education.

Corequisites (12 units)

EDFN 437 plus two of the following:

EDCI 453,455, 549

EDFN 560, 563

Requirements of the Program (49-57 units)

Required Courses (49-50 units)

EDAD 506 Leadership in Education (3)

EDAD 507 Educational Planning and Decision Making Models (3)

EDAD 509 Basic School Law (3)

EDAD 510 School Finance (3)

EDAD 515 Social and Political Forces Affecting Education (3) or

EDFN 537 Educational Issues in Metropolitan Areas (4)

EDAD 517 Educational Staff Development and Evaluation (3)

EDAD 518 Program Management, Development and Evaluation(3)

EDAD 548 Seminar: Supervision of Instructional Programs (3)

EDAD 554 Seminar: Research and Development in Educational Administration (3)

EDFN 540 Bilingual Education Models: Theoretical Foundations (4)

EDFN 553 Educational Research and Decision Making (4)

EDFN 580 Field Work in Administration and Supervision of Bilingual/Crosscultural Programs (3)

EDSP 501 Problems and Practices in Special Education (3)

Select two from following:

EDAD 581 ABCD Field Work in Educational Administration (2, 2)

Select one from following:

EDFN	506	Comparative Education	(4) or
EDFN	507	History of Education	(4) or
EDFN	508	Philosophy of Education	(4)

Comprehensive Examination or Thesis or Project (0, 7 units)

EDFN	596	Comprehensive Examination	(0) or
EDFN	599A	Thesis or Project Planning	(2) plus
EDFN	599B	Thesis or Project	(5)

Students should expect to take the comprehensive examination (EDFN 596) the quarter they complete all course work on their program and must comply with school and division requirements.

Community College Instructor Credential

Requirements for the Community College Instructor credential are set by the Board of Governors of the California Community Colleges. Details of these requirements and of a program in professional education for those interested in community college teaching may be secured from the Coordinator for Community College Education; a brochure is available in the Division of Educational

Foundations and Interdivisional Studies office.

Designated Subjects Teaching Credential

The Designated Subjects credential authorizes holders to teach in the subject designated on the credential in classes organized primarily for adults. Programs are submitted to the Commission on Teacher Credentialing for approval in such general areas as Technical and Trade Education, Business Education, Homemaking Education, Adult Education, Driver Education, and Driver Training. The following departments offer vocational area advisement: Criminal Justice, Family Studies and Consumer Sciences, Office Systems and Business Education, or Technology. The Division of Educational Foundations and Interdivisional Studies advises in adult education and coordinates the credential program.

Requirements for Preliminary Credential

Applicants must satisfy the following criteria for the university-recommended credential

- * Formal admission to the Designated Subjects. credential program.
- * Verification of a bachelor's degree from a regionally accredited institution and a passing score on the CBEST.

(for adult-academic authorizations and for driver education)

- * Verification of five years of work experience in an appropriate vocational area and possession of a high school diploma.*(for vocational authorizations)*
- * Submission of an acceptable program and evaluation plan for completion of requirements for the clear credential.
- * Satisfaction of U.S. Constitution requirement.

Requirements for Clear Credential

Applicants must complete the following requirements for the university-recommended credential:

- * Satisfy requirements for the preliminary credential.
- * Complete all formal admission requirements including the development of a personalized In-service Training Program and Evaluation Plan for professional studies and other requirements.
- * Complete a program of professional study and other academic or occupational requirements.
- * Pass UNIV 400, the Writing Proficiency Examination (WPE).

- * Satisfy the U.S. Constitution requirement.
- * Complete two years of full-time or part-time teaching as defined by the Commission on Teacher Credentialing.
- * Satisfy the state requirement for course work in health education. (including nutrition and the study of the physiological and sociological effects of the use of dangerous drugs narcotics, alcohol, and tobacco) by completing HS 456 or equivalent.

Professional Education Requirements (18 units):

EDAC	471	Methods and Materials of Adult Education	(4)
EDAC	472	Principles of Teaching Adult and Occupational Education	(3)
EDAC	473X,Y	Supervised Field Experiences in Adult and Occupational Education	(2, 2)
EDAC	476	Curriculum Development in Adult and Occupational Education	(4)
EDAC	477	Counseling in Adult and Occupational Education	(3)

Determination of academic and/or occupational competence shall be made by university faculty and personnel from cooperating school districts and agencies.

Library Media Teacher Credential Program

The Library Media Teacher credential program authorizes services as a school library media specialist in both elementary and secondary schools. The program is approved by the Commission on Teacher Credentialing.

Admission to the Program

Applicants to the credential program must fulfill university requirements for admission to postbaccalaureate study and admission to the School of Education. The Commission on Teacher Credentialing requires that applicants for the *Library Media Teacher* credential have a valid teaching credential and pass the California Basic Educational Skills Test (CBEST).

Requirements for the Credential (50 units)

EDCI	560	Principles and Practices of Curriculum Development	(4)
EDEL	427	Using Children's Literature in Elementary Classrooms	(4)
EDIT	451	Instructional Media Techniques	(4)
EDSE	524	Instructional Materials in Secondary Schools	(4)
LIBR	401	Management of School Library Media Programs	(4)
LIBR	403	The School Library Media Program and the Curriculum	(4)
LIBR	406AB	Information Services in School Library Media Programs I, II	(4,4)
LIBR	407	Selection, Acquisition, and Utilization of Instructional Materials	(4)
LIBR	409	Cataloging and Classification of Instructional Materials	(4)
LIBR	450	Field Work in School Library Media Programs (6)	
LIBR	501	Computer Applications in School Library Media Centers	(4)

Supplementary Authorization for Single or Multiple Subject Teaching Credential

Holders of a Single Subject or Multiple Subject teaching credential issued by the state of California may supplement that credential with an authorization in Introductory English as a Second Language (ESL) for teaching ESL at any grade level through grade 9 by completing the following program with a C grade or higher in each course. For other requirements, consult the School of Education.

Complete or demonstrate proficiency in each of the following courses (16 units):

EDCI	453	Teaching in Bilingual/Crosscultural Schools	(4) or
EDCI	535	Instructional Strategies for Teaching Cultural Awareness	(4)
EDFN	560	Theories of Teaching and Learning Second Languages	(4)
EDFN	562	Methods for Teaching Second Languages	(4)
ENGL	401	English Language in America	(4)

Certificate Program in Computer Applications in Schools

The credit certificate program in Computer Applications in Schools is designed to prepare teachers to use computers in their classrooms and to take leadership roles in their schools. Those who complete the program will be prepared to teach computer programming/problem solving; to select and modify instructional software; to evaluate and select hardware; and to use computers to manage classrooms and schools. Completion of this credit certificate program requires 28 units in core and elective courses with a minimum B (3.0) average. Refer to the *Graduate Study* chapter of this catalog for general regulations governing all certificate programs.

Requirements for the Certificate (28 units)

Core Courses (12 units):

EDIT	430	Introduction to Computers and Their Uses in Classrooms	(4)
------	-----	--	-----

Select two from following:

EDEL	480	Teaching Microcomputing in Schools	(4)
EDIT	481	Microcomputing in Schools: BASIC I	(4)
EDIT	482	Microcomputing in Schools: BASIC II	(4)
EDIT	483	Pascal for Teachers	(4)
EDIT	484	Computer Authoring Tools	(4)

Electives (select 16 units from following with careful attention to prerequisites):

EDAD 545
EDEL 480, 580, 581
EDIT 452, '481, *482, '483, *484, 525, 555, 556, 557
EDSP 508

**if not taken in the core*

Students are encouraged to consult an adviser for assistance in planning their program to fulfill individual needs. Careful attention to course prerequisites is urged, also.

Certificate Program in English as a Second Language (ESL)

This program is designed to prepare and qualify teachers to work in classrooms or other educational settings where students are learning to speak, read, and write English as a second language (kindergarten through adult levels).

Admission to the Program

Apply for formal admission to the program through the Division of Educational Foundations and Interdivisional Studies.

Requirements for the Certificate (minimum 32 units)

In addition to course requirements, a passing UNIV 400--Writing Proficiency Examination (WPE) score and a valid California teaching credential, or eligibility for one, are required for issuance of the certificate. A minimum B (3.0) grade point average is required in all course work on the program. Refer to the *Graduate and Postbaccalaureate Study* chapter of this catalog for general regulations governing all certificate programs.

Required Courses (32 units):

The following sequence is recommended:

ENGL	401	English Language in America	(4)
EDCI	453	Teaching in Bilingual/Crosscultural Schools	(4)
EDCI	549	Developing English Reading Skills in Bilingual/Crosscultural Individuals	(4)
COMD	455	Natural Processes of First Language Acquisition	(4)
EDFN	560	Theories of Teaching and Learning Second Languages	(4)
EDFN	562,563	Methods for Teaching Second Languages	(4, 4)
EDFN	568	Field Work in English as a Second Language	(4)

Optional Electives (select in adviser consultation):

EDFN 540, 567, 570, 571

EDIT 452

ENGL 405

Language Development Specialist Certificate

(issued by the state of California)

The Language Development Specialist certificate program is designed to prepare teachers to work with Limited English Proficient (LEP) students in the areas of English as a second language and basic skills development. Completion of the program entitles participants to register for a state examination leading to issuance of a Language Development Specialist certificate provided they meet all state requirements including those listed below. Students may pursue this certificate simultaneously with a teaching certificate program.

Admission to the Program

In addition to university requirements for admission to graduate study, applicants must have completed at least one year of college level course work in a foreign language and must hold a valid teaching credential issued by the state of California or be eligible for one. Formal admission to the program is obtained through application to the Division of Educational Foundations and Interdivisional Studies.

Requirements for the Certificate (minimum 36 units)

In addition to course requirements, a passing score on UNIV 400, the Writing Proficiency Examination (WPE), is required. A minimum B (3.0) grade point average is required on all course work included in the program.

Required Courses (36 units):

The following sequence is recommended:

ENGL	401	English Language in America	(4)
EDCI	453	Teaching in Bilingual/Crosscultural Schools	(4)
EDCI	549	Developing English Reading Skills in Bilingual/Crosscultural Individuals	(4)
COMD	455	Natural Processes of First Language Acquisition	(4)
EDFN	560	Theories of Teaching and Learning Second Languages	(4)
EDFN	562, 563	Methods for Teaching Second Languages	(4,4)
EDFN	567	Language Testing	(4)
EDFN	568	Field Work in English as a Second Language	(4)

Optional Electives (select with adviser consultation):

EDFN 540, 570, 571

EDIT 452

ENGL405

SPECIAL EDUCATION_

School of Education

DIVISION OFFICE

King Hall C1064

Telephone: (213) 343-4400

Program advisement provided for:

- * Communicatively Handicapped
- * Early Childhood Handicapped
- * Gifted
- * Handicapped Adolescents and Young Adults
- * Learning Handicapped
- * Multicultural/Multilingual Special Education
- * Orientation and Mobility
- * Physically Handicapped
- * Resource Specialist
- * Severely Handicapped
- * Visually Handicapped
- * Joint Doctoral Program

Courses offered in:

- * Higher Education (EDHI)
- * Special Education (EDSP)

Master of Arts Degree in Special Education

The Master of Arts degree in Special Education provides administrators, teachers, and therapists with advanced preparation for work with exceptional learners. Master's degree candidates must incorporate the specialist credential requirements in their area of specialization as a part of their program. (This requirement may be waived for personnel such as nurses, occupational or physical therapists, or orientation and mobility specialists.) The masters degree program includes a choice among twelve options.

Admission to the Program

In addition to university requirements for admission to graduate study, applicants must have a 2.75 grade point average in their last 90 quarter units attempted, must have completed (or complete concurrently) requirements for a California credential in Special Education (except in selected areas), must complete all division application procedures, and must obtain approval from the division. A number of scholarships and traineeships is available to qualified students. Interested students should contact the division office.

Advisement

Students should seek advisement for all Special Education credential and graduate programs in the Division of Special Education.

Requirements for the Degree (45 units)

A total of 45 units is required, with at least 23 in 500-level courses. The program has four components: core requirements; option; electives; comprehensive examination or thesis or project. Students may pursue the thesis or project option only when they meet specified division and school criteria. There is a limit on credit that may be earned in variable-unit courses. See *Restriction on Credit Earned in Variable Unit Courses* earlier in this chapter.

Required Core (11 units)

EDSP	400	Education and Psychology of Exceptional Individuals	(4)
EDSP	500	Seminar: Special Education	(4)
EDSP	501	Problems and Practices in Special Education	(3)

Options (11-31 units)

Select one option from the following, with advisor consultation and approval. Special education credential courses may be included to a maximum of 16 units.

* **Early Childhood Education for the Handicapped (19--22 units)**

EDSP 415, 416, 503 (3--6 units), 515, 580

* **Education of Communication Handicapped Individuals (28 units)**

Required courses (12 units):

EDSP 502, 550, 568

Select 16 units from following:

COMD 406, 501

EDSP 401,404, 405, 408,420, 521,522, 523, 530

*** Education of Handicapped Adolescents and Young Adults (25 units)**

COUN 405B or

PSY 412B

CRIM 460 or

SOC 484 or 486

EDSP 405, 502, 503*, 506

SOC 482

** course substitution permitted with advisor approval for in-service individuals*

*** Gifted Education (19 units)**

EDSP 440, 441,503, 540, 541

*** Education of Learning Handicapped Individuals (31 units)**

Required courses (15 units):

EDSP 502, 503 (3 units), 555, 580

Select 16 units from following:

COMD 450, 456

EDSP 401,402,404, 405, 450, 556

PSY 406

*** Multicultural/Multilingual Programs in Special Education (31 units)**

Prerequisites:

EDSP 401,402

EDSP 408 or

COMD 455

Recommended prerequisites:

COUN 502

EDSP 510

Required Courses (15 units):

COUN 501

EDSP 503, 511,512

BILINGUAL/ESL METHODOLOGY (8 units)

Select one methodology area listed below and complete 8 units within that area.

Bilingual Methodology

EDCI 453, 455, 536

EDFN 537, 540

English as a Second Language (ESL) Methodology

EDFN 560, 562, 563

EDUC 499

CULTURE AREA (8 units)

Select one culture area listed below and complete eight units within that area.

Chicano Studies

ANTH 443 or

EDFN 437 or

SPCH 489

CHS 06, 410, 440, 470, 504

Chinese-American Studies

One of the following:

ANTH 443;
ART 431;
EDFN 437 or 438;
PHIL 435;
SPCH 489
CHIN 408, 410
GEOG 430
HIST 494B

Japanese-American Studies

One of the following:

ANTH 443;
ART 431;
EDFN 437 or 438;
GEOG 425;
PHIL 435;
SPCH 489
JAPN 400A, 400B, 403, 454LP, 460

Latin American Studies

ANTH 443 or
EDFN 437 or
SPCH 489
LAS 424, 435, 450

Pan-African Studies

ANTH 443 or
EDFN 437 or
SPCH 489
PAS 400, 401, 410, 425

* **Orientation and Mobility Specialist for the Blind (29 units)**

EDSP 460 or 469
EDSP 465, 475, 476, 503(for 9 units), 575

* **Education of Physically Handicapped Individuals (24 units)**

Required course (8 units)
EDSP 502, 560

Select 16 units from following:

EDSP 401,402,404, 405, 460, 461,462 COMD 450, 452

* **Resource Specialist in Special Education (15 units)**

EDSP 502, 503, 510, 585

* **Education of Severely Handicapped Individuals (110r 19 units)**

Plan A. Autistic and Severely Emotionally Disturbed
EDSP 503, 582
PSY 512

Plan B. Moderately and Profoundly Retarded

EDSP 450, 580, 581,582
PE 452

* **Education of Visually Handicapped Individuals (24 units)**

Required courses (8 units):

EDSP 502, 565

Select 16 units from following:

EDSP 401, 402, 404, 405, 460, 465, 466, 467, 568

Electives (0-23 units):

Courses must be approved by an adviser and will include graduate courses, courses that meet credential requirements in the candidate's field of specialization, and two courses outside the field.

Sixteen units of credential courses within the candidate's field of specialization, exclusive of EDSP 400, may be applied toward the master's degree if taken in graduate standing.

Comprehensive Examination or Thesis or Project (0, 7 units)

EDSP 596	Comprehensive Examination	(0) or
EDFN 599A	Thesis or Project Planning	(2) plus
EDSP 599B	Thesis or Project	(5)

Students should expect to take the comprehensive examination (EDSP 596) the quarter they complete all course work on their program and must comply with school and division requirements.

Specialist Credential Program

Preparation for the Special Education Specialist credential involves two levels of training. The first is the generic core, required of all students completing Specialist credential preparation in Special Education at California State University, Los Angeles. The core is designed to provide broad exposure to all exceptionalities through lecture courses and field experiences. The second level of preparation includes the specialization courses that provide knowledge and experiences related to the area of specialization. For credentials that allow for more than one area of emphasis, there is course work within each area of emphasis. Students may combine their program to earn dual emphases within a credential or two Special Education teaching credentials.

The following material provides general credential information and indicates course requirements for Specialist credential preparation within the Division of Special Education. Students must possess or be concurrently earning a California Single Subject or Multiple Subject credential before the Specialist credential can be issued. The Specialist credential also may be obtained by those who possess or qualify for a basic teaching credential authorized under previous legislation.

Specialist Credential Program Areas

Programs for all Special Education Specialist areas defined by the Education Code and Title 5 have been approved for offering at Cal State L.A. The programs are available to those who possess, or are earning concurrently, a Multiple Subject or Single Subject teaching credential. The programs are also available to those who possess, or can qualify for, a basic teaching credential authorized under previous legislation. Areas of Special Education preparation under this option are:

- * *Communication Handicapped Specialist Credential.* Includes speech and hearing, aphasic and severe oral language handicapped, and deaf and severely hard of hearing, and deaf-blind.
- * *Gifted Specialist Credential.*
- * *Learning Handicapped Specialist Credential.* Includes learning disabilities, behavior disorders, and educationally retarded.
- * *Physically Handicapped Specialist Credential.* Includes orthopedically handicapped, crippled, and other health impaired.
- * *Severely Handicapped Specialist Credential.* Includes trainable mentally retarded, severely multiple handicapped, seriously emotionally disturbed, and autistic.
- * *Visually Handicapped Specialist Credential.* Includes blind and partially seeing.
- * *Clinical-Rehabilitative Services Credential in Orientation and Mobility.* Authorizes services for work with the blind and partially sighted in schools and rehabilitation agencies.

- * *Administrative Services Credential:* Authorizes services as a superintendent, associate superintendent, deputy superintendent, principal, assistant principal, supervisor, consultant, or coordinator, or in an equivalent intermediate level administrative position.
- * Resource Specialist in Special Education Certificate.

Admission to Credential Programs

All students who plan to enter a program for one of the Special Education Specialist credentials must apply for admission to the School of Education Credential Programs. Students in upper division standing at Cal State L.A. are eligible to apply. However, 45 units beyond the baccalaureate are needed to obtain the credential. All students must possess or concurrently obtain a basic California teaching credential. Consult advisers in the Division of Curriculum and Instruction for specific course sequences and requirements for the basic credential. Individuals who hold a valid basic credential (preliminary or clear) may obtain information and application forms at the School of Education Student Services Center, KH D2078. Individuals who have not completed the basic credential (preliminary or clear) should register for EDCI 300. Also see *Admission to Credential Programs and Directed Teaching*.

Admission to the Division of Special Education Credential Programs is based on:

- * Completion of application.
- * Completion of EDCI 300 (if applicable).
- * Verification of academic ability by grade point average or scores on one of the following tests: ACT, SAT, GRE, SCAT, or MAT.
- * Three letters of recommendation.
- * Letter of professional intent.
- * Employment by participating school district (for admission to an internship credential program).

Special Education Specialist Credentials

* **Communication Handicapped Specialist Credential (61-116 units)**

This specialization has two subareas of preparation—one offered by the Division of Special Education and one offered by the Department of Communication Disorders. The subarea of Deaf and Severely Hard of Hearing requires 62 units. The subarea of Speech and Hearing, Aphasic, and Severely Oral Language Handicapped requires 116 units.

Required Courses (50 units):

EDSP 400-405, 407, 408, 420, 521,522, 523
 COMD 406, 501

The 116 units required for the subarea of Speech and Hearing, Aphasic, and Severely Oral Language Handicapped include 100 units of required courses and 16 units of electives.

Required Courses (100 units):

COMD 400-406, 420, 425, 429, 450, 456, 461,462AB, 470-476, 478AB, 490AB, 570AB-578
 COUN 405 or PSY 412AB

Electives (16 units):

Select courses in communicative disorders (COMD), counseling (COUN), special education (EDSP), and speech communication (SPCH), with adviser approval. At least 4 units must be taken in courses specific to the subarea.

* **Gifted Specialist Credential (47 units)**

Required Courses (39 units):

EDSP 400-404, 407 (for 12 units), 440, 441

Electives (select 8 units from following):

COUN 492 EDCI 526

COUN/EDCI 528

EDSP 408, 540

* **Learning Handicapped Specialist Credential**

Option 1. On-Campus Program (45 units):

EDSP 400-405, 407 (for 12 units), 550

EDSP 450 or

PSY 406

EDSP 408 or

COMD 450 or 456

Option 2. Off-Campus Program (45 units):

Courses should be taken in the following recommended sequence:

EDSP 400, 401,402, 489 (for 5 units),

404, 405, 550, 489 (two quarters, 5 units each),

598 (for 2 units)

Select one from following (4 units):

EDSP 450 or

PSY 406

Select one from following (4 units):

EDSP 408 or

COMD 450 or 456

* **Orientation and Mobility (37 units):**

EDSP 400, 406,465, 476, 501,503, 575, 576 EDSP 460 or 469

* **Physically Handicapped Specialist Credential (53 units)**

EDSP 400-405, 407 (for 12 units), 461,462

COMD 450, 452

COMD 456 or

EDSP 408

* **Severely Handicapped Specialist Credential (48 units)**

Option 1. On-Campus Program (49 units):

Required courses:

EDSP 400-405, 407 (for 12 units), 480, 481

COMD 456 or

EDSP 408

COUN 501

Option 2. Off-Campus Program (49 units):

Courses should be taken in the following recommended sequence:

EDSP 400, 401,402, 489 (for 5 units),

404, 405, 480, 481,489 (two quarters, 5 units each),

598 (for 2 units)

Additional required courses (8 units):

COUN 501

EDSP 408 or

COMD 456

* **Visually Handicapped Specialist Credential**

Option 1: On-Campus Program (58 units):

EDSP 400-405, 407 (for 12 units),

461,465, 466, 467, 469, 568

COMD 456 or

EDSP 408

Option 2: Internship Program (59 units):*Required Courses (44 units):*EDSP 400-402, 404, 405, 461, 465, 466, 467, 469,
568, 598 (for 2 units)

COMD 456 or

EDSP 408

Practicum Requirements (15 units):

EDSP 489 (5, 5) (directed teaching)

EDSP 489 (5) (generic practicum)

*** Administrative Services Credential: Supervision of Special Education**

Requirements for the credential appear in the listing of programs within the Division of Administration and Counseling (Preliminary Administrative Services credential) earlier in this chapter.

*** Resource Specialist in Special Education**

The Resource Specialist in Special Education serves mildly handicapped children and youth who spend a majority of their school day in a regular classroom. The Resource Specialist must possess a valid teaching credential in Special Education; have a minimum of three years of successful full-time classroom teaching that includes both regular class and special education experience; and have completed or be enrolled in an advanced preparation program in Special Education.

The Commission on Teacher Credentialing has adopted a certificate authorizing service as a Resource Specialist in Special Education. Because of the varying needs and backgrounds of students, three program options have been approved for offering at Cal State L.A.

*** Option for Preservice Resource Specialist Training***Required Courses (16-17 units):*

EDSP 489 (5) or 503 (6)

* EDSP 501, 510, 512

* *must be taken before 489 or 503**** Option for In-Service Resource Specialist Training**

This option is intended for individuals who are currently functioning as Resource Specialists and who hold the Preliminary Certificate of Competence, and is available only to prearranged groups.

Required Courses:

EDSP 489 (for 12 units), ** 504

** *must be taken before 489**** Option for Internship Resource Specialist Training***Required Courses (26-27 units)*

EDSP 489 or 503 (15-16 units)

**EDSP 501, 510, 512

** *must be taken before 489*

The specific competencies and skills developed through this option are identical to the two other existing training options but have increased emphasis on intensive supervised field work (three experiences extending over a three-quarter period).

Early Childhood Special Education: Infancy Emphasis

This certificate program prepares students to provide educational intervention to handicapped and high-risk (including medically fragile) infants and their families. Because of the life-threatening conditions that characterize this population, applicants to the program will be screened carefully during an admission interview.

Completion of this credit certificate program requires 30 units of course work with a minimum B (3.0) grade point average. Refer to the *Graduate and Postbaccalaureate Study* chapter of this catalog for general regulations governing all certificate programs.

Prerequisites

- * Bachelor's degree in Child Development or related field
- * Experience with infants and young children, ages birth to three
- * EDSP 400
- * Minimum 2.75 undergraduate grade point average in last 90 quarter units attempted

Requirements for the Certificate (30 units)

CHDV	501	Infants and Toddlers-Development and Care	(4)
EDSP	408	Cognitive and Linguistic Processes in Exceptional Individuals	(4)
EDSP	415	Educational Assessment Techniques for Young Handicapped Children	(4)
EDSP	416	Working with Families of Young Handicapped Children	(4)
EDSP	503	Field Work in Special Education	(3)

(Early Childhood Special Education: Hospital/Home-based Programs)

EDSP	503	Field Work in Special Education	(3)
------	-----	---------------------------------	-----

(Early Childhood Special Education: Center-based Program)

EDSP	515	Planning Programs for Exceptional Infants and Young Children	(4)
EDSP	516	Seminar: Advanced Assessment and Intervention Techniques for Special Needs Infants	(4)

Early Childhood Special Education: Preschool Emphasis

This certificate program prepares teachers to teach in district classrooms for preschool children, ages three to five years, with disabilities.

Completion of this credit certificate program requires 27 units of course work with a minimum B (3.0) grade point average. Refer to the *Graduate and Postbaccalaureate Study* chapter of this catalog for general regulations governing all certificate programs.

Prerequisites

- * Bachelor's degree in Child Development or related field
- * Multiple Subject or Special Education credential
- * EDSP 400
- * Minimum 2.75 undergraduate grade point average in last 90 quarter units attempted

Requirements for the Certificate (27 units)

EDEL	461	Curriculum Procedures and Materials for Early Childhood Education	(4)
EDEL	462	Dynamics of Play	(4)
EDSP	408	Cognitive and Linguistic Processes in Exceptional Individuals	(4)
EDSP	415	Educational Assessment Techniques for Young Handicapped Children	(4)
EDSP	416	Working with Families of Young Handicapped Children	(4)
EDSP	503	Field Work in Special Education	(3)

(Early Childhood Special Education)

EDSP	515	Planning Programs for Exceptional Infants and Young Children	(4)
------	-----	--	-----

Doctor of Philosophy Degree in Special Education

A doctoral program in Special Education, offered jointly by the University of California, Los Angeles and California State University, Los Angeles, combines the unique resources of the two institutions. The program provides preparation for leadership positions in higher education and the public schools, as well as preparation for a career in scholarly research.

The degree requires major work in special education and cognate, minor, and breadth work in related areas. Advanced courses and research seminars supply technical backgrounds in the specialization in which students plan to do their dissertation. Practicum, field work, and/or internship assignments are planned on an individual basis.

Admission to the Program

To be considered for admission, applicants must meet the following requirements:

- * Have completed a masters degree or the equivalent, either in special education in an allied field, or in the cognate field in which they propose to work. If any aspect of such preparation is lacking, applicants will engage in studies to achieve the requisite background.
- * Have passed such examinations as may be specified by the Committee on Graduate Degrees (currently, a minimum total score of 1,000 is required on the general test of the Graduate Record Examination).
- * Have a grade point average of at least B (3.0) in all upper division work.
- * Maintain at least a 3.5 grade point average in all work completed subsequent to the baccalaureate.
- * Show evidence of research capability. A master's thesis or comparable research project may be acceptable.
- * Complete sufficient course work to merit recommendation for admission by at least two resident graduate faculty members and one professional field supervisor, or three resident faculty members from one or both campuses.

The resident adviser on the campus where applicants initiate work will assist in preparation of materials for consideration by the joint admissions committee. Applicants will be considered for admission by the Cal State L.A. Joint Doctoral Committee and the UCLA Committee on Admissions and Standards.

Planning the Program

Upon admission to the program, students are assigned a faculty member at each campus to assist them in planning their program of studies. About half of the course work is taken at Cal State L.A. Course requirements from both campuses include core, minor, breadth, research and design, research internship, specialization, and cognate courses. Specific courses in each of the required areas are determined by the candidate, the faculty advisers, and the joint doctoral coordinator, within approved program guidelines. The students' individual programs are based on their background and are designed to ensure their competencies in the above areas. Advisement materials are available from the joint doctoral coordinator and in the division office.

The program is planned to provide a comprehensive understanding of the entire field of special education and is designed to develop competence in statistics and research; provide an understanding of research relating to exceptional children; strengthen background through study in a cognate area; and provide electives to complete a balanced program of study. The program is not built around specific unit requirements, but will be designed to ensure the candidate's competencies in the above areas.

Residence Requirements

All doctoral candidates are required to engage in six or more quarters of resident study; minimum requirement is three quarters in full-time residence on each campus. Normally the program may be expected to require more than minimum residence requirements. The exact distribution of time on each campus will depend upon the individual program. Doctoral candidates must be enrolled in three of every four quarters unless on formal leave of absence.

Candidates are allowed a period of time not to exceed four years from the beginning of course work to advancement to candidacy, and four additional years from advancement to candidacy to completion of the dissertation.

Qualifying Examinations

When the candidate has completed the course work recommended by the resident advisers, application is made for written qualifying examinations.

After the candidate has completed the written qualifying examinations successfully, a joint doctoral committee will be appointed by the deans of the graduate divisions of the two institutions. This committee will be composed of two approved faculty members from the UCLA Graduate School of Education, two from the Cal State L.A. Division of Special Education, one from the cognate department at UCLA, and one from the cognate department at Cal State L.A. This committee will conduct an oral examination covering topics from both special education and the cognate discipline related to the candidate's research proposal, to determine the candidate's qualifications to conduct meaningful research in the field.

Advancement to Candidacy

Candidates who have passed both written and oral qualifying examinations file an application for advancement to candidacy. Thereafter, enrollment is required each quarter in EDSP 699, or such course or courses as the student's committee chair may direct, until the dissertation is completed.

Dissertation

The dissertation embodies the results of the candidate's independent investigation. It must contribute to the body of knowledge in the field and draw upon interrelations between education and the cognate discipline. The dissertation must be approved by the candidate's dissertation committee and, after approval, copies must be filed in the libraries of both institutions. An abstract must be submitted to University Microfilms for publication in Dissertation Abstracts. Candidates should check with the committee chairperson regarding the need for additional copies of the dissertation.

Final Examination

Candidates must pass a final oral examination conducted by the dissertation committee, with major emphasis on the interrelation of the dissertation to existing knowledge in education and in the cognate field. The major emphasis of this examination is on defense of the dissertation.

Advisement

A faculty member on each campus is designated as resident doctoral adviser for all students intending to apply for admission to the Joint Doctoral Program. As soon as the decision is made to seek admission, applicants should consult the adviser for assistance in planning the initial program and for advice about formal procedures required for consideration for admission to the program.

The addresses and phone numbers for the resident doctoral advisers are as follows:

California State University, Los Angeles Division of Special Education
5151 State University Drive
Los Angeles, California 90032-8144 King Hall C1064
Phone: (213) 343-4400
University of California, Los Angeles

Graduate School of Education
405 Hilgard Avenue
Los Angeles, California 90024
Phone: (213)825-8343

COURSES IN EDUCATION_

The School of Education offers courses in several disciplines, each with a distinct four-letter course abbreviation. These disciplines are listed below with the names of the offering divisions. Courses that follow are arranged alphabetically by course abbreviation.

Discipline Name and Abbreviation Division

Adult and Continuing Education (EDAC)	Educational Foundations and Interdivisional Studies
Counseling (COUN)	Administration and Counseling Curriculum and Instruction
Instruction (EDCI)	Curriculum and Instruction
Educational Administration (EDAD)	Administration and Counseling
Educational Foundations (EDFN)	Educational Foundations and Interdivisional Studies
Elementary Education (EDEL)	Curriculum and Instruction
Higher Education (EDHI)	Special Education**
Instructional Technology (EDIT)	Educational Foundations and Interdivisional Studies
Library Science (LIBR)	Educational Foundations and Interdivisional Studies
Secondary Education (EDSE)	Curriculum and Instruction
Special Education (EDSP)	Special Education

** graduate level courses only

Courses in Adult and Continuing Education (EDAC)

(Division of Educational Foundations and Interdivisional Studies)

400-Level Courses

All 400-level courses may be applied toward masters degree requirements, subject to limits established by the division and approval of the graduate adviser.

Graduate Courses

Classified graduate standing is required for admission, except that I postbaccalaureate students may enroll in 500-level courses that are required in a credential program.

507 Adult Illiteracy (4)

(also listed as EDSP 507) Nature of illiteracy among adults in the U.S.; impact of illiteracy upon career, social, and life stage development. Implications for program planning.

578 Organization, Administration, and Supervision of Adult Education (4)

Prerequisite: Clear Designated Subjects credential. Procedures for planning and management of academic, vocational, and special programs in community adult schools and regional occupational centers; research on topics related to supervision and coordination strategies.

581 The Community College (3)

Prerequisite: Instructor consent. History, aims and functions, organization, and curriculum of community colleges, with particular emphasis upon current issues, emerging patterns in urban California colleges.

582 Instruction in Community College (4)

Prerequisites: Master's degree or near completion, instructor consent. Specific preparation for directed teaching. Multiple purposes of the community college, community relationships and materials; organization, personnel relationships; qualifying for and securing employment.

589 Directed Teaching in Community College (6) Prerequisites: EDAC 582, approval of coordinator for community college education. Directed teaching in a community college for selected students holding a masters degree. Graded CR/NC.

Courses in Counseling (COUN)

(Division of Administration and Counseling)

400-Level Courses

All 400-level courses may be applied toward master's degree requirements, subject to limits established by the division and approval of the graduate adviser.

Graduate Courses

Classified graduate standing is required for admission, except that postbaccalaureate students may enroll in 500-level courses that are required in a credential program.

501 Behavior Analysis in School, Home, and Agency Settings (4)

Prerequisite: COUN 406 or 489 Or EDSP 402 or PSY 428. Principles and application of behavioral contingency management procedures.

502 Advanced Behavioral Contingency Management in Schools (4)

Prerequisites: 501, instructor consent. Behavioral research, ethics, and recent developments in applying behavioral procedures to school and consulting relationships.

503 Sociological and Cultural Factors in Counseling (4)

Effect of social environment and cultural group membership on behaviors related to counseling; relationship of social and cultural background to counseling theory and techniques to our changing cultures; implications of crosscultural research for counseling practice.

504 Advanced Topical Study in Application of Behavior Analysis to Education (4)

Prerequisite: COUN 502. In-depth study of particular topics within behavior analysis. May be repeated to maximum of 8 units as subject matter changes.

505 Practicum: Counseling (3)

Prerequisites: COUN 405A; admission to a degree or credential program or employment as a counselor. Practical experience preparatory to working with clients; experiences designed to develop students' sensitivity to personal values and needs, and their significance in counseling process. Graded CR/NC.

506 Individual Counseling Strategies (4)

Prerequisites: COUN 405A, 505; instructor consent; prerequisite or corequisite: COUN 447 or 448. Techniques and strategies of individual counseling that apply to specific settings or derive from specific theories of counseling.

507 Individual Clinical Counseling (3)

Prerequisites: COUN 428, 447, or 448; 406 or 501; 505, 506; instructor adviser consent; prerequisite or corequisite: COUN 428. Supervised individual career and personal counseling in the campus Counseling and Assessment Clinic. Students implement theory, develop case management strategies, and develop their own counseling behavior. Lecture 1 hour, clinical field experience 3 hours scheduled plus 3 hours arranged. May be repeated once for credit. Graded CR/NC.

510 Counseling Students in Higher Education (4)

Characteristics and problems of American college students; impact of college life on individual, psychosocial aspects of student culture and college environment as well as cultural differences.

511 Long Range Planning in Educational Settings (4)

Long range planning techniques for a systematic study of the future within the specific context of educational institutions and their environments.

512 Strategies for Introducing Futures Studies into Curriculum (4)

Teaching strategies designed to help individuals develop understandings, attitudes, and abilities to deal more effectively with change and with the social responsibilities of living in an information society.

514 Stress Counseling (4)

Prerequisite: COUN 405A. Familiarization with assessment and management techniques related to client stress in a variety of settings such as schools, colleges, and rehabilitation agencies.

515 The Future of Education in a Changing Society (4)

Review and critique of theoretical contributions of leading educational futurists; future oriented perspectives on significant educational issues; curricular and other educational modifications in light of rapid sociocultural change.

516 Group Counseling (4)

Prerequisites: COUN 405A; 406 or 501; 505. Theory and practice of group processes, leadership, membership skills; group skills appropriate to school, college, agency settings; counseling group and task group processes; current research in group theory and practice.

517 Group Counseling: Practicum (3)

Prerequisite: COUN 516. Supervised group counseling in campus' Counseling and Assessment Clinic or local high school or agency. Lecture 1 hour, clinical experience 3 hours scheduled plus 3 hours arranged. May be repeated once for credit. Grade@CR/NC.

520 Introduction to Family Evaluation and Counseling (4)

Prerequisites: COUN 506,507; corequisite: COUN 523. Introduction to major counseling theories and practices for working with relationships in family contexts; focus on methods of initial family assessment and family counseling with individual family members.

521 Advanced Family and Marriage Counseling (4) Prerequisite: COUN 520; corequisite: COUN 589. Approaches to joint family counseling and marriage counseling within family systems framework.

522 Family Counseling with Children (4)

Prerequisite: COUN 589 or 586. Theory and methods of counseling children in families; includes assessment and study of child's role in family structure; applications of verbally- and activity-based therapy.

523 Family Counseling Laboratory (3)

Prerequisites: COUN 406or 501;507; corequisite: COUN 520. Supervised counseling of couples and families utilizing strategies and techniques of systems theory; practical experience designed to enhance students' skills as family counselors. Lecture 1 hour, laboratory 3 hours. May be repeated to maximum of 6 units.

528 Creative Behavior: Development and Facilitation (4)

(also listed as EDCI528) Prerequisites: Teaching credential, teaching experience. Factors that inhibit and facilitate creative thinking directed toward stimulating and productively utilizing creative abilities of students in urban society.

529 Principles of Research and Program Evaluation in Counseling (4)

Prerequisite: EDFN 452 or PSY 302. Principles, procedures, and ethical considerations underlying collection, analysis, and interpretation of data for research and evaluation of counseling programs.

531AB Individual Testing and Case Study Techniques (4, 4) (also listed as PSY531AB)

Prerequisites: PSY 430 or COUN 428 plus one of following sequences: PSY 410AB and 438; 410AB and 431 ;418AB and 431; or 410A and COUN 405A, 501, and 529. Intensive practice in administration and interpretation of better known testing devices for mental ability, perceptual and motor functioning, and personality dynamics, with attention to integration of results in case studies. Lecture 3 hours, laboratory 3 hours.

532 Diagnosis of Learning Problems and Remedial Procedures (4)

Prerequisite: COUN 531 B. Methods used by classroom teachers and school specialists in diagnosis and remediation of learning disabilities.

533 Psychological Testing Applied to Mentally, Physically Atypical (4)

Prerequisite: COUN 531 B. Selection, administration, and interpretation of tests used for appraising the atypical individual. Lecture 3 hours, laboratory 3 hours.

534 Methods of Personality Assessment (4)

(also listed as PSY 534) Prerequisite: COUN 531AB. Study and evaluation of current personality tests, objective and projective. Administration, scoring, interpretation, and reporting of results; findings of empirical research. Lecture 3 hours, laboratory 3 hours.

535 Alternative Assessment (3)

Prerequisite: COUN 531A. Selection, educational implications, and use of alternative assessment techniques and findings; implications for least restrictive placement. Offered: Winter.

538 Seminar: Methods of Diagnostic Assessment in Counseling (4)

Prerequisites: COUN 428,506; PSY 410Aor B. Use of statistical and clinical methods as bases for diagnostic appraisal in counseling; emphasis on individual case reports. Includes utilization of

current versions of professionally mandated resources like the APA Diagnostic and Statistical Manual (DSM).

540AB Foundations of Rehabilitation (3, 3)

Prerequisite: Admission to graduate Rehabilitation Counseling option. Introduction to rehabilitation counseling profession, including study of roles and functions of rehabilitation counselors and impact of disability on individual's psychological, physical, and social life. Participation in field observation required.

541 Intervention Strategies with Disabled Adults (4)

Prerequisites: Admission to a graduate program in Counseling; COUN 442, 506, 540AB or employment experience as a rehabilitation counselor and permission of instructor; corequisite: appropriate field work or employment experience as a rehabilitation counselor. Systematic analysis of case data for decision-making, intervention recommendations and methods of expediting the case process in public and private sector rehabilitation systems; strategies for managing caseload pressure.

542AB Medical Aspects of Disability (3, 3)

Review of literature and research implications for rehabilitative counseling of major physical and psychiatric conditions leading to disablement; etiology, therapy, and prognosis of rehabilitation.

552 Counseling and Human Sexuality (4)

Prerequisites: COUN 405A or 405B; 450 or 480 or 506 or 508; corequisite: SOC 421. Latest developments in theory and research in area of human sexuality as these pertain to role of counselor.

581 Seminar: Pupil Personnel Services (4)

Prerequisite or corequisite: COUN 586. Organization, administration, and evaluation of pupil personnel services in public elementary and secondary schools or in community colleges.

583 Seminar: Preventive Counseling (4)

Prerequisites: COUN 405A, 503. Primary prevention as a model of counselor service delivery; developmental interventions that simulate affective development through didactic and experiential learning activities.

585 Seminar: School Psychology (4)

Prerequisite: Instructor consent; corequisite: COUN 586P. History and foundations of school psychology. Legal, ethical and professional issues and standards. Roles and functions of the school psychologist.

586 Supervised Field Experience in Pupil Personnel Services (2-10)

Prerequisite: Admission by application filed with division by fifth week of preceding quarter and approved by adviser and division associate chair. Supervised field experience in school counseling, higher education counseling, or school psychology involving work with pupils, parents, teachers, administrators, community agencies, and others. Graded *CR/NC*. May be repeated to maximum of 30 units. Candidates for Services credential with Pupil Personnel Services specialization enroll in an appropriate field experience as follows:

586C Higher Education Counseling**586P School Psychology Internship****586S School Counseling****587 Seminar: Higher Education Counseling (4)**

Prerequisites: Advancement to candidacy in Higher Education Counseling option and instructor consent. Examination and investigation of critical issues in higher education counseling. Seminar reports required.

588 Supervised Practice in Rehabilitation Counseling (3-10)

Prerequisites: COUN 505, instructor consent, application filed with division by fifth week of preceding quarter. Supervised professional experience. One unit requires 40 hours of practice. Graded *CR/NC*. May be repeated to maximum of 15 units.

589 Site Practicum in Marriage, Family, and Child Counseling (3-5)

Prerequisites: COUN 505, 520; corequisite: COUN 5210r 522; admission by application filed with division by fifth week of preceding quarter. Supervised counseling involving work with individuals, children, couples, and families. GradedCR/NC. May be repeated to maximum of 15 units.

590 Special Topics in Counselor Education (1-4)

Prerequisite: Consent of division chair. Intensive study of designated problems in counselor education. May be repeated for credit as subject matter changes.

591 Supervised Field Experience in Applied Behavior Analysis (3)

Prerequisites: COUN 593, application filed with division by fifth week of preceding quarter. Supervised professional experience; one unit requires 40 hours of practice. GradedCR/NC only. May be repeated to maximum of 6 units.

593 Practicum: Staff Development and Consultation (3)

Prerequisites: COUN 502, 586S. Practical experience consulting with parents and teachers regarding behavior management problems and assisting school personnel in providing in-service training. Lecture 1 hour, clinical field experience 3 hours scheduled plus 3 hours arranged. May be repeated once for credit. GradedCR/NC.

597 Graduate Research (1-4)

Prerequisites: COUN 529, instructor consent to act as sponsor, division approval of project prior to registration. Independent research under guidance of faculty. May be repeated for credit. GradedCR/NC.

598 Graduate Directed Study (1-4)

Prerequisites: A B (3.0) grade point average in all graduate work in education, consent of division chair and of instructor to act as sponsor. Independent directed study of advanced topics in field; regular conferences with sponsor. May be repeated for credit.

Courses in Curriculum and Instruction (EDCI)

(Division of Curriculum and Instruction)

400-Level Courses

All 400-level courses may be applied toward master's degree I requirements, subject to limits established by the division and approval of the graduate adviser.

Graduate Courses

Classified graduate standing is required for admission, except that postbaccalaureate students may enroll in 500-level courses that are required in a credential program.

504 Optional Systems in Education (4)

Prerequisite: Teaching credential. Trends in alternative education such as continuation education, year-round schools, alternative schools, with specific reference to Southern California.

510 Instructional Materials in Multicultural Education (4)

Prerequisite: Teaching credential. Analysis of instructional materials relating to experiences of minority cultural groups in America; elementary and secondary materials considered. May be repeated to maximum of 8 units.

513 Reading as a Cognitive Process (4)

Prerequisites: EDEL 400 or EDSE 423; teaching credential and teaching experience. Advanced study of current issues and programs in reading instruction; application of recent research findings to reading curriculum. Open to both elementary and secondary teachers.

522 Diagnosis and Remedial Reading/Language Arts Procedures (4)

Prerequisite: EDEL 400 or 513 or EDSE 423. Formal and informal diagnostic methods; remedial reading methods within integrated whole-language classroom; instruction for elementary through secondary levels; supervised diagnostic experience.

524 Diagnostic Procedures for Reading/Language Arts Clinicians (5)

Prerequisite: EDCI 522. Advanced diagnosis of severely disabled readers and/or writers; supervised experience in diagnosis and small group instruction with students who need assistance. Lecture 3 hours, laboratory 2 hours.

526 Principles and Practices of Leadership (4)

Prerequisites: Enrollment in School of Education credential or degree program and instructor consent. Training in social sensitivity, behavioral flexibility, interpersonal knowledge and skills; understanding of self and others; effects of leadership in urban society. Sensitivity training laboratory. Meets 5 hours weekly. Credit awarded for only one of EDCI 526 and EDAD 526.

527 Seminar: Issues and Trends in Using of Children's Literature (4)

Prerequisite: EDFN 500. Issues and trends in using of children's literature to teach reading, language arts, and other school subjects; analysis of research on literature-based instruction.

528 Creative Behavior: Development and Facilitation (4)

(also listed as COUN 528) Prerequisites: Teaching credential, teaching experience. Factors that inhibit and facilitate creative thinking directed toward stimulating and productively utilizing creative abilities of students in urban society.

535 Instructional Strategies for Teaching Cultural Awareness (4)

Prerequisites: ANTH 443, EDFN 500. instructional strategies, materials, resources, and procedures for creating sensitivity to cultural differences and similarities. Nature of stereotypes, misconceptions, and prejudices.

536 Crosscultural Studies Materials for Classroom Use (4)

Collection, analysis, adoption or adaptation, and development of crosscultural studies materials, e.g., Afro-American, Chicano, Filipino-American, for use in classroom.

538 Advanced Design and Evaluation of Reading/ Language Arts Programs (4)

Prerequisites: Valid California teaching credential; prerequisite or corequisite: EDCI 541. Reading/language arts program planning and evaluation; articulation of school and district reading/language arts programs; delineation of reading/language arts specialist responsibilities; development and maintenance of school/community channels of communication.

539 Instructional Strategies for Inner City Schools (4)

Prerequisite: Teaching credential. Instructional strategies, resources, and organizational patterns designed for teaching children and youth of inner city schools; methods of dealing with typical learning disabilities of inner city school children. Field work included.

540 Application of Therapeutic Procedures in Reading/Language Arts (2)

Prerequisites: EDCI 524, instructor consent. Supervised experience in small-group instruction with remedial or disabled reading/writing clinic student. May be repeated to a maximum of 6 units.

541 Field Work in Reading/Language Arts (4)

Prerequisites: EDCI 540, instructor consent. Supervised field experience in organization, administration, and supervision of reading/language arts programs at district or school level.

549 Developing English Reading/Language Arts Skills in Bilingual/Crosscultural Individuals (4)

Prerequisite: EDEL 400, EDSE 423, teaching credential, or instructor consent; prerequisite or corequisite: EDCI 453. Analysis of research, curriculum design and selection of materials and strategies for the development of English reading/language arts skills for the culturally/linguistically diverse student.

560 Principles and Practices of Curriculum Development (4)

Curricular trends in historical perspective; sociological change, research in child growth and development, basic philosophies. Objectives, practices, materials, evaluation in curriculum development process.

583 Application of Hypermedia in Instruction (4) Prerequisites: EDIT 430, teaching credential. Hands-on instruction in uses of hypermedia for teaching in K-12 schools; strategies for use of hypermedia by both teachers and students to enhance instruction.

Courses in Educational Administration (EDAD)

(Division of Administration and Counseling)

Graduate Courses

Classified graduate standing is required for admission, except that postbaccalaureate students may enroll in 500-level courses that are required in a credential program.

506 Leadership In Education (3)

Prerequisite: EDAD 503. Investigation of principles of educational leadership and organizational theory, including analysis of administrative roles, process, and communication.

507 Educational Planning and Decision Making Models (3)

Educational models; includes interunit and intraunit processes; uses of research and technology in school management; developing, implementing, and evaluating goals to practices.

509 Basic School Law (3)

Legal aspects of education, including rights, duties, and liabilities of employer, employees, parents, and students.

510 School Finance (3)

Prerequisite: EDAD 509. School budgeting, monetary management and accounting, physical resource management and control, financial management of funded programs, resource administration and accounting. Lecture (3 units) required; 10 hours of administrative related field activities required.

515 Social and Political Forces Affecting Education (3)

Social and political forces affecting education, including power structures and other influences.

517 Educational Staff Development and Evaluation (3)

Investigation of principles of educational staff development and evaluation; includes supervision, evaluation, personnel development, and personnel relations for certificated and classified staff.

518 Program Management, Development, and Evaluation (3)

Overview of major trends in curriculum development; management of curriculum K-12; program articulation and evaluation, relationship between human development/learning theory and curriculum management; program implementation and staff development.

526 Principles and Practices of Leadership (3)

Prerequisite: EDAD 506. Training in social sensitivity, behavior flexibility, interpersonal knowledge and skills. Understanding of self and others; effects of leadership pertaining to school administration and supervision. Sensitivity training laboratory 4 hours weekly. Grade CR/NC. Credit awarded for only one of EDCI 526 and EDAD 526.

527 Advanced Educational Management and Evaluation (3)

Prerequisites: EDAD 507, admission to EDAD program. Management and evaluation of educational programs for school administrators. Development of goals and objectives, evaluation of educational outcomes and instructional performance; use of education management systems. Lecture (3 units) required; 10 hours of administrative related field activities required.

533 Legal Research in Educational Administration (3)

Prerequisite: EDAD 509. Effects of laws, legal materials, judicial decisions on school operations. Techniques of legal research and its relation to school administration.

533P Practicum: Legal Research in Educational Administration (3)

Prerequisites: Admission to EDAD program, EDAD 509. Practical experience of applying techniques of legal research to issues of educational administration. Grade CR/NC.

536 Special Seminar: Problems in School Administration (1-5)

Prerequisite: Administrative Services credential. Theoretical and practical aspects of special problems in school administration; specific topic announced in Schedule of Classes. Course does not meet credential requirements. May be repeated to maximum of 5 units.

539 Educational Personnel Administration (3)

Prerequisites: EDAD 507, 509. Principles, practices, and procedures in public school personnel administration; recruitment, selection, placement, evaluation, retention, dismissal, welfare benefits.

539P Practicum: Educational Personnel Administration (3)

Prerequisite: Admission to EDAD program. Practical experience in applying principles, practices, and procedures of school personnel administration; includes recruitment, selection, placement, evaluation, retention, dismissal, benefits. Grade CR/NC.

542 Collective Bargaining in Education (3)

Prerequisite: EDAD 539. Practices and procedures affecting employer-employee relations; emphasis on statutory enactments, underlying principles, contract writing and administration, and desirable practices affecting collective bargaining in education.

542P Practicum: Collective Bargaining in Education (3)

Prerequisite: Admission to EDAD program. Practical experience with practices and procedures affecting employer-employee relations; emphasis on statutory enactments, underlying principles, contract writing and administration, and desirable practices affecting collective bargaining in education. Graded *CR/NC*.

543 Seminar: School Business and Facility Management (3)

Prerequisites: EDAD 510, 539. Theory and practices of school business and facility management including accounting, purchasing, and supply management; evaluation, maintenance, and function of educational facilities and their interrelationships. Lecture (3 units) required; 10 hours of administrative related field activities required.

543P Practicum: School Business and Facility Management (3)

Prerequisite: Admission to EDAD program. Practical experience with theory and practices of school business and facility management including accounting, purchasing, and supply management; evaluation, maintenance, and function of educational facilities and their interrelationships. Graded *CR/NC*.

545 Management Information Systems in Educational Administration (3)

Prerequisite: Introductory computer course. Principles, practices, and procedures related to information management systems in educational administration; evaluation of system requirements; management of information management systems in educational administration.

545P Practicum: Management Information Systems in Educational Administration (3)

Prerequisites: Admission to EDAD program, EDAD 545. Practical experience related to information management systems in educational administration; evaluation of systems requirements; management of information management systems in educational administration. Graded *CR/NC*.

548 Seminar: Supervision of Instructional Programs (3)

Prerequisite: Admission to EDAD program. Development of skills in educational supervision including observations, feedback, conferences, indirect supervision, time logging; review of research; effective staff development.

552 Instructional Leadership in Socioculturally Diverse Schools (3)

Prerequisites: Admission to EDAD program; EDAD 506; 515 or EDFN 537. Theory, research, and practice related to skills, techniques, and attitudes of successful instructional leaders in socioculturally diverse schools.

552P Practicum: Instructional Leadership in Socioculturally Diverse Schools (3)

Prerequisites: Admission to EDAD program; EDAD 506; 515 or EDFN 537. Practical experience in applying skills, techniques, and attitudes necessary to be a successful instructional leader in socioculturally diverse schools. Graded *CR/NC*.

554 Seminar: Research and Development in Educational Administration (3)

Prerequisites: EDFN 553, admission to EDAD program, completion of core. Application of basic research tools and techniques in the completion of a research project in educational administration.

555 Advanced Organizational Theory and Development of Schools (3)

Prerequisites: Admission to EDAD program; EDAD 507, 517. Theory of urban school organization and its relation to staff development, operations, and effective practices.

555P Practicum: Advanced Organizational Theory and Development of Schools (3)

Prerequisites: Admission to EDAD program; EDAD 507, 517. Practical experience in applying organizational theory to urban school operation, research on effective schools, and principles of adult learning for staff development. Graded *CR/NC*.

567 Seminar: Current Issues in Educational Administration (3)

Current issues in educational administration including educational administration trends, legislation, research, and on-going school problems.

567P Practicum: Current Issues in Educational Administration (3)

Prerequisite: Admission to EDAD program. Practical experience in researching possible solutions to issues facing school administrators. Graded CR/NC.

572 Simulation Seminar: Elementary Administration (3)

Prerequisites: Admission to EDAD program, completion of core and required courses in principalship option. Application, through simulation techniques, of administrative and supervisory theories, structures, and methods to administration of elementary schools.

575 Simulation Seminar: Junior High and Middle School Administration (3)

Prerequisites: Admission to EDAD program, completion of core and required courses in principalship option. Application, through simulation techniques, of administrative and supervisory theories, structures, and methods to administration of junior high and middle schools.

578 Simulation Seminar: High School Administration (3)

Prerequisites: Admission to EDAD program, completion of core and required courses in principalship option. Application, through simulation techniques, of administrative and supervisory theories, structures, and methods to administration of high schools.

581 ABCD Field Work in Educational Administration (2, 2, 2, 2)

Prerequisite: Division approval. Administrative, supervisory, and curricular experiences at school or district level. Graded CR/NC.

584 ABCD Field Work in Central Office Administration and Supervision (3, 3, 3, 3)

Prerequisites: Admission to central office administration option, division approval. Intensive and extensive participation in general school administration; areas of emphasis determined in consultation with adviser. Graded CR/NC.

587 ABCD Internship in Educational Administration (3, 3, 3, 3)

Prerequisites: Admission to internship program, approval of both division and school district. Participation in school administration and supervision in school district where student is employed; supervision by on-site administrator and university instructor; regular seminar sessions. Graded CR/NC.

595 Professional Development in Educational Administration (3)

Prerequisites: Admission to EDAD program, completion of core. Knowledge and skills presented by agencies approved for this program. May be repeated to maximum of 6 units. Graded CR/NC.

597 Graduate Research (1-4)

Prerequisites: EDFN 500 or 509, instructor consent to act as sponsor, division approval of project prior to registration. Independent research under guidance of faculty. May be repeated for credit. Graded CR/NC.

598 Graduate Directed Study (1-4)

Prerequisites: A B (3.0) grade point average in all graduate work in education, consent of division chair and of instructor to act as sponsor. Independent directed study of advanced topics in field; regular conferences with sponsor. May be repeated for credit.

Courses in Educational Foundations (EDFN)

(Division of Educational Foundations and Interdivisional Studies)

400-Level Courses

All 400-level courses may be applied toward master's degree requirements except the following, subject to limits established by the division and approval of the graduate adviser: EDFN 413,414

Graduate Courses

Classified graduate standing is required for admission, except that postbaccalaureate students may enroll in 500-level courses that are required in a credential program.

500 Evaluation of Educational Research (4)

Criteria for evaluation of educational research; critical analysis of representative research reports. Survey of educational research methods, planning a research study, organization of a research report. Credit allowed for only one of EDFN 500, 509, and 553.

506 Comparative Education (4)

Prerequisite: EDFN 414. Selected foreign educational systems within context of their respective cultures. Particular attention to multilingual/multicultural and urban educational issues.

507 History of Education (4)

Prerequisite: Four units chosen from HIST 110ABC or 202AB. Historical analysis of current educational issues with particular attention to multilingual/multicultural and urban education problems.

508 Philosophy of Education (4)

Prerequisite: PHIL 1510r 152 recommended. Selected current philosophies of education and their applications to educative process. Particular attention to philosophical analysis of issues related to multilingual/multicultural and urban education.

510 Advanced Study: Learning Theory and Education (4)

Prerequisite: EDFN 413. Recent significant developments in learning theory with emphasis on classroom application.

520 Urban Education and Politics (4)

Urban power structure and its interaction with education.

525 Educational Sociology (4)

Prerequisite: EDFN 414. Application of insights of social sciences to education in areas of cultural anthropology, sociology, political theory, economics.

530 Advanced Study in Child Development (4)

Prerequisites: EDFN 413, at least one year of teaching experience. Recent significant contributions in child development research and theory; emphasis on implications for education of children.

531 Education of Potential Dropout Students (4)

Prerequisite: Teaching credential or consent of instructor. Identification of characteristics of students at-risk of dropping out; review of related knowledge base for educators; introduction of competencies for teachers working with at-risk students, including evaluation of appropriate resource materials.

537 Educational Issues in Metropolitan Areas (4)

School issues in metropolitan areas as related to urbanization, socioeconomic stratification, racial and ethnic differences, desegregation and integration, community relationships, and control, school reform, federal and state aid, school personnel.

540 Bilingual Education Models: Theoretical Foundations (4)

Theoretical foundations for bilingual education models as established by national policy and empirical research and practices, including design, staffing, and assessment.

553 Educational Research and Decision Making (4)

Methods and tools of research and evaluation with implications for educational decision making. Credit allowed for only one of EDFN 500, 509, and 553.

560 Theories of Teaching and Learning Second Languages (4)

Prerequisite: Teaching credential. Addresses major questions such as how first language acquisition compares with second, which affective/cultural variables have an impact on second language teaching/learning, and which teaching approaches are advantageous.

562 Methods for Teaching Second Languages I (4)

Prerequisite: EDFN 560. Current instructional methods for teaching second languages to students at beginning levels (kindergarten through adult).

563 Methods for Teaching Second Languages II (4)

Prerequisite: EDFN 562. Current instructional methods for teaching second languages to students at intermediate through advanced levels (kindergarten through adult), providing In-Service training for content-area teachers, and materials selection and development.

564 Teaching English as a Second Language for Academic Purposes (4)

Prerequisites: EDFN 560, 562. Teaching techniques for preparing ESL students for university-level academic study.

567 Language Testing (4)

Prerequisite: ENGL 401. Analysis of testing and evaluation in second language programs; emphasis on evaluating effectiveness of teacher-made tests and current standardized test instruments used for assessing language proficiency.

568 Field Work in English as a Second Language (4)

Prerequisite: EDFN 563. Supervised field experience in teaching English as a second language.

570 Educational Sociolinguistics (4)

Prerequisite: ENGL 401. Influences of community, home, and school on language acquisition process. Language policy, social and linguistic change, language variations described; current status assessed; related cultural and pedagogical issues raised.

571 Seminar: Discourse Analysis in the Language Classroom (4)

Prerequisite: ENGL 401. A sociolinguistic analysis of interactional patterns, expectations, and communication strategies in the language classroom; emphasis on current studies with some direct experience in discourse analysis as a legitimate research method.

572 ESL/EFL Course, Syllabus and Materials Design (4)

Prerequisites: ENGL 401, EDFN 560, 562. Survey of approaches to ESL/EFL course and syllabus design including materials selection, adaptation, development, and evaluation.

573 Seminar: Issues in Classroom Second Language Acquisition (4)

Prerequisites: COMD 455, EDFN 500, 560. Current research as it illuminates the second language acquisition process in classrooms.

580 Field Work in Administration and Supervision of Bilingual/Crosscultural Program (3)

Prerequisite: Division approval. Administrative and supervisory experiences dealing with bilingual/crosscultural programs at school or district level. Graded *CR/NC*.

581 Bilingual/Crosscultural Advanced Field Work (2)

Prerequisites: Teaching credential, approval of bilingual/crosscultural advisory committee. Teaching in bilingual/crosscultural situations; demonstrating effective teaching techniques to teachers and parents; planning and conducting in-service meetings for teachers and paraprofessionals; critiques of existing programs; development of materials. Must be repeated to total of 4 units.

594 Selected Studies in Education (1-5)

Prerequisite: Consent of division chair. Intensive study of designated problems in education. May be repeated for credit as subject matter changes.

597 Graduate Research (1-4)

Prerequisites: EDFN 500 or 509, instructor consent to act as sponsor, division approval of project prior to registration. Independent research under guidance of faculty. May be repeated for credit. Graded *CR/NC*.

598 Graduate Directed Study (1-4)

Prerequisites: A B (3.0) grade point average in all graduate work in education, consent of division chair and of instructor to act as sponsor. Independent directed study of advanced topics in field; regular conferences with sponsor. May be repeated for credit.

599A Thesis or Project Planning (2)

Prerequisites: EDFN 500 or 509, advancement to candidacy, written approval of graduate adviser. Prior to completion student will have completed tentative outline of thesis or project, petitioned graduate adviser for appointment of a thesis committee, and submitted tentative outline to thesis committee. Graded *CR/NC*.

599B Thesis or Project (1-5)

Prerequisites: EDFN 599A, written approval of thesis committee chair. Completion of thesis or project under direct supervision of thesis committee. Must be repeated to total of 5 units. Graded *CR/NC*.

Courses in Elementary Education (EDEL)

(Division of Curriculum and Instruction)

400-Level Courses

All 400-level courses may be applied toward master's degree requirements except the following, subject to limits established by the division and approval of the graduate adviser: EDEL 400-404, 465

Graduate Courses

Classified graduate standing is required for admission, except that postbaccalaureate students may enroll in 500-level courses that are required for a credential program.

511-551 Seminars: Research in Teaching Elementary School Subjects (4 each)

Prerequisites: EDFN 500, teaching experience. Analysis of research on instruction and learning; application of implications of research to the solution of classroom problems. An action research project, including an extensive review of the literature, is required.

511 Reading

521 Language Arts

531 Mathematics

541 Social Studies

551 Science

525 Whole Language Across the Curriculum (4)

Prerequisites: EDEL 400, 4010r equivalent, teaching experience. Whole language instruction research base and applications; literature-based action research project across the curriculum.

535 Seminar: Diagnosis Remediation in Mathematics (4) Prerequisites: EDEL 431, teaching credential, teaching experience. Causes of failure to learn arithmetic; diagnostic procedures, remediation techniques, and clinical experience.

560 Design and Management of Early Childhood Public Educational Programs (4)

Prerequisites: EDEL 461,462, EDFN 530, FSCS 422. Design and management of early childhood public educational programs; leadership, goals, budget, accountability, differentiated staffing, management, proposal writing, articulation.

563 Seminar: Issues and Trends in Early Childhood Education (4)

Prerequisites: EDFN 503, completion of or concurrent enrollment in last quarter of Early Childhood Specialist instructional credential or M.A. degree in Child Development, teaching experience with young children. Persistent problems in early childhood education; review of literature concerning problems in early childhood education programs.

580 Evaluation of Microcomputer Courseware for Elementary Schools: Mathematics and Science (2)

Prerequisite: EDCI 4810r EDEL 480. Development of evaluation criteria for microcomputer courseware, based on research; application of these criteria to mathematics and science software marketed for elementary school use.

581 Microcomputer Applications in Reading and Language Arts (2)

Prerequisite: EDEL 400 or EDIT 452 or 456 or EDSE 423. Evaluation of microcomputer software applications in reading and the language arts.

589 Seminar: Elementary Education (4)

Prerequisite: Completion of or concurrent enrollment in last 10 units for M.A. degree in Education: Elementary Teaching option. Identification and analysis of problems and trends in urban elementary education.

590 Problems in Classroom Group Behavior (4)

Prerequisites: Teaching credential, teaching experience. Analysis of class behavior and techniques for changing behavior in problem situations; implications of current theory and research for classroom management.

594 Selected Studies in Elementary Education (1-4)

Prerequisite: Consent of division chair. Intensive study of designated problems in elementary education. May be repeated for credit as subject matter changes.

595 Advanced Field Work: Early Childhood Specialist Instructional Credential (5)

Prerequisites: EDEL 560, teaching credential, formal admission to Early Childhood Specialist instructional credential program. Specialized field work assigned on individual basis. Scheduled field work; tutorial session required. Graded CR/NC.

597 Graduate Research (1.-4)

Prerequisites: EDFN 500 or 509, instructor consent to act as sponsor, division approval of project prior to registration. Independent research under guidance of faculty. May be repeated for credit. Graded CR/NC.

598 Graduate Directed Study (1-4)

Prerequisites: A B (3.0) grade point average in all graduate work in education, consent of division chair and of instructor to act as sponsor. Independent directed study of advanced topics in field; regular conferences with sponsor. May be repeated for credit.

Courses in Higher Education (EDHI)

(Division of Special Education)

Doctoral Courses**610 Research, Issues, and Practices in College and University Teaching (4)**

Prerequisite: Post-master's degree standing. Current research, issues, and practices in college and university teaching; instructional planning and preparation; student and program evaluation; noninstructional responsibilities of faculty.

611 Seminar: Supervision in College and University Teaching (4)

Prerequisite: Post-master's degree standing. Review of research and practices in higher education supervision of students; discussion of college/university student field and laboratory teaching assignments and evaluation.

612 Program Proposal, Development, and Evaluation in Higher Education (4)

Prerequisite: Post-master's degree standing. Procedures for needs assessment, development, evaluation of special programs/projects; development of proposals and grant applications.

Courses in Instructional Technology (EDIT)

(Division of Educational Foundations and Interdivisional Studies)

400-Level Courses

All 400-level courses may be applied toward master's degree requirements, subject to limits established by the division and approval of the graduate adviser.

Graduate Courses

Classified graduate standing is required for admission, except that postbaccalaureate students may enroll in 500-level courses that are required for a credential program.

525 Instructional Materials in Secondary Schools: Computer Software (4)

Prerequisite: EDIT 430. Analysis of computer software relating to teaching of secondary school subjects.

551 Advanced Multimedia Techniques (3)

Prerequisite: Teaching experience. Critical analysis of principles of selection and use of multimedia in education and training; programming, production, practicality.

552 Instructional Media Design (3)

Prerequisite: EDIT 453. Diagnosis, prescription, and design of mediated instruction with practice in application of learning theory to media design and instrumentation.

553 Administration of Instructional Media Services (4)

Prerequisite: EDIT 451. Consulting skills needed by instructional designers in an organization; working with subject matter experts, developing an effective relationship, conducting a needs analysis, involving the client, managing and evaluating the media project.

554A Video Technology in Education (4)

Prerequisite: EDIT 451. Educational value and utilization of video technology in instructional settings; review and application of research; exploration of future uses of the medium.

554B Advanced Instructional Television Design and Production (4)

Prerequisite: EDIT 541. Instructional design of educational TV/video; studio production techniques; educational research on video production; future of educational TV/video; teleconferencing and editing techniques. Seminar 3 hours, activity 2 hours.

555 Simulation and Gaming (3)

Prerequisite: EDIT 4510r 453. Analysis of techniques and procedures in simulation and game design; development and evaluation; current research and theory.

556 Role of the Computer Specialist in Education (4)

Prerequisite: EDIT 430. Running a computer laboratory in a school: evaluating, selecting, and maintaining software libraries and hardware. Computer based education systems that assist teachers in integrating computers into their curricula.

557 Computer Assisted and Managed Instruction (4)

Prerequisites: EDIT 430, 456, 482. Fundamentals of information systems, data processing systems, and current research for the design, development, and implementation of computer assisted and managed instruction. Lecture 3 hours, laboratory 2 hours.

560 Telecommunications in Education (4)

Prerequisite: EDIT 430. Survey of telecommunications hardware, software, curriculum materials, school-based projects and research in educational applications of telecommunications.

570 Research in Instructional Technology (4)

Prerequisites: EDFN 500; EDIT 430. Analysis of research in instructional technology. An action research project, including an extensive review of the literature, is required. 5701 Instructional Applications 570S Special Education Applications

594 Selected Studies in Instructional Technology (1-4)

Prerequisites: Consent of division chair; appropriate prerequisite. Advanced specialized topics involving instructional technology. May be repeated for credit as subject matter changes.

Courses in Library Science (LIBR)

(Division of Educational Foundations and Interdivisional Studies)

400-Level Courses

All 400-level courses may be applied toward master's degree requirements, subject to limits established by the division and approval of the graduate adviser.

Graduate Course

Classified graduate standing is required for admission, except that postbaccalaureate students may enroll in 500-level courses that are required for a credential program.

501 Computer Applications in School Library Media

Centers (4) Prerequisites: EDIT 430, LIBR 401. Uses of computers in school library media centers; library administration software programs, data base management, word processing, and utilization of computer-assisted instructional programs.

Courses in Secondary Education (EDSE)

(Division of Curriculum and Instruction)

400-Level Courses

All 400-level courses may be applied toward master's degree requirements except the following, subject to limits established by the division and approval of the graduate adviser. EDSE401, 421, 441, 442A B.

Graduate Courses

C/ass/fled graduate standing is required for admission, except that postbaccalaureate students may enroll in 500-level courses that are required for a credential program.

520 Evaluation of Teaching Competencies in Metropolitan Schools (4)

Prerequisite: Two or more years of teaching experience. Emphasis on identification of teaching competencies of prospective and practicing teachers, procedures for assessment and

improvement of competencies, and program implications for preservice and In-Service education of metropolitan teachers.

521 Teaching Effectiveness: Research and Application (4)

Prerequisites: EDFN 500; at least one year of teaching experience. Analysis of teaching effectiveness, review of research application of research findings to classroom instruction, and evaluation of instruction.

523 Current Procedures and Materials in Teaching Secondary School Subjects in Metropolitan Community (4 each)

Prerequisites: EDSE 421, teaching experience. Analysis and evaluation of current problems and trends in teaching secondary school subject fields; review and interpretation of current research; investigation of new materials and approaches.

523B Business Communication

Prerequisite: OSBE 301 523S Social Studies

524 Instructional Materials in Secondary Schools (4)

Prerequisite: Teaching credential. Survey, analysis, and utilization of secondary instructional materials for English, foreign languages, mathematics, natural and social sciences, and other secondary school subjects. Students may focus on a specific credential subject.

591 Problems of Metropolitan Secondary School Students (4)

Prerequisites: Secondary credential, secondary teaching experience. Consideration of typical and special problems of adolescents, with emphasis on their perception of such problems; investigation of selected aspects of adolescent attitudes, interests, and behavior.

594 Selected Studies in Secondary Education (1-4)

Prerequisite: Consent of division chair. Intensive study of designated problems in secondary education. May be repeated for credit as subject matter changes.

595 Seminar: Metropolitan Secondary Education (4)

Prerequisite: Instructor consent or completion of or concurrent enrollment in final units of program for Master of Arts degree: Option in Secondary Teaching. Identification and analysis of persistent problems as they affect metropolitan secondary education.

597 Graduate Research (1-4)

Prerequisites: EDFN 500 or 509, instructor consent to act as sponsor, division approval of project prior to registration. Independent research under guidance of faculty. May be repeated for credit. Graded *CR/NC*.

598 Graduate Directed Study (1-4)

Prerequisites: A B (3.0) grade point average in all graduate work in education, consent of division chair and of instructor to act as sponsor. Independent directed study of advanced topics in field; regular conferences with sponsor. May be repeated for credit.

599B Thesis or Project (1-5)

Prerequisites: EDFN 599A, written approval of thesis committee chair. Completion of thesis or project under direct supervision of thesis committee. Must be repeated to total of 5 units. Graded *CR/NC*.

Courses in Special Education (EDSP)

(Division of Special Education)

400-Level Courses

All 400-level courses may be applied toward master's degree requirements except the following, subject to limits established by the division and approval of the graduate adviser: EDSP403, 407, 489

Graduate Courses

Classified graduate standing is required for admission, except that postbaccalaureate students may enroll in 500-level courses that are required in a credential program.

500 Seminar: Special Education (4)

Prerequisite: EDSP 400. Study of research relating to psychological and educational problems of exceptional children, introduction to methodological problems in developing, conducting, and reporting research in special education.

501 Problems and Practices in Special Education (3)

Prerequisite: EDSP 400. Problems of organization, administration, and supervision of special educational programs; evaluation of recent proposed needed legislation; review of current literature. For advanced students and administrators.

502 Educational Measurements in Special Education (4)

Prerequisites: EDFN 409, EDSP 400, basic courses in student's special field. Interpretation and use of test and other measurements for study of the exceptional child. May not be substituted for the credential requirement of administration of individual psychological tests.

503 Field Work in Special Education (3--6)

Prerequisite: Consent of division chair. Supervised field training in problems relating to instruction, supervision, administration, evaluation, and guidance of exceptional children. Special assignments in schools, diagnostic centers, and community agencies. May be repeated to maximum of 9 units.

504 Selected Studies in Special Education (3-5)

Prerequisite: EDSP 400. Intensive study of designated problems in special education. May be repeated for credit as subject matter changes.

505 Sexuality and Sex Education of Exceptional Individuals (4)

Investigation and comparison of sex behavior in normal and exceptional individuals including orthopedically, visually, hearing, and learning disabled; sexuality, social development and family-life education of the exceptional. Graded CR/NC.

506 Education and Psychology of Handicapped Adolescents and Young Adults (4)

Prerequisites: EDSP 400, PSY 412B. Current issues and problems in education and treatment of handicapped adolescents and young adults emphasizing etiology, services, relevant education approaches, and inter-personal relationships.

507 Adult Illiteracy (4)

(also listed as EDSE507) Nature of illiteracy among adults in the U.S.; impact of illiteracy upon career, social, and life stage development. Implications for program planning.

508 Computer Applications in Special Education (4)

Prerequisites: EDIT 452, EDSP 403. Microcomputer technology compatible with curriculum and data management strategies for exceptional individuals; hardware and software, modifications; examination of relevant research.

510 Resource Specialist in Special Education (4)

Prerequisites: Graduate standing *and/or* current enrollment in special education credential or school psychology program. Problems of serving individuals with exceptional needs in regular school program; advanced skills that enhance remedial process in special education; consultation, coordination of services for exceptional pupils.

511 Seminar: Issues and Strategies for Multicultural Special Education Students (4)

Prerequisites: EDSP 402; 408 or COMD 455. Special education for multicultural/bilingual exceptional students, issues in nondiscriminatory assessment, instructional strategies for multicultural/bilingual special education students.

512 Collaboration and Consultation in Special Education (4)

Prerequisites: COUN 501; EDSP 402; also recommended: COUN 502, EDSP 510. Theoretical framework for consultation; collaborative and consultative processes in special education; role of the special educator in improving curriculum and instruction; staff development and parent education.

515 Planning Programs for Exceptional Infants and Young Children (4)

Prerequisites: EDSP 415, 416. A study of research and issues related to assessment, planning, and implementation (intervention) of services for at risk and exceptional infants and young children.

516 Seminar: Advanced Assessment and Intervention Techniques for Special Needs Infants (4)

Prerequisites: EDSP 515, instructor consent. Explores assessment/intervention strategies for handicapped and high-risk infants (e.g., drug exposed) and their families, for prevention/amelioration of developmental delays. In-home and hospital observations included.

521 Communication Skills for Deaf: Theory (5)

Prerequisites: EDEL 400, 401; 402 or EDSE 401. Instruction of the deaf; analysis of research in speech and language development, speech reading, auditory training, elementary school subjects; practical applications at preschool, primary, intermediate, and advanced levels.

522 Communication Skills for Deaf: Educational Planning (5)

Prerequisite: EDSP 521. Instruction of the deaf; analysis of research in speech and language development, speech reading, auditory training, elementary school subjects; practical applications at preschool, primary, intermediate, and advanced levels.

523 Communication Skills for Deaf: Research (3)

Prerequisite: EDSP 522. Methods of instructing the deaf. Research in speech and language development. Modification of elementary and secondary school subjects for hearing impaired.

524 Current Trends in Educating the Hearing Impaired (4)

Prerequisite: Specialist credential in Communicatively Handicapped. Innovative methods and issues in the area of hearing impairment; topics covered will include communication advances, early intervention, legislative issues, and parent education.

525 Language and Speech for Profoundly Deaf Child (4)

Prerequisite: Instructor consent. Methods used in development and remediation of receptive and expressive language for profoundly deaf children of preschool, primary, and intermediate academic levels.

540 Affective Development of Exceptional Individuals (4)

Prerequisite: EDSP 400. Relationship of affective factors, e.g., receiving, responding, valuing, self concept of learner and teacher, to cognitive growth of exceptional individual. Emphasis on affective area applicable to all exceptionalities, as approached through current research related to exceptional individuals.

541 Advanced Studies in Gifted Education (4)

Prerequisite: EDSP 441. Exploration of issues, research trends, and current practices for gifted individuals in educational programs.

550 The Learning Handicapped Individual (4)

Prerequisite: EDSP 400. Problems of management and treatment of children with learning and behavior disorders; emphasis on learning problems, emotionality, organicity, and techniques in psychoeducational habilitation.

554 Educating Individuals with Serious Emotional Disturbances (4)

Prerequisites: EDSP 550, instructor consent. Educational management and instruction of individuals with serious emotional disturbances; emphasis on identification, assessment, educational planning, and delivery of educational services, in public and private educational settings, to individuals with serious emotional disturbances.

555 Advanced Problems in Education of Learning Handicapped (4)

Prerequisites: EDSP 450, 550. Identification and analysis of problems and current issues relating to education of learning handicapped, including learning disabled, educable retarded, and behavior disordered.

560 Seminar: Education of Individuals with Physical Disabilities (4)

Prerequisite: EDSP 462. Identification and analysis of problems and current issues relating to the education of individuals with physical disabilities and those with multiple disabilities; review of research on specific disabilities.

565 Advanced Problems in Education of Visually Handicapped (4)

Prerequisite: Completion of requirements for credential for teaching visually handicapped. (May be taken concurrently with EDSP 407.) Identification and analysis of problems and current issues

relating to education of visually handicapped; review of recent research specifically related to visual impairment and its application to educational practice.

568 Adaptive Living Skills for Exceptional Individuals (4)

Current issues and research in daily living and adaptive living skills for visually handicapped, deaf, physically and multihandicapped, including concept formation, spatial development, psychomotor skills, orientation and mobility.

575 Supervised Field Training in Orientation and Mobility for the Blind (5)

Prerequisite: EDSP 476. (Open only to students in orientation and mobility training program.) Clinical training in orientation processes and independent mobility techniques for the blind; development and application of methods, materials, and individualized instructional units in meeting needs of the blind. Seminar 2 hours, supervised field training 9 hours per week.

576 Orientation and Mobility: Visually Impaired Multihandicapped Practicum (4)

Prerequisite: EDSP 476. Teaching orientation and mobility to visually impaired multihandicapped individuals, emphasizing modification of normal instructional strategies and techniques. Lecture 2 hours, field practicum 6 hours per week.

580 Biomedical Aspects of Mental Retardation (4)

Prerequisite: PSY 406. Etiological and developmental aspects of mental retardation from biological and medical points of view.

581 Vocational Rehabilitation of Mentally Retarded (3)

Prerequisites: PSY 406 (may be taken concurrently), instructor consent. Principles, problems, and methods of vocational development; work evaluation and adjustment, job training, and placement of retarded youth and adults. Individual projects.

582 Problems of Severely Handicapped Individuals (4)

Prerequisite: EDSP 481. Issues and research relevant to current practices in education of severely handicapped individuals, including trainable mentally retarded, profoundly retarded, autistic, and other developmentally disabled individuals. independent field work required.

585 Organization and Administration of Special Education Programs (4)

Prerequisite: Consent of divisions of Special Education, of Administration and Counseling. Planning and financing of special education programs. Organization of local, state, federal, and private agencies related to education of exceptional children.

597 Graduate Research (1-4)

Prerequisites: EDFN 500 or 509, instructor consent to act as sponsor, division approval of project prior to registration. Independent research under guidance of faculty. May be repeated for credit. Graded *CR/NC*.

598 Graduate Directed Study (1-4)

Prerequisites: A B (3.0) grade point average in all graduate work in education, consent of division chair and of instructor to act as sponsor. Independent directed study of advanced topics in field; regular conferences with sponsor. May be repeated for credit.

599B Thesis or Project (1-5)

Prerequisites: EDFN 599A, written approval of thesis committee chair. Completion of thesis or project under direct supervision of thesis committee. Must be repeated to total of 5 units. Graded *CR/NC*.

Doctoral Courses**600 Seminar: Current Practices and Innovative School Programs (4)**

Prerequisite: Post-master's degree standing. Current issues in special education, including educational trends, legislation, emphasis on research and ongoing school problems. Variable content; may be repeated for credit.

602 Practicum: Program Development and Evaluation (1-3)

Prerequisite: Post-master's degree standing. Development of proposals and grant applications for submission to federal, state, and private agencies for research, training, and public school program funding. May be repeated for credit.

603 Research in Performance of Exceptional Individuals (4)

Prerequisite: Post-master's degree standing. Experimental and theoretical literature on learning style and performance of exceptional individuals.

604 Law and Handicapped Individual in School (4)

Prerequisites: Post-masters degree standing, EDSP 501. Current issues related to legislation and litigation in special education; rights, due process, criminal justice, resource agencies.

615 Research Seminar in Early Childhood Special Education (4)

Prerequisite: Post-master's degree standing. Research seminar about early childhood special education issues including emphasis on current research, theory and practice; research and evaluation of program models; intervention methods.

620 Research: Hearing Impaired (4)

Prerequisites: Instructor consent. Intensive review of research relating to developmental processes in hearing impaired students and their relationship to language proficiency and school achievement.

640 Research in Education of Gifted (4)

Prerequisites: EDSP 400, 440. Intensive study of current research about gifted, talented, and creative; factors in intellectual development; experimental school programs.

650 Research on Psychological Characteristics of Handicapped Adolescents and Young Adults (4)

Prerequisite: Post-master's degree standing. Theories and research on handicapped adolescents and young adults; emphasis on learning and behavior disorders.

680 Research on Severely Handicapped (4)

Prerequisite: Post-master's degree standing. Intensive study of medical research, public policy, social adjustment and integration research program development, evaluation, design, and other current issues that create an impact on individuals with severe handicaps.

698 Graduate Directed Study (1-8)

Prerequisite: Consent of an instructor to act as sponsor. Independent directed study of advanced topics in field; regular conferences with sponsor. May be repeated for credit.

699 Doctoral Dissertation (4-8)

Prerequisites: Advancement to candidacy for Ph.D. degree, consent of an instructor to act as sponsor, division approval of topic prior to registration. Continuous enrollment required while student is working on dissertation.

SCHOOL OF ENGINEERING AND TECHNOLOGY***Departments within the School*****Department of Civil Engineering****Department of Electrical and Computer Engineering****Department of Mechanical Engineering****Department of Technology**

SCHOOL OF ENGINEERING AND TECHNOLOGY**INFORMATION CENTERS****Engineering**

Engineering and Technology A237
Phone: (213) 343-4510

Technology

Engineering and Technology A341
Phone: (213) 343-4550

GRADUATE PROGRAMS Degrees Offered

The school offers graduate programs leading to master's degrees in the following five fields.

- * Master of Science degree in Civil Engineering
- * Master of Science degree in Electrical Engineering
- * Master of Science degree in Mechanical Engineering
- * Master of Arts degree in Industrial and Technical Studies
- * Master of Arts degree in Vocational Education

ENGINEERING

The objective of the Master of Science degree programs in Civil, Electrical, and Mechanical Engineering is to prepare students for employment in design, research, and development positions in industry, for positions as engineering teachers, and for further study toward doctoral degrees.

Admission to Engineering Programs

In addition to university requirements for admission to graduate study, applicants must possess the equivalent of the Bachelor of Science degree currently specified by Cal State L.A. for the field of engineering in which they wish to specialize and a 2.75 grade point average in the last 90 quarter units attempted in the undergraduate program. Applicants who do not meet the above admission requirements may be admitted at the discretion of the department in which the proposed graduate degree is offered. Applicants who earned less than a 2.5 grade point average in the last 90 units attempted in undergraduate status will not be admitted to a master's degree program in Engineering without clear and compelling evidence of current capacity for satisfactory performance in such a program.

Consultation with a department graduate adviser is required before any courses are attempted, to determine if deficiencies exist in undergraduate preparation. Students should provide transcripts of all undergraduate work, which will be retained by the adviser. MATH 402A, entitled Advanced Mathematics for Engineers and Physicists I, is required for all graduate programs in Engineering if not previously completed.

TECHNOLOGY

The Department of Technology offers a Master of Arts degree in Industrial and Technical Studies and a Master of Arts degree in Vocational Education.

In addition to the graduate degree programs, the Department of Technology also offers a credit certificate program in Electronics Technology. This program is described in the undergraduate *School of Engineering and Technology* chapter. General regulations governing all credit certificate programs are included in the *Undergraduate Study* and *Graduate and Postbaccalaureate Study* chapters.

CIVIL ENGINEERING_**School of Engineering and Technology****DEPARTMENT OFFICE**

Engineering and Technology A211
Phone: (213) 343-4450

**Master of Science Degree in Civil Engineering
Requirements for *the Degree* [45 units]**

A total of 45 units is required, with at least 24 in 500-level courses. A thesis or comprehensive examination is required.

The advice and approval of a civil engineering graduate adviser must be obtained before enrolling in any course.

Area of Specialization (24--37 units);

Select a minimum of 24 units in 500-level engineering courses. At least 20 units must be in civil engineering courses from the following list, must be in a coherent group of courses that fulfills the student's objectives, and must have the approval of adviser and department chair.

CE	560	Structural Mechanics III	(4)
CE	561	Advanced Structural Design	(4)
CE	562	Reinforced Concrete Design II	(4)
CE	563	Matrix Computer Analysis of Structures	(4)
CE	564	Numerical Methods in Structural Analysis	(4)
CE	565	Dynamics of Structures	(4)
CE	566	Soil Mechanics II	(4)
CE	567	Foundations II	(4)
CE	569	Earth Structures	(4)
CE	570	Soil Dynamics	(4)
CE	571	Highway Design	(4)
CE	572	Plates and Shells	(4)
CE	574	Traffic Flow Analysis	(4)
CE	575	Urban Transportation Planning	(4)
CE	577	Bridge Engineering	(4)
CE	581	Modeling Techniques in Hydraulic Engineering	(4)
CE	582	Statistical Hydrology	(4)
CE	583	Hydrology II	(4)
CE	586	Open Channel Hydraulics	(4)
CE	587	Hydraulics II	(4)
CE	588	Hydraulic Structures	(4)
CE	589	Coastal Engineering	(4)
ME	502	Theory of Elasticity	(4)

Electives in Engineering (0-13 units):

Select from 400- and 500-level courses.

Electives in Related Fields (8-21 units):

Select a minimum of 8 units, other than in civil engineering, related to program. These will usually be in mathematics. MATH 402A (4 units) must be included in these electives unless already completed.

Comprehensive Examination or Thesis (0, 4 units)

ENGR	596	Comprehensive Examination	(0) or
ENGR	599	Thesis	(4)

Students who select the comprehensive examination (ENGR 596) should expect to take it the quarter they complete all course work on their program, and must comply with school and departmental requirements.

ELECTRICAL AND COMPUTER ENGINEERING

School of Engineering and Technology

DEPARTMENT OFFICE

Engineering and Technology A316

Phone: (213)343-4470

**Master of Science Degree in Electrical Engineering
Requirements for the Degree (45 units)**

A total of 45 units is required, with at least 24 units in 500-level courses. A thesis or comprehensive examination is required.

Minimum scores of 400 on the Quantitative section of the GRE general test and 500 on the subject test in Engineering are required for classified graduate standing. The GRE requirement is waived for those students holding a BS degree in Electrical Engineering from an accredited institution with an upper division major GPA of 3.0 or above.

The advice and approval of an electrical engineering graduate adviser must be obtained before enrolling in any course.

Area of Specialization (24--37 units):

Select a minimum of 24 units in 500-level engineering courses; at least 16 units must be selected from the following electrical engineering courses:

EE	530	Linear Systems Analysis	(4)
EE	531AB	Principles of Communication Theory I, II	(4, 4)
EE	532	Detection of Signals in Noise	(4)
EE	533	Computer Methods in Power Systems	(4)
EE	534	Power Systems Stability	(4)
EE	536ABC	Solid State Electronics I, II, III	(4, 4, 4)
EE	538	Linear and Nonlinear Control Systems Theory	(4)
EE	544	Digital Systems Design	(4)
EE	547AB	Computer System Architecture	(4, 4)
EE	548	Digital Sampled Data and Logic Control Systems Theory	(4)

Electives in Engineering (0-13 units of 400- or 500-level courses)

Electives in related fields (8-21 units):

MATH 402A (4 units) must be included in these electives unless already completed.

Typical courses are:

MATH 402B, 474, 580 PHYS 426AB, 510AB

Comprehensive Examination or Thesis (0, 4 units)

ENGR	596	Comprehensive Examination	(0) or
ENGR	599	Thesis	(4)

Students who select the comprehensive examination (ENGR 596) should expect to take it the quarter they complete all course work on their program, and must comply with school and departmental requirements.

MECHANICAL ENGINEERING_

School of Engineering and Technology

DEPARTMENT OFFICE

Engineering and Technology A205

Phone: (213) 343-4490

Master of Science Degree in Mechanical Engineering Requirements for the Degree (45 units)

A total of 45 units is required, with at least 24 in 500-level courses. A thesis or comprehensive examination is required.

The advice and approval of a mechanical engineering graduate adviser must be obtained before enrolling in any course. MATH 402A is required of all students who have not already completed this course.

Area of Specialization (24-45 units):

Students must choose in advance a group of courses that fulfills their objectives. Approval of adviser and department chair is required. Suggested groupings of courses that cover programs in thermo-fluid systems design and mechanical systems design are available from advisers.

Select a minimum of 24 units in 500-level engineering courses; at least 16 units must be selected from following list of mechanical engineering courses:

ME	501A	Advanced Mechanics of Particles	(4)
ME	501 B	Advanced Mechanics of Rigid Bodies	(4)
ME	502	Theory of Elasticity	(4)
ME	503	Design of Mechanical Systems and Products	(4)
ME	504	Thermal Radiation	(4)
ME	505	Heat Conduction	(4)
ME	506	Heat Convection	(4)
ME	508	Compressible Fluids	(4)
ME	509	Viscous Fluids and Boundary Layer Theory	(4)
ME	511	Vibrational Analysis II	(4)
ME	512	Advanced Topics in Thermodynamics	(4)
ME	521	Dynamic Systems Analysis	(4)
ME	522	Optimal Control of Mechanical Systems	(4)
ME	525	Process Mass and Heat Transfer	(4)
ME	528	Metalforming Science and Applications	(4)
ME	529	Machining Science and Applications	(4)

Electives (0-21 units):

Select from 400- and 500-level courses in engineering or related fields, with adviser approval.

Comprehensive Examination or Thesis (0, 4 units)

ENGR	596	Comprehensive Examination	(0) or
ENGR	599	Thesis	(4)

Students who select the comprehensive examination (ENGR 596) should expect to take it the quarter they complete all course work on their program, and must comply with school and department requirements.

TECHNOLOGY_

School of Engineering and Technology

DEPARTMENT OFFICE

Engineering and Technology A341

Phone: (213) 343-4550

The Department of Technology offers Master of Arts degrees in Industrial and Technical Studies and in Vocational Education.

Master of Arts Degree in Industrial and Technical Studies

This program is designed to increase the effectiveness of industry professionals and industrial arts teachers in their professional service area by allowing specialization in two of three areas of interest, as follows:

- * *Teaching*: emphasizes advanced subject matter content.
- * *Technical*: emphasizes advanced subject matter preparation.
- * *Supervision*: emphasizes supervision, mainly department level.

Admission to the Program

In addition to university requirements for admission to graduate study, applicants must have a baccalaureate in a related field with combined course work and industrial experience acceptable to the department.

Requirements for the Degree (45 units)

A total of 45 units is required, with at least 23 in 500-level courses.

Required Courses (13 units):

TECH 485	History, Philosophy, and Organization of Industrial Education	(3)
TECH 487	Seminar: Comprehensive Career Education for Industrial Studies and Vocational Education	(3)
TECH 502	Modern Industry	(3)
EDFN 500	Evaluation of Educational Research	(4)

Areas of Interest (20-24 units)

Select two of the following areas and complete 10-12 units in each:

Teaching (10-12 units)

With adviser approval, complete TECH 506 (4 units), TECH 583 (4 units), and 2-4 units of technology or education courses to total 10-12 units.

Technical (10-12 units)

With adviser approval, complete 10-12 units in 400-level TECH courses; TECH 598 may be included for 3--6 units.

Supervision (10-12 units)

With adviser approval, complete TECH 486 (3 units), TECH 505 (4 units), and 3-5 units of technology, business, or education courses to total 10-12 units; may include second enrollment in TECH 486.

Additional Electives (select 3-7 units in technology and related fields with adviser approval)

Thesis or Project (5 units):

TECH 599AB	Thesis or Project	(2, 3)
------------	-------------------	--------

Master of Arts Degree in Vocational Education

This program for vocational educators offers a choice of two areas:

- * *Technical or Professional:* An in-depth study of advanced work in the vocational educator's teaching specialty.
- * *Vocational Education Leadership:* Course work and field experience designed to prepare professional educators for work as administrators, supervisors, or coordinators in secondary schools, community colleges, or specialized vocational schools, and for training or related responsibilities in industry.

Admission to the Program

In addition to university requirements for admission to graduate study, applicants must have a baccalaureate in vocational education or a combination of teaching and industrial experience and sufficient course work toward the vocational credential to provide a foundation for advanced study in the graduate degree program.

Requirements for the Degree (45 units)

A total of 45 units is required, with at least 23 in 500-level courses

TECH 485	History, Philosophy, and Organization of Industrial Education	(3)
TECH 486	Seminar: Vocational Education	(3)
TECH 502	Modern Industry	(3)
EDFN 500	Evaluation of Educational Research	(4)

Areas of Interest (20-22 units)

Select one of the following specializations:

Technical or Professional (20-22 units)

With adviser approval, select 13-16 units of technical or professional courses in the vocational teacher's subject matter specialization. Include 4-9 units of TECH 598 for a total of 20-22 units.

Vocational Education Leadership (20-22 units)

With adviser approval, select TECH 505 for 4 units, TECH 598 for 6-9 units, and 7-12 units in technology, education, and business for a total of 20-22 units.

Electives (select 5-7 units outside technology with adviser approval)

Thesis or Project (5 units):

TECH 599AB Thesis or Project (2, 3)

Credit Certificate Programs

The Department of Technology offers several credit certificate programs which are open to all students who meet stated prerequisites. These programs are listed with the department's bachelor's degree curricula in the *Undergraduate Programs* section of this catalog. Regulations governing all certificate programs are found in the *Undergraduate Study* and the *Graduate and Postbaccalaureate Study* chapters.

COURSES IN ENGINEERING AND TECHNOLOGY

Courses in Engineering (ENGR)

400-level Courses

All 400-level courses may be applied toward master's degree I requirements, subject to limits established by the department and approval of the graduate adviser.

Graduate Courses

Classified graduate standing is required for admission.

597 Graduate Research (1-5)

Prerequisites: Instructor consent to act as sponsor, departmental approval of project prior to registration. Independent research under guidance of the faculty. May be repeated for credit to maximum of 5 units. GradedCR/NC.

598 Graduate Directed Study (1-4)

Prerequisite: Instructor consent to act as sponsor. Independent, directed study of advanced topics in the field, regular conferences with the sponsor. May be repeated for credit.

599 Thesis (1-4)

Prerequisite: Advancement to candidacy, instructor consent to act as sponsor, school approval of the topic prior to registration. Independent research resulting in a thesis. Must be repeated to maximum of 4 units. GradedCR/NC.

Courses in Civil Engineering (CE)

400-level Courses

All 400-level courses may be applied toward master's degree requirements, subject to limits established by the department and approval of the graduate adviser

Graduate Courses

Classified graduate standing is required for admission.

560 Structural Mechanics III (4)

Prerequisite: CE 460. Column analogy, moment distribution applied to nonprismatic members, elastic energy method applied to arches and curved members, influence lines for indeterminate structures and secondary stresses.

561 Advanced Structural Design (4)

Prerequisite: CE 461. Design of light gauge steel members, aluminum alloys, and timber. Plastic design. Optimum design principles and its applications.

562 Reinforced Concrete Design II (4)

Prerequisite: CE 462. Creep and plastic flow of concrete. Theory and practice of ultimate strength design. Prestressed concrete structures.

563 Matrix Computer Analysis of Structures (4)

Prerequisites: CE 460, ENGR 490. Matrix methods applied to statically determinate and indeterminate structures, flexibility and stiffness methods, digital computer applications.

564 Numerical Methods in Structural Analysis (4)

Prerequisites: ENGR 490, CE 460 or 402. Finite difference and finite-element methods for structures; free and forced vibrations; bending, buckling of beams and plates; special applications.

565 Dynamics of Structures (4)

Prerequisite: CE 460 or ME 414. Free vibrations, forced vibrations and transient response of structures and structural components having one and many degrees of freedom; damping and inelastic action, earthquakes and nuclear blasts; dynamic resistance of structures; limit design; design for dynamic loads.

566 Soil Mechanics II (4)

Prerequisite: CE 467. Stress and strain in soil mass, equilibrium and movement of soil water, soil consolidation, settlement, and soil strength.

567 Foundations II (4)

Prerequisite: CE 467. Earth-pressure problems and problems of deep excavation; design of anchored bulkheads, cofferdams, piles under lateral loads, underpinning.

569 Earth Structures (4)

Prerequisite: CE 467. Factors influencing design, explorations for foundations and construction processes, compactions, stability analysis, seepage control, earth dams.

570 Soil Dynamics (4)

Prerequisite: CE 467. Dynamic properties of soils, vibratory effects on foundations, earthquake effects on foundations, dynamic stability of earth structures.

571 Highway Design (4)

Prerequisite: CE 471. Practical application of American Association of State Highway and Transportation Officials (AASHTO) policy on design controls; capacity analysis for uninterrupted flow, weaving section and ramps; functional design procedures in development of an interchange.

572 Plates and Shells (4)

Prerequisites: CE 402, 460. Equations of bending of thin elastic plates, energy method; approximate and numerical methods; theory of shells with application to tanks, roofs, and pressure vessels.

574 Traffic Flow Analysis (4)

Prerequisite: CE 370. Measurements and analysis of traffic flow characteristics: speed, density, flow, headway; statistical data analysis, time-space diagrams, traffic flow models, queuing theory, shock wave analysis, traffic models applications.

575 Urban Transportation Planning (4)

Prerequisite: CE 370 for Civil Engineering majors; permission of department chair for others. Travel forecasting, data requirements, collection methods, trip generation and distribution models; modal split analysis, trip assignment, plan alternatives and evaluation methodology.

577 Bridge Engineering (4)

Prerequisites: CE 461, 462. Design of steel, concrete, and timber bridges, piers, and abutments; American Association of State Highway and Transportation Officials (AASHTO) specifications; criteria for earthquake resistant design of bridges; geometry, safety, economics, and aesthetics.

581 Modeling Techniques in Hydraulic Engineering (4)

Prerequisite: CE/ME 303. Dimensional analysis: similarity law and hydraulic, coastal, and estuarine models; mathematical models.

582 Statistical Hydrology (4)

Prerequisites: CE 483, ENGR 210, 211. Statistical and probability analysis of hydrologic processes. Application of correlation and regression method to hydrologic variables. Elementary time series analysis of hydrologic data.

583 Hydrology II (4)

Prerequisite: CE 483. Space-time characteristics and mechanics of rainfall, surface run-off and infiltration. Theory of drainage basin dynamics. Low stream flow.

586 Open Channel Hydraulics (4)

Prerequisites: CE 387, MATH 215. Flow types, flow profile computations; design of channels and transition structures; unsteady flow.

587 Hydraulics II (4)

Prerequisite: CE 387. Unsteady flow in pipes, wave motion, sediment transportation, and coastal engineering.

588 Hydraulic Structures (4)

Prerequisite: CE 387. Hydraulic structures for impounding, conveying, and controlling water.

589 Coastal Engineering (4)

Prerequisite: CE 387. Fundamentals of water waves and their effects. Diffraction, reflection, and refraction; impulsively generated waves; effect of waves on coastal structures.

Courses in Electrical Engineering (EE)**400-level Courses**

All 400-level courses may be applied toward master's degree requirements, subject to limits established by the department and approval of the graduate adviser.

Graduate Courses

Classified graduate standing is required for admission.

530 Linear Systems Analysis (4)

Prerequisites: EE 430, MATH 402A. Review of transform methods; inverse transforms by contour integration; state space variable, properties of network functions and network parameters; time domain analysis; positive real functions.

531A Principles of Communication Theory I (4)

Prerequisites: EE 420, MATH 402A. Comparative analysis of the following information transmission systems; AM, FM, PPM, and PCM. Introduction to statistical methods in analysis of information transmission systems.

531 B Principles of Communication Theory II (4)

Prerequisites: EE 531 A, MATH 402A. Transmission and filtering of random signals. Causal and noncausal filters; communication of digital data in the presence of noise.

532 Detection of Signals in Noise (4)

Prerequisite: EE 531 A. Techniques for detection of both known and unknown signals with unknown parameters in presence of noise. Discussion of hypothesis testing, likelihood functions, receiver configurations, and basic estimation theory.

533 Computer Methods in Power Systems (4)

Prerequisites: EE 332, 433, ENGR 490. Algorithms for formulation of network matrices; short-circuit studies on computers; iterative solutions of algebraic and differential equations; digital computer techniques for load flow.

534 Power System Stability (4)

Prerequisites: EE 438A, 533. Steady state and transient stability of electric power systems; stability criterion; emphasis on digital computer techniques as applied to stability problems of electric power systems.

536A Solid State Electronics I (4)

Prerequisite: EE 436. Characteristics of solid state electronic devices; fabrication of discrete devices and integrated circuits; analysis and characteristics of integrated circuits.

536B Solid State Electronics II (4)

Prerequisite: EE 536A. Continuation of Solid State Electronics I; characteristics and applications of integrated circuits.

536C Solid State Electronics III (4)

Prerequisite: EE 536B. Applications of integrated circuits; metaloxide-silicon devices; optoelectronics.

538 Linear and Nonlinear Control Systems Theory (4)

Prerequisites: EE 438B, MATH 402A. Analysis and design of advanced control systems, including optimal control; use of computer in control systems.

544 Digital Systems Design (4)

Prerequisite: EE 449. Advanced study of selected topics in digital systems design. Design automation techniques; digital simulation; computer elements.

547AB Computer System Architecture (4, 4)

Prerequisite: EE 449. (EE 547A is prerequisite to 547B.) Computational algorithms and the arithmetic processor, central control and microprogramming, input-output processors, data communication processors and time-sharing systems.

548 Digital Sampled Data and Logic Control Systems Theory (4)

Prerequisites: EE 244, 438B, MATH 402A. Analysis and design of linear and nonlinear sampled data, digital and logic control systems. Numerical control and on-line computer control systems.

Courses in Mechanical Engineering (ME)**400-level Courses**

All 400-level courses may be applied toward master's degree requirements, subject to limits established by the department and approval of the graduate adviser.

Graduate Courses

Classified graduate standing is required for admission.

501 A Advanced Mechanics of Particles (4)

Prerequisite: ME 421. Analytical approach to kinematics and dynamics of particles in three-dimensional space.

501 B Advanced Mechanics of Rigid Bodies (4)

Prerequisite: ME 501A. Analytical approach to kinematics and dynamics of rigid bodies in three-dimensional space.

502 Theory of Elasticity (4)

Prerequisite: ME 402. Stress-strain relations, yield criteria, equations of linear elasticity, energy methods, boundary value problem, thermoelasticity, nonlinear elasticity, applications in structural and machine design.

503 Design of Mechanical Systems and Products (4)

Prerequisite: ME 414. Principles of design; value criteria; manufacturing and human factors; computer-aided simulation and analysis; synthesis of design.

504 Thermal Radiation (4)

Prerequisite: ME 406. Thermodynamics and physics of thermal radiation and its interactions with matter; formulation and solution of radiative transfer equations for surfaces and enclosures by means of exact, approximate, and numerical methods; applications to selected topics.

505 Heat Conduction (4)

Prerequisite: ME 406. Fundamentals of heat conduction, solution of steady and unsteady state heat conduction problems by means of exact, approximate, and numerical methods; applications to selected topics.

506 Heat Convection (4)

Prerequisite: ME 406 or 408. Development of equations describing fluid motion and heat convection. Analytical and experimental results for free and forced convection and for changes in phase.

508 Compressible Fluids (4)

Prerequisite: ME 408. One-dimensional gas dynamics; shock waves in supersonic flow; flow in ducts and nozzles; applications to high speed aerodynamics; multidimensional and unsteady frictionless flow; solution by small perturbation theory and method of characteristics.

509 Viscous Fluids and Boundary Layer Theory (4)

Prerequisites: ME 408, MATH 402A. Derivation of Navier-Stokes and boundary layer equations. Solutions for very slow, viscous motion, incompressible and compressible laminar boundary layers, introduction to turbulent boundary layer theory. Heat transfer and aerodynamic applications.

511 Vibrational Analysis II (4)

Prerequisite: ME 411. Analysis of multidegree of freedom systems, continuous systems, random vibrations, analog and digital computer applications.

512 Advanced Topics in Thermodynamics (4)

Prerequisite: ME 426 or CHEM 414. Advanced study of selected topics in thermodynamics with applications to engineering systems; review of current literature.

521 Dynamic Systems Analysis (4)

Prerequisite: ME 409 or 410. Dynamic behavior of physical systems; input-output and state space representation of linear continuous-time and discrete-time systems; controllability, observability, and stability of linear systems; examples of mechanical, thermal, fluid, and electrical systems.

522 Optimal Control of Mechanical Systems (4)

Prerequisite: ME 410 or 422. State space representation of continuous-time and discrete-time dynamic systems, problem statement of optimal control and performance index, maximum principle, design of linear optimal control systems, mechanical system examples.

525 Process Mass and Heat Transfer (4)

Prerequisite: ME 415. Principles of mass transfer by diffusion, evaporation and condensation, phase equilibrium, two-phase flow. Applications such as cooling towers, heat exchangers, vaporizers, evaporators, reboilers, distillation, and desalinization.

528 Metalforming Science and Applications (4)

Prerequisite: ME414. Nature and purpose of metalworking theory, determination of working loads, drawing and rolling of flat slabs and strips, deep drawing, extrusion, forging, punching and piercing, friction and lubrication in metalworking.

529 Machining Science and Applications (4)

Prerequisite: ME 414. Deformation of materials during machining; mechanics of orthogonal cutting; cutting fluids; tool wear; tool life and machinability; vibrations in cutting; practical machining operations; and modern machining processes.

Courses in Technology (TECH)**400-level Courses**

All 400-level courses may be applied toward masters degree requirements, subject to limits established by the department and approval of the graduate adviser.

Graduate Courses

Classified graduate standing is required for admission.

502 Modern Industry (3)

Prerequisites: An acceptable undergraduate major in Industrial Arts or Vocational Arts, or comprehensive background of industrial experience, and TECH 300AB. Advanced study of growth, development, and organization of industry; new materials and processes. Problems of industry with significance for present social order.

505 Supervision and Organization of Vocational Education (4)

Responsibilities of supervisor for organizing vocational education programs at various levels and for improving instruction. May be repeated to maximum of 8 units with permission of instructor.

506 Seminar: Industrial Education (4)

Investigation of teaching problems in industrial education. Individual and group studies of special problems.

507 Seminar: Industrial Studies (4)

Prerequisite: TECH 502. Advanced study of developments in industrial materials, processes, machines, and equipment; relationships between industrial developments and society; emphasis on research and investigation.

583 Development, Use, and Evaluation of Industrial Education Instructional Materials (4)

Advanced course in development, use, and evaluation of instructional materials, with emphasis on three-dimensional teaching aids, charts, slides, and displays.

598 Graduate Directed Study (1-4)

Prerequisite: Instructor consent to act as sponsor. Independent study of advanced topics in field; regular conferences with sponsor. May be repeated to maximum of 9 units.

599A Thesis or Project (1-2)

Prerequisites: Instructor consent to act as sponsor, departmental approval of topic prior to registration. Independent research resulting in a thesis or project. Must be repeated to total of 2 units. Graded *CR/NC*.

599B Thesis or Project (1-3)

Prerequisites: TECH 599A, instructor consent to act as sponsor, departmental approval of topic prior to registration. Independent research resulting in a thesis or project. Must be repeated to total of 3 units. Graded *CR/NC*.

of Health and Nutritional Sciences

SCHOOL OF HEALTH AND HUMAN SERVICES**CHILD DEVELOPMENT****School of Health and Human Services****PROGRAM OFFICE**

Engineering and Technology A535

Phone: (213) 343-4590

The Master of Arts degree in Child Development strengthens professional competence and prepares individuals for various leadership positions as child development specialists. Students may coordinate degree requirements with those for the Multiple Subject, the Early Childhood Specialist Instructional or Community College Teaching Credentials.

Master of Arts *Degree***Admission to the Program**

- * Baccalaureate in Child Development or a closely related academic field from a fully accredited college or university.
- * Minimum 2.75 grade point average in last 90 quarter units or minimum B (3.0) grade point average in undergraduate major.
- * Written statement of personal and professional goals received by the Child Development graduate adviser before the student registers in the program.
- * Initial interview with the Child Development graduate adviser prior to registration in the program.
- * In addition to meeting university requirements for admission to graduate study, applicants must have completed course work in theories of human development, issues and trends in child development, and early childhood education

Students without a baccalaureate in Child Development or a closely related field must complete a 27-unit prerequisite program before being admitted to the Child Development master's degree program. Further information is available in the Child Development office.

Requirements for the Degree (45 units)

A total of 45 units is required, with at least 23 in 500-level courses *Required core (28 units)*

CHDV	500	Studying Children: Theories and Methods	(4)
CHDV	501	Infants and Toddlers-Development and Care	(4)
CHDV	502	Children Under Transitory Stress	(4)
CHDV	503	Working with Parents	(4)
CHDV	504	Research Methods with Children and Families	(4) or
FSCS	577	Research Concepts in Home Economics	(4) or
PSY	411	Research Methodology in Psychology	(4)
CHDV	505	Selected Topics in Current Issues and Research in Child Development	(4) or
EDFN	530	Advanced Study in Child Development	(4)
CHDV	595	Graduate Field Work	(4)

Electives (11-17 units)

Students must select electives in consultation with a graduate adviser to give meaningful support to their professional goals. The development of an individualized interdisciplinary program is essential. Students also seeking an Early Childhood Specialist credential should select electives in consultation with a credential adviser and a Child Development graduate adviser.

Comprehensive Examination or Thesis or Project (0, 6 units)

CHDV	596	Comprehensive Examination	(0) or
CHDV	599	Thesis or Project	(6)

A comprehensive examination or a thesis or project is required for the master's degree. Students should expect to take the comprehensive examination (CHDV 596) the quarter they complete all course work on their program or thereafter and must comply with school and departmental requirements. A thesis or project, in lieu of the comprehensive examination, may be undertaken upon approval by a Child Development faculty committee.

Courses in Child Development (CHDV)

400-level Courses

With graduate adviser approval, appropriate 400-level courses in Child Development-related disciplines may be applied toward requirements for the master's degree.

Graduate Courses

Classified graduate standing is required for admission.

500 Studying Children: Theories and Methods (4)

The foundation of graduate level study of children; major theories of child development; issues and methods in current research.

501 Infants and Toddlers Development and Care (4)

Physical, cognitive, affective development, birth-30 months; environmental, cultural influences. Lecture 3 hours, laboratory 3 hours.

502 Children Under Transitory Stress (4)

Normal infants' and young children's efforts to cope with physical, situational stresses such as short-term hospitalization, death, serious illness, separation from family, divorce, birth of sibling. Lecture 3 hours, laboratory 3 hours.

503 Working with Parents (4)

Parent education trends: theory, dynamics, implementation, programs, research, and community resources. Lecture 3 hours, laboratory 3 hours.

504 Research Methods with Children and Families (4)

Prerequisite: EDFN 452. Current research issues about children and families; ways of studying children and families: observation, interviews, questionnaires, testing; ethical issues; development and implementation of pilot research study.

505 Selected Topics in Current Issues and Research in Child Development (4)

In-depth study of selected topics related to current issues and research in child development.

595 Graduate Field Work (1-4)

Prerequisites: CHDV 501,502, 503; instructor consent to act as supervisor. Supervised practical experience in specialized community settings related to infant care, parent education, and/or hospitalization; assignments on individual basis. May be repeated to maximum of 8 units. Graded CR/NC.

598 Graduate Directed Study (1-4)

Prerequisites: CHDV 501,502, 503; instructor consent to act as supervisor. Independent directed study of advanced topics in the field of child development; regular conferences with instructor. May be repeated to maximum of 8 units.

599 Thesis or Project (1-6)

Prerequisites: CHDV 504; advancement to candidacy; instructor consent to act as adviser; approval of topic prior to registration for thesis or project. Independent research resulting in thesis or project. Must be repeated to maximum of 6 units. Grade CR/NC.

COMMUNICATION DISORDERS

School of Health and Human Services

DEPARTMENT OFFICE

King Hall B106

Phone: (213) 343-4690

The Department of Communication Disorders offers the Master of Arts degree in Communicative Disorders with options in Audiology and Speech-Language Pathology; the Clinical-Rehabilitative Services Credential in Audiology; the Clinical-Rehabilitative Services Credential in Language, Speech, and Hearing; the Clinical-Rehabilitative Services Credential in Language, Speech, and Hearing with Special Class Authorization; and the Certificate in Rehabilitative/School Audiology

Master of Arts Degree in Communicative Disorders Admission to the Program

In addition to university requirements for admission to graduate study, applicants must satisfy specific department requirements before admission to the program. These include a baccalaureate in Communicative Disorders or equivalent and a minimum 2.75 grade point average in the last 90 quarter units attempted prior to the baccalaureate.

For the *Audiology option*, applicants must have a minimum cumulative score of 900 on the Verbal and Quantitative sections of the GRE General Test. For the *Speech-Language Pathology option*, completion of COMD 458 or equivalent is required. Students must meet with a faculty adviser before beginning the graduate program.

Completion of the following courses or their equivalents is prerequisite to admission to the program: COMD 400, 401, 402, 403 or 407, 420, 425, 429, 450, 458, 460AB, 461, 462AB, 470--478AB.

Completion of COMD 469 is corequisite to the program.

Students who meet the equivalency requirements must earn, or have earned, a grade of C or higher in each of the core courses: COMD 400, 401, 402, 450, 460AB, 461, and 462AB. Repetition of core courses is limited to a maximum of two attempts in the entire core.

Students are required to meet personal and professional standards established by the department which include (but are not limited to): acceptable speech, language, and hearing; the capacity to accept instruction; willingness to assume professional responsibility for the welfare of clients; and the ability to relate well to clients, peers, and faculty. Students also must possess qualities of personal integrity, maturity, and sound professional judgment.

Requirements for the Degree (*minimum 45 units*)

A minimum of 45 units is required, with at least 29 in 500-level courses. A comprehensive examination or a thesis is required.

*** Audiology Option (*45 units*)**

The Audiology option prepares students to serve in various professional settings including:

- * *clinical settings* such as hospitals, medical offices, private practice, rehabilitation clinics that require a master's degree or equivalent with emphasis in clinical audiology, licensure in audiology issued by the state Board of Medical Quality Assurance, and the Certificate of Clinical Competence (CCC) in Audiology issued by the American Speech-Language Hearing Association
- * *public school settings* as a rehabilitative/school audiologist which requires a Clinical-Rehabilitative Services credential for School Audiologist
- * *private school settings* as a rehabilitative audiologist which requires a certificate in rehabilitative audiology plus a master's degree or equivalent in rehabilitative audiology

Required Courses (33 units):

COMD 500	Seminar: Amplification Systems for Audiologists	(4)
COMD 503	Seminar: Bone Conduction, Masking, Impedance Audiometry	(4)
COMD 504	Seminar: Audiological Psychoacoustics	(4)
COMD 505	Seminar: Special Auditory Tests	(4)
COMD 506	Seminar: Special Auditory Tests	(4)
	Sensorineural Hearing Losses	(4)
	Central Auditory Problems	(4)
COMD 510	Seminar: Audiological Instrumentation	(4)
COMD 541	Clinical Procedures in Hearing Evaluation	(1)

COMD 542 Clinical Practice in Hearing Evaluation (2, 2-2, 2)

Electives (12 units):

With adviser approval, select courses appropriate for California licensure and ASHA certification.

Comprehensive Examination or Thesis (0, 6 units)

COMD 596 Comprehensive Examination (0) or
COMD 599 Thesis (6)

In conference with an adviser, students must elect to complete either the comprehensive examination or a thesis.

A. Comprehensive Examination (0)

COMD 596 Comprehensive Examination (0)

Students should expect to take the comprehensive examination (COMD 596) the quarter they complete all course work on their program and must comply with school and departmental requirements.

B. Thesis (6 units)

Students must have adviser approval, be advanced to candidacy, and be enrolled in COMD 599 during the quarters the thesis is in progress. COMD 599 units may be substituted for elective units, but not for required courses in audiology.

* **Speech-Language Pathology Option (minimum 45 units)**

The Speech-Language Pathology option prepares students to work in various professional settings including:

- * *clinics, hospitals, medical offices, or private practice* as a speech-language pathologist which requires a master's degree or equivalent with emphasis in speech-language pathology, licensure in speech-language pathology issued by the state Board of Medical Quality Assurance, and the Certificate of Clinical Competence (CCC) issued by the American Speech Language Hearing Association
- * *public and private schools* as a language-speech and hearing specialist which requires a Clinical-Rehabilitative Services credential in Language, Speech, and Hearing
- * *public school programs* for the severely language handicapped which requires a Clinical-Rehabilitative Services credential in Language, Speech, and Hearing with Special Class Authorization.

Required Courses (33 units):

COMD 560 Seminar: Natural Acquisition of Language (4)
COMD 570AB Graduate Studies in Stuttering (3, 3)
COMD 571 Seminar: Language Disorders in Children (4)
COMD 572 Seminar: Voice Disorders (4)
COMD 573 Seminar: Articulation Disorders (4)
COMD 574 Seminar: Neuropathologies of Speech and Language (4)
COMD 576 Advanced Diagnostic Procedures in Communication Disorders (3)
COMD 578 Advanced Clinical Procedures in Communication Disorders (2, 2)

Electives (4-6 units):

In consultation with adviser, select one course (4-6 units) from the following:
COMD 454, 598, 599.

Additional Electives (6-8 units):

With adviser approval, select courses appropriate for California licensure and ASHA certification.

Comprehensive Examination or Thesis (0, 6 units)

COMD 596 Comprehensive Examination (0) or
COMD 599 Thesis (6)

Students should expect to take the comprehensive examination (COMD 596) the quarter they complete all course work on their program and must comply with school and departmental requirements. Students should consult a speech-language pathology adviser about the thesis option, and should enroll in COMD 599 during the quarters the thesis is being undertaken.

Clinical-Rehabilitative Services Credential in Audiology

Requirements for the Credential (114 units)

COMD 400	Peripheral Hearing Mechanism	(3)
COMD 401	Audiological Acoustics	(2)
COMD 402	Pure-Tone Audiometry	(3)
COMD 403	Speech Audiometry	(3)
COMD 407	Pediatric Audiology	(3)
COMD 420	Rehabilitative Audiology	(3)
COMD 425	Management of Hearing Impaired Child	(3)
COMD 429	Clinical Practice in Aural Rehabilitation	(1)
COMD 450	Introduction to Communication Disorders	(4)
COMD 460AB	Speech and Language Acquisition in Children	(3, 3)
COMD 461	Descriptive Phonetics	(4)
COMD 462AB	Speech-Language Science	(3, 3)
COMD 470	Clinical Processes in Communication Disorders	(4)
COMD 471	Language Disorders in Children	(4)
COMD 472	Voice and Articulation Disorders	(4)
COMD 476	Diagnostic Procedures in Speech and Language Disorders	(3)
COMD 500	Seminar: Amplification Systems for Audiologists	(4)
COMD 503	Seminar: Bone Conduction, Masking, Impedance Audiometry	(4)
COMD 504	Seminar: Audiological Psychoacoustics	(4)
COMD 505	Seminar: Special Auditory Tests Sensorineural Hearing Losses	(4)
COMD 506	Seminar: Special Auditory Tests-Central Auditory Problems	(4)
COMD 507	Seminar: Special Auditory Tests- Auditory Brainstem Responses	(4)
COMD 510	Seminar: Audiological Instrumentation	(4)
COMD 541	Clinical Procedures in Hearing Evaluation	(1)
COMD 542	Clinical Practice in Hearing Evaluation	(2, 2-2, 2-2)
COMD 547	Seminar: Audiology	(3)
EDSP 400	Education and Psychology of Exceptional Individuals	(4)
EDSP 420	Implications of Communication Handicaps	(4)
EDSP 430	Sign Language	(3)
EDSP 431A	Laboratory: Sign Language, Beginning	(1)
EDSP 525	Language and Speech for Profoundly Deaf Child	(4)

Clinical-Rehabilitative Services Credential in Language, Speech, and Hearing

This credential requires 118 units of which 45 units must be completed in the fifth year, including the 500-level courses listed below. Students must earn a B (3.0) grade point average in all 500-level courses required for the credential to receive university recommendation for issuance of the credential.

Requirements for the Credential (118 units)

COMD 400	Peripheral Hearing Mechanism	(3)
COMD 401	Audiological Acoustics	(2)
COMD 402	Pure-Tone Audiometry	(3)
COMD 403	Speech Audiometry	(3) or
COMD 407	Pediatric Audiology	(3)
COMD 420	Rehabilitative Audiology	(3)
COMD 425	Management of Hearing Impaired Child	(3)

COMD 429	Clinical Practice in Aural Rehabilitation	(1)
COMD 450	Introduction to Communication Disorders	(4)
COMD 460AB	Speech and Language Acquisition in Children	(3, 3)
COMD 461	Descriptive Phonetics	(4)
COMD 462AB	Speech-Language Science	(3, 3)
COMD 469	Role of Speech-Language Pathologist in Professional Settings	(1)
COMD 470	Clinical Processes in Communication Disorders	(4)
COMD 471	Language Disorders in Children	(4)
COMD 472	Voice and Articulation Disorders	(4)
COMD 476	Diagnostic Procedures in Speech and Language Disorders	(3)
COMD 478AB	Clinical Procedures in Communication Disorders	(2, 2)
*COMD 490AB	Language, Speech, and Hearing Service in Public Schools	(1, 1)
COMD 560	Seminar: Natural Acquisition of Language	(4)
COMD 570AB	Graduate Studies in Stuttering	(3, 3)
COMD 571	Seminar: Language Disorders in Children	(4)
COMD 572	Seminar: Voice Disorders	(4)
COMD 573	Seminar: Articulation Disorders	(4)
COMD 574	Seminar: Neuropathologies of Speech and Language	(4)
COMD 576	Advanced Diagnostic Procedures in Communication Disorders	(3)
EDFN 413	Psychological Foundations of Education	(4)
EDSP 400	Education and Psychology of Exceptional Individuals	(4)
EDSP 403	Special Education Laboratory	(1)
*COMD 480	Directed Teaching in Communication Disorders	(6, 6)
PSY 412AB	Psychology of Human Development: Childhood and Adolescence	(4, 4)

* *must be taken concurrently*

The *Special Class Authorization to Teach Severe Language Handicapped Children* requires an additional 28 units:

COMD 480	Directed Teaching in Communication Disorders	(6, 6)
COMD 585	Seminar: Advanced Language Techniques for Severe Language Handicapped Children	(4)
EDEL 400	Proseminar: Curriculum and Teaching of Reading	(4)
EDEL 401	Proseminar: Curriculum and Teaching of Mathematics and Language Arts	(4)
EDSP 402	Curriculum Modification and Instructional Strategies for Exceptional Individuals	(4)

Certificate Program in Rehabilitative/School Audiology

This credit certificate program is designed to prepare rehabilitative/school audiologists who do not seek the California credential.

Admission to the Program

Formal admission to the program is obtained only at the graduate level, although students may complete 400-level courses in the program while in undergraduate standing. Requirements for admission are the same as those for the Audiology option for the Master of Arts degree in Communicative Disorders.

Requirements of the Program (114 units)

This program requires a total of 114 units and utilizes the same courses as the Clinical-Rehabilitative Services credential in Audiology, described on the previous page. Students are cautioned to read descriptions of all required courses for prerequisites and to complete such prerequisites before enrolling in advanced courses.

Courses in *Communication Disorders (COMD)*

400-Level Courses

All 400-level courses may be applied toward master's degree requirements, subject to limits established by the department and approval of the graduate adviser.

Graduate Courses

Classified graduate standing is required for admission.

500 Seminar: Amplification Systems for Audiologists (4)

Prerequisite: COMD 403. Electroacoustic characteristics of individual hearing aids and classroom amplification systems; assessment and fitting procedures; spectral analysis of hearing aids; troubleshooting hearing aids; room acoustics; practical experience included.

501 Seminar: Amplification Systems for Teachers of Hearing Impaired (4)

Prerequisite: COMD 406. Appropriate hearing aids for specific hearing loss; types of group amplifiers commercially available for classroom use; use of amplification in developing residual hearing.

503 Seminar: Bone-conduction, Masking, Impedance Audiometry (4)

Prerequisite: COMD 403. Advanced audiological theories, principles, and techniques; bone-conduction, effective masking and impedance audiometry for differentiating conductive from sensorineural hearing losses; laboratory projects included.

504 Seminar: Audiological Psychoacoustics (4)

Prerequisite: COMD 503. Relationships among acoustic stimulus parameters, aural physiological activities, and psychological sensations including loudness, pitch, adaptation, and different limens; laboratory projects with audiometric equipment included.

505 Seminar: Special Auditory Tests-Sensorineural Hearing Losses (4)

Prerequisite: COMD 503. Advanced audiological theories, principles, and techniques; psychoacoustic hearing tests for differentiating cochlear from retrocochlear lesions; practice in administering special tests and interpreting test results.

506 Seminar: Special Auditory Tests-Central Auditory Problems (4)

Prerequisites: COMD 504, 505. Advanced audiological theories, principles, and techniques; psychoacoustic hearing tests for differentiating peripheral from central hearing disorders; practice in administering advanced special tests and interpreting test results.

507 Seminar: Special Auditory Tests-Auditory Brainstem Responses (4)

Prerequisites: COMD 504, 505. Advanced audiological theories, principles, techniques; physiological tests for measuring electric brainstem responses to acoustic stimuli; electronystagmyography; practice with brainstem audiometer and ENG equipment.

510 Seminar: Audiological Instrumentation (4)

Prerequisite: COMD 505. Audiological instrumentation; calibration standards; calibration instruments and procedures for earphones, bone vibrators, loudspeakers, pure tones, speech, masking noise; practice in calibrating audiometers.

541 Clinical Procedures in Hearing Evaluation (1)

Prerequisites: COMD 503. Practice in administering hearing tests, interpreting tests results, and writing audiological reports before working with patients in the Hearing Clinics.

542 Clinical Practicum in Hearing Evaluation (2)

Prerequisites: first quarter: COMD 541; second quarter: COMD 407, 500, one quarter of clinic practicum; third quarter: COMD 505, minimum B (3.0) grade point average in clinic courses completed prior to enrollment, two quarters of clinic practicum; fourth quarter: COMD 506, 507, three quarters of clinic practicum; fifth quarter for school audiology credential: COMD 429, four quarters of clinic practicum. Sequential progression of supervised clinical practice in hearing

evaluations; on-campus Hearing Clinic for first two quarters; off-campus medical center for next two quarters; public school for fifth quarter.

547 Seminar: Audiology (3)

Prerequisite: COMD 506. Basic statistical procedures for measurement of central tendency, correlation, and significance; research design in the context of current scientific studies on hearing; individual research project using audiometric equipment.

560 Seminar: Natural Acquisition of Language (4)

Prerequisites: COMD 460AB or 456. Research, methods, major issues in language acquisition in early childhood; methods for studying semantic, syntactic, pragmatic, and phonological systems, principally among English-speaking children.

570AB Graduate Studies in Stuttering (3, 3)

Prerequisite: COMD 470. Theory, research, and methodology in assessment and treatment of stuttering in children and adults. Clinical practicum required. Enrollment in successive quarters required. Lecture 2 hours, laboratory 3 hours.

571 Seminar: Language Disorders of Children (4)

Prerequisites: COMD 470, 471. Theory, research, and methodology in assessment of and intervention in various kinds of language disorders in children; multiethnic, multicultural considerations.

572 Seminar: Voice Disorders (4)

Prerequisite: COMD 472. Theory, research, methodology in diagnosis and treatment of various kinds of functional and organic voice disorders.

573 Seminar: Articulation Disorders (4)

Prerequisite: COMD 472. Theory, research, methodology in assessing and intervening in various kinds of articulation disorders.

574 Seminar: Neuropathologies of Speech and Language (4)

Prerequisite: COMD 462B. Theory, research, and methodology in diagnosis and treatment of various kinds of speech and language disorders associated with neuropathologies.

576 Advanced Diagnostic Procedures in Communication Disorders (3)

Prerequisite: COMD 476. Tests, methods, and procedures used in assessing individuals with speech-language disorders with special emphasis on integration of results in case studies; multiethnic, multicultural considerations. Independent supervised advanced clinical practicum. Lecture 2 hours, laboratory 3 hours.

578 Advanced Clinical Procedures in Communication Disorders (2)

Prerequisite: COMD 478AB. Advanced clinical procedures in assessment of and intervention with communicatively handicapped children and adults; independent supervised clinical experience in on- or off-campus sites. May be repeated to maximum of 8 units.

585 Seminar: Advanced Language Techniques for Severe Language Handicapped Children (4)

Recommended corequisite: EDSP 407 (SLH). Advanced methods course for students seeking Clinical-Rehabilitative Services credential in Language, Speech, and Hearing with Special Class Authorization; classroom programming for language-disordered children ages 3-18 including behavior management, classroom organization, curriculum adaptation to meet individual language needs.

598 Graduate Directed Study (1-4)

Prerequisite: Instructor consent to act as sponsor. Independent study of advanced topics in field; regular conferences with sponsor. May be repeated for credit.

599 Thesis (1-6)

Prerequisites: Advancement to candidacy, instructor consent to act as sponsor, departmental approval of topic before registration; additional prerequisite for Audiology option: COMD 547. Independent research resulting in a thesis; oral defense of thesis required. May be repeated to maximum of 6 units. GradedCR/NC.

CRIMINAL JUSTICE**School of Health and Human Services****DEPARTMENT OFFICE**

King Hall D1045

Phone: (213) 343-4610

Two Master of Science degrees are offered by the Department of Criminal Justice. The Criminalistics degree offers a specialization in the application of science to the criminal justice process; the Criminal Justice degree includes an Administration option that emphasizes management skills and an education option that prepares students for specialized teaching assignments.

Admission to the Program

Application to both the Department of Criminal Justice and the university is required, on forms available from the department's graduate admissions committee. Transcripts from all colleges and universities attended must be submitted with the application to the department's graduate admissions committee at the same time that the university application is filed with the Admissions Office.

A minimum 2.75 grade point average is required in the last 90 quarter units of undergraduate study, and a minimum B (3.0) in all upper division course work in the undergraduate major and all prerequisite and corequisite courses. Applicants who have not completed an undergraduate major in a criminal justice area or whose grade point average is below that required for regular admission into the program may be admitted under certain circumstances in conditional status at the discretion of the departmental graduate admissions committee.

Master of Science Degree in Criminalistics

The Criminalistics program is built on undergraduate preparation in chemistry and provides technical training in crime laboratory skills, with special emphasis on development of skilled experts able to function in a variety of scientific fields.

In addition to university requirements for admission to graduate study, applicants must have a baccalaureate in chemistry from an accredited college or university, or a baccalaureate in a related scientific field with a minimum of 36 quarter units in chemistry, including 12-15 units in organic chemistry.

The following courses in criminal justice or their equivalents must have been completed prior to admission to graduate study or may be taken concurrently. These courses are not included in the 45 units required for the master's degree.

CRIM 126	Concepts of Criminal Law	(4)
CRIM 221	Legal Aspects of Evidence	(4)
CRIM 235	Elements of Investigation	(4)
CRIM 362	Investigative Photography	(4)
CRIM 365	Personal Identification Systems	(4)
CRIM 461	Physical Evidence	(4)

Requirements for the Degree (45 units)

A total of 45 units is required, with at least 23 in 500-level courses.

Required Courses (32 units):

CRIM 551-553	Advanced Criminalistics I-III	(4, 4, 4)
CRIM 554	Identification of Modern Drugs	(4)
CRIM 555	Questioned Document Analysis	(4)
CRIM 556	Seminar: Special Problems in Criminalistics	(4)
CRIM 557	Legal Medicine in Criminalistics	(4)
CRIM 599	Thesis	(4)

Electives (13 units):

Select 5 units in criminal justice and 8 units in related fields with adviser approval.

Master of Science Degree in Criminal Justice

The Criminal Justice program provides advanced study in theory and application of methods in administration and management of criminal justice agencies, with emphasis on those whose function is law enforcement.

In addition to university requirements for admission to graduate study, applicants must possess a baccalaureate from an accredited college or university, with acceptable undergraduate preparation in police administration or criminal justice. Undergraduate preparation must include the following courses or equivalents:

CRIM 126, 221,401,404, 428,437

ECON 309 or

EDFN 452 or

PSY 302

POLS 403, 405

SOC 480

Requirements for the Degree(45 units)

A total of 45 units is required, with at least 23 in 500-level courses.

Required Courses (24 units):

CRIM	501	Seminar: Administration of Justice	(4)
CRIM	506	Seminar: Comparative Criminal Justice Administration	(4)
CRIM	538	Seminar: Criminal Justice Problems	(4)
CRIM	581	Law Enforcement Bibliography and Research	(4)
CRIM	582	Criminal Justice Resource Allocation	(4)
CRIM	599	Thesis	(4)

Options*** Option in Criminal Justice Administration (21 units)****Required Courses (16 units):**

POLS	460	Foundations of Public Administration	(4)
POLS	461	Dynamics of Urban Administration	(4)
POLS	560	Seminar: Public Administration	(4)
POLS	561	Seminar: State and Local Government and Administration	(4)

Electives (5 units):

Select courses in criminal justice with adviser approval.

*** Option in Criminal Justice Education (21 units)**

Students pursuing this option should seek advisement in the appropriate divisions within the School of Education as well as the Department of Criminal Justice.

Required courses(15 units):

COUN	503	Sociological and Cultural Factors in Counseling	(4)
COUN	510	Counseling Students in Higher Education	(4)
EDAC	581	The Community College	(3)
EDAC	582	Instruction in Community College	(4)

Electives (6 units):

Select courses in criminal justice with adviser approval.

Courses in Criminal Justice (CRIM)**400-level Courses**

All 400-level courses may be applied toward master's degree I requirements except the following, subject to limits established by the department and approval of the graduate adviser.
CRIM 499

Graduate Courses

Classified graduate standing is required for admission.

501 Seminar: Administration of Justice (4)

Advanced studies of interrelating component parts of criminal justice system, with particular emphasis on managerial aspects of agencies involved.

506 Seminar: Comparative Criminal Justice Administration (4)

Comparison of criminal justice systems of world, past and present; American systems, national, state, county, and municipal levels; military police systems; organizations, practices, and trends.

538 Seminar: Criminal Justice Problems (4)

Advanced investigation and reports on selected critical problems in criminal justice; emphasis on scientific method and acquaintance with reliable methods of research.

551-553 Advanced Criminalistics I, II, III (4, 4-4)

Methods of scientific analysis, comparison, identification, and individualization of physical evidence and its presentation in court. Lecture 2 hours, laboratory 6 hours.

551: Prints and imprints, tool marks, weapons, bullets, and cartridges.

552: Microscopic evidence, textile fibers, clothing and cloth, ropes, cordage and packing materials, cosmetics, crystalline evidence, paint, glass, soil, metals, and plastics.

553: Hair, blood, biological fluids, blood alcohol, arson evidence, bombs, and explosives.

554 Identification of Modern Drugs (4)

Prerequisite: Instructor consent. Nature, therapeutic action, toxicology, chemical and physical identification of modern drugs; drug nomenclature; scientific, official, and trade names; drug classifications.

555 Questioned Document Analysis (4)

Prerequisite: Instructor consent. Analysis of handwriting, typewriting, inks, paper, forgeries, alterations, erasures; use of photographic, microscopic, infrared, and ultraviolet light equipment; presentation of evidence in court. Lecture and demonstration.

556 Seminar: Special Problems in Criminalistics (4)

Prerequisite: Instructor consent. Inquiry in depth into criminalistics, with emphasis on homicide and major crime, literature of criminalistics field, correlation and synthesis of different methods of approach to criminalistics problems.

557 Legal Medicine in Criminalistics (4)

Prerequisite: Instructor consent. Correlation of findings of autopsy surgeon and criminalist; traumatic injuries, evaluation of wounds, time of death, rigor mortis, post mortem lividity; recognition of poison deaths.

581 Law Enforcement Bibliography and Research (4)

Research methodology in criminal justice field, survey of authorities and their writings, research reports and manuscripts.

582 Criminal Justice Resource Allocation (4)

Analysis of budgeting protocol, models of justice administration delivery systems, and strategies for allocating resources.

595 Directed Field Work (1-4)

Prerequisites: Departmental approval, agency acceptance. Supervised individual field experience in an applied area of criminal justice. May be repeated to maximum of 8 units. Graded *R/NC*.

598 Graduate Directed Study (1-5)

Prerequisite: Instructor consent to act as sponsor. Independent study of advanced topics covering the criminal justice system; regular conferences with sponsor. May be repeated to maximum of 9 units; maximum of 12 units in combination of CRIM 499 and 598 may be applied toward degree.

599 Thesis (1-4)

Prerequisites: Consent of an approved thesis committee to act as sponsor, completion of appropriate forms, approval of department. Independent research resulting in a thesis. Must be repeated to maximum of 4 units. Graded *CR/NC*.

Courses in Traffic and Safety Education (TSE)

400-level Courses

All 400-level courses may be applied toward master's degree requirements except the following, subject to limits established by the department and approval of the graduate adviser: TSE 475

Graduate Courses

Classified graduate standing is required for admission.

575 Analysis of Accident and Safety Programs (4)

Prerequisite: TSE 475. Safety programs and evaluation strategies; includes analysis of data relevant to traffic, occupational, and public safety programs.

577 Advanced Studies in Traffic and Safety Education (4)

Prerequisites: TSE 474, 475. Analysis of latest developments and trends in safety and traffic education relating to driver education and driver training programs.

578 Legal Aspects of Driver Education and Driver Training (4)

Prerequisites: TSE 474,475. Critical analysis of driver safety laws relating to teacher; related laws that affect driver education and training programs.

FAMILY STUDIES AND CONSUMER SCIENCES**School of Health and Human Services****DEPARTMENT OFFICE**

Fine Arts 238

Phone: (213) 343-4630

One graduate program is offered by the Department of Family Studies and Consumer Sciences: the Master of Arts in Home Economics.

Master of Arts Degree in Home Economics

The Master of Arts degree in Home Economics is designed to strengthen professional competence and to prepare students for leadership positions in teaching, community agencies, and consumer-oriented occupations related to housing, interiors, and equipment; management and consumer education; and fashion and textiles. The flexibility of the program enables students to pursue individualized courses of study designed to meet professional needs and goals.

Admission to the Program

In addition to university requirements for admission to graduate study, applicants must have an undergraduate major in home economics or equivalent, or a major in a related field and at least 30 quarter units in FSCS courses which may be taken as corequisites, providing prerequisites to individual courses in the program have been met. Applicants must have a minimum 2.75 grade point average in the last 90 quarter units.

Requirements for the Degree (45units)

A total of 45 units is required, with at least 23 in 500-level courses. All programs must be approved by the department graduate studies committee.

Required Courses (7 units):

FSCS 577 Research Concepts in Home Economics (4)
Select, with adviser approval, a 3-unit, 500-level FSCS seminar.

Electives (23 units):

Select FSCS courses, with adviser approval, including at least 7 units in 500-level courses.

Additional Electives (6-15 units):

Select courses in FSCS and related fields, with adviser approval.

Comprehensive Examination or Thesis or Project (0, 6--9 units):

FSCS 596 Comprehensive Examination (0) or
FSCS 599 Thesis or Project (6-9)

Students should expect to take the comprehensive examination (FSCS 596) the quarter they complete all course work on their program and must comply with school and departmental requirements.

Courses in *Family Studies and Consumer Sciences (FSCS) 400-level Courses*

All 400-level courses may be applied toward masters degree I requirements subject to limits established by the department and approval of the graduate adviser.

Graduate Courses

Classified graduate standing is required for admission.

501 Experimental Fashion Design (3)

Prerequisite: FSCS 401. Theory of fashion design and its application; creative designing through experimentation. Lecture/laboratory 6 hours.

502 Readings in Sociopsychological Aspects of Clothing (4)

Prerequisites: FSCS 302, basic courses in psychology and sociology/anthropology. Clothing as an aspect of human behavior; theories and research in social sciences with clothing as a variable; clothing in relation to individual and social behavior.

509 Seminar: Textiles and Clothing (3)

Prerequisites: FSCS 577, 6-8 units of 400- or 500-level textiles and/or clothing courses. In-depth study of selected topics in textiles and clothing.

529 Seminar: Child and Family Development (3)

Prerequisite: Upper division child/family course. Child and family development, integrating developmental research and theory.

530 Household Equipment: Performance Testing (4)

Prerequisite: FSCS 430. Performance testing of selected pieces of household equipment; evaluation of materials, construction, and effect on product. Lecture-laboratory 8 hours.

541 Theory and Philosophy of Home Management (4)

Prerequisite: FSCS 341. Philosophical and conceptual development of home management; analysis of theoretical framework; research and implementation techniques.

549 Seminar: Family Economics and Home Management (3)

Prerequisites: FSCS 341,440. Analysis of research and theoretical frameworks in family economics and home management.

560 Housing and Residential Interiors (4)

Prerequisite: FSCS 460. Current research on home environment, environmental factors, psycho-social, physical, cultural, and aesthetic human environments of significance to designer and planner.

569 Seminar: Housing and Interiors (3)

Prerequisites: FSCS 577, two upper division housing and interiors courses. Advanced selected topics in housing and interiors.

573 Problems in Home Economics Curriculum (4)

Prerequisites: Baccalaureate in home economics or related field; 40 home economics units. Current concepts, developments, trends in home economics curricula; application to specific tasks in curriculum development.

577 Research Concepts in Home Economics (4)

Prerequisite: A course in statistics. Examination of research methodology within a conceptual framework of home economics; utilization of the tools of research; review and critique of research reports; development of a research proposal and a pilot project.

595 Field Work in Family Studies and Consumer Sciences (2-4)

Prerequisites: Department approval, agency/business acceptance, 23 units in FSCS master's degree program. Supervised experience at supervisory level; four hours per week required for

each unit. May be repeated to maximum of 6 units *combined 495, 595, 597, 598, 599 units may not exceed 15. Graded CR/NC.*

597 Graduate Research (1-4)

Prerequisites: FSCS 577, instructor consent to act as sponsor, department approval of project before registration. Independent research under faculty guidance. May be repeated to maximum 8 units; *combined 597/598 units may not exceed 12 units; combined 595, 597, 598, 599 units may not exceed 15. Graded CR/NC.*

598 Graduate Directed Study (1-4)

Prerequisite: FSCS 577, instructor consent to act as sponsor, department approval of topic before registration. Supervised study of advanced topics. May be repeated to maximum of 8 units; *combined 597 and 598 units may not exceed 12 units; combined 595, 597, 598, 599 units may not exceed 15.*

599 Thesis or Project (1-6)

Prerequisites: FSCS 577, seminar in thesis/project research area, 3 units of 597, advancement to candidacy, minimum 3.5 GPA, instructor consent to act as sponsor, department approval of topic before registration. Independent research resulting in thesis or project; oral thesis defense required. May be repeated to maximum of 9 units *combined 595, 597, 598, and 599 units may not exceed 15. Graded CR/NC.*

HEALTH AND NUTRITIONAL SCIENCES

School of Health and Human Services

DEPARTMENT OFFICE

Engineering and Technology A505

Phone: (213) 343-4740

The Master of Arts degree in Health Science provides advanced preparation in health sciences and safety fields including school, community, and allied health programs. It qualifies graduates for advanced leadership positions and provides the health science foundation for community college teaching positions.

The Master of Science degree in Nutritional Science is an individualized program designed to develop specialized professional competence in the selected areas of nutrition, food, or dietetics, while also providing breadth in the related areas. The program is designed for persons preparing for positions as public health nutritionists or supervisors in dietetics and food production and service, or doctoral study in nutrition and/or foods.

Graduate students seeking to qualify for the Registered Dietitian examination may complete appropriate course work and clinical experiences concurrently with requirements for the master's degree by also enrolling in the Coordinated Dietetics Program (CDP) clinical courses.

Master of Arts Degree in Health Science

Admission to the Program

Prerequisites (9 units):

HS	350	Health Maintenance Problems	(3)
HS	360	Selecting Health and Medical Services and Products	(3)
HS	463	National and International Health Problems	(3)

Applicants must have a baccalaureate from an accredited institution with sufficient courses in health science and the basic sciences to provide a foundation for advanced work. In addition, applicants must have a 2.75 grade point average in the last 90 quarter units or have demonstrated ability to earn a B (3.0) grade point average at the post baccalaureate level.

Requirements for the Degree (45 units)

A total of 45 units is required, with at least 23 in 500-level courses.

Required Courses (14 units):

HS	530	Research Design in Health Science	(4)
----	-----	-----------------------------------	-----

HS	560	Administration of Health Science Education	(3)
HS	580	Seminar: Health Science Research	(4)
HS	591	Advances in Health Science Education	(3)

Electives (select 16-30 HS units with adviser approval)

Electives in related fields (select 0- 14 units with adviser approval)

Comprehensive Examination or Thesis or Project (0, 6 units)

HS	596	Comprehensive Examination	(0) and
HS	598	Graduate Directed Study	(1-4) or
HS	599	Thesis or Project	(6)

Students should expect to take the comprehensive examination (HS 596) the quarter they complete all course work on their program and must comply with school and departmental requirements.

Master of Science Degree in Nutritional Science

Admission to the Program

In addition to university requirements for admission to graduate study, applicants must possess a baccalaureate from an accredited university. Applicants must have a 2.75 grade point average in the last 90 quarter units. Graduates with a related major may enter the program but must complete 30 quarter units of FSCS courses that are corequisite to the program including NTRS 210 and 317 and related corequisites CHEM 151 and 152. Corequisites must be approved by the department graduate studies committee.

Requirements for the Degree (45 units)

A total of 45 units is required, with at least 23 in 500-level courses. The program requires a minimum of 5 courses, excluding those devoted to seminars, directed study, research, or a thesis, from at least 2 of the following 3 areas: nutrition, food, and dietetics.

Required Courses (19 units):

NTRS	519	Seminar: Nutrition, Food, and Dietetics	(3)
FSCS	577	Research Concepts in Home Economics	(4)
FSCS	597	Graduate Research	(4)

Select one from following (4 units):

NTRS	510	Research Methodology in Food	(4) or
NTRS	511	Research Methodology in Nutrition	(4) or
NTRS	512	Research Methodology in Dietetics	(4)

Select one from following (4 units):

NTRS	513	Advanced Problems in Nutrition	(4) or
NTRS	514	Advanced Problems in Food	(4) or
NTRS	515	Advanced Problems in Dietetics	(4)

Electives (11-26 units):

Select FSCS courses with approval of adviser and department graduate studies committee.

Electives in Related Fields (0-9 units):

Select with approval of adviser and department graduate studies committee.

Comprehensive Examination or Thesis or Project (0, 6 units)

FSCS	596	Comprehensive Examination	(0) or
FSCS	599	Thesis or Project	(6)

Students should expect to take the comprehensive examination (FSCS 596) the quarter they complete all course work on their program and must comply with school and departmental requirements.

Courses in Health Science (HS)

400-level Courses

All 400-level courses may be applied toward master's degree requirements except the following, subject to limits established by the department and approval of the graduate adviser:
HS 401

Graduate Courses

Classified graduate standing is required for admission.

530 Research Design in Health Science (4)

Prerequisite: A four-unit, upper division statistics course. Examination of research methodology within a conceptual framework of health science; utilization of the tools of research.

540 Analysis of Health Care Delivery Systems (4)

National and international health care delivery systems, their historical development, objectives, designs, systems components; personnel, facilities, financing, and utilization problems; future patterns in health care delivery systems. Field visits may be required.

550 Health and Safety Risk Management (4)

Component analysis of health facility and industrial risk management programs; evaluation and implementation techniques with review strategies. Data and functions for programs as integral part of quality assurance system.

560 Administration of Health and Safety Education (3)

Organization, content, and evaluation of health and safety education programs; administration and supervision in official and non official agencies.

570 Health Appraisal and Guidance (4)

Developing skills in recognizing health problems; choosing appropriate procedures for screening programs; implementation of appraisal findings through appropriate health guidance techniques.

580 Seminar: Health Science Research (4)

Prerequisite: HS 591. Analysis of and research in health science.

591 Advances in Health Education (3)

Prerequisite: HS 530. Analysis of selected contemporary problems in health science.

595 Field Study in Health Science (1-6)

Prerequisites: Departmental approval, agency acceptance. Supervised individual field experience in an applied area of health or safety. May be repeated to maximum of 8 units. Grade *CR/NC*.

597 Graduate Research (1-6)

Prerequisites: Instructor consent to act as sponsor, departmental approval of project prior to registration. Independent research under guidance of the faculty. May be repeated to maximum of 6 units. Graded *CR/NC*.

598 Graduate Directed Study (1-4)

Prerequisite: Instructor consent to act as sponsor. Independent study of advanced topics in field; regular conferences with sponsor. May be repeated to maximum of 6 units.

599 Thesis or Project (1-6)

Prerequisites: Instructor consent to act as sponsor, departmental approval of topic prior to registration. Independent research resulting in a thesis or project. Must be repeated to maximum of 6 units. Graded *CR/NC*.

Courses in Nutritional Sciences (NTRS)**400-level Courses**

All 400-level courses may be applied toward master's degree requirements except the following, subject to limits established by the department and approval of the graduate adviser.' NTRS
419ABC, 419S, 479

510 Research Methodology in Food (4)

Prerequisite: NTRS 410. Research problems in food. Lecture 2 hours, laboratory 6 hours.

511 Research Methodology in Nutrition (4)

Prerequisite: NTRS 417A. Research problems in nutrition. Lecture 2 hours, laboratory 6 hours.

512 Research Methodology in Dietetics (4)

Prerequisite: NTRS 415AB. Research problems in dietetics. Lecture 2 hours, laboratory 6 hours.

513 Advanced Problems in Nutrition (4)

Prerequisite: NTRS 417ABL. Contemporary problems in nutrition.

514 Advanced Problems in Food (4)

Prerequisite: NTRS 410. Contemporary problems in food.

515 Advanced Problems in Dietetics (4)

Prerequisites: NTRS 410, 415AB, 417ABL. Contemporary problems in dietetics.

519 Seminar: Nutrition, Food, and Dietetics (3)

Prerequisites: FSCS 577, 8 units of 400- or 500-level courses in nutrition and foods. Selected topics in nutrition, food, and dietetics.

NURSING_

School of Health and Human Services

DEPARTMENT OFFICE

Simpson Tower F417

Phone: (213) 343-4700

The Master of Science degree in Nursing provides advanced study in the following five areas:

- * Nursing Administration
- * Nursing Education
- * Clinical Nurse Specialization (Adult, Parent-Child, Psychiatric Mental Health)
- * Home Health Care Administration
- * Nurse Practitioner: Obstetrics-Gynecology

Advanced clinical study also is provided in adult nursing, family nursing, or home health care nursing. Field study assignments are directed toward meeting individual goals of students relative to their clinical specialization and functional interest.

Students seeking the credential to teach nursing in community colleges should consult the Coordinator of Community College Education in the School of Education and an adviser in the Department of Nursing.

The Master of Science degree in Nursing is accredited by the National League for Nursing.

Master of Science Degree

Admission to the Program

- * Applicants must fulfill the following prerequisites and criteria:
- * Equivalent of requirements for Bachelor of Science degree in Nursing from an NLN-accredited program in effect at the time of admission as a graduate;
- * Minimum B (3.0) grade point average in upper division nursing courses or permission of the departmental graduate studies committee;
- * 2.75 grade point average in the last 90 quarter units attempted;
- * Minimum of 4 quarter units in an upper division statistics course, which may be taken concurrently with NURS 500 or electives;
- * NURS 390 or equivalent (prerequisite to NURS 500);
- * Malpractice insurance for professional nursing practice.

Admission to Accelerated Master's Program

I. Admission Requirements for RNs with a Non-Nursing Baccalaureate

- * A baccalaureate from an accredited institution with a major other than nursing
- * An A.A. or A.S. degree in Nursing from an accredited college or an NLN-accredited diploma program;
- * Completion of current B.S. degree in Nursing course prerequisites;
- * Eligibility for university admission in conditionally classified graduate standing;
- * A minimum 2.75 grade point average in the last 90 quarter units attempted; and
- * Current licensure to practice nursing in California and malpractice insurance.
- * To continue in the accelerated program, students must:
 - * complete one year of clinical employment as an RN before they may enroll in NURS 345; and
 - * Maintain a *minimum* B (3.0) grade point average in required upper division nursing courses to qualify for classified graduate standing.

Baccalaureate Course Requirements

(a bachelor's degree is conferred in this accelerated masters degree program only to students who fulfill current general education requirements)

Required in Related Fields (53 units)

ANTH	444	Medical Anthropology	(4)
BIOL	200AB	Human Anatomy and Physiology I, II	(5, 5)
CHEM	151, 152	Fundamentals of Chemistry I, II	(5, 5)
ENGL	190	Freshman Composition: Explanation	(4)
*FSCS	317	Fundamentals of Human Nutrition	(3)
**MICR	201	Microbiology for Health Related Sciences	(4)
**MICR	202	Microbiology Laboratory for Health Related Sciences	(2)
PSY	150	Introduction to Psychology	(4)
SOC	201	Principles of Sociology	(4)
SPCH	150	Oral Communication	(4)

Any upper division statistics course of 4 units or more

* *Students entering with 3 or more semester units (4 1/2 quarter units) of credit for a course in general nutrition from an accredited college or diploma program satisfy this requirement by transfer credit.*

* * *Students entering with 4 or more semester units (6 or more quarter units) of credit from an accredited college for a course including laboratory satisfy this requirement by transfer credit.*

Required in Nursing (80 units)**Lower Division Required Courses (44 units):**

Lower division required courses are met by 44 quarter units of transfer credit granted by the Department of Nursing.

R.N. students may enroll in NURS 342-343 and/or the last natural science course concurrent with the first quarter of 300-level nursing courses.

Upper Division Required Courses (30 units):

NURS	302	Coping with Chronic Illness and Aging	(3)
NURS	304	Coping with Selected Problems of Illness and Disability	(3)
NURS	342	Nursing Process: Self-Care	(2)
NURS	343	Nursing Process: Self-Care Laboratory	(1)

NURS 344	Coping with Loss	(3)
NURS 345	Nursing Process Laboratory: Home Health Care	(3)
NURS 372	Physical Assessment	(3)
NURS 373	Physical Assessment Laboratory	(1)
NURS 390	Introduction to Nursing Research	(4)
NURS 470	Family and Community Health Assessment	(4)
NURS 471	Family and Community Health Assessment Laboratory	(3)

Clinical electives (6 units):

Select two courses, a lecture with a respective concurrent laboratory, from the list of clinical electives below. Completion of specified 300-level courses is prerequisite to enrollment in clinical electives.

- NURS 400+401
- NURS 442+443
- NURS 403+404
- NURS 456+457
- NURS 430+431
- NURS 474+475A or 475B

II. Admission Requirements for RNs without a Baccalaureate

- * An A.A. or A.S. degree in Nursing from an accredited college or an NLN-accredited diploma program with a minimum 2.75 grade point average
- * Completion of current B.S. degree in Nursing course prerequisites
- * Current license to practice nursing in California; and malpractice insurance for professional nursing practice

To qualify for classified graduate standing, students pursuing this accelerated program must:

- * Complete one year of clinical employment as an RN
- * Complete all required baccalaureate nursing courses
- * Maintain a minimum B (3.0) grade point average in required upper division nursing courses

Requirements for the Bachelor's Degree Major

A total of 186 units is required for the Bachelor of Science degree in Nursing, which is conferred concurrently with the Master of Science degree in Nursing.

Required in Related Fields (53 units)

ANTH 444	Medical Anthropology	(4)
BIOL 200AB	Human Anatomy and Physiology I, II	(5, 5)
CHEM 151. 152	Fundamentals of Chemistry I, II	(5, 5)
ENGL 190	Freshman Composition: Explanation	(4)
*FSCS 317	Fundamentals of Human Nutrition	(3)
**MICR 201	Microbiology for Health Related Sciences	(4)
**MICR 202	Microbiology Laboratory for Health Related Sciences	(2)
PSY 150	Introduction to Psychology	(4)
SOC 201	Principles of Sociology	(4)
SPCH 150	Oral Communication	(4)

Any upper division statistics course of 4 units or more

* Students entering with 3 or more semester units (4 1/2 quarter units) of credit for a course in general nutrition from an accredited college or diploma program satisfy this requirement by transfer credit.

** Students entering with 4 or more semester units (6 or more quarter units) of credit from an accredited college for a course including laboratory satisfy this requirement by transfer credit.

Required In Nursing (83 units)**Lower Division Required Courses (44 units):**

Lower division required courses are met by 44 units of transfer credit granted by the Department of Nursing.

R.N. students may enroll in NURS 342-343 and/or the last natural science course concurrent with the first quarter of 300-level nursing courses.

Upper Division Required Courses (33 units):

NURS 302	Coping with Chronic Illness and Aging	(3)
NURS 303	Nursing Process Laboratory: Chronicity and Aging	(3)
NURS 304	Coping with Selected Problems of Illness and Disability	(3)
NURS 342	Nursing Process: Self-Care	(2)
NURS 343	Nursing Process: Self-Care Laboratory	(1)
NURS 344	Coping with Loss	(3)
NURS 345	Nursing Process Laboratory: Home Health Care	(3)
NURS 372	Physical Assessment	(3)
NURS 373	Physical Assessment Laboratory	(1)
NURS 390	Introduction to Nursing Research	(4)
NURS 470	Family and Community Health Assessment	(4)
NURS 471	Family and Community Health Assessment Laboratory	(3)

Clinical electives (6 units):

Select two courses, a lecture with a respective concurrent laboratory, from the list of clinical electives below. Completion of all required 300-level courses is prerequisite to clinical electives.

NURS 400+401
 NURS 442+443
 NURS 403+404
 NURS 456+457
 NURS 430+431
 NURS 474+475A or 475B

Requirements for the Master's Degree (4554 units)

A total of 45-54 units is required, with at least 23-27 in 500-level courses.

Required Core (16 units)

NURS 500	Nursing Research Evaluation	(4)
NURS 590	Seminar: Methodology of Nursing Research	(4)
NURS 592	Seminar: Nursing Theories	(4)
NURS 594	Advanced Study of Issues and Trends in Nursing	(4)

Advanced Clinical Area(7 units)

Select *one* of following nursing seminars:

NURS 504	Seminar: Adult Nursing	(4) or
NURS 574	Seminar: Family Nursing	(4) or
NURS 581	Seminar: Home Health and Community Systems	(4) and
**NURS 595	Advanced Field Study	(3)

** *Must be taken with each seminar*

Functional Area/Specialty Area (7-20 units)

Select one of following areas:

NURSING ADMINISTRATION (7 units)

NURS 562	Human Resource Utilization in Health Care Organizations	(2)
NURS 564	Seminar: Health Care Administration	(2)
**NURS 595	Advanced Field Study	(3)
<i>** Must be taken with NURS 564</i>		

NURSING EDUCATION (7 units)

NURS 560	Development of Educational Programs in Nursing	(4)
**NURS 595	Advanced Field Study	(3)
<i>** Must be taken with NURS</i>		<i>560</i>

CLINICAL SPECIALTY (20 units)

Required Course (2 units)

NURS 568	Clinical Nurse Specialty: Role Development	(2)
----------	--	-----

Select one sequence from following (18 units):

NURS 506A	Seminar: Advanced Theoretical Foundations of Adult Care	(2) plus
NURS 506B	Seminar: Advanced Clinical Assessment of the Adult	(2) plus
NURS 506C	Seminar: Advanced Adult Patient Management	(2) or
NURS 520ABC	Seminar: Parent-Child Nursing	(2,2,2) or
NURS 542ABC	Seminar: Psychiatric/Mental Health Nursing	(2, 2, 2) plus
**NURS 595	Advanced Field Study	(4, 4, 4)

*** Must be taken with NURS506ABC, 520ABC, and 542ABC and in quarter(s) following for a total of 12 units.*

HOME HEALTH CARE ADMINISTRATION (14 units)

NURS 582	Seminar: Home Health System Management	(4)
NURS 583	Seminar: Home Health Care Administration	(4)
**NURS 595	Advanced Field Study	(3, 3)
<i>** Must be taken with NURS 582 and 583</i>		

NURSE PRACTITIONER: OBSTETRICS GYNECOLOGY (20 units)

NURS 432	Assessment and Management of Obstetric Health	(4)
NURS 433	Obstetric Health Care Laboratory for Nurse Practitioners	(4)
NURS 436	Assessment and Management of Gynecologic Health	(4)
NURS 437	Gynecological Health Care Laboratory for Nurse Practitioners	(4)
NURS 472	Physical Assessment for Nurse Practitioners	(4)

Additional Professional (CA BRN Credit)

Requirements (26 units)

Electives (*select 6-15 units with adviser approval*):

Completion of a minimum of 6 units of electives is required. If a thesis is not conducted, students selecting either a clinical or nurse practitioner specialty area must complete a minimum of 11 elective units.

Comprehensive Examination or Thesis or Project (0, 5 units)

NURS 596	Comprehensive Examination	(0) or
NURS 597	Graduate Research	(2) plus
NURS 599	Thesis or Project	(3)

Students who select the comprehensive examination (NURS 596) should take the four sub examinations one to two quarters after they complete all required nursing courses and must comply with school and departmental requirements.

Students who elect the thesis or project option (NURS 599) must complete 2 units of NURS 597 prior to the required 3 units of NURS 599.

Health Services Credential: School Nurse Services

State of California credential requirements for a clear Health Services credential include a fifth year of study, completed after the baccalaureate. The fifth year consists of a minimum of 45 quarter units beyond the baccalaureate for a Professional Credential in Health Services for School Nurse. This program leads to certification as a school nurse for professional employment in California public schools.

School nurse candidates must be employed as a school nurse in the California public schools for two years full-time or the equivalent in part-time employment under the supervision of a credentialed school nurse. Candidates must request letters of recommendation from their immediate supervisors confirming employment and satisfactory performance. Candidates must also have a supervised, guided, and evaluated clinical practicum with a credentialed school nurse preceptor in elementary, secondary, and special education program settings with multi-cultural and multi-ethnic individuals.

Requirements for the Credential(45 units)

Required Courses (36-37 units):

NURS	372	Physical Assessment	(3)
NURS	373	Physical Assessment Clinical Laboratory	(1)
NURS	423	Nursing in School Health Programs Clinical Laboratory	(6)
NURS	426	Nursing Management in Public Schools	(4)
NURS	428	Nursing Assessment in Public Schools	(4)
COMD	440	School Audiometry	(4)
COUN	480	Fundamentals of Counseling	(4) or
NURS	442	Assisting Strategies in Psychosocial Nursing	(3) or
NURS	456	Crisis Theory: Mental Health Promotion	(3)
EDSP	400	Education and Psychology of Exceptional Individuals	(4)
HS	456	Health Studies on Alcohol, Narcotics, Nutrition, and Tobacco	(4)
HS	490	Administration of School Health Programs	(3)

Required Electives

Students select the remainder of the courses from at least two disciplines on the list below to allow flexibility in meeting individual professional needs and goals for their own specific public school nurse practice.

Selected Electives

NURS 430, 442, 456, 460, 462, 464, 488, 490, 590
 ANTH 443, 444
 ART 410
 CHDV 420
 CHDV/FSCS 425
 COMD 400, 401, 402, 457
 COUN 403, 405A, 406, 460
 CRIM 439
 EDAD 509, 510
 EDFN 438, 452
 EDIT 452, 453, 456
 EDSP 408, 412, 430, 431AB, 440, 460, 462, 465, 515
 FSCS 423

HS 401,444, 455, 460
HS/NURS 482
NTRS 413, 416
PHIL 491
PSY 403, 412A, 412B
SW 456, 476
SOC 425, 460, 482
SPCH 489

Four units selected from: CHIN 100ABC, 101ABC, SPAN 110

Courses in Nursing (NURS)

400-level Courses

All 400-level courses may be applied toward master's degree requirements, subject to limits established by the department and approval of the graduate adviser.

Graduate Courses

Classified graduate standing is required for admission.

500 Nursing Research Evaluation (4)

Prerequisite: NURS 390. Critique of selected nursing studies; research problems, theories, designs, and instruments; alternative interpretations of findings explored.

504 Seminar: Adult Nursing (4)

Prerequisite: NURS 592; corequisite: NURS 595. Investigation of approaches to theory/research utilization in construction and evaluation of educative-supportive systems of nursing assistance for selected self-care deficits common to adults with major health deviations.

506A Seminar: Advanced Theoretical Foundations of Adult Care (2)

Prerequisites: NURS 372, 373, 400, 404, 504, appropriate clinical experience; corequisite: NURS 595. Theories and research related to pathophysiological dysfunction and human responses to illness using hospitalized adult patients with acute, potentially progressive, or complicated chronic health-related difficulties.

506B Seminar: Advanced Clinical Assessment of the Adult (2)

Prerequisite/corequisite: NURS 506A; corequisite: NURS 595. Advanced comprehensive assessment of acutely or chronically ill hospitalized adult patients.

506C Seminar: Advanced Adult Patient Management (2)

Prerequisite or corequisite: NURS 506B; corequisite: NURS 595. Advanced adult patient management and other collaborative strategies used by clinical nurse specialists in acute health care setting.

520ABC Seminar: Parent-Child Nursing (2, 2-2)

Prerequisites: NURS 574, instructor consent; corequisite: NURS 595. Theoretical approach to health care of families with healthy infants, children, and adolescents and those experiencing developmental problems, illness, child abuse and neglect, and death.

542ABC Seminar: Psychiatric Mental Health Nursing (2, 2, 2)

Prerequisite: NURS 574; corequisite: NURS 595. Study and analysis of theories of psychotherapy, family therapy and group therapy; development of eclectic models; application of appropriate models to development of psychiatric/mental health nursing interventions.

560 Development of Educational Programs in Nursing (4)

Prerequisites: NURS 592, EDFN 510. Growth and development of educational programs in nursing; conceptual models for organization of professional and technical curricula; models for career mobility; and criteria for accreditation.

562 Human Resource Utilization in Health Care Organizations (2)

Analysis of procedures in health care personnel practices: licensure, recruitment, hiring, staffing, continuing education, performance evaluation, incentive plans; changing roles among health care personnel.

564 Seminar: Health Care Administration (2)

Corequisite: NURS 595. Administrative issues in health care settings: goal complexity, power distribution, administrative-professional conflict, decision making process, introduction of change; systems concept as assessment tool; interdependence of management team members in a health agency.

568 Clinical Nurse Specialty: Role Development (2)

Prerequisite: NURS 504 or 574. Clinical, educational, consultative, and research role components of clinical nurse specialist examined within various clinical settings.

574 Seminar: Family Nursing (4)

Prerequisite: NURS 592; corequisite: NURS 595. Evaluation of theoretical perspectives and models appropriate for working with families, including utilization of family research in clinical assessment generation of intervention strategies within health care setting.

581 Seminar: Home Health and Community Systems (4)

Prerequisite: NURS 592; corequisite: NURS 595. Advanced concepts in home health and community systems within which patient/family systems operate and interact; analysis of systems, their functions, and regulatory constraints.

582 Seminar: Home Health System Management (4)

Prerequisite: NURS 581; corequisite: NURS 595. Management and leadership theories and application in home health care organization including decision-making, contingency model, leadership, effective human resource management, and productivity.

583 Seminar: Home Health Care Administration (4)

Prerequisite: NURS 582; corequisite: NURS 595. Administrative role for reducing environmental uncertainties for home health care organization; emphasis on providing appropriate structure, financial planning, budgetary concerns, human resource issues, and organizational effectiveness.

590 Seminar: Methodology of Nursing Research (4)

Prerequisites: NURS 504 or 574. Concepts and issues related to research design and measurement; development of hypothetical nursing research projects.

592 Seminar: Nursing Theories (4)

Prerequisites: NURS 500, instructor consent. Major theories underlying nursing practice/research, curriculum development.

594 Advanced Study of Issues and Trends in Nursing (4)

Advanced study of the nursing profession's progress within a context of social criticism and change; designed to advance graduate student knowledge and conceptualization of nursing leadership and practice.

595 Advanced Field Study (2-6)

Corequisites: NURS 581-583; one NURS seminar selected from 504, 506ABC, 520ABC, 542ABC, 560, 564, and 574 or enrollment in MS-Health Care Management program. Experience in specialized clinical and functional areas assigned on an individual basis. Weekly tutorial sessions required for student-teacher synthesis of data from concurrent seminar and field experience. Graded *CR/NC*.

597 Graduate Research (1-4)

Prerequisites: NURS 590, instructor consent to act as sponsor. Independent research under guidance of faculty sponsor. May be repeated for credit. Grade *CR/NR* only.

598 Graduate Directed Study (1-4)

Prerequisite: Instructor consent to act as sponsor. Directed study of advanced topics in field; regularly scheduled conferences with sponsor. May be repeated to maximum of 8 units.

599 Thesis or Project (1-3)

Prerequisites: Advancement to candidacy, two units of NURS 597, instructor consent to act as sponsor, departmental approval of topic prior to registration. Independent research resulting in a thesis or project. Must be repeated to maximum of 3 units. Grade *CR/NC*.

PHYSICAL EDUCATION**School of Health and Human Services****DEPARTMENT OFFICE**

Physical Education 206

Phone: (213) 343-4650

The Master of Arts degree in Physical Education is designed to provide teachers and other practitioners with experience in analyzing critically the problems in testing and programming in exercise facilities, and teaching physical education programs in schools. It adds depth to the professional preparation of leaders in the field and serves as a basis for further study. Students elect one of three areas of specialization: Administration and Instruction, Exercise Science, or General Physical Education. The specific courses included in the master's degree program to develop the area of emphasis must be selected with the approval of the principal graduate adviser.

Master of Arts Degree in Physical Education Admission to the Program

Applicants must have adequate undergraduate preparation in physical education and a minimum 2.75 grade point average in the last 90 quarter units.

Requirements for the Degree (45 units)

A total of 45 units is required, with at least 23 in 500-level courses. PE 401 (4 units) is required of all students for advancement to candidacy. Students in the Exercise Science area of specialization must also take PE 470. PE 502 is prerequisite or corequisite to all other 500-level courses in physical education, and must be taken in the first quarter of enrollment in 500-level courses.

Required Courses (9 units):

PE	502	Seminar: Research in Current Literature	(3)
PE	504	Seminar: Historical and Philosophical Bases of Physical Education	(3)
PE	506	Seminar: Current Issues in Physical Education and Sport	(3)

Area of Specialization

Select one of the following areas of specialization (12-13 units).

*** Administration and Instruction (12 units)**

Select 12 units from following:

PE	511	Seminar: Administration of Physical Education	(3)
PE	512	Seminar: Concepts of Lifetime Sports Programs	(3)
PE	515	Seminar: Program Planning in Physical Education	(3)
PE	516	Seminar: Administration of Intramural Programs	(3)
PE	517	Seminar: Administration of Athletic Programs	(3)

*** Exercise Science (12-13 units)**

Required Course (3 units):

PE	520	Experimental Design in Physical Education	(3)
----	-----	---	-----

Select 3 courses from following (9-10 units):

PE 521, 522, 524, 528, 532, 535, 536, 547.

Electives:

PE	547	Seminar: Selected Topics in Physical Education and Human Performance	(3-4)
----	-----	--	-------

*** General Physical Education (12-13 units)**

With adviser approval, select PE courses from the above two areas of specialization.

Electives (select 18-24 units with adviser approval)

Comprehensive Examination or Thesis or Project (0, 5 units)

PE	596 C	comprehensive Examination	(0) or
PE	599	Thesis or Project	(5)

Students who select the comprehensive examination (PE 596) may take it in their last quarter of course work, or in any subsequent quarter it is offered, and must comply with school and departmental requirements. The comprehensive examination consists of two parts, one covering the required area and the other covering the student's area of specialization. Students are responsible for the material covered in all courses in the area of specialization except special topics courses.

Courses in Physical Education (PE)

400-level Courses

All 400-level courses may be applied toward master's degree requirements except the following, subject to limits established by department and approval of graduate adviser: PE 498, 499

Graduate Courses

Classified graduate standing is required for admission.

502 Seminar: Research in Current Literature (3)

Prerequisite: Undergraduate major or minor in physical education. Analysis, evaluation, and interpretation of research studies and investigation in physical education.

504 Seminar: Historical and Philosophical Bases of Physical Education (3)

Prerequisite or corequisite: PE 502. Critical analysis of student's philosophy of physical education through study of history, purposes, values, basic beliefs, and programs of physical education.

506 Seminar: Current Issues in Physical Education and Sport (3)

Prerequisite or corequisite: PE 502. Advanced study of selected contemporary issues in physical education and sport; professional implications.

511 Seminar: Administration of Physical Education (3)

Prerequisite or corequisite: PE 502. Theory and practice of administration of physical education departments at elementary, secondary, and college levels.

512 Seminar: Concepts of Lifetime Sports Programs (3)

Prerequisite or corequisite: PE 502. Concepts of establishing and maintaining programs of lifetime sports in educational settings.

515 Seminar: Program Planning in Physical Education (3)

Prerequisite or corequisite: PE 502. History, background, philosophy, and current types of instructional programs in physical education at elementary and secondary school levels; methods of planning functional physical education curricula.

516 Seminar: Administration of Intramural Programs (3)

Prerequisite or corequisite: PE 502. Organization and administration of intramural programs at elementary, secondary, and higher education levels.

517 Seminar: Administration of Athletic Programs (3)

Prerequisite or corequisite: PE 502. Organization and administration of athletic programs at secondary and university levels.

520 Experimental Design in Physical Education (3)

Prerequisites: PE 439; 502 (may be taken concurrently). Applications of experimental design procedures to physical education; emphasis on practical approaches to communication of research findings, including on-line computer analysis.

521 Seminar: Physical Conditioning (3)

Prerequisite or corequisite: PE 502. Various methods of physical conditioning for physical education programs at elementary, secondary, and college levels. Lecture 2 hours, laboratory 3 hours.

522 Seminar: Exercise in Stressful Environments (3)

Prerequisites: PE 400B; 502 (maybe taken concurrently). Capacity to exercise in environments of heat, cold, air pollution, altitude, air and water pressure; adaptation techniques during exercise.

524 Seminar: Advanced Kinesiology (3)

Prerequisite or corequisite: PE 502. Anatomical and mechanical characteristics of complex human motor skills.

528 Seminar: Motor Learning (3)

Prerequisite or corequisite: PE 502. Nature, bases, and characteristics of human movement and acquiring of motor skills.

532 Concepts of Sensory-Motor Processes (4)

Prerequisites: PE 450; 502(*may be taken concurrently*). Neurophysiological concepts of sensory-motor processes; theoretical models, assessment techniques, practical applications for exceptional individuals. Lecture 3 hours, laboratory 2 hours.

535 Leadership Perspective of Adapted PE (3)

Prerequisite or corequisite: PE 502. Advanced techniques for staff, program, curriculum development in adapted physical education; effect of current legislation on role of adapted physical educator; design and development of curricular materials; staff development.

536 Seminar: Problems in Adapted PE (3)

Prerequisites: PE 450; 502 (may be taken concurrently). Individual investigation of problems in administration, supervision, instruction, curriculum, evaluation of adapted physical education.

547 Seminar: Selected Topics in Physical Education and Human Performance (3-4)

Advanced study of selected contemporary topics in physical education and human performance. May be repeated to maximum of 12 units as topic changes.

598 Graduate Directed Study (1-3)

Prerequisites: PE 502, instructor consent to act as sponsor. Independent study of advanced topics in field; regular conferences with sponsor. May be repeated to maximum of 9 units. Graded *CR/NC*.

599 Thesis or Project (1-5)

Prerequisites: Advancement to candidacy, instructor consent to act as sponsor. Independent research resulting in a thesis or project. Must be repeated to maximum of 5 units. Graded *CR/NC*.

SCHOOL OF NATURAL AND SOCIAL SCIENCES**GRADUATE COORDINATOR'S OFFICE**

King Hall D1051

Phone: (213) 343-2005

Graduate Writing Skills Requirement

The policy governing the Graduate Writing Skills Requirement for the School of Natural and Social Sciences differs somewhat from the overall university policy. The school policy is as follows:

All students admitted to a graduate program in the School of Natural and Social Sciences who have not passed UNIV 400, the Writing Proficiency Examination (WPE), before beginning their graduate studies are encouraged to take the examination in their first quarter in residence as postbaccalaureate students. Students must pass the WPE before the end of their second quarter in residence as postbaccalaureate students. Those who do not pass the WPE before the end of their second quarter in residence will be suspended from further work on their programs until they have passed the examination.

Students who are applying for admission by special action to a graduate program in the School of Natural and Social Sciences must pass the WPE before submitting their application for admission by special action.

Graduate students who are readmitted to a graduate program within the School of Natural and Social Sciences at Cal State L.A. after a break in residence and who have not passed the WPE must pass the exam in their first quarter in residence after readmission to the program or they will be suspended from further work on their program until they have passed the exam.

The Cal State L.A. Writing Proficiency Examination may not be waived for graduate students admitted to programs in the School of Natural and Social Sciences even if they have satisfied a writing proficiency requirement at another institution.

ANTHROPOLOGY_**School of Natural and Social Sciences****DEPARTMENT OFFICE**

King Hall C4068

Phone: (213) 343-2440

The M.A.-Anthropology degree provides training in five areas: culture theory, ethnography, archeology, linguistics, and physical anthropology.

Master of Arts *Degree***Admission to the Program**

Applicants must have a baccalaureate in Anthropology and a 2.75 grade point average in the last 90 quarter units attempted or a B (3.0) grade point average in anthropology courses. Those whose undergraduate major was not Anthropology must complete 20-32 units in anthropology, including ANTH 497, with a B average. Students' actual number of units required is determined in a qualifying conference during their first quarter of postbaccalaureate study.

Requirements for the Degree (45 units)

A total of 45 units is required, with at least 23 in 500-level courses.

Language, Linguistic, or Statistics Proficiency

All students must have a reading or speaking knowledge of a relevant research language or demonstrate proficiency in the linguistic analysis of a language approved by the department or in statistics. Students must satisfy this requirement before they may attempt the comprehensive examination or submit a thesis. Language proficiency is demonstrated by passing a foreign language reading examination administered by the Department of Foreign Languages and Literatures. Statistics proficiency is demonstrated by a B or higher grade in POLS 480, PSY 414, or SOC 410.

Required Courses (8 units):

ANTH 510AB Seminar: Anthropological Theory and Analysis (4, 4)
(grade B or better required for continuance in program)

Electives (31-37 units):

Select from 400- and 500-level anthropology courses, including at least four different 500-level courses. A maximum of 8 units in a related field may be included with prior adviser consent. Total must include 6 units of ANTH 599 if thesis option is elected.

Comprehensive Examination or Thesis (0, 6 units)

ANTH 596 Comprehensive Examination (0) or
 ANTH 599 Thesis (6)

Students who select the comprehensive examination (ANTH 596) should expect to take it no earlier than the quarter they complete all course work on their program and must comply with school and department requirements. Examinations are required in culture theory and two of the following areas: archeology, ethnography, linguistics, physical anthropology. Students who write a thesis must have successive enrollments in ANTH 599 for a total of 6 units.

Courses in Anthropology (ANTH)**400-level Courses**

All 400-level courses may be applied toward master's degree requirements except the following, subject to limits established by department and approval of graduate adviser: ANTH 454L, P, 497

Graduate Courses

Classified graduate standing is required for admission.

501 Seminar: Ethnography (4)

Prerequisites: Graduate standing in a social science major, instructor consent. Selected topics in major world areas, as announced in *Schedule of Classes*. May be repeated for credit to maximum of 8 units for different areas.

510AB Seminar: Anthropological Theory and Analysis (4, 4)

Advanced consideration of problems involved in application of anthropological theory to cultural data; limitations of contemporary analytical methods.

520 Seminar: Archeology (4)

Prerequisite: ANTH 421, 424, or 425. Archaeological theory, method, and relationship of archaeological materials to central problems of anthropology. May be repeated once for credit.

530 Seminar: Social Organization (4)

Prerequisite: Classified graduate standing in Anthropology. Problems and theories of contemporary social anthropology. May be repeated once for credit.

560 Seminar: Physical Anthropology (4)

Prerequisite ANTH 461 or 462. Problems and theories of contemporary physical anthropology. May be repeated once for credit.

570 Seminar: Language and Culture (4)

Prerequisites: Sixteen units of ANTH courses, including 470 or 471. Advanced study of concepts of language and culture; use of linguistic data and methods in anthropology; relationships between linguistic and nonlinguistic behavior; linguistic models. May be repeated for credit.

580 Methods in Ethnography (5)

Prerequisite: Classified graduate standing in Anthropology. Advanced principles and methods concerned with ethnographic field work; techniques of gathering, reporting, and interpreting field data relating to research problems and design. May be repeated once for credit. Lecture 3 hours, laboratory and field work 6 hours.

594 Seminar: Problems in Cultural Anthropology (4)

Prerequisite: Classified graduate standing in Anthropology. Problems and theories of contemporary cultural anthropology. May be repeated once for credit.

598 Graduate Directed Study (1-3)

Prerequisite: Instructor consent to act as sponsor. Independent study of advanced topics in field; regular conferences with sponsor. May be repeated to maximum of 6 units.

599 Thesis (1-3)

Prerequisites: Advancement to candidacy, instructor consent to act as sponsor, departmental approval of topic prior to registration. Independent research resulting in a thesis. Must be repeated to total of 6 units. Graded *CR/NC*.

BIOLOGY AND MICROBIOLOGY

School of Natural and Social Sciences GRADUATE PROGRAMS OFFICE

Biological Science 140
Phone: (213)343-2030

The Master of Science degree in Biology is designed to prepare students for biological research, doctoral study, technical positions in industry and government agencies, and community college teaching. Graduate students may pursue the degree in any of the following areas of specialization: animal behavior, animal physiology, aquatic biology, cell biology, developmental biology, ecology, electron microscopy, entomology, environmental biology, evolution, genetic engineering, genetics, histology and anatomy, invertebrate zoology, molecular biology, mycology, parasitology, physiological ecology, plant anatomy, plant physiology, plant taxonomy, tissue culture, vertebrate paleontology, or vertebrate zoology.

Master of Science Degree in *Biology*

Admission to the Program

Application to both the Department of Biology and Microbiology and the University is required. The completed departmental application, together with transcripts of all previous college work and three letters of recommendation, must be received by the department prior to the following deadlines:

- * August 1 for admission to fall quarter
- * November 1 for admission to winter quarter
- * February 1 for admission to spring quarter
- * April 1 for admission to summer quarter.

Applicants who desire a teaching assistantship must also submit three letters of recommendation by the same deadline.

Applicants are expected to possess a baccalaureate in a biological science equivalent to the Bachelor of Science degree major offered at Cal State L.A. All entering graduate students must submit GRE scores, including the Advanced Biology Exam, prior to admission to classified standing. The scores will be used for advisement and guidance in course selection. Applicants may be admitted to the degree program *inclassified* or *conditionally classified* standing. Classified standing is granted to those who have a minimum 2.75 grade point average in their last 90 quarter units attempted. Conditionally classified standing is granted to those whose grade point average in their last 90 quarter units attempted is between 2.5 and 2.74. Conditionally classified students must achieve a B (3.0) grade point average in four qualifying courses (to be approved in advance by the graduate adviser) that should be completed by the end of their second quarter of graduate study and must be among the first six courses completed.

Applicants who wish to enter the program from outside the biological science area must complete the following courses (or equivalents) to be eligible for graduate status in the Biology Department:

BIOL	101-103	Principles of Biology	(5, 5, 3)
BIOL	302	Biometrics	(4)
BIOL	315	General Genetics	(4)
BIOL	330	Cell Biology	(4)
BIOL	360	General Ecology	(4)
CHEM	101-103	General Chemistry I, II, III	(5, 5, 5)

CHEM	301ABC	Organic Chemistry	(3, 3, 3)
CHEM	302ABC	Organic Chemistry Laboratory	(2, 2, 2)
PHYS	101-103	Physics	(4, 4, 4)

Requirements for the Degree (45 units)

A minimum of 45 units is required, with at least 23 in 500-level courses. A comprehensive examination or a thesis is required. All students must take BIOL 510 (Seminar: Biology) twice during their first year in classified graduate standing. Students also must fulfill all university requirements including the Writing Proficiency Examination (WPE). All students must present a final graduate seminar.

Comprehensive Examination or Thesis (0, 1-9 units)

Students may elect either the comprehensive examination option or the thesis option.

BIOL	596	Comprehensive Examination	(0) or
BIOL	599	Thesis	(1-9 units)

* **Comprehensive Examination Option**

This option is available for students who are planning to teach high school. This option requires completion of a minimum of 22 units of 400- or 500-level courses in biology or related fields. These courses are selected in consultation with an adviser and should provide the students with the background needed to take an examination covering all major areas of biology.

This option also requires completion of 23 units of 500-level courses which may include up to 4 units of BIOL 598 (Graduate Directed Study). Students who select the comprehensive examination option should expect to enroll in BIOL 596 (Comprehensive Examination) the quarter they complete course work. The departmental graduate adviser, who coordinates and administers the comprehensive examination, gives consent to enroll in BIOL 596. For their final departmental seminar, students select a topic from the literature and present it to the department.

* **Thesis Option**

This option is recommended for students planning to pursue an advanced degree (Ph.D., M.D., D.D.S., etc.) as well as those planning careers in biology at the masters degree level. The option requires a minimum of 22 units of 400- or 500-level courses in biology or related fields. These courses are selected in consultation with an adviser and should provide the student with the necessary background for thesis research.

The option requires a minimum of two graduate seminar courses in addition to BIOL 510 and 15 units selected from the following courses:

BIOL	595	Individual Research in Gene Manipulation	(4)
BIOL	597	Graduate Research	(1-6)
BIOL	598	Graduate Directed Study	(1-6)
BIOL	599	Thesis	(1-9)

Before enrolling in BIOL 597 and 599, students prepare a research prospectus and have it approved by their examining committee and the departmental graduate studies committee. This prospectus must be approved within three quarters of the date they receive classified graduate standing in order for them to remain eligible for assistantships.

Before being awarded the M.S. degree, students must pass a final oral examination administered by the thesis committee and the Department of Biology and Microbiology and must present their thesis research at a department seminar.

Master of Science Degree in Microbiology

Two options exist within the Master of Science degree in Microbiology. Objectives of the thesis option are to prepare for continued graduate work leading to the doctorate; to train for positions in industry, university, hospital, and public health laboratories that require the master's degree; to qualify for city, state, and federal civil service positions for which the masters degree and five years of experience are required; to train prospective community college microbiology and medical technology teachers. The course option provides postgraduate training for persons who need

further academic work to advance in their field or update their training in the areas of medical technology, public health, and microbiology.

Admission to the Program

In addition to university requirements for admission to graduate study, applicants must have an undergraduate degree in Microbiology, Bacteriology, or Medical Technology with training equivalent to the department's baccalaureate program and must be accepted to the program by the department graduate studies committee. A score of 400 on either the Verbal or Quantitative section of the GRE General Test is required.

Requirements for the Degree (4.5 units)

A total of 45 units is required, with at least 23 in 500-level courses.

Required Courses (select 15 units from following):

MICR 503	Seminar: Special Topics in Microbiology	(3)
MICR 510	Microbial Genetics	(3)
MICR 520	Advanced Immunology	(3)
MICR 530	Advanced Microbial Physiology	(3)
MICR 580	Graduate Seminar: Microbiology	(1, 1, 1)
CHEM 503	Seminar: Biochemistry	(3)
CHEM 534	Seminar: Clinical Biochemistry	(3)

* Thesis Option (30 units)

Electives (15 units):

Select from 400- or 500-level courses with adviser approval.

Research and Thesis (15 units):

Thesis option candidates must submit an acceptable thesis based on research and take an oral examination in defense of the thesis.

MICR 597	Graduate Research	(4)
MICR 598	Graduate Directed Study	(4)
MICR 599	Thesis	(7)

* Course Option (30 units)

Candidates specializing in Public Health must include 18 units in three or more courses relating to environmental health aspects of food, water supplies, water oriented recreation, waste water, disposal and reclamation, occupational health, housing and institutions, vector control, solid wastes, and safety.

*Required Courses (select 30 units from following):

MICR 503, 510, 520, 530, 580

BIOL 501, 515, 537, 539

CHEM 503, 534

HS 540, 560, 580

MGMT 501, 564

NURS 562, 564

**including MICR and CHEM courses not used in core*

Comprehensive Examination (0 units)

Students should expect to take the comprehensive examination (MICR 596) the quarter they complete all course work on their program and must comply with school and department requirements.

Certificate Program in Biotechnology

This postbaccalaureate credit certificate program provides intensive theoretical and laboratory training in the techniques and application of genetic engineering and related technologies. The program is designed to prepare students for employment in industrial or academic research positions or for advanced study in molecular biology. Courses taken to fulfill certificate requirements may also be applied toward the masters degree in Biology.

The certificate program requires completion of a minimum of 26 units, taken in postbaccalaureate or graduate standing, of which 19 are in required courses and seven or more are in electives. Refer to the *Graduate Study* chapter of this catalog for general information governing all certificate programs.

Prerequisites for admission to the program:

- * Admission, in classified graduate standing, to the Department of Biology and Microbiology and the Department of Chemistry and Biochemistry;
- * Completion with a B (3.0) grade point average or higher, of the following courses or equivalents:
- * BIOL 330 Cell Biology (lecture and laboratory) or MICR 340 Microbial Genetics
- * CHEM 431ABC Biochemistry (lecture)
- * CHEM 432AB Biochemistry (laboratory)(*recommended*)

As space is available, students who have not completed these prerequisites may be admitted to a core course (see below) with the consent of the instructor, but award of the certificate is contingent upon completion of all prerequisites for the program. Students who have had neither a laboratory course in nor employment experience with sterile microbiological techniques must complete MICR 202 (Microbiology Laboratory for Health-Related Sciences-2 units) during their first quarter in the certificate program.

Requirements for the Certificate(*minimum 26 units*): *Required Core (19 units)*:

BIOL	417	Principles of Gene Manipulation	(4)
BIOL	517	Seminar: Gene Manipulation	(3)
BIOL	519	Laboratory Experiments in Gene Manipulation	(8)
BIOL	595	Individual Research in Gene Manipulation	(4)

Electives (minimum 7 units):

Select from following; include no more than 6 units in seminars.

BIOL	416	Molecular Genetics	(4)
BIOL	437	Advanced Cell Physiology	(4)
BIOL	515	Seminar: Genetics	(3)
BIOL	525	Seminar: Developmental Biology	(3)
BIOL	539	Seminar: Cell Biology	(3)
CHEM	432AB	Biochemistry Laboratory	(2, 2)
CHEM	503	Advanced Biochemistry	(3)
MICR	401	General Virology	(3)
MICR	402	Virology Laboratory	(2)
MICR	430	Bacterial Physiology	(3)
MICR	433	Bacterial Physiology Laboratory	(2)
MICR	510	Microbial Genetics	(3)

Courses in Biology (BIOL)

400-level Courses

All 400-level courses may be applied toward masters degree requirements except the following, subject to limits established by the department and approval of the graduate adviser: BIOL 499 and all courses with the suffix N.

Graduate Courses

Classified graduate standing is required for admission.

501 Seminar: Development of Biological Concepts (3)

Impact of great concepts in biological science on human thought and activities and on present day understanding. *Maybe repeated once for credit as subject matter changes.*

510 Seminar: Biology (1)

Attendance at regular departmental seminar program: participation in seminar training program with course instructor; presentation of a departmental seminar. Grade CR/NC.

515 Seminar: Genetics (3)

Prerequisite: BIOL 315. Recent developments in various fields of genetics. May be repeated once for credit as subject matter changes.

517 Seminar: Gene Manipulation (3)

Prerequisites: BIOL 417; instructor consent. Critical evaluation and communication of recent literature in molecular biology. May be repeated to maximum of 6 units.

519 Genetic Engineering Laboratory (8)

Prerequisites: BIOL 417; BIOL 330 or MICR 200AB; CHEM 431ABC; instructor consent.
Introduction to basic techniques.
Lecture 2 hours, laboratory 18 hours.

522 Seminar: Morphology (3)

Advanced studies in animal or plant morphology, with emphasis on evolutionary and environmental adaptations. May be repeated to maximum of 6 units as topic changes.

525 Seminar: Developmental Biology (3)

Prerequisites: BIOL 330, instructor consent. Discussion of recent advances in the field of plant and/or animal embryonic and postembryonic development. May be repeated to maximum of 6 units as topic changes.

534 Seminar: Systems Physiology (3)

Prerequisite: BIOL 330. Advanced study in various areas of systems physiology. May be repeated to maximum of 6 units as subject matter changes.

537 Seminar: Endocrinology (3)

Prerequisite: BIOL 437. Discussion of current topics and trends in endocrine physiology. May be repeated to maximum of 6 units as subject matter changes.

538 Seminar: Environmental Physiology (3)

Prerequisite: A course in animal or plant physiology. Mechanism and specialization of animals or plants as related to their environment. May be repeated once for credit as subject matter changes.

539 Seminar: Cell Biology (3)

Prerequisites: BIOL 330, CHEM 431C. Major cell functions considered primarily from standpoint of causative and control mechanisms. May be repeated once for credit as subject matter changes.

540 Seminar: Biological Systematics (3)

Prerequisites: A course in genetics, statistics, and either a botany or zoology systematics course. Fundamental concepts and problems in definition and recognition of species and higher taxa, and the special experimental or biometric techniques used. May be repeated to maximum of 6 units as subject matter changes.

560 Topics in Animal Ecology (4)

Prerequisite: BIOL 360. Advanced studies in ecological relationships of animals; class, field and/or laboratory research projects involving data gathering, analysis and synthesis. May be repeated once for credit. Lecture 2 hours, laboratory/field work 6 hours.

562 Advanced Topics in Plant Ecology (3)

Prerequisite: BIOL 462. Analysis of selected plant communities to determine structure, pattern, and interrelationships; discussion of current theories, problems, and methods of vegetational sampling, analysis, and synthesis. Lecture 2 hours, laboratory and/or field work 3 hours.

563 Seminar: Ecology (3)

Prerequisite: BIOL 360. Recent advances and current research in ecology. May be repeated once for credit.

575 Seminar: Animal Behavior (3)

Prerequisite: BIOL 475 or PSY 408. Current topics in animal behavior, with emphasis on origin and ecological significance of behavioral patterns. May be repeated for credit to maximum of 6 units as subject matter changes.

595 Individual Research in Gene Manipulation (4)

Prerequisites: BIOL 517, 519. Laboratory research project conducted in approved on- or off-campus laboratory. Graded CR/NC.

597 Graduate Research (1-6)

Prerequisite: Approval of program committee. Conducting research toward masters degree. May be repeated to maximum of 6 units. Graded CR/NC.

598 Graduate Directed Study (1-4)

Prerequisites: Instructor consent to act as sponsor, approval of program by departmental graduate studies committee. Directed study of advanced topics in biology. Assigned readings, conferences, lectures, and seminars. Graded CR/NC.

599 Thesis (1-9)

Prerequisites: Advancement to candidacy, instructor consent to act as sponsor, departmental approval of topic prior to registration. Independent research resulting in thesis. May be repeated to maximum of 9 units. Graded CR/NC.

Courses in Microbiology (MICR)**400-level Courses**

All 400-level courses may be applied toward master's degree requirements except the following, subject to limits established by the department and approval of the graduate adviser.' MICR 401, 430, 433

Graduate Courses

Classified graduate standing is required for admission.

503 Seminar: Special Topics in Microbiology (3)

Prerequisite: Instructor consent. Special topics of current interest in microbiology as announced in Schedule of Classes. May be repeated, as subject matter changes, to maximum of 9 units.

510 Microbial Genetics (3)

Prerequisites: MICR 200AB, BIOL 315. Concepts of microbial genetics, including dissociation, transformation, transduction, gene transfer, and biochemical mutation; laboratory techniques, practical aspects such as antibiotic resistance. Lecture 3 hours.

520 Advanced Immunology (3)

Prerequisite: Consent of graduate adviser. Advanced principles and concepts of immunology, fundamental biological significance of the immune reaction.

530 Advanced Microbial Physiology (3)

Prerequisite: Consent of graduate adviser. Biochemical aspects of microbial physiology and metabolism, with special emphasis on recent advances in field.

580 Seminar: Microbiology (1)

Attendance at departmental seminar program; participation in seminar training; presentation of a satisfactory departmental seminar. Must be repeated to maximum of 3 units. Graded CR/NC.

597 Graduate Research (1-4)

Prerequisites: Instructor consent to act as sponsor, successful performance on departmental qualifying examination. Independent research under guidance of faculty. Must be repeated to maximum of 4 units. Graded CR/NC.

598 Graduate Directed Study (1-4)

Prerequisite: Instructor consent to act as sponsor. Directed study of advanced topics in microbiology. Must be repeated to maximum of 4 units.

599 Thesis (7)

Prerequisites: MICR 597, instructor consent to act as sponsor. Independent research resulting in a thesis. Must be repeated to maximum of 7 units. Graded CR/NC.

CHEMISTRY AND BIOCHEMISTRY

School of Natural and Social Sciences

DEPARTMENT OFFICE

Physical Science 616

Phone: (213) 343-2300

The Graduate Program

The objective of the thesis option and the Biochemistry option in the Master of Science degree in Chemistry is to prepare students for employment in industrial research, teaching positions in community colleges, or more advanced study toward the Ph.D. degree.

The comprehensive examination option is intended for persons in industry or government who need to develop a more current understanding of chemistry; for community college faculty preparation; and for other specific areas of chemical application in which an advanced degree is required. The comprehensive examination option is not recommended for persons who wish to continue to a doctoral program in chemistry, nor for those who intend to upgrade their laboratory research capabilities significantly.

Master of Science Degree in Chemistry

Admission to the Program

Admission to the program requires a baccalaureate in Chemistry or Biochemistry from an accredited college or university or a baccalaureate in a related field with a strong background in chemistry. Applicants interested in the Biochemistry option should have a preparation equivalent to that required for the Cal State L.A. baccalaureate in Biochemistry, which includes, among other requirements, 10 units of introductory biology, 8 units of microbiology, and 11 units of upper division biology.

All applicants are required to have a 2.5 grade point average in their last 90 quarter units. Applications for any quarter must be submitted early in the previous quarter. Students must apply to both the department and the university.

Placement Examinations

All new graduate students must take a placement examination administered by the Department of Chemistry and Biochemistry at first registration. The examination covers physical, analytical, inorganic, and organic chemistry. For those specializing in Biochemistry, examinations in biochemistry and biology replace those in analytical and inorganic chemistry. The time and place are announced by the department.

Students entering the program must take all placement examinations appropriate to their area. If students do not take an examination, it is presumed that they are not proficient in the particular area, and are then required to take the complete undergraduate sequence for that area as corequisite or qualifying courses. Students who do not take or do not pass an area examination may, upon approval by the principal graduate adviser, be allowed a second opportunity to take it the next time it is given.

Requirements for the Degree (45 units)

A total of 45 units is required for the degree. Both the thesis option program in Chemistry and the option in Biochemistry consist of required courses, electives, research (597) and thesis (599), with a minimum of 26 units in 500-level courses, including 597 and 599. Of the remaining 19 units, students must take eight outside their area of specialization in chemistry. The comprehensive examination option in Chemistry consists of required courses, including advanced laboratory courses and elective courses, with a minimum of 23 units in 500-level courses. *Students must comply with school and departmental requirements.*

Each student's program is designed with the assistance of a faculty adviser and the student's advisory committee.

Additional Requirements

Thesis option candidates must meet the following requirements:

- * Submit a thesis, which must be approved by the Department of Chemistry and Biochemistry as a part of the program.
- * Pass a final oral examination, primarily about the thesis, administered by the department.

Comprehensive examination option candidates must pass written comprehensive examinations on the subjects of the required courses.

Candidates for all degree options must possess a reading knowledge of chemistry in a foreign language or complete an auxiliary coordinated program of study in computer analysis or chemical education consisting of 8-12 quarter units, 4 units of which will be in CHEM 598, taken for at least two quarters, as recommended by the graduate adviser and approved by the department graduate studies committee. These units are required in addition to the minimum required for the degree.

Language proficiency is demonstrated by passing a foreign language reading examination (FL 901) in the language selected as offered in the Department of Foreign Languages and Literatures and with approval of that department.

The language examination normally will be taken in German or Russian, or French for the Biochemistry option, although other languages will be accepted if, in the opinion of the advisory committee, a reading knowledge of the alternate language proposed would be of value to students in their professional career.

Students in the Biochemistry option will not receive graduate credit for CHEM 431ABC or 432AB and will be allowed 14 units of electives outside the field of chemistry.

Students must select the required courses for Chemistry, or for the Biochemistry option, as appropriate; however, students who have previously completed the equivalent of any of these courses will not be required to repeat them.

* **Thesis Option (45 units) Required Courses (15 units):**

CHEM 420	Advanced Organic Chemistry	(4)
CHEM 501	Quantum Chemistry	(4)
CHEM 504	Advanced Inorganic Chemistry	(4)
CHEM 580	Graduate Seminar: Chemistry	(1, 1, 1)

Electives (18-20 units):

Select 18-20 units in chemistry from the following with adviser approval; include enough 500-level courses to meet department minimum of 26 units:

CHEM 414, 425, 431ABC, 432AB, 433, 440, 454L, P, 480, 503, 505, 534, 590, 598.

Of the 18-20 elective units, a maximum of 9 may be outside the field of chemistry with adviser approval.

Research and Thesis (10-12 units):

CHEM 597	Graduate Research	(6-8) and
CHEM 599	Thesis	(4)

* **Comprehensive Examination Option (45 units)**

Required Courses (28-30 units):

CHEM 420	Advanced Organic Chemistry	(4)
CHEM 504	Advanced Inorganic Chemistry	(4)
CHEM 580	Graduate Seminar: Chemistry	(1, 1, 1)

Select one of following pairs:

CHEM 431ABC	Biochemistry	(3, 3, 3) plus
CHEM 501	Quantum Chemistry	(4) or
CHEM 503	Advanced Biochemistry	(3, 3, 3) plus
*CHEM 590	Advanced Laboratory	(4)

Select 4-6 units of advanced laboratory courses, with adviser approval, from following:

CHEM 462	Instrumental Analysis	(6)
*CHEM 590	Advanced Laboratory	(1-4)
CHEM 597	Graduate Research	(1-6)

*maximum 4 units applicable to program Electives(15-17 units):

Select 15-17 units in chemistry from the following with adviser approval; include enough 500-level courses to meet department minimum of 26 units:

CHEM 414, 425, 432AB, 433,440, 454L, P, 480, 503, 505, 534A, 590, 598.

Of the 15-17 elective units, a maximum of 9 may be outside chemistry with adviser approval.

Comprehensive Examination (0 units)

CHEM 596	Comprehensive Examination	(0)
----------	---------------------------	-----

Students who select the comprehensive examination (CHEM 596) should expect to take it the quarter they complete all course work on their program and must comply with school and departmental requirements.

* **Biochemistry Option (45 units)**

Required Courses (12 units):

CHEM 503	Advanced Biochemistry	(3, 3, 3)
CHEM 580	Graduate Seminar in Chemistry	(1, 1, 1)

Electives (7-23 units):

Select from the following with adviser approval; include sufficient 500-level courses to meet department minimum of 26 units:

CHEM 414, 418, 420, 425, 433, 440, 454L, P, 462, 480, 501,504, 505, 534, 590, 598.

Additional electives (0-14 units):

Select an additional 0--14 units outside chemistry with adviser approval.

Research and Thesis (10-12 units):

CHEM 597	Graduate Research	(6-8) and
CHEM 599	Thesis	(4)

Certificate Program in Industrial Chemistry

The Department of Chemistry and Biochemistry offers a credit certificate program in Industrial Chemistry for postbaccalaureate and graduate students. This program is designed to develop skills in instrumental analysis by providing a broad range of experience with instrumental methods and modern techniques to complement students' theoretical preparation in chemistry. The program is intended to enhance the ability of advanced students to function effectively in industrial and government laboratory positions in chemistry.

The program requires completion of a total of 16 units of 400- and 500-level course work with a B (3.0) grade point average. Some courses taken to meet requirements of this program may also be applied toward the master's degree program in Chemistry. A bachelors degree in Chemistry is required for admission to the program. Refer to the *Graduate and Postbaccalaureate Study* chapter of this catalog for general regulations governing all graduate level certificate programs.

Requirements for the Certificate (16 units)

Required Courses (16 units):

CHEM 425	Polymer Chemistry	(4)
CHEM 440	Industrial Chemistry	(4)
CHEM 498	Cooperative Education	(2)
CHEM 580	Graduate Seminar: Chemistry	(2)
CHEM 590	Advanced Laboratory	(4)

Students may substitute other appropriate courses with adviser approval.

Courses in Chemistry (CHEM)**400-level Courses**

All 400-level courses may be applied toward master's degree requirements except the following, subject to limits established by the department and approval of the graduate adviser:

Chemistry, M.S. (thesis option):

CHEM 401,402, 403, 412AB, 418**, 462**

Chemistry, M.S. (comprehensive examination option):

CHEM 401,402, 403, 412AB, 418*

Chemistry, M.S. (Biochemistry option):

CHEM 401,431ABC, 432AB

** Student may petition to waive the rule regarding this course.

Graduate Courses

Classified graduate standing is required for admission.

501 Quantum Chemistry (4)

Prerequisites: CHEM 402, 403. Quantum chemistry, including discussion of molecular orbital and valence bond theories and their applications to chemistry.

503 Advanced Biochemistry (3)

Prerequisites: CHEM 431ABC, 432AB. Recent concepts of enzyme systems, biological oxidation, intermediate metabolism, biosynthesis of macromolecules, biochemical genetics, metabolic regulation, and related phenomena. May be repeated as subject matter changes to maximum of 12 units.

504 Advanced Inorganic Chemistry (4)

Prerequisite: CHEM 418. Selected topics on structure and mechanism in inorganic chemistry; discussion of modern theories applied to inorganic chemistry.

505 Special Topics in Graduate Chemistry (4)

Prerequisite: Instructor consent. Specialized topics in chemistry given at an advanced level. May be repeated once for credit.

534 Seminar: Clinical Biochemistry (3)

Prerequisites: CHEM 431ABC, 432AB, 433. Recent developments in clinical biochemistry, with emphasis on abnormal protein, lipid and carbohydrate metabolism, hormone assay, and endocrine functions.

580 Graduate Seminar: Chemistry (1)

Attendance at regular departmental seminar program; participation in seminar training program with course instructor; presentation of a satisfactory departmental seminar. May be repeated to maximum of 3 units. Graded CR/NC.

590 Advanced Laboratory (1-2)

Prerequisites: CHEM 302B; 412B or 42B or 433. Introduction to advanced laboratory techniques involving individual student projects. May be repeated four times to maximum of 6 units; maximum of 4 units may be applied to M.S. degree. Combined units of CHEM 590, 597, 598, and 599 may not exceed 15.

597 Graduate Research (1-4)

Prerequisite: Approval of departmental adviser. Research leading toward MS. degree. Graduate students must earn a minimum of 6 and a maximum of 8 units. Combined units of CHEM 590, 597, 598, and 599 may not exceed 15. Graded CR/NC.

598 Graduate Directed Study (1-4)

Prerequisite: Instructor consent to act as sponsor. Independent study of advanced topics in the field, regular conferences with sponsor. Student's progress determined by oral and/or written reports. May be repeated for credit; combined units of 597 and 598 may not exceed 13. Combined units of CHEM 590, 597, 598, and 599 may not exceed 15.

599 Thesis (1-4)

Prerequisites: Advancement to candidacy, instructor consent to act as sponsor, departmental approval of topic prior to registration. Independent research resulting in thesis and oral defense thereof. May be repeated to maximum of 4 units. *Combined units of CHEM 590, 597, 598, and 599 may not exceed 15.* Graded CR/NC.

CHICANO STUDIES

School of Natural and Social Sciences

DEPARTMENT OFFICE

King Hall C3095

Phone: (213)343-2190

The Master of Arts degree in Mexican-American Studies is designed for graduate students who wish to pursue advanced study toward the Ph.D. degree; or teach in community colleges, or secondary, or elementary schools; or work as professionals in private agencies or government service. An option is offered in *Professional Teacher Preparation*.

Master of Arts Degree in Mexican-American Studies

Admission to the Program

Prerequisites to admission are a baccalaureate in Mexican-American Studies or a related field, with at least 20 upper division units in Chicano Studies courses including CHS 403, 410, and 444. Students who lack prerequisite courses must complete them with a B (3.0) average or better.

Requirements for the Degree (45 units)

A total of 45 units is required, with at least 23 in 500-level courses. Language Requirement

Candidates for the master's degree in Mexican-American Studies must demonstrate proficiency in the Spanish language before beginning thesis work or attempting the comprehensive examination by one of the following methods:

- * Passing the Foreign Language Reading Examination (FL 901) in Spanish as offered by the Department of Foreign Languages and Literatures and in accordance with the practices of that department or
- * Passing a 400-level, four-unit Spanish course with a grade of C or better. This course may not be used as an elective for the master's degree.

Required Courses (23 units):

CHS	501AB	Seminar: Theory and Method in Chicano Studies	(4-3)
CHS	504	Seminar: Chicano Psychological Issues	(4)
CHS	505	Seminar: Chicano Literature	(4)
CHS	506	Seminar: Chicano History	(4)
CHS	509	Interdisciplinary Seminar in Chicano Studies	(4)

Electives (4-22 units):

Remaining course work may include 400- and 500-level courses in Chicano Studies and appropriate related fields selected with departmental consultation and approval.

* Professional Teacher Preparation Option

Select 12 units with adviser approval in consultation with the School of Education. Core courses required for the partial credential shall not qualify for this option. This option must be declared before advancement to candidacy.

Comprehensive Examination or Thesis (0-6 units)

CHS	596	Comprehensive Examination	(0)
or CHS	599	Thesis	(6)

A comprehensive examination or a thesis is required for the masters degree. Students should expect to take the comprehensive examination (CHS 596) the quarter they complete all course work on their program and must comply with school and departmental requirements.

Courses in Chicano Studies (CHS)

400-Level Courses

All 400-level courses may be applied toward masters degree requirements, subject to limits established by the department and approval of the graduate adviser.

Graduate Courses

Classified graduate standing is required for admission.

501AB Seminar: Theory and Method In Chicano Studies (4-3)

Prerequisite: CHS 450 recommended for 501 B. Advanced analysis of Chicano Studies with emphasis on behavioral theory and methodologies applied to special fields of culture, including history, psychology, politics, education, economics, language; emphasis on current social issues.

504 Seminar: Chicano Psychological Issues (4)

Prerequisite: PSY 150 or CHS 410. Selected psychological issues of Chicanos including such topics as cultural psychodynamics, the fully functioning Chicano, special psychological problems, therapy and counseling effectiveness, and social psychological models.

505 Seminar: Chicano Literature (4)

Prerequisite: CHS 403. Literary genres within Chicano literature in relation to the cultural and social context of Chicanos.

506 Seminar: Chicano History (4)

Prerequisite: CHS 444. Advanced study of Chicano historiography readings, reviews, discussions, oral reports, and research proposals.

509 Interdisciplinary Seminar in Chicano Studies (4)

Prerequisite: Advancement to candidacy in master's degree program. Interdisciplinary investigation and discussion of selected topics in Chicano studies.

598 Graduated Directed Study (1-4)

Prerequisite: Consent of faculty sponsor, approved study prior to registration. Directed reading and critical analysis of advanced topics in Chicano Studies. Regular conference with sponsor. May be repeated for credit to maximum of 8 units.

599 Thesis (1-6)

Prerequisites: Advancement to candidacy, instructor consent to act as sponsor, departmental approval of topic prior to registration. An oral examination about the thesis is required. Must be repeated to total of 6 units. GradedCR/NC.

GEOGRAPHY AND URBAN ANALYSIS**School of Natural and Social Sciences****DEPARTMENT OFFICE**

King Hall C4067

Phone: (213) 343-2220

The Master of Arts degree program in Geography is designed to prepare students for teaching at the secondary and community college levels, employment in government and private industry, and further graduate study in geography.

Master of Arts Degree in Geography**Admission to the Program**

Applicants must possess a baccalaureate in Geography with a minimum 2.75 grade point average (A=4.0) in the 90 quarter units and be approved by the department's Graduate Studies Subcommittee. Applicants whose undergraduate major was not geography must have a minimum 2.75 grade point average in the last 90 quarter units attempted, a minimum B (3.0) grade point average in all geography courses attempted, and must have completed 16-32 quarter units of geography courses. Those who have completed no lower division course work in geography must complete GEOG 370 (World Regions) or equivalent.

Requirements for the Degree (45 units)

A total of 45 units is required, with at least 23 in 500-level courses.

Before enrolling in GEOG 599 or taking the comprehensive examination (GEOG 596), students must satisfy *one* of the following requirements, subject to principal graduate adviser approval:

- * Pass a foreign language reading examination (FL 901) in the geographic literature of a foreign language, as offered by the Department of Foreign Languages and Literatures and in accordance with the practice of that department.
- * Complete 12 units in a foreign language in accordance with the practice of that department.
- * Complete CIS 294 or CS 290 with a grade of B or higher.
- * Pass an examination in statistical methods in geography administered by the department.
- * Complete an upper division statistics course with a grade of B or higher.

Geography Core Seminar (4 units):

GEOG 570 Seminar: Nature of Geography (4)

Electives (select 12 units from following):

GEOG 530 Seminar: Urban Social Systems (4)

GEOG 571 Seminar: Regional Geography (4)

GEOG 575 Seminar: Human Geography (4)

GEOG 580 Seminar: Physical Geography (4)

Select electives with the approval of the principal graduate adviser. Students may repeat GEOG 571, 575, and 580, provided the seminar topic is not repeated in the exact area and theme.

Electives in Geography and Related Fields (20-29 units):

Select 400- and 500-level GEOG courses. Students who elect the comprehensive examination option must include a minimum of 7 units at the 500 level. With approval of the principal graduate adviser a maximum of 8 units may be in related fields.

Comprehensive Examination or Thesis (0, 6-9 units)

Students who select the comprehensive examination must include a minimum of 29 units in *Electives in Geography and Related Fields* above, should expect to take the examination (GEOG 596) the quarter they complete all course work on their program and must comply with school and departmental requirements.

The examination consists of a section about geographic theory plus sections about two of the following areas selected by the student: advanced regional geography, advanced physical geography, advanced human geography, geography research techniques.

Students who elect to write a thesis will need to enroll in GEOG 599 for a minimum of two quarters and a total of 6-9 units. In addition to the 16 units of required core seminars, these students need to complete a minimum of 20-23 units of electives to satisfy the 45-unit requirement for the master's degree.

Courses in Geography (GEOG)

400-level Courses

All 400-level courses may be applied toward masters degree I requirements, subject to limits established by the department and approval of the graduate adviser.

Graduate Courses

Classified graduate standing is required for admission.

530 Seminar: Urban Social Systems (4)

(also listed as SOC 530) Prerequisite: Instructor consent. Growth and nature of urban social systems in selected cities and metropolitan areas; theories of urban structure and problems; improving quality of urban life; comparisons of cities in various countries.

570 Seminar: Nature of Geography (4)

Prerequisite: Instructor consent. History, objectives, and methods of geography.

571 Seminar: Regional Geography (4)

Prerequisite: Instructor consent. Selected regions of world. May be repeated as subject matter changes.

575 Seminar: Human Geography (4)

Prerequisite: instructor consent. Selected topics pertaining to geography of man. May be repeated as subject matter changes.

580 Seminar: Physical Geography (4)

Prerequisite: Instructor consent. Seminar on nature, origin, and areal occurrence of physical qualities of the land (climate, landforms, water, soils, and vegetation). May be repeated as subject matter changes.

598 Graduate Directed Study (1-4)

Prerequisite: Instructor consent to act as sponsor. Project selected in conference with sponsor.

599 Thesis (1-6)

Prerequisites: Advancement to candidacy, approval of department, completion of course work in master's program, completion of foreign language or upper division statistical or computer skill requirement. May be repeated to maximum of 9 units. Graded CR/NC.

GEOLOGICAL SCIENCES**School of Natural and Social Sciences****DEPARTMENT OFFICE**

Physical Sciences 216

Phone: (213) 343-2400

The objective of the Master of Science degree in Geology is to prepare students for professional level employment in industry and government, teaching positions in community colleges, or advanced study toward the Ph.D. degree. A student may achieve this objective by completing the program with either a thesis or a comprehensive examination.

Cooperative Master of Science Degree

The Department of Geological Sciences participates in a cooperative program with California State University campuses at Long Beach and Northridge. This cooperative program enables students to apply an unrestricted number of courses from the participating campuses toward the M.S. degree. Students take part on a voluntary basis and are not required to enroll at the Long Beach or Northridge campuses. The cooperative program offers students the advantage of utilizing the faculty and equipment of a larger part of the California State University system.

Admission to the Program

Admission requirements include possession of a bachelor's degree in Geology, or equivalent, from an accredited college or university, with a minimum 2.75 grade point average in the last 90 quarter units and upper division course work substantially equivalent to that required of Cal State L.A. Geology majors. Applicants who are lacking appropriate upper division geology courses may be admitted to the program but will be expected to remove any deficiencies by completing appropriate courses selected through consultation with the graduate adviser.

Application Procedures

Applications for any quarter should be submitted early in the preceding quarter both to the Department of Geological Sciences and to the university. In addition to the specific prerequisites stated above, students must meet university requirements for admission to graduate study.

Requirements for the Degree (45 units)

The graduate program requires 45 quarter units of work including 22.5 units of 500-level courses chosen with adviser approval. All students must complete Graduate Research (GEOL 597) and either a thesis (GEOL 599) or the comprehensive examination (GEOL 596).

The comprehensive examination must be taken no later than one quarter following completion of all course work. A student who has selected the thesis track by enrolling in GEOL 599 or the comprehensive examination track by enrolling in GEOL 596 may not later change to the other option.

With approval of the department graduate adviser, students may substitute appropriate 400- or 500-level courses from related areas in science, mathematics, or engineering in the official program to a maximum of 13.5 quarter units.

Courses in Geology (GEOL)

400-level Courses

All 400-level courses may be applied toward master's degree requirements except the following, subject to limits established by the department and approval of the graduate adviser:

GEOL 401 AB, 402, 410, 420, 430, 431, 460AB, 497, 499

Graduate Courses

Classified graduate standing is required for admission.

510 Paleontology (4.5)

Prerequisites: Advanced undergraduate courses in invertebrate paleontology, and stratigraphy or micropaleontology. Seminars in various topics in invertebrate paleontology, such as biostratigraphy, paleoecology, and functional morphology. May include field or laboratory investigations. May be repeated as subject matter changes.

520 Stratigraphic Analysis (4.5)

Prerequisites: GEOL 460AB. Principles and techniques of stratigraphic analysis, with emphasis on reconstruction of environment of deposition and paleogeography. Approximately half of laboratory devoted to field studies.

525 Sedimentary Processes, Environments, and Structures (4.5)

Prerequisites: GEOL 402, 430. Identification and analysis of sedimentary structures and hydrodynamically generated bedforms to determine sedimentary processes and environments of deposition.

530 Seminar: Structural Geology and Tectonics (4.5)

Prerequisite: GEOL 410 or upper division structural geology course. Critical review of selected topics concerning analysis, interpretation, and origin of geologic structures, mechanics of rock deformation and of large scale crustal deformation.

531 Tectonic Problems of Southern California (4.5)

Prerequisite: GEOL 410 or upper division structural geology course. Current topics in the geotectonic evolution of southern California.

533 Seminar: Quaternary Geology (4.5)

Prerequisite: GEOL 430. Studies of Quaternary climate, geomorphology, and soils including interglacial and glacial history.

534 Volcanology (4.5)

Prerequisites: GEOL 401AB. Mineralogy, petrology, geochemistry, tectonics, and geomorphology of volcanoes and volcanic processes.

540 Igneous Petrology (4.5)

Prerequisites: GEOL 400, 401 AB. Advanced study of occurrence and petrogenesis of igneous rocks. Laboratory includes microscopic study of selected rock suites and application of instrumental techniques of igneous rocks.

541 Metamorphic Petrology (4.5)

Prerequisites: GEOL 400, 403. Advanced study of occurrence, origin, and interpretation of metamorphic rocks. Laboratory includes microscopic study of rock suites.

550 Crystal Chemistry (4.5)

Prerequisite: GEOL 470. Seminars in crystal chemistry, emphasizing structural and chemical mineralogy, determinative methods, mineral synthesis, and computer applications. May be repeated for credit.

555 Geochemistry (4.5)

Prerequisite: GEOL 370 or upper division geochemistry course. Methods of radio-metric age determination, including dating of igneous and metamorphic rocks and sediments; use of lead and strontium as natural tracers; light stable isotopes, oxygen, carbon, and sulfur as petrogenetic indicators in igneous rocks and ore-forming processes.

570 Special Topics (2-4.5)

Prerequisite: Instructor consent. Discussion of selected topics in geology. May include up to 2 units of laboratory. May be repeated for credit as subject matter changes.

581 Seminar: Engineering Geology (4.5)

Prerequisite: GEOL 4810r senior engineering geology course. Advanced study relating geologic factors to engineering projects, with emphasis on slope stability, subsidence, engineering seismology, and construction problems related to engineering geology.

582 Hydrology (4.5)

Prerequisite: GEOL 484. Advanced study of groundwater topics including transmissivity, storage capacity, water quality, hydrologic inventory, and numerical methods. Includes field pumping test and its analysis.

583 Engineering Geomorphology (4.5)

Application of geomorphic analysis to engineered structures; techniques and methods of evaluating landscape evolution during last 50,000 years.

597 Graduate Research (1.5-4.5)

Prerequisites: Instructor consent to act as sponsor, approval of project by student's graduate advisory committee. Independent research under guidance of faculty. Grade **CR/NC**.

598 Graduate Directed Study (1.5-4.5)

Prerequisite: Instructor consent to act as sponsor. Directed research on subjects selected in consultation with faculty. May be repeated to maximum of 6 units.

599 Thesis (1.5-4.5)

Prerequisites: Advancement to candidacy, instructor consent to act as sponsor. Presentation of independent research work in a written thesis, which is defended orally. Grade **CR/NC**.

HISTORY_

School of Natural and Social Sciences

DEPARTMENT OFFICE

King Hall C4066

Phone: (213) 343-2020

The Master of Arts degree in History is designed for the attainment of a liberal education appropriate to careers in such professions as law, journalism, business, government service, and librarianship, as well as preparation for teaching and further graduate study.

The program requires intensive study involving courses, seminars, and directed reading in preparation for comprehensive examinations or a thesis. Students should obtain reading lists well before the examination from the examining faculty member in each field.

Master of Arts Degree

Admission to the Program

In addition to university requirements for admission to graduate study, applicants without a baccalaureate in history must have completed HIST 390 plus 20-28 units of approved upper division history courses with a minimum B (3.0) average.

Requirements for the Degree(48-52 units)

A minimum of 48 or 52 units is required, depending on whether the student selects a thesis or comprehensive examinations, with at least 24 in 500-level courses.

Required Courses (24 units):

Select six 500-level history courses, with adviser approval, for a total of 24 units.

Electives (24 units):

Select 400- or 500-level courses in history with adviser approval. Courses outside history may be substituted to maximum of 8 units, with adviser approval.

Comprehensive Examinations or Thesis (0-4 units):

Students must successfully complete either comprehensive examinations or a thesis.

A. Comprehensive Examinations (0 units):

Candidates must demonstrate a reading comprehension in one foreign language or competence in computer applications and statistics before they may attempt the history comprehensive examinations. They must demonstrate this competence within 7 years prior to completion of degree in one of the following ways.

- * Passing a foreign language reading examination (FL 901) in the historical literature of a foreign language, as offered by the Department of Foreign Languages and Literatures and in accordance with the practice of that department;
- * Completing 12 units in one foreign language with a grade of B or better in each course; or
- * Completing 12 units in statistics and computer courses (minimum 4 units in each area), as approved by the department adviser, with a minimum B grade in each course.

Comprehensive examinations must be passed in three fields chosen from two or more areas listed below. Flexibility for options within these fields can be arranged. Students should expect to take the comprehensive examinations (HIST 596) the quarter they complete all course work on their program and must comply with school and departmental requirements.

Fields of Concentration: Area One: United States United States to 1876

United States since 1850 (*with possible concentration on the West or social and intellectual history*)

Area Two: Western Civilization and Europe

Ancient (*with possible concentration on Greece or Rome*)

Medieval (*with possible concentration on Early Medieval to 1100 or Late Medieval after 1100*)

Early Modern: Renaissance to 1789

Modern: 1789-present (*with possible concentration on British peoples, Russia/Soviet Union, or history of science*)

Area Three: The Non-Western World

Middle East

Asia (*with possible concentration on East Asia or South Asia*)

Africa

Latin America

B. Thesis (4 units)

HIST 599 Thesis (4)

Students who select the thesis option will complete a minimum of 52 units for the degree.

Courses in History (HIST)**400-level Courses**

All 400-level courses may be applied toward master's degree I requirements, except the following, subject to limits established by the department and approval of the graduate adviser:
HIST 499

Graduate Courses

Classified graduate standing is required for admission.

510 Seminar: History of Science (4)

Readings, discussion, and research paper on topics in internal history of science and in social relations of science. May be repeated for credit.

519 Seminar: Ancient History (4)

Readings, discussion, and paper on topics in Greek or Roman history. May be repeated for credit.

520 Seminar: History of Middle Ages (4)

Readings, discussion, and research paper. May be repeated for credit.

522 Seminar: Middle Eastern History (4)

Readings, discussion, and research paper. May be repeated for credit.

532 Seminar: Early Modern European History (4)

Readings, discussion, and research paper. May be repeated for credit.

533 Seminar: Recent European History (4)

Readings, discussion, and research paper in modern European history. May be repeated for credit.

540 Seminar: British History (4)

Readings, discussion, and research paper. May be repeated for credit.

542 Seminar: Russian History (4)

Readings, discussion, and research paper. May be repeated for credit.

550 Seminar: Special Studies (4)

Topics of special interest that transcend cultural and chronological lines, as announced in *Schedule of Classes*. May be repeated for credit as subject matter changes.

561 Seminar: History of Modern Mexico (4)

Readings, discussion, and research paper. May be repeated for credit.

562 Seminar: Latin American History (4)

Latin American historiography; research in selected topics in Latin American history excluding modern Mexico. Readings, discussion, oral reports, and research paper. May be repeated for credit.

571 Seminar: Early History of U.S. (4)

Readings, discussion, and research paper. May be repeated for credit.

575 Seminar: Recent History of U.S. (4)

Readings, discussion, and research paper. May be repeated for credit.

577 Seminar: American Social and Intellectual History (4)

Readings, discussion, and research paper. May be repeated for credit.

581 Seminar: History of the U.S. West (4)

Readings, discussion, and research paper. May be repeated for credit.

591 Seminar: Recent Asian History (4)

Readings, discussion, and research paper. May be repeated for credit.

598 Graduate Directed Study (1-4)

Prerequisite: Instructor consent to act as sponsor. Independent study of advanced topics in field; regular conferences with sponsor. May be repeated for credit.

599 Thesis (1-4)

Prerequisites: Advancement to candidacy, instructor consent to act as thesis director, departmental approval of topic prior to registration. Independent research resulting in a thesis. Must be repeated to total of 4 units. Graded CR/NC.

LATIN AMERICAN STUDIES**School of Natural and Social Sciences****PROGRAM OFFICE**

Library North B552

Phone: (213)343-2180

The Master of Arts degree program in Latin American Studies is designed to provide a multidisciplinary approach to the study of one of the world's major regions. The program also provides advanced training for students who wish to pursue careers in teaching, government service, or commerce.

Master of Arts Degree

A masters degree in Latin American Studies affords students a wide range of career opportunities in the U.S. and abroad. The growth of the Latin population in the U.S. has created an increasing need for trained persons with a knowledge of the region to work in government, teaching, business, and other fields. Opportunities abroad are available to graduates with a master's degree who are qualified to teach at the university level in Latin American educational institutions.

Admission to the Program

Admission is governed by university requirements for admission to graduate study. New graduate students must consult with the Latin American Studies graduate adviser before registration for assistance in planning their program and to evaluate their program prerequisites.

Program Requirements

A minimum of 20 units in upper division Latin American content courses is prerequisite to the program; LAS 497 is a corequisite. Students who have not met these requirements through courses taken as an undergraduate must take courses in two or more departments in postbaccalaureate standing. In exceptional cases the Latin American Studies graduate studies committee may waive a portion of these prerequisites.

Language Requirement

Students must demonstrate written and oral competence in Spanish or Portuguese before they may be advanced to candidacy by passing a foreign language reading examination (FL 901) in the language selected, as offered by the Department of Foreign Languages and Literatures and with approval of that department.

Requirements for the Degree (minimum 45 units)

A total of 45 units is required, with at least 23 in 500-level courses. The program involves study in seminars and courses. It offers considerable flexibility for students to pursue individual interests and particular career goals. Students must have a minimum of 5 graduate level courses, distributed in at least 3 fields, chosen from: anthropology, art, business, economics, education, geography, history, political science, sociology, and Spanish. Other fields may be included in consultation with the adviser. The necessary language proficiency is established by examination. Students have the option of passing a comprehensive examination or writing a thesis as the final phase of the degree program.

Required Course (4 units):

LAS 508 Seminar: Latin-American Social Systems	(4) or
LAS 590 Interdisciplinary Seminar in Latin American Studies	(4)

Additional Seminars (19-20 units):

Select 500-level courses from the following (include seminars in at least three disciplines).

*ANTH 501	Seminar: Ethnography	(4)
-----------	----------------------	-----

*ANTH 530	Seminar: Social Organization	(4)
*ANTH 594	Seminar: Problems in Cultural Anthropology	(4)
*ART 501	Seminar: Art History	(4)
*ECON 560	Seminar: Economic Growth in Underdeveloped Areas	(3)
*EDFN 506	Comparative Education	(4)
*GEOG 571	Seminar; Regional Geography	(4)
*GEOG 575	Seminar: Human Geography	(4)
*GEOG 580	Seminar: Physical Geography	(4)
HIST 561	Seminar: History of Modern Mexico	(4)
HIST 562	Seminar: Latin American History	(4)
LAS 508	Seminar: Latin American Social Systems	(4)
LAS 590	Interdisciplinary Seminar in Latin American Studies	(4)
LAS 598	Graduate Directed Study	(1-4)
*MKT 543	Seminar: International Marketing	(3)
**POLS 527	Seminar: Advanced Studies in Comparative Politics and International Relations	(4)
POLS 531	Seminar: Latin American Government	(4)
**SOC 514	Seminar: Contemporary Sociological Theory	(4)
SPAN 505	Studies in El Modernismo in Spanish America	(4)
SPAN 545	Seminar: Contemporary Spanish-American Poetry	(4)
*SPAN 575	Seminar: Hispanic Language	(4)

* *when emphasis is on Latin America*
 ** *Area of emphasis should be applied to Latin America*

Electives (21-22 units):

Additional units from among Latin American content courses, including appropriate departmental 499 and 598 courses, selected in consultation with the Latin American Studies graduate adviser.

Comprehensive Examinations or Thesis (0, 2-9 units):

Students must successfully complete either comprehensive examinations or a thesis.

Comprehensive Examinations (0 units):

Comprehensive written examinations about Latin America must be passed successfully **three** of the following academic fields: anthropology, art, comparative education, economics, geography, history, marketing, political science, or other fields approved by the graduate committee in Latin American Studies.

Students should expect to take the comprehensive examinations (LAS 596) the quarter they complete all course work on their program and must comply with school and program requirements. Students must notify the Coordinator of Latin American Studies in writing of their intention to take the examinations.

Thesis (2-9 units):

Instead of the comprehensive examinations, students may choose to write an interdisciplinary thesis under the guidance of a three member faculty committee selected in consultation with an adviser. Students making this choice must enroll in LAS 599, in which a maximum of 9 units may be taken.

Immediately following completion of the comprehensive examinations or thesis, students must pass an oral examination conducted by a three-member faculty committee.

Courses in Latin American Studies (LAS)

400-level Courses

All 400-level courses listed in the undergraduate major, general option, may be applied toward masters degree requirements except the following, subject to limits established by the department and approval of the graduate adviser: LAS 497

Graduate Courses

Classified graduate standing is required for admission.

508 Seminar: Latin American Social Systems (4)

Recommended prerequisites: ANTH404 or 408, reading competence in Spanish or Portuguese. Analysis of selected aspects of contemporary Latin American social systems. May be repeated for credit.

590 Interdisciplinary Seminar: Latin American Studies (4)

Prerequisite: LAS 497. Interdisciplinary investigation and discussion of selected Latin American topics. May be repeated for credit.

598 Graduate Directed Study (1-4)

Prerequisite: Instructor consent to act as sponsor. Independent study of advanced topics in field; regular conferences with sponsor. May be repeated for credit.

599 Thesis (1-9)

Prerequisites: Instructor consent to act as sponsor, approval of topic prior to registration. Independent research resulting in a thesis. May be repeated to maximum of 9 units. Graded CR/NC.

MATHEMATICS AND COMPUTER SCIENCE**School of Natural and Social Sciences****DEPARTMENT OFFICE**

Simpson Tower F206

Phone: (213) 343-2150

The Graduate Program**Master of Science Degree in Computer Science**

A Master of Science degree program has been developed and is awaiting final approval for implementation. Consult the Department of Mathematics and Computer Science office for further information.

Master of Science Degree in Mathematics

The Master of Science degree in Mathematics is offered in two options. Option 1 is a flexible program that can be concentrated on pure mathematics or incorporate elements of both pure and applied mathematics. Option 2 emphasizes applied mathematics. Both options prepare the student for higher mathematical work in industry, business, or government, for teaching in a community college, and for further graduate work in the respective areas.

Admission to the Program

Admission is governed by general university requirements for admission to graduate study.

Requirements for the Degree (minimum 45 units)

A minimum of 45 units is required, with at least 23 in 500-level courses. Students must successfully complete either comprehensive examinations or a thesis in addition to course requirements.

Comprehensive Examination or Thesis (0, 1--4 units)

MATH 596	Comprehensive Examination	(0) or
MATH 599	Thesis	(1-4)

A. Comprehensive Examination

Students must pass Option 1 written comprehensive examinations in 3 of 4 areas: topology, abstract algebra, complex analysis, and real analysis; for Option 2, 4 areas: applied linear analysis, calculus of variations, complex analysis, and numerical analysis. Students should expect to take the comprehensive examinations (MATH 596) the quarter they complete all course work on their program and must comply with school and departmental requirements.

B. Thesis

Subject to approval by graduate adviser, students may be permitted to write a thesis in lieu of taking comprehensive examinations. If the thesis is accepted, a maximum of 4 units of MATH 599 may be applied to the master's degree program.

* **Option 1: General Mathematics**

The candidate's baccalaureate preparation should be substantially equivalent to that required for Cal State L.A.'s Bachelor of Arts degree in Mathematics.

Required Courses (12 units-select three from following):

MATH 530	Topology	(4)
MATH 540AB	Abstract Algebra I, II (4,4)	
MATH 562	Advanced Complex Analysis	(4)
MATH 580	Real Analysis	(4)

Electives (12 units):

Select from 500-level MATH courses including at least one seminar (550, 551,552, or 553).

Electives (21 units):

Select from 400- and 500-level courses with graduate adviser approval and no more than 12 units in nonmathematics courses.

* **Option 2: Applied Mathematics**

The candidate's undergraduate preparation should be substantially equivalent to that required for Cal State L.A.'s Bachelor of Science degree in Mathematics.

Required Courses (28 units):

MATH 502AB	Applied Linear Analysis I, II	(4, 4)
MATH 520	Calculus of Variations	(4)
MATH 521	Mathematical Models and Optimizations	(4)
MATH 562	Advanced Complex Analysis	(4)
MATH 570AB	Advanced Numerical Analysis	(4, 4)

Electives (17 units):

Select 400- and 500-level CS and MATH courses. With graduate adviser approval, 8 units may be taken in business, economics, engineering, or physics. At least 4 units must be 500 level.

Courses in Computer Science (CS)

400-level Courses

All 400-level courses may be applied toward masters degree requirements, subject to limits established by the department and approval of the graduate adviser.

Graduate Courses

Classified graduate standing is required for admission.

510 Computer Systems Architectures and Uses (4)

Prerequisite: CS 440. Nontraditional computer architectures and extensions of traditional architectures; implications for operating systems and programming languages; analysis of local and dispersed computer networks; supporting theories.

512 Analysis of Algorithms (4)

Prerequisite: CS 412, 486. Computational complexity; worst case and average-case analysis of algorithms for common computational tasks, including sorting, matrix multiplication, fast Fourier transform, graph problems.

522 Data Base and Knowledge Base Management Systems (4)

Prerequisite: CS 422. Advanced data models such as E/R and temporal logic; knowledge bases and storing rules as data; distributed data bases and transaction management; data bases for nontraditional data.

532 Theory of Programming Languages (4)

Prerequisite: CS 432. Specifications of programming languages using denotational and axiomatic semantics, applications to program verification; type theory and other issues in design and specifications of programming languages.

537 Advanced Software Engineering (4)

Prerequisite: CS 437. The software development life cycle, software project management, software engineering environment.

555 Topics in Combinatorics, Graphs, and Networks (4)

Prerequisite: CS 412. Selected topics in combinatorics, graphs, and networks; emphasis on applications to computer science and implementation of algorithms; topics vary according to instructor.

575 Mathematical Programming (4)

Prerequisite: MATH 470. Combinatorial optimization methods including linear programming, network flows, dynamic programming; special emphasis on large scale problems, data structures, coding, and implementation of selected algorithms.

586 Theory of Computation (4)

Prerequisite: CS 486. Theoretical study of foundations of current models of computation; topics include Turing machines, partial recursive functions, decidability, undecidability, Church's hypothesis, NP-complete problems, intractable problems.

590 Seminar: Computer Science (4)

Prerequisite: Instructor consent. Recent developments in computer science, study of new areas of interest, review of current literature.

598 Graduate Directed Study (1-4)

Prerequisite: Instructor consent. Independent study of advanced topics in computer science; may be repeated to maximum of 4 units.

599 Thesis or Project (1-4)

Prerequisites: Advancement to candidacy, instructor consent to act as sponsor, and departmental approval of topic prior to registration. Independent work resulting in a thesis or project. May be repeated to maximum of 4 units. Graded CR/NC.

Courses in Mathematics (MATH)**400-level Courses**

All 400-level courses may be applied toward master's degree requirements except the following, subject to limits established by department and approval of graduate adviser: MATH 401, 454, 455, 465

Graduate Courses

Classified graduate standing is required for admission.

501 Nonlinear Differential Equations (4)

Prerequisites: MATH 215 or 401; 466. Vector matrix notation, stability in nonlinear systems, Poincare phase plane, method of Liapounov, perturbation techniques.

502A Applied Linear Analysis I (4)

Prerequisites: MATH 215 or 401; 255; 410 or 467. Function Spaces, convergence, inner product, bounded linear operators, integral operators and integral equations, adjoint operators, expansion in eigenfunctions, resolvent kernel.

502B Applied Linear Analysis II (4)

Prerequisite: MATH 502A. Unbounded operators, differential operators of second order, Sturm-Liouville operators, eigenvalues and eigenfunctions, Green's Functions, and additional topics.

520 Calculus of Variations (4)

Prerequisites: MATH 255, 466. Euler-Lagrange equation for various types of external problems; fixed and variable end points; broken externals; variational problems with constraints; canonical form and direct methods.

521 Mathematical Models and Optimizations (4)

Prerequisites: MATH 215, 255, 474. Topics from: Markov chains and decision theory, game theory, programming algorithms, models for growth processes, applied graph theory, and theory of maxima and minima.

525 Approximation Theory (4)

Prerequisites: MATH 466; approval of the instructor. Density theorems, existence, uniqueness, characterization and degree of best approximation, processes of approximation; other topics of current interest.

530 Topology (4)

Prerequisite: MATH 465. Basic concepts of point set topology: mappings, compactness, connectedness, separation properties, and metrization.

540AB Abstract Algebra I, II (4, 4)

540A: Prerequisite: MATH 455. Theory of groups, introduction to rings.

540B: Prerequisite: MATH 540A. Theory of rings and fields.

550 Seminar: Algebra

Prerequisite: Approval of instructor. Readings and discussion of topics from group theory, ring theory, linear algebra, discrete mathematics, and combinatorics. May be repeated to maximum of 8 units.

551 Seminar: Analysis (4)

Prerequisite: Approval of instructor. Readings and discussion of topics from real analysis, complex analysis, functional analysis, and applied analysis. May be repeated to maximum of 8 units with approval of graduate adviser.

552 Seminar: Topology and Geometry (4)

Prerequisite: Approval of instructor. Readings and discussion of topics from general and algebraic topology, differential topology and geometry, and geometrical foundations. May be repeated to maximum of 8 units with approval of graduate adviser.

553 Seminar: Applied Mathematics (4)

Prerequisite: Approval of instructor. Readings and discussions of selected topics in field. May be repeated to maximum of 8 units with approval of graduate adviser.

562 Advanced Complex Analysis (4)

Prerequisite: MATH 463. Laurent series, singularities, residue problems, contour integration, conformal mapping, and additional topics.

570ABC Advanced Numerical Analysis (4, 4, 4)

570A: Prerequisite: MATH 471. Numerical solution of linear systems of equations, finite difference approximation to elliptic partial differential equations.

570B: Prerequisite: MATH 570A. Numerical solution of parabolic and hyperbolic partial differential equations; consistency, convergence, stability.

570C: Prerequisite: MATH 570B. Numerical solution of ordinary and partial differential equations, eigenvalue problems, nonlinear systems, approximation theory, finite elements, integral equations.

580 Real Analysis (4)

Prerequisite: MATH 466. Theory of Lebesgue measure on the real line; theory of the Lebesgue integral and related convergence theorems.

584 Advanced Probability Theory (4)

Prerequisite: MATH 580. Probability spaces; random variables; abstract probability integrals, moments, convergence theorems; distribution and characteristic functions; central limit theorems; dependence.

591 Functional Analysis (4)

Prerequisite: MATH 580. Banach spaces, Hilbert spaces, linear functionals and operators, spectral theory.

598 Graduate Directed Study (1-4)

Prerequisite: Instructor consent. Independent study of advanced topics in mathematics; regular conferences with instructor. May be repeated once.

599 Thesis (1-4)

Prerequisites: Advancement to candidacy, instructor consent to act as sponsor, departmental approval of topic prior to registration. Independent research resulting in a thesis. May be repeated to maximum of 4 units. Graded CR/NC.

PHYSICS AND ASTRONOMY

School of Natural and Social Sciences

DEPARTMENT OFFICE

Physical Science 315

Phone: (213) 343-2100

The Master of Science degree in Physics is designed to prepare students for community college teaching, employment in industry, or further graduate study toward the doctorate in Physics.

Master of Science Degree in Physics

Admission to the Program

Applicants must meet university requirements for admission to graduate study. Before undertaking required graduate courses, students must complete the equivalent of an undergraduate major in Physics, and must have specific competence in the subjects covered in PHYS 206, 425AB, 426AB, and 432AB.

New graduate students must consult with the departmental graduate advisor *before registration* for assistance in planning their programs. Students should achieve classified graduate standing as early as practicable in their graduate study because it is prerequisite to the completion for credit of any courses in the degree program.

Requirements for the Degree (45 units)

A total of 45 units is required, with at least 23 in 500-level courses. Advancement to candidacy is prerequisite to filing the thesis or taking the comprehensive examination. Students should apply for candidacy immediately upon completing 16 units of their official program with the required grade point average.

Required Courses (25 units):

PHYS 510AB	Mathematical Methods of Physics	(4, 4)
PHYS 530AB	Classical Physics	(4, 4)
PHYS 532AB	Quantum Mechanics	(4, 4)
PHYS 542	Physics Research Conference	(1)

(Minimum of one quarter required.)

Options

Students select Option A or Option B for completion of their program. *Option A* emphasizes research and requires a thesis. *Option B* emphasizes advanced study which may be taken in a variety of physics areas. Option B programs may include research and directed study; such programs culminate in a comprehensive examination rather than a thesis. For special professional objectives, students may substitute 9 units of graduate level work in another science or mathematics area in place of Option A or B, with approval of adviser.

The *Interdisciplinary/Studies Master's* (described in the *Graduate and Postbaccalaureate Study* chapter) permits the combination of physics courses with courses in biology and chemistry in a program suited to interdisciplinary professional careers.

A. Research Option (20 units)

Required Courses (9 units):

Select from following:

PHYS 597	Graduate Research	(1-4)
PHYS 598	Graduate Directed Study	(1-4)
PHYS 599	Thesis	(1-4)

Electives (11 units):

Select with adviser approval.

B. Course Option (20 units)**Required Courses (9--12 units):**

Select *three* from following:

PHYS 411	Introduction to Astrophysics	(3)
PHYS 412	Laboratory Applications of Minicomputer and Microcomputers	(4)
PHYS 428	Statistical Physics	(3)
PHYS 431	Modern Optics	(4)
PHYS 433-434	Solid State Physics I, II	(4, 4)
PHYS 443AB	Biophysics (3, 2)	
PHYS 444	Nuclear Physics	(4)
PHYS 471	Advanced Physics Laboratory II	(3)
PHYS 491	Topics in Contemporary Experimental Physics	(3)
PHYS 492	Topics in Contemporary Theoretical Physics	(3)
PHYS 512AB	Modern Physics	(4, 4)
PHYS 531	Topics in Electrodynamics	(4)
PHYS 533	Solid State Theory	(4)
PHYS 542	Physics Research Conference	(1)

(Repeat to total of 2 units)

PHYS 544	Theoretical Nuclear Physics	(4)
PHYS 592	Seminar: Contemporary Physics	

Electives (8-11 units):

Select with adviser approval.

A maximum of 4 units of PHYS 598 may be included in the official program under this option. PHYS 597 and 599 may not be included in this option.

Comprehensive Examination (0 units)

All candidates must pass an examination administered by the department. For students who elect Option A (Research), this is an oral examination based on the thesis. For students who elect Option B (Course), this is a comprehensive examination (PHYS 596) about graduate level physics.

Normally, it will be a three-hour written examination which may be supplemented by an oral examination at the discretion of the examining committee. The examination will be given at least twice a year as announced by the department.

Students should expect to take the comprehensive examination (PHYS 596) the quarter they complete all course work on their program and must comply with school and departmental requirements.

Courses in Physics (PHYS)**400-level Courses**

All 400-level courses may be applied toward master's degree requirements except the following, subject to limits established by the department and approval of the graduate adviser. PHYS 410AB, 425AB, 426AB, 427, 432AB, 470, 497, 499

Graduate Courses

Classified graduate standing is required for admission.

510AB Mathematical Methods of Physics (4, 4)

Prerequisites: PHYS 410AB, 425AB, 426AB. Intended for beginning graduate students. Problem-solving using techniques current in theoretical physics. Series, integration, complex variables, integral transforms, matrices, eigenvalues, special functions, integral equations, numerical methods, probability, tensors.

512AB Modern Physics (4, 4)

Prerequisites: PHYS 425AB, 426AB.

512A: Hydrogen atom, atomic spectroscopy, electron shell structure, molecular binding, quantum statistics, theory of solids.

512B: X-rays, properties of nuclei, radioactivity, nuclear forces, elementary particles, cosmic rays, nuclear astrophysics.

530AB Classical Physics (4, 4)

Prerequisite or corequisite: PHYS 510AB. Unified treatment of advanced topics in classical physics, including Lagrange's and Hamilton-Jacobi theory, special relativity, electrodynamics, radiation theory.

531 Topics in Electrodynamics (4)

Prerequisite: PHYS 530AB. Continuation and expansion of topics covered in 530B. Emphasis on special topics and applications such as wave guides, scattering, diffraction, plasma physics, radiation damping, and self fields of a particle.

532AB Quantum Mechanics (4, 4)

Prerequisite or corequisite: PHYS 510AB.

532A: Formal structure of quantum mechanics, hermitian operators, Schrodinger theory and applications to soluble systems; angular momentum and rotation matrices.

532B: Scattering theory and phase-shift analysis, matrix mechanics, spin, permutation symmetry and identical particles, approximation methods.

533 Solid State Theory (4)

Prerequisites: PHYS 432AB, 510AB; 433 recommended. Use of quantum field theory and group theory for development of solid state topics such as band theory, transport processes, and collective particle phenomena.

542 Physics Research Conference (1)

Weekly meetings of faculty and students for report and discussion of recent developments in physics. Includes presentations by faculty, advanced students, or invited speakers. May be repeated to maximum of 2 units. Graded *CR/NC*.

544 Theoretical Nuclear Physics (4)

Prerequisites: PHYS 510AB, 532A. Selected topics from theory of nuclear models, nuclear reactions, and symmetry properties of elementary particles.

592 Seminar: Contemporary Physics (1-4)

Prerequisite: Department approval. Current topics in theoretical and/or experimental physics. May be repeated to maximum of 16 units as subject matter changes.

597 Graduate Research (1-4)

Prerequisites: Consent of a faculty sponsor and departmental approval of project prior to registration. Independent research, under guidance of the faculty. May be repeated for credit. Graded *CR/NC*.

598 Graduate Directed Study (1-4)

Prerequisite: Consent of a faculty sponsor before registration.

Independent study of advanced topics in the field; regular conferences with the sponsor. May be repeated for credit.

599 Thesis (1-4)

Prerequisites: Advancement to candidacy, consent of a faculty sponsor, departmental approval of topic prior to enrollment in course. Independent research resulting in a thesis. May be repeated to maximum of 9 units. Graded *CR/NC*.

POLITICAL SCIENCE**School of Natural and Social Sciences****DEPARTMENT OFFICE**

Engineering and Technology A523

Phone: (213) 343-2230

The Graduate Program

Two master's degree programs are offered in Political Science, in order to satisfy varying career objectives of graduate students. The Master of Arts degree emphasizes advanced studies for those interested in teaching, preparing for doctoral studies in political science, or preparing for political journalism, similar occupations, or various forms of citizen leadership. The Master of Science degree in Public Administration provides present and future public service employees the administrative skills and knowledge necessary for competent direction of personnel, administration of financial controls, and coordination of agency functions.

Admission to the Programs

Application must be made to both the Department of Political Science and the university. Forms for both may be obtained from the department office.

Completed departmental applications with one copy of transcripts from all colleges attended and two letters of recommendation (normally from Cal State L.A. faculty in the case of recent Cal State L.A. graduates) must be received by the Department of Political Science before August 1 for admission to fall quarter, December 1 for winter quarter, February 1 for spring quarter, and May 1 for summer quarter. University applications and two copies of official transcripts from all colleges attended must be sent to the Admissions Office in accordance with university admission deadlines.

Master of Arts Degree in Political Science

The program is built on the foundation of an undergraduate government or political science major and is designed to provide systematic study in government and related fields at an advanced level.

Departmental Requirements

In addition to university requirements for admission to graduate study, applicants must have a B (3.0) grade point average in the last 90 quarter units attempted. Applicants who have not completed an undergraduate major in government or political science or whose grade point average is below that required for regular admission may be admitted at the discretion of the department's graduate admissions committee.

Requirements for the Degree (45 units)

A total of 45 units is required, with at least 23 in 500-level courses. Choice of Fields
Three fields for the program must include *political theory*. The remaining fields must include at least *one* of the following: *American political studies*, *international relations and comparative political systems*, or *public administration*. When appropriate, students may choose one related outside field of graduate study in another discipline. Programs must include at least four units of 500-level courses in each of the three fields selected.

Required Courses (8 units):

POLS 509	Foundations of Empirical Political Theory	(4)
POLS 510	Seminar: Political Theory	(4)

Electives(8 units):

With adviser approval, select courses from two of following fields:

AMERICAN POLITICAL STUDIES

POLS 505	Seminar: Contemporary American Political Studies	(4)
POLS 510	Seminar: Political Theory	(4)

INTERNATIONAL RELATIONS AND COMPARATIVE POLITICAL SYSTEMS

POLS 527	Seminar: Advanced Studies in Comparative Politics and International Relations	(4)
POLS 531	Seminar: Latin American Government	(4)

PUBLIC ADMINISTRATION

POLS 560	Seminar: Public Administration	(4)
----------	--------------------------------	-----

POLS 561	Seminar: Intergovernmental Relations and Administration	(4)
POLS 564	Bureaucratic Systems	(4)
POLS 591	Seminar: Administrative Theory and Behavior	(4)

Additional Seminar (4 units):

Select one additional field from above or a 500-level course from history, economics, sociology, or geography,

Electives (26-30 units):

Select courses in political science or related fields at the 400- or 500-level with approval of adviser. Four units of POLS 599 may be included.

Comprehensive Examinations or Thesis (0, 5 units)

POLS 596	Comprehensive Examination	(0) or
POLS 599	Thesis	(5)

Written and oral comprehensive examinations are required to demonstrate the student's competence in three selected fields, one of which may be in a related discipline, and in the overall field of political science. Students should expect to take the comprehensive examinations (POLS 596) the quarter they complete all course work on their program or subsequently and must comply with school and departmental requirements. Students will be allowed a maximum of two attempts to complete the comprehensive examinations successfully. Failure to pass the comprehensive examinations, or any portion thereof, will result in disqualification from the program.

A thesis, in lieu of written comprehensive examinations (but not in lieu of the oral portion), may be authorized for exceptional students who present a proposal the department deems worthy of study. POLS 599 is required of all students authorized to submit a thesis.

Master of Science Degree in Public Administration

The degree program in Public Administration consists of core requirements and other graduate work selected to assist students in meeting their study objectives.

Departmental Requirements

In addition to university and departmental requirements for admission to graduate study, applicants with a 2.5-2.75 grade point average in the last 90 quarter units attempted in undergraduate status must complete a set of qualifying courses-16 quarter units on their program-with a minimum B (3.0) grade point average to qualify for classified graduate standing and continue in the program. Students who have not completed the corequisites listed below will include them among the qualifying courses.

Applicants with lower than a 2.5 grade point average in the last 90 quarter units attempted in undergraduate status will not be admitted to the M.S. program in Public Administration without clear and compelling evidence of their current capacity for satisfactory graduate academic performance.

Corequisites (16 units):

Completion of the following political science courses or equivalent is required. Students must earn a minimum B (3.0) average in corequisites and must repeat any course they complete with lower than a C grade.

*POLS 403	State and Local Government	(4)
*POLS 405	Intergovernmental Relations in the U.S	(4)
*POLS 460	Foundations of Public Administration	(4)
*POLS 479	Computers in the Public Sector	(4)

**These may be taken as corequisites to the M.S. degree program and must be among the first five courses completed.*

Requirements for the Degree (minimum 48 units)

A minimum of 48 units is required, with at least 24 in 500-level courses.

In addition to course requirements, students must complete a one-year internship in public administration or an approved field project. This requirement may be waived if the candidate holds, or has held, a position entailing managerial or professional level of responsibility in a public or private nonprofit agency.

Required Courses (28 units):

POLS 464	Public Sector Labor Relations	(4) or
POLS 476	Administrative Law	(4) or
ECON 433	Public Finance	(4)
POLS 466	Public Financial Administration	(4)
POLS 472	Organization and Management	(4)
POLS 480	Advanced Quantitative Methods in Political Science and Public Administration	(4)
POLS 530	Seminar: Public Policy Analysis	(4)
POLS 560	Seminar: Public Administration	(4)
POLS 590	Seminar: Philosophy of Public Service	(4)

Areas of Concentration (minimum 20 units)

Select two areas of concentration below and complete courses within them as indicated.

Financial Management

POLS 481	Managerial Computing in the Public Sector	(4)
POLS 566	Seminar: Public Budgeting and Financial Administration	(4)

Human Resources Management

POLS 463	Public Personnel Administration	(4) or
POLS 464	Public Sector Labor Relations	(4)
POLS 474	Organization Behavior and Development	(4)
POLS 563	Seminar: Advanced Problems in Public Personnel Administration	(4) or
POLS 564	Bureaucratic Systems	(4)

Human Services and Community Development

POLS 468	Administration of Human Resource Programs	(4)
or POLS470	Public Relations in Government	(4)
POLS 568	Seminar: Community Development Administration	(4)

Intergovernmental Relations

POLS 461	Dynamics of Urban Administration	(4)
POLS 561	Seminar: Intergovernmental Relations Administration	(4)

Public Management

POLS 473	Systems Design in Government	(4) or
POLS 481	Managerial Computing in the Public Sector	(4)
POLS 591	Seminar: Administrative Theory and Behavior	(4)

Public Policy Analysis and Evaluation

POLS 439	Policy Evaluation	(4) or
POLS 481	Managerial Computing in the Public Sector	(4)
POLS 539	Seminar: Policy Evaluation	(4)

Outside Area of Concentration

Select courses with adviser approval.

Students may substitute either of the following courses for a course in one of the fields above:

POLS 595	Selected Issues in Public Administration	(4) or
POLS 598	Graduate Directed Study	(4)

Comprehensive Examinations or Thesis (0, 5 units)

POLS 596	Comprehensive Examination	(0) or
POLS 599	Thesis	(5)

Students should expect to take the comprehensive examinations (POLS 596) the quarter they complete all course work on their program or subsequently and must comply with school and departmental requirements. Students will be allowed a maximum of two attempts to complete the comprehensive examinations successfully. Failure to pass the comprehensive examinations, or any portion thereof, will result in disqualification from the program. The comprehensive examination is a two-day examination consisting of three parts: a core examination in the various aspects of public administration (taken by all candidates) and examinations in each of the two areas of concentration (individually selected by each candidate).

A thesis, in lieu of the written examinations, may be authorized for exceptional students who present a proposal the department deems worthy of study, but only if the students can indicate in an oral examination competence in the field of public administration. POLS 599 is required of all students planning to submit a thesis.

Courses in Political Science (POLS)

400-level Courses

All 400-level courses may be applied toward master's degree requirements except the following, subject to limits established by the department and approval of the graduate adviser:

M.A.-Political Science:

POLS 470, 473

M.S.-Public Administration:

POLS 491, 492, 494, 496

Graduate Courses

Classified graduate standing is required for admission.

505 Seminar: American Political Studies (4)

Prerequisite: Baccalaureate, superior academic performance in political science. Analysis of selected issues and problems of national significance in the U.S. May be repeated as subject matter changes.

509 Seminar: Foundations of Empirical Political Theory (4)

Prerequisite: Departmental approval. Values and limitations in past and current applications of philosophy and methods of science to study of politics.

510 Seminar: Political Theory (4)

Prerequisite: POLS 410, 411, or 413. Selected topics in political philosophy. May be repeated as subject matter changes.

526 Seminar: International Political Economy (4)

(also listed as ECON 526) Prerequisite: ECON/POLS 426 or ECON 406 plus POLS 427. Research and analysis of the interactions of politics and economics in the international arena.

527 Seminar: Advanced Studies in Comparative Politics and International Relations (4)

Prerequisite: Eight units in international relations (LAS 424, POLS 425-427) or in comparative politics (POLS 421 plus 4 units in 450-456). Special problems in international relations and comparative politics. May be repeated as subject matter changes.

530 Seminar: Policy Analysis (4)

Prerequisite: POLS 430. Concepts and techniques of policy analysis, including nature of public problems, initiation, estimation, implementation, analysis of impacts and evaluation.

531 Seminar: Latin American Government (4)

Prerequisite: POLS 451. Analysis of selected topics in Latin American politics.

539 Seminar: Policy Evaluation (4)

Prerequisite: POLS 439. Concepts and techniques of policy evaluation. Individual projects.

560 Seminar: Public Administration (4)

Prerequisite: POLS 460. Advanced studies in administrative organization; delegation, field coordination, communication, accountability, and controls; analysis of values process, structures, and arrangements in large scale governmental management; trends in administrative research.

561 Seminar: Intergovernmental Relations and Administration (4)

Prerequisite: POLS 405; 460 or 461. Dynamics and patterns of vertical and horizontal intergovernmental relations; challenges to the contemporary urban administrator in dealing with other governments at all levels.

563 Seminar: Advanced Problems in Public Personnel Administration (4)

Prerequisite: POLS 463. Case studies of personnel problems encountered in governmental agencies; examination of varying roles of boards, commissions, and official legislative bodies; new frontiers in personnel research and personnel legislation.

564 Bureaucratic Systems (4)

Prerequisites: POLS 474, classified standing in master's degree program in Department of Political Science. Analysis of bureaucratic systems at all levels of government, with emphasis on value context, environmental setting, operational dynamics, and power variables. May be repeated as subject matter changes.

566 Seminar: Public Budgeting and Financial Administration (4)

Prerequisite: POLS 466. Issues and problems in budget authorization, execution, and control, including public policy implications; special emphasis on program and performance budgeting.

568 Seminar: Community Development Administration (4)

Prerequisite: Instructor consent. Theory and process of planned development; role of administration in formulating and implementing development goals at all political community levels; planning, strategy, obstacles, assistance, development of competent personnel, institution-building.

590 Seminar: Philosophy of Public Service (4)

Prerequisites: POLS 560 or 561, instructor consent. Past and present philosophies of public service; bureaucracy in modern society; social-psychological and ethical aspects of public service; case studies of decision making.

591 Seminar: Administrative Theory and Behavior (4)

Prerequisite: POLS 472. Analysis of administrative theory and utilization of advances in behavioral research as they apply to studies of administrative process and organization.

595 Selected Issues in Public Administration (4)

Prerequisite: Twelve units in public administration, including one seminar. Presentation and discussion of selected issues and trends in administrative processes at all levels of government. Topics change. May be repeated to maximum of 8 units with adviser approval.

598 Graduate Directed Study (1-5)

Prerequisite: Instructor consent to act as sponsor. Independent study of advanced topics in field; regular conferences with sponsor. May be repeated.

599 Thesis (1-5)

Prerequisites: Advancement to candidacy, instructor consent to act as sponsor, departmental approval of topic prior to registration. Independent research resulting in a thesis. Grade *A/R/NC*.

PSYCHOLOGY_**School of Natural and Social Sciences****DEPARTMENT OFFICE**

King Hall C3104

Phone: (213) 343-2250

The Graduate Program

The Department of Psychology offers both Master of Arts and Master of Science degrees. Although both provide strong preparation for doctoral work, the M.A. with its research orientation, is more specifically predoctoral. The M.S. prepares students for such professions as marriage, family, and child counseling; applied behavior analysis; and community, industrial, organization psychology and community college teaching.

Admission to the Program

Applicants must have completed an undergraduate major in psychology and must apply to the Department of Psychology. Application forms are available in the department graduate studies office. Completed applications and transcripts from all colleges and universities attended (except Cal State L.A.) must be received by the department before action on admission can be ensured.

Students who have not received a baccalaureate in psychology or whose grade point average in the last 90 quarter units falls below the minimum 2.5 required for admission to the university may, under certain conditions, be admitted by special action. Evaluation of undergraduate preparation is made by the principal graduate adviser.

Classified Standing

Students are encouraged to apply for classified standing during their first quarter in attendance as a graduate student. This is done by completing an official program sheet that must be approved by the principal graduate adviser, department chair, and school dean. No more than 13 units completed prior to attainment of classified standing may be included on the official master's degree program.

Departmental Requirements

Students who have a bachelor's degree in Psychology from Cal State L.A., or equivalent, and who have attained a 3.4 grade point average in their undergraduate major, or a B (3.0) grade point average with a score of 550 or higher on the GRE subject examination in Psychology, may elect two additional graduate seminars with adviser approval.

Within their first 16 units, students are required to successfully complete one of the following:

*PSY 411, 414, or 429

**Applied Behavior Analysis option students may substitute PSY 417*

Students who have a bachelor's degree in Psychology from Cal State L.A., or equivalent, but whose grade point average and/or test score is below the minimum required must complete PSY 555 and one of PSY 411, 414, and 429 (for *Applied Behavior Analysis* option, may substitute PSY 417), each with a B grade or higher, within their first 16 units.

Students who enter the program without an undergraduate degree in Psychology are required to complete 37 units of upper division course work in psychology. Upon completion, students may proceed with their graduate course work as outlined above.

Enrollment in additional 500-level courses is restricted to students who have completed the above required courses each with a grade of B or higher.

Advancement to Candidacy

Upon completion of 16 units of the approved master's degree program with a B (3.0) grade point average or higher, students must apply for advancement to candidacy. Enrollment in PSY 585, 590, 595, 597, 598, 599, and the comprehensive examinations (596) is limited to students who have been advanced to candidacy.

Requirements for the Degrees

The two degrees share a common core of psychology seminars, as follows:

Required Courses (10- 12 units):

One of the following:

*PSY 411, 414, 429

**Applied Behavior Analysis option students may substitute PSY 417*

In addition, select two 500-level courses with adviser approval.

Master of Arts Degree (45 units)

A total of 45 units is required, with at least 23 in 500-level courses *Electives in Psychology/Related Fields (29-35 units)*:

Select 2-5 units of PSY 597 and 598, determined in consultation with departmental adviser, and an additional 24-33 units of courses approved by adviser to complete 45 units required for the degree.

Of the required 23 units of 500-level courses in psychology, no more than 13 units may be elected in combinations of PSY 590, 595, 597, 598, and 599.

Comprehensive Examination or Thesis (0, 4 units)

PSY	596	Comprehensive Examination (0) or	
PSY	599	Thesis	(4)

Students should expect to take the comprehensive examination (PSY 596) the quarter they complete all course work on their program and must comply with school and departmental requirements.

Master of Science Degree (54-86 units)

A total of 54-86 units is required, depending on the option selected.

The *General* option requires 54 units, the *Applied Behavior Analysis* option requires 57 units, and the *Marriage, Family, and Child Counseling* option requires 73-86 units.

*** General Option (minimum 54 units) Required Field Study (8 or 12 units)**

PSY	585	Directed Clinical Practice	(4,4, 4) or
PSY	595	Field Experience in Psychology	(4, 4)

This requirement may be waived for students with adequate prior experience in an appropriate field as determined by the department. Any combination of field and teaching experience that meets School of Education requirements for the credential program with specialization in *school psychology* also satisfies this requirement.

Electives in Psychology and Related Fields (26-36 units)

Select 2-5 units of PSY 597 and 598, in consultation with a departmental adviser, and an additional 21-34 units of adviser-approved courses to comprise the total number of units required for the degree.

Of the required 27 units of 500-level courses in psychology, no more than 13 units may be elected in combinations of PSY 590, 595, 597, 598, and 599.

Comprehensive Examination or Thesis (0, 4 units)

Students should expect to take the comprehensive examination (PSY 596) the quarter they complete all course work on their program and must comply with school and departmental requirements.

*** Applied Behavior Analysis Option (57 units)**

The major with this option trains students in the concepts and techniques of behavior analysis as applied to areas of counseling, behavioral medicine, and education. It also provides training in traditional areas of psychology and prepares students for employment at the master's degree level and for doctoral level training.

Required courses (57 units):

METHODOLOGY (4 units):

PSY	417	Single Case Research Design	(4)
-----	-----	-----------------------------	-----

CONCEPTUAL ANALYSIS (4 units):

PSY 428 Introduction to Analysis of Behavior (4)

EXPERIMENTAL ANALYSIS OF BEHAVIOR (8 units):

PSY 421 Psychology of Learning: Basic Processes (4)

PSY 500 Seminar: Learning and Behavior (4)

APPLIED BEHAVIOR ANALYSIS (23 units):

COUN 406 Behavioral Counseling and Self-Management (4)

COUN 501 Behavior Analysis in School, Home, and Agency Settings (4)

COUN 502 Advanced Behavioral Contingency Management in Schools (4)

COUN 504 Advanced Topical Study in Application of Behavior Analysis in Education (4)

COUN 593 Practicum: Staff Development and Consultation (3)

PSY 528 Seminar: Behavior Modification (4)

ELECTIVE (4 units):

Select one from following:

PSY 501 Seminar: Sensation and Perception (4)

PSY 502 Seminar: Motivation and Emotion (4)

PSY 503 Seminar: Complex learning Processes (4)

PSY 506 Seminar: Physiological Psychology (4)

PSY 508 Seminar: Comparative Psychology (4)

PSY 510 Seminar: Abnormal Psychology (4)

PSY 511 Seminar: Experimental Child Psychology (4 each)

PSY 512 Behavior Disorders in Children (4)

* **FIELD WORK (6 units):**

PSY 595 Field Experience in Psychology (6) or

COUN 586S Supervised Field Experience in Pupil Personnel Services: School Counseling (6)

COUN 588 Supervised Practice in Rehabilitation Counseling (6)

* *interview required before admission to field work courses*

GRADUATE RESEARCH AND THESIS (8 units):

PSY 597 Graduate Research (2)

PSY 599 Thesis (6)

Marriage, Family, and Child Counseling Option (73-86 units)

The major with this option is designed to fulfill recently-enacted state regulations for licensure in Marriage, Family, and Child Counseling as outlined in the Business and Professions Code Section 4980.37. The program further prepares students with the skills necessary for employment in mental health and related fields that utilize psychological and counseling services.

Required Courses (73-86 units):

HUMAN BIOLOGICAL, PSYCHOLOGICAL, AND SOCIAL DEVELOPMENT (4 or 8 units):

PSY 412AB Psychology of Human Development: Childhood and Adolescence (4, 4) or

PSY 462 Psychology of Human Development: Maturity and Aging (4) or

COUN 405AB Theoretical and Developmental Aspects of Behavior (4, 4)

HUMAN SEXUALITY (4 units):

PSY 542 Human Sexuality: Dysfunction and Treatment (4) or

COUN 552 Counseling and Human Sexuality (4)

PSYCHOPATHOLOGY (8 units):

PSY	510	Seminar: Abnormal Psychology	(4) <i>plus</i>
PSY	410A or 410B	Abnormal Psychology	(4)

CROSSCULTURAL MORES AND VALUES (4 units):

SOC	460	Race and Ethnic Relations	(4)
-----	-----	---------------------------	-----

THEORIES OF MARRIAGE, FAMILY, AND CHILD COUNSELING (19-20 units):

PSY	426	Family Therapy Dynamics and Perspectives	(4)
PSY	436AB	Counseling and Psychotherapy: Theories, Methods, and Issues	(4, 4)
EDSP	412	Issues in Child Abuse, Neglect, and Family Violence	(4) <i>plus</i>
PSY	512	Behavior Disorders in Children	(4) <i>or</i>
COUN	450	Counseling Theories	(3)

PROFESSIONAL ETHICS AND LAW (4 units):

PSY	464	Psychology and the Law	(4)
-----	-----	------------------------	-----

HUMAN COMMUNICATION (4 units):

PSY	427	Family Therapy Techniques:Strategies for Change	(4)
-----	-----	---	-----

APPLIED PSYCHOTHERAPEUTIC TECHNIQUES OF MARRIAGE, FAMILY, AND CHILD COUNSELING (12 units):

PSY	585	Directed Clinical Practice	(4, 4, 4)
-----	-----	----------------------------	-----------

RESEARCH METHODOLOGY (4 units):

PSY	411	Research Methodology in Psychology	(4) <i>or</i>
COUN	428A	Principles of Measurement and Research in Counseling	(4) <i>or</i>
CHDV	504	Research Methods with Children and Families	(4)

SURVEY IN PSYCHOLOGICAL TESTING (4-12 units):

PSY	431	Survey of Psychological Tests	(4) <i>or</i>
COUN	428B	Principles of Measurementand Research in Counseling	(4) <i>or</i>
PSY	531AB**	Individual Testing and Case Study Techniques	(4, 4) <i>plus</i>
COUN/PSY	534	Methods of Personality Assessment	(4)

***must be taken as a sequence and appear on graduate program*

ALCOHOL AND CHEMICAL SUBSTANCE (4 units):

HS	456	Health Studies on Alcohol, Narcotics, Nutrition, and Tobacco	(4)
----	-----	---	-----

COMPREHENSIVE EXAMINATION (2 units):

PSY	596	Comprehensive Examination	(0) <i>plus</i>
PSY	598	Graduate Directed Study	(2)

The Psychology Clinic

The Department of Psychology provides a training facility for Psychology majors and students in the School Psychology credential program. The facility is part of the Associated Clinics in the School of Health and Human Services. Students selected are admitted to this program upon approval for enrollment in applicable psychology courses. Qualified students may counsel children, families, and/or groups.

Courses in Psychology (PSY)**400-level Courses**

All 400-level courses may be applied toward master's degree requirements, subject to limits established by the department and approval of the graduate adviser.

Graduate Courses

Classified graduate standing is required for admission.

500 Seminar: Learning and Behavior (4)

Prerequisite: PSY 421. Examination of critical areas of the experimental literature in learning and behavior with a stress on issues related to the experimental analysis of behavior.

501 Seminar: Sensation and Perception (4)

Prerequisite: PSY 425. Critical review of current literature; theories, methods, and problems concerning sensation and perception.

502 Seminar: Motivation and Emotion (4)

Prerequisite: PSY 423. Critical review of current literature and methods in the study of motivation and emotion.

503 Seminar: Complex Learning Processes (4)

Prerequisites: PSY 424, 500. Critical examination of experimental data and theory in learning, memory, and cognition.

504 Advanced Experimental Methods (4)

Prerequisite: Instructor consent. Nonstatistical issues in design of experimental psychological research. Topics include design logic, literature sources, apparatus, subjects. Emphasis on preparation of an experimental design in an area of student's interest.

506 Seminar: Physiological Psychology (4)

Prerequisite: PSY 401. Critical discussions, including physiological correlates and mechanisms of motivation and emotion, learning and memory, human psychopathology.

508 Seminar: Comparative Psychology (4)

Prerequisites: PSY 401,408. Examination in depth of contemporary research dealing with behavior of organisms at different phyletic levels. May be repeated once for credit as subject matter changes.

510 Seminar: Abnormal Psychology (4)

Prerequisite: PSY 410AB. Intensive analysis of major types of abnormal behavior, their development and prevention. Emphasis on relationship of abnormal behavior to theories of personality and research findings.

511 Seminar: Experimental Child Psychology (4 each)

Prerequisites: PSY 304AB, 412AB or comparable undergraduate work in research methods and human development, and instructor consent. Issues in developmental psychology. Topics announced in *Schedule of Classes*, selected from following. May be repeated to maximum of 8 units with different suffixes.

511 R Research Methods in Child Psychology

511 T Theories of Developmental Psychology

512 Behavior Disorders in Children (4)

Prerequisites: PSY 410AB, 412AB. Application of principles of psychology to behavior disorders in children. Designed primarily for clinicians, social workers, school psychologists, and parent educators.

515 Advanced Statistical Methods in Psychology (4)

Prerequisite: PSY 414. Topics include fixed, mixed, and random models of analysis of variance, interaction, analysis of covariance, and miscellaneous nonparametric statistics.

522 Seminar: Social Psychology (4)

Prerequisite: PSY 422. Theory, methodology, and applied problems dealing with the phenomena of social behavior. Individual projects required.

528 Seminar: Behavior Modification (4)

Prerequisite: PSY 4210r 428; PSY 417 recommended. Basic theory and procedures in behavior modification including desensitization, token economies, biofeedback, and self control. Discussion of procedures for assessing the effectiveness of intervention.

531AB Individual Testing and Case Study Techniques (4, 4)

(also listed as COUN 531AB) Prerequisites: PSY 430 or COUN 428 and one of the following sequences: PSY 410AB and 438; 410AB and 431; 418AB and 431; or 410A and COUN 405A, 501 and 529. Intensive practice in administration and interpretation of better known testing devices for mental ability, perceptual and motor functioning, and personality dynamics, with attention to integration of results in case studies. Lecture 3 hours, laboratory 3 hours.

534 Methods of Personality Assessment (4)

(also listed as COUN 534) Prerequisite: PSY 531 AB. Study and evaluation of current personality tests, objective and projective. Administration, scoring, interpretation, and reporting of results; findings of empirical research. Lecture 3 hours, laboratory 3 hours.

536 Seminar: Counseling (4)

(general and special sections) Prerequisites: PSY 410AB, 418AB, or 436AB and instructor consent. Intensive discussion of typical counseling situations coordinated with readings in area; evaluation of selected counseling theories. Offered in general and special sections, e.g., child, family, group. May be repeated in different sections, with maximum of 8 units applied to master's degree.

537 Introduction to Rorschach Technique (4)

Prerequisites: Minimum of 12 units of 500-level PSY courses, including 534, instructor consent. Appraisal of personality by means of the Rorschach technique; administration, scoring, and basic interpretation. Lecture 3 hours, laboratory 3 hours.

541 Seminar: Group Processes (4)

Psychological nature of social groups with emphasis on processes in small groups. Research design and experimental methods of studies in social interaction of small groups; analysis of research findings.

542 Human Sexuality: Dysfunction and Treatment (4)

Prerequisite: Eight units of course work in theory and techniques of counseling. Theoretical perspectives on treatment of sexual dysfunction; diagnosis, treatment, research findings, ethical considerations.

546 Seminar: Human Resource Development (3)

Prerequisite: PSY 446. Analysis of results of recent behavioral research applied to employment; psychological aspects of work in an industrial setting stressed.

547 Seminar: Psychological Factors in Man-Machine Systems (4)

Individual research projects in application of behavioral properties of man to man-machine systems. Ways of structuring machines to enhance system performance; research methods in human factors engineering; current problem areas.

552 Seminar: Psychological Foundations of Organizational Behavior (3)

Investigation and analysis of psychological foundations of organizational behavior. Particular attention given to relationship of psychological principles to organizational structure and functions in industry.

555 Introduction to Graduate Study in Psychology (6)

Prerequisites: PSY 304AB, 308. Critical evaluation of core areas in psychology including: learning, perception, personality, physiological, social, and developmental psychology. Extensive use of bibliographic resources and oral and written presentations.

585 Directed Clinical Practice (4)

Prerequisites: PSY 438; 436Bor 531B; or 405 and 445; advancement to candidacy; departmental approval. Lecture, discussion, and supervised experience in providing psychological services in campus or community settings. May be repeated to maximum of 12 units. Grade CR/NC.

588 Critical Problems in Psychology (4)

Prerequisite: Instructor consent. Critical problems in psychology as a science or as a profession. Topic varies each quarter. May be repeated for credit.

590 Practicum in Counseling (1-9)

Prerequisites: PSY 438; 536(*may be taken concurrent/y*); advancement to candidacy; and approval by departmental committee in quarter prior to enrollment. Independent supervised field experience in counseling. GradedCR/NC.

595 Field Experience in Psychology (1-9)

Prerequisites: Advancement to candidacy; instructor consent; application to department in quarter prior to enrollment. Independent supervised field experience in an applied area of psychology. May be repeated to maximum of 12 units. GradedCR/NC.

597 Graduate Research (1-6)

Prerequisites: Advancement to candidacy; instructor consent to act as sponsor; departmental approval of project prior to registration. Independent research under guidance of the faculty. May be repeated for credit. GradedCR/NC.

598 Graduate Directed Study (1-4)

Prerequisites: Advancement to candidacy; instructor consent to act as sponsor. Independent study of advanced topics in the field; regular conferences with sponsor. May be repeated for credit. Graded CR/NC.

599 Thesis (1-9)

Prerequisites: Advancement to candidacy, instructor consent to act as sponsor, departmental approval of topic prior to registration. Independent research resulting in a thesis. May be repeated to maximum of 9 units. GradedCR/NC.

SOCIOLOGY_

School of Natural and Social Sciences

DEPARTMENT OFFICE

King Hall C3093

Phone: (213) 343-2220

FAX: (213) 343-5155

The Master of Arts degree in Sociology provides advanced study in sociological theory and methods of research with a variety of subject matter emphases that students plan with a graduate adviser. The program prepares students for doctoral studies, teaching at the secondary or community college level, or working in a professional capacity in governmental or private agencies or organizations. Two options are offered. Option A requires a thesis, and Option B requires a comprehensive examination.

Master of Arts *Degree*

Admission to the Program

Prerequisite to admission are 36 undergraduate units in sociology. These must include SOC 201,210AB, 390, 412, 414, and other courses as necessary. Satisfactory equivalents will be determined by a graduate adviser in Sociology.

Requirements for the Degree (45 units)

A total of 45 units is required, with at least 23 in 500-level courses.

Required Courses (12-20 units):

SOC 410	Advanced Statistics	(4)
<i>(if not taken in undergraduate standing)</i>		
SOC 490	Advanced Research Methods	(4)
<i>(if not taken in undergraduate standing)</i>		
SOC 512	Seminar: History of Sociological Theory	(4)
SOC 514	Seminar: Contemporary Sociological Theory	(4)
SOC 590	Seminar: Sociological Research	(4)

Electives (19-33 units):

These must include 8 units of 500-level SOC seminars for students who elect Option A and 11 units for Students who elect Option B.

Comprehensive Examination or Thesis (0,6 units)

Students elect Option A or Option B.

Option A: Thesis

SOC 599 Thesis (6)
Oral defense of the thesis is required.

Option B: Comprehensive Examination

SOC 596 Comprehensive Examination (0)

The comprehensive examination (SOC 596) is a written examination in three fields of concentration: theory, methods, and one other field selected by the candidate and approved by the adviser. Students should expect to take the comprehensive examination the quarter they complete all course work on their program and must comply with school and department requirements. Students are allowed a maximum of two attempts to complete the comprehensive examination successfully.

Courses in Sociology (SOC)

400-level Courses

All 400-level courses may be applied toward master's degree 1 requirements subject to limits established by the department and approval of the graduate adviser.

Graduate Courses

Classified graduate standing is required for admission.

512 Seminar: History of Sociological Theory (4)

Historical dimensions, European and American, of development of systematic sociological theory and method; continuity and critique of major contributions to theories of society and the social processes.

514 Seminar: Contemporary Sociological Theory (4)

Exploration and critique of problems, methods, and theories characteristic of contemporary sociological inquiry; their relationship and contribution to advancement of sociological theory and application to selected social problems.

521 Seminar: Sociology of Knowledge (4)

Relationships of scientific, artistic, legal, and intellectual activities to social structure, institutions, and historical change.

522 Seminar: Social Psychology (4)

Analysis and critique of current approaches and investigations of the social processes that bind individuals and groups.

526 Seminar: Sociology of Deviant Behavior (4)

Prerequisites: SOC 426, instructor consent. Analysis of major theoretical approaches and empirical studies in deviance; selected topics and current issues in study of social deviance.

530 Seminar: Urban Social Systems (4)

(also listed as GEOG 530) Prerequisite: Instructor consent. Growth and nature of urban social systems in selected cities and metropolitan areas, theories of urban structure and problems, improving quality of urban life, comparisons of cities in various countries.

534 Seminar: Population (4)

Prerequisite: SOC 434. Problems of population growth; social and psychological factors in population dynamics; population planning and policy.

540 Seminar: Marriage and the Family (4)

Advanced study of sociopsychodynamics of marriage and the family; emphasis on recent research on family change, parent-child relationships, and family instability; successful family life.

544 Seminar: Social Organization and Institutions (4)

Advanced consideration of selected macrosocial structures and their related processes and functions: total societies, institutional subsystems, complex organizations, ethnic subsocieties, professions; emphasis varies.

560 Seminar: Racial and Ethnic Minorities (4)

Prerequisite: SOC 460 recommended. Examination in depth of critical problems and trends affecting American minority groups; emphasis on analysis of change in strategies, tactics, ideologies, theories, and consequences of minority group relations.

580 Seminar: Criminology (4)

Prerequisite: SOC 480. Advanced study of criminal behavior, social deviance, and social structure; comparative studies of contemporary criminality, criminal justice, and criminal codes; legal, medical, and psychiatric interpretation of criminal behavior.

584 Seminar: Corrections (4)

Advanced study of sociological aspects of treatment of offender from arrest to release process; discussion of cross-cultural practices and current theories.

590 Seminar: Sociological Research (4)

Prerequisite: SOC 490; recommended corequisite: SOC 597. Advanced study in behavioral research methodology; survey design; experimental design, analysis; problems of interpretation, scaling techniques, models, simulation, computer data analysis, supervised application of methods.

591 Seminar: Computer Applications of Multivariate Techniques in Sociology (4)

Prerequisite: SOC 410. Multivariate statistical techniques in sociology and their computer applications; multivariate table analysis, multiple regression, path analysis, analysis of variance, discriminant analysis, factor analysis, and other selected topics of multivariate analysis.

595 Critical Issues and Problems in Sociology (4)

Prerequisite: Instructor consent. Critical areas of social inquiry and special problems of sociology as a social science and as a profession. Content varies; see *Schedule of Classes* for specific topic. May be repeated once for credit.

597 Graduate Research (1-3)

Prerequisite: Consent of faculty sponsor. Proposed study must be approved prior to registration. Directed empirical research on a problem in sociology from conception through design; data gathering, analysis, and final written report. May be repeated for credit. Graded CR/NC.

598 Graduate Directed Study (1-4)

Prerequisite: Consent of faculty sponsor. Proposed study must be approved prior to registration. Directed reading and critical analysis of a problem in sociology; written reports and conferences. May be repeated for credit.

599 Thesis (1-3)

Prerequisites: Advancement to candidacy, instructor consent to act as sponsor, department approval of topic prior to registration. Independent research resulting in a thesis. Must be repeated to maximum of 6 units. Graded CR/NC.

FACULTY

FULL-TIME FACULTY, 1992-1993

Listings corrected to April 13, 1993. Year in parentheses indicates year of appointment as a full-time faculty member.

Russell J. Abbott (1987)

Professor of Computer Science

B.A., 1962, Columbia University; M.A., 1963, Harvard University; Ph.D., 1973, University of Southern California

Adrian Muhammad Abdeen (1986)

Professor of Accounting

B.S., 1963, M.B.A. 1965, University of Southern Mississippi; D.B.A., 1974, Mississippi State University

Kodzo O. Abledu (1985)

Professor of Electrical Engineering

B.Sc., 1976, University of Science and Technology, Ghana; MSc., 1979, University of British Columbia; Ph.D., 1983, Iowa State University

Raquel Ackerman (1987)

Assistant Professor of Anthropology

B.A., 1976, Barnard College, Columbia University; Ph.D., 1986, Kings' College, University of Cambridge, U.K

Laura Chey Acuna (1990)

Assistant Professor of Broadcasting

B.A., 1978, California State College, Long Beach; M.F.A., 1986, University of California, Los Angeles

T. Jean Adenika-Morrow (1992)

Associate Professor of Education

B.A., 1966, San Francisco State University; M.S., 1968, Ph.D., 1972, Florida State University

Abdallah M.A. Aish (1966)

Professor of Management

B.B.A., 1954, Ein-Shams University, Egypt; M.B.A., 1961, Columbia University; Ph.D., 1969, University of California, Los Angeles

Vladimir N. Akis (1982)

**Associate Professor of Mathematics
and Computer Science**

B.A., 1976, California State University, Sacramento; M.A. 1977, University of California, Berkeley; Ph.D., 1982, University of California, Davis

Mohammad Ala (1985)

Professor of Management

B.S. 1976 Tehran College of Insurance, Iran; MB.A., 1978, Emporia State University; D.B.A., 1983, Louisiana Tech University

Kathryn L Alesandnni (1984)

Professor of Education

B.A., 1970, Ed.M., 1971, University of Illinois; Ph.D., 1979, University of California, Los Angeles

Radi Al-Jishi (1986)

Associate Professor of Physics

B.S. 1975, American University of Beirut, Lebanon; Ph.D., 1982, Massachusetts Institute of Technology

Janicemarie Allard (1970)

Professor of Sociology

B.A., 1966. M.A., 1968, Ph.D., 1973, University of California, Los Angeles

Wayne Paul Alley (1969)

Professor of Biology

B.A., 1961, University of California, Berkeley; M.S., 1964, San Diego State College; Ph.D., 1968, University of Michigan

John M. Allswang (1968)

Professor of History

A.B., 1959, University of Illinois; M.A., 1960, University of Iowa; Ph.D., 1967, University of Pittsburgh

Burton L Alpers (1974)

B.A., 1962, Baldwin-Wallace College; M.A., 1964, Ph.D., 1967, Michigan State University

Professor of Psychology**J. Theodore Anagnoson (1983)**

B.A. 1965, Lehigh University; M.A., 1969, American University; M.A. 1975, Ph.D., 1977, University of Rochester

Professor of Political Science**E. Frederick Anderson (1991)**

B.A., 1965, California State University, Los Angeles; M.S.W., 1967, San Diego State University; Ph.D., 1976, University of Southern California; L.C.S.W., 1969, M.F.C.C., 1969, California

Professor of Social Work

Kenneth L Anderson (1970)

Associate Professor of Microbiology

B.S., 1963, Iowa State University; M.S., 1965, University of Iowa; Ph.D., 1968, University of Utah

Konrad A. Annul (1984)

B.S., 1970, University of Illinois; M.S., 1973, McMaster University, Canada; Ph.D., 1977, Australian National University

Professor of Physics**Ralph Arroyo (1977)**

B.A., 1970, California State College, Los Angeles; M.S., 1972, Ph.D., 1979, University of Southern California

Professor of Education**Mohammad B. Ayati (1982)**

B.S., 1966, University of Tehran, Iran; M.S., 1975, Ph.D., 1980, University of California, Los Angeles

Professor of Information Systems**Kevin Baaske (1988)**

B.A., 1976, M.A., 1978, University of Wisconsin-Milwaukee; Ph.D., 1989, University of Southern California

Assistant Professor of Speech Communication**George O. Bachmann (1978)**

B.A., 1965, M.A., 1971, California State College at Los Angeles

Associate Director, Admissions and University Outreach**Gordon Bagot (1988)**

B.S. 1967, University of Arizona; M.B.A., 1969, University of Nevada; Ph.D., 1974, University of California, Los Angeles

Assistant Professor of Management**Mark Lee Bailey (1989) Assistant**

B.S., 1976, University of Wisconsin; M.S., 1982, Ph.D., 1986, Indiana University

Professor of Physical Education**William G. Baker (1972)**

B.A., 1967, Washington University; M.S., 1969, Ph.D., 1970, University of Oklahoma

Professor of Management**Mark Balaguer (1992)**

B.A., B.S., 1986, University of Colorado; Ph.D., 1992, City University of New York

Assistant Professor of Philosophy**Mariohn Balas (1965)**

B.S., 1960, Columbia Union College; University; R.N., 1961, California

Professor of Nursing

M.S., 1965, Loma Linda

Francisco E. Balderrama (1984)

B.A., 1970, Loyola University of Los Angeles; M.A., 1972, Ph.D., 1978, University of California, Los Angeles

Professor of Chicano Studies and History**Frank R. Balle (1962)**

B.S.C.E. 1957, M.S.C.E., 1958, University of Michigan; Registered Professional Civil Engineer, 1965, California

Professor of Civil Engineering**Roy I. Barnett, Jr. (1985)**

B.S., 1951, Lehigh University; M.S., 1953, Ph.D., 1963, Ohio State University

Professor of Electrical Engineering

C. Allen Barrett (1991)**Associate Professor of Criminal Justice**

B.A., 1966, St. Paul's College; M.A., 1978, New York University; Ph.D., August Bollmer University

Butrus G. Basmaji (1969)**Professor of Mathematics**

B.S. 1963, M.S., 1964, American University of Beirut, Lebanon; Ph.D., 1968, University of Maryland

Sharon Bassett (1967)**Professor of English**

B.A., 1964, Elmira College; M.A., 1967, Ph.D., 1971, University of Rochester

Stephen J. Baumgartner (1988)**Assistant Professor of Information Systems**

B.S., 1964, St. Lawrence University; M.B.A., 1968, State University of New York at Buffalo; M.S., 1971, London School of Economics (U.K.)

Pollyanna Baxter (1988)**Associate Professor of Music**

B.A., 1956, Los Angeles State College; M.A., 1978, California State College. Los Angeles

Linda Beamer (1991)**Associate Professor of Office Systems and Business Education**

B.A., College of Wooster; M.A., Ph.D., University of Toronto, Canada

Abdallah J. Beddawi (1963)**Professor of French**

B.A., 1954, Syrian University, Syria; M.A., 1957, University of California. Berkeley; Doctorat d'Universite, 1966, University of Paris, France

Gerald Beer (1971)**. Professor of Mathematics**

B.A., 1967, University of California, Santa Barbara; M.A., 1969, Ph.D., 1971. University of California, Los Angeles

William L Belan (1982)**. Professor of Music**

B.M., 1972, University of California, Los Angeles; M.M., 1975, University of Tulsa; D.M.A., 1984, University of Oklahoma

James R. Bell (1990)**Assistant Professor of Anthropology**

B.A., 1974. M.A., 1977, California State College, Los Angeles; Ph.D., 1987, University of California, Santa Barbara

Beryl L Bellman (1989)**Associate Professor of Speech Communication**

B.A., 1964, M.A., 1966, University of California, Los Angeles; Ph.D., 1971, University of California, Irvine

Alfred Bendixen (1988)**. Associate Professor of English**

B.A. 1973, M.A., 1974, State University of New York at Binghamton; Ph.D., 1979, University of North Carolina

Jeffrey W. Benedict (1989)**Assistant Professor of Music**

B.Mus., 1980, M.A., 1982, University of Denver

Bernard B. Berk (1973)**Associate Professor of Sociology**

B.A., 1956, University of California, Los Angeles; M.A., 1957, Ph.D., 1961, University of Michigan

Gary A. Best (1968)**. Professor of Education**

B.A., 1961, Los Angeles State College; MA., 1965, California State College, Los Angeles; Ph.D., 1968, University of Minnesota

Shirley Jean Better (1969)**Professor of Social Work**

B.A., 1956, University of Illinois; M.S.W., 1958. University of Michigan; D.S.W., 1987, University of California, Los Angeles

Anjan K. Bhaumik (1966)**Professor of Civil Engineering**

B.E., 1961, Calcutta University, India; M.S., 1963, Ph.D., 1966, University of Minnesota

Jens D. Biermeier (1985)**Professor of Marketing**

B.S., 1974, Fachhochschule of Cologne, Germany; MBA., 1977, Ph.D., 1982, University of Essen, Germany

Beverly R. Bigler (1973)**Professor of Nursing**

B.S., 1965, California State College, Los Angeles; M.S., 1973, University of California, San Francisco; Ed.D., 1988, Nova University; R.N., 1960, California; National Pediatric Nurse Practitioner Certification, 1979

Ann M. Bingham-Newman (1974)**Professor of Family Studies
and Consumer Sciences**

B.S., 1965, M.S., 1971, Ph.D., 1974, University of Wisconsin; M.A., 1980, California Family Study Center; Licensed Marriage, Family, and Child Counselor, 1984, California

Loretta Birkhead (1987)**Professor of Nursing**

B.S., 1968, University of Richmond; B.S., 1971, M.S., 1973, Medical College of Virginia; Ed.D., 1978, Boston University; R.N., P.H.N., 1978, California

Kim M. Bishop (1993)**Assistant Professor of Geological Sciences**

B.S., 1979, University of California, Los Angeles; M.S. 1985, California State University, Northridge

Sharon Bishop (1967)**Professor of Philosophy**

B.A., 1961, Macalester College; A.M., 1966, Ph.D., 1968, Harvard University

Wayne W. Bishop (1971)**Professor of Mathematics**

B.A., 1964, University of Northern Iowa; M.A., 1967, Northwestern University; Ph.D., 1971, Western Michigan University

John M. Blackburn (1981)**Associate Professor of Business Law
and Real Estate**

B.A., 1953, East Texas State Teachers College; J.D., 1976, Southeastern University School of Law; Admitted to the Bar, 1977, California

Carlton Blanton (1970)**Associate Professor of Health Science**

B.A. 1961, Los Angeles State College; M.A., 1969, California State College, Los Angeles; Ed.D., 1987, University of Southern California

Alan J. Bloom (1981)**Professor of Broadcasting**

B.A. 1973, Sonoma State College; M.F.A., 1975, California College of Arts and Crafts

Keith R. Blunt (1967)**Professor of Management**

B.A., 1953, M.A., 1954, Ph.D., 1958, University of Iowa

James A. Bolton (1989)**Professor of Education**

B.A., 1954, Langston University; M.A., 1970, Atlanta University; Ph.D., 1972, Claremont Graduate School

Hugh S. Bonar, Jr. (1954)**Professor of History**

B.A., 1947, M.A., 1948, Ph.D., 1952, University of Wisconsin-Madison

Maria Boss (1988)**Professor of Finance and Law**

B.A., 1965, University of California, Davis; J.D., 1974, University of California Hastings College of Law; Admitted to the Bar. 1974. California

James D. Boulgarides (1977)**Professor of Marketing**

B.S., 1951, Columbia University; B.S., 1953, Cooper Union; M.E.A 1966, University of Utah; D.B.A., 1973, University of Southern California

George B. Bouse (1959) **Professor of Electrical Engineering**
B.S., 1954, M.S., 1963, University of California. Los Angeles; Registered Professional Engineer. 1958, California

Helen R. Boussalis (1985) **Professor of Electrical Engineering**
B.S., 1974, New York Institute of Technology; M.S., 1976, Ph.D., 1980, New Mexico State University

Roger R. Bowers (1972) **Professor of Biology**
B.S., 1966, Creighton University; M.S., 1968, Ph.D., 1971, University of Nebraska

Barbara Ann Boyer (1989) **Professor of Art**
B.S., 1958, State University of New York, College at Buffalo; M.A., 1968, California State College at San Jose; Ph.D., 1980, University of Oregon

Joseph Bragin (1970) **Associate Dean, School of Natural and Social Sciences and Professor of Chemistry**
B.S., 1959, Brooklyn College; Ph.D., 1967, University of Wisconsin-Madison

Roger D. Brandt (1962) **Professor of Electrical Engineering**
B.S.E.E., 1956, M.S.E.E., 1959, University of North Dakota; Registered Professional Electrical Engineer, 1964, California

Donald W. Bray (1981) **Professor of Political Science**
B.A. 1950. Pomona College; M.A., 1957, University of California, Berkeley; Ph.D., 1961, Stanford University

Dwan M. Bridges (1992) **Assistant Professor of Physical Education**
B.S., M.Ed., Louisiana State University; M.C., Loyola University, Louisiana, Ph.D., 1992, Ohio State University

Peter A. Brier (1971) **Professor of English**
B.A., 1956, Yale University; M.A., 1958, Harvard University; Ph.D., 1970, Occidental College/Claremont Graduate School

William J. Britton (1979) **Counselor, Educational Opportunity Program**
B.A., 1967, California State College, Los Angeles; M.A., 1974, California State University, Los Angeles

Martin G. Brodwin (1988) **Assistant Professor of Education**
B.A., 1966, University of California, Los Angeles; M.S., 1969, California State College, Los Angeles; Ph.D., 1973, Michigan State University

Grover Lee Brooks (1981) **Associate Librarian, Reference**
B.S., 1965, Kent State University; M.Ed., 1972, Wright State University; M.S.L.S., 1978, University of Illinois

Costello L Brown (1969) **Associate Dean of Graduate Studies and Professor of Chemistry**
B.A., 1963, Hampton Institute; M.S., 1966, Ph.D., 1968, Iowa State University Elizabeth R. Bryant (1990) Assistant Professor of Art B.F.A., 1973, Moore College of Art; M.A., 1980, University of Florida

Marilyn Buccellati (1973)**Professor of Art**

B.A., 1961, College of St. Elizabeth; M.A., 1967, Ph.D., 1974, University of Chicago

David A. Buck (1976)**Professor of Music**

B.M., 1966, University of the Pacific; M.M., 1968, D.M.A., 1970, University of Washington

Millie Burnett (1978)**Professor of Music**

United States International University

Stanley M. Burstein (1968)**Professor of History**

A.B., 1963, M.A., 1965, Ph.D., 1972, University of California, Los Angeles

Emelia Burt (1993)**Assistant Professor of Geological Sciences**

B.S., 1979, M.S. 1983, University of Maryland; M.S., 1990, Ph.D., 1993, California Institute of Technology

John Butler (1988)**Associate Professor of Art**

B.A., 1970. MA., 1972, California State College, Los Angeles; M.F.A., 1979, University of California, Los Angeles

William G. Byron (1954)**Professor of Geography**

A.P., 1948, M.A., 1951, University of California, Los Angeles; Ph.D., 1954, Syracuse University

Herminia G. Cadenas (1990)**Associate Professor of Education**

B.A., 1966, M.A., 1967, California State College, Los Angeles; Ph.D., 1987, University of California, Irvine

H. David Caffey (1984)**Professor of Music**

B.M., 1972, M.M., 1974, University of Texas

Naomi Joy Caiden (1993)**Professor of Political Science**

B.S., 1959, University of London; M.A., 1966, Australian National University (Canberra); Ph.D., 1978, University of Southern California

Evelyn Ruiz Calvillo (1990)**Associate Professor of Nursing**

B.S., 1983, University of Texas at Galveston; M.S., 1986, Loma Linda University; DN.Sc., 1991, University of California, Los Angeles; R.N., Texas, 1964, California, 1984

Brace L Campbell (1977)**Associate Professor of Family Studies
and Consumer Sciences**

B.S., 1966, M.S., 1967, Brigham Young University; Ph.D., 1972, University of Minnesota; M.A., 1981, Azusa Pacific College; Licensed Marriage, Family, and Child Counselor, 1989, California

Randy V. Campbell (1991)**Associate Professor of Education**

B.A., University of the Pacific; M.S., Ph.D., Southern Illinois University at Carbondale

Giorgio Canarella (1973)**Professor of Economics and Statistics**

Laurea in Economia, 1966. University of Milan, Italy; Ph.D., 1973, University of Virginia

Roberto Cantu (1976)**Professor of Chicano Studies**

B.A., 1968, M.A., 1970. California State College, San Diego; Ph.D., 1982, University of California, Los Angeles

Sandra E. Card (1989)**Associate Librarian, Systems**

B.A., 1969, M.L.S., 1978, C. Phil., 1975, University of California, Los Angeles

Desdemona Cardoza (1988)**Vice President for Information
Resources Management and Associate Professor of Psychology**

B.A., 1975. University of California, Berkeley; M.A., 1979, Ph.D., 1982, University of California, Riverside

Roland L Carpenter (1968)

B.A., 1950, Los Angeles State College; M.A., 1964, Ph.D., 1966, University of California, Los Angeles

Professor of Physics**Robert H. Can' (1964)**

B.A. 1957, Cornell University; Ph.D., 1963, Iowa State University

Professor of Physics**Samantha Carrington (1986)**

B.A. 1974, National University of Iran; M.A., 1981, Ph.D., 1985, University of California, Santa Barbara

Associate Professor of Economics and Statistics**David B. Carroll (1969)**

B.A., 1964, University of British Columbia; M.A., 1967, University of California, Riverside; Ph.D., 1971, Rice University; J.D., 1980, Loyola University of Los Angeles; Member of the State Bar of California

Professor of English**E. Dale Carter, Jr. (1966)**

A.B., 1958, A.M., 1959, Long Beach State College; A.M., 1963, Ph.D., 1966, University of Southern California

Professor of Spanish**Michael J. Carter (1990)**

B.A., 1979, University of California, Los Angeles; M.A., 1982, California State University, Northridge, M.F.C.C., 1984, California. Ph.D., 1993, University of California, Los Angeles

Assistant Professor of Education**Joseph Casanova, Jr. (1981)**

S.B., 1953, Massachusetts Institute of Technology; M.S., 1956, Ph.D., 1957, Carnegie Institute of Technology

Professor of Chemistry**Barbara S. Case (1973)**

B.A., 1969, M.L.S., 1970, University of California, Berkeley

Librarian, Reference**Susan B. Cash (1981)**

B.A., 1980, California State University, Fullerton; M.F.A., 1982, University of California, Irvine

Assistant Professor of Art**Marshall Louis Cates (1971)**

B.A., 1965, Washington State University; A.M., 1967, Ph.D., 1971, University of Illinois

Professor of Mathematics**Martha S. Cattell (1977)**

B.S., 1940, Ohio State University; LI.B., 1946, J.D., 1969, Columbia University

Associate Professor of Business Law**Paul L Chabot (1970)**

B.S., 1965, Boston College; Ph.D., 1969, University of Notre Dame

Professor of Mathematics**Richard W. Chamberlain (1960)**

B.A., 1952, Westmont College; M.A., 1960, University of California, Santa Barbara

Assistant Professor of Mathematics**Berken Chang (1969)**

B.S., 1958, California Institute of Technology; Ph.D., 1967, University of California, Berkeley

Professor of Physics**Derek K. Chang (1983)**

M.S., 1978; Ph.D., 1983, University of California, Riverside

Professor of Mathematics**Jack S. K. Chang (1985)**

B. Eng., 1972, National Taiwan University, Taiwan; M. Eng., 1975, University of Toronto; M.B.A., 1979, Ph.D., 1983, University of Houston

Associate Professor of Finance**Stella Chang (1992)**

B.S., 1963, Tamkang College, Taiwan, R.O.C.; M.L.S., 1965, Vanderbilt University

Associate Librarian, Cataloging

David L Chapman (1970)**Professor of Criminal Justice**

B.A., 1963, San Fernando Valley State College; J.D., 1968, University of San Fernando Valley College of Law; Member of the State Bar of California; Member of the Supreme Court of the United States

Hema Chari (1992)**Assistant Professor of English**

B.A., 1975, M.A., 1977, Madras University, India; PGDES (graduate diploma), 1980, M. Litt., 1982, Central Institute of English and Foreign Languages, India; M.A., 1987, University of Southern California

May F. Chin (1975)**Associate Professor of
Communication Disorders**

B.S., 1954, Ohio State University; M.A., 1966, California State College, Long Beach; Ph.D., 1971, Northwestern University

Patricia Ann Chin (1989)**Assistant Professor of Nursing**

B.S., 1979, California State College, Los Angeles; M.S., 1984, California State University, Los Angeles

Philip Chinn (1988)**Professor of Education**

B.A., 1959, Baylor University; M.A., 1963, Ed.D., 1967, University of Northern Colorado

Mikyung Mika Cho (1991)**Assistant Professor of Art**

B.F.A., 1982, M.F.A., 1984, Sook Myung Women's University, Korea; M.A., 1988, Ph.D., 1992, Illinois State University

Louis I. Choi (1993)**Assistant Professor of Marketing**

B.A., 1981, University of California, Berkeley; M.S., 1985, University of Utah; M.Phil, 1990, Ph.D., 1992 Columbia University, New York;

Joseph A. Chrzanowski (1969)**Professor of Spanish**

A.B. 1966, Fairfield University; M.A., 1967, Ph.D., 1971, Pennsylvania State University

Barbara J. Clark (1968)**Professor of Education**

A.B., 1955, Wichita State University; M.A., 1966, Ed.D., 1969, University of California, Los Angeles

John L. Cleman (1971)**Professor of English**

B.A., 1965, Stanford University; M.A., 1967, Washington State University; Ph.D., 1973, University of Wisconsin

Darrell R. Clemmensen (1976)**Professor of Office Systems and
Business Education**

B.S., 1970, University of Minnesota; M.S.T., 1974, University of Wisconsin; Ed.D., 1976, Arizona State University

Nancy Cobb (1965)**Professor of Psychology**

B.A., 1961, College of William and Mary; M.A., 1963. Ph.D., 1965, University of Massachusetts

Bernard Codner (1955)**Professor of Marketing**

B.S., 1949, City College of New York; M.S., 1950, Columbia University

Harold L Cohen (1969)**Professor of Physics**

B.A., 1959. M.S., 1962, Ph.D., 1968, Rutgers University

Neil A. Cohen (1976)**Professor of Social Work**

B.A., 1961, University of California, Los Angeles; M.S.W., 1966, University of California, Berkeley; Ph.D., 1974, Case Western Reserve University

William A. Cohen (1979)**Professor of Marketing**

B.S., 1959, United States Military Academy; M.B.A., 1967, University of Chicago; M.A., 1978, Ph.D., 1978. Claremont Graduate School

Kathleen Cohn (1989) **Associate Professor of Education**
B.A., 1967, University of Kansas; M.P.A., 1976. California State College, Long Beach; Ph.D., 1985, University of Southern California

Charles C. Coleman (1968) **Professor of Physics**
B.A., 1959, M.A., 1961, Ph.D., 1968, University of California, Los Angeles

Joanna A. Collins (1982) **Professor of Accounting**
B.S., 1968, M.B.A., 1970, Illinois Institute of Technology; Ph.D., 1976, Northwestern University; C.P.A., 1976, Illinois; C.M.A., 1981, California

Alan Andrew Colville (1962) **Professor of Geology**
B.S., 1954, M.A., 1958. Ph.D., 1961, University of Indiana

Kathryn L Combs (1986) **Assistant Professor of Economics and Statistics**
B.A., 1978, Washington State University; M.A., 1985, Ph.D., 1988, University of Minnesota

David N. Connors (1990) **Assistant Professor of Music**
B. Mus., B.M.E., 1980, Bradley University; M.M., 1988, University of Cincinnati

Mary Conroy (1969) **Professor of Physical Education**
B.A., 1964, University of Arizona; M.A., 1965, Ed.D., 1972, Columbia University

Mark Steven Cook (1992) **Assistant Professor of Biology**
B.S., 1986, Grand Valley State College

Judith L Cope (1987) **Associate Professor of Education**
B.A., 1961, M.Ed., 1968, Indiana University of Pennsylvania; Ph.D., 1981, University of Pittsburgh

William Cordeiro (1990) **Assistant Professor of Management**
B.S., 1966, University of San Francisco; M.B.A., 1969, University of Southern California; M.A., 1983, Ph.D., 1986, Claremont Graduate School

Mafia Dolores Costa (1992) **Assistant Professor of Spanish**
B.A., 1985, M.A., 1987, Kent State University, Ph.D., 1992, University of Massachusetts

Kathleen M. Costantini (1967) **Associate Professor of Education**
B.A., 1963, M.S., 1967, University of Southern California

Webster E. Cotton (1966) **Professor of Education**
A.B., 1950, University of Massachusetts; M.A., 1959, Ed.D., 1963, University of California. Los Angeles

Alan N. Crawford (1969) **Professor of Education**
A.B., 1963, Occidental College; M.A., 1967, California State College, Los Angeles; Ed.D., 1970. University of California, Los Angeles

Frances A. Crawford (1979) **Director, Testing Office**
A.P., 1973. Fontbonne College; M.A., 1974, Washington University

Daniel Crecelius (1964) **Professor of History**
A.B., 1959, Colorado College; M.A., 1962. Ph.D., 1967, Princeton University

Theodore J. Crovello (1987) **Dean of Graduate Studies and Research and Professor of Biology**
B.S., 1962, Syracuse University; Ph.D., 1966, University of California, Berkeley

Cheryl Cruz (1992)**Associate Professor of Accounting**

B.S., 1969, University of Massachusetts; M.B.A., 1975, Northeastern University; J.D., 1978, University of California, Los Angeles; M.B.T., 1988, University of Southern California; C.P.A., California; Member, State Bar of California

Leonardo Cuellar (1988)**Head Coach, Man's Soccer**

M.A., 1976, Universidad Nacional Autonoma de Mexico

Ivan N. Cury (1990)**Assistant Professor of Broadcasting**

B.F.A., 1959, Carnegie Mellon University; M.F.A., 1960, Boston University

Fred Daneshgaran (1987)**Assistant Professor of
Electrical Engineering**

B.S. 1984, M.S., 1985, California State University, Los Angeles, Ph.D., 1992, University of California, Los Angeles

Abbas Daneshvari (1982)**Professor of Art**

B.S., 1969, California State College, Hayward; M.A., 1971, University of Massachusetts; Ph.D., 1977, University of California, Los Angeles

William D. Darrough (1973)**Professor of Sociology**

B.A., 1965, Whittier College; M.S.W., 1967, University of California, Berkeley; Ph.D., 1975, University of British Columbia

Michael M. Davidson (1977)**Associate Professor of Accounting**

B.S., 1970, California State College, Los Angeles; M.B.T., 1976, University of Southern California; C.P.A., 1977, California

Rebecca L Davis (1990)**Assistant Professor of Family Studies
and Consumer Sciences**

B.S., 1977, University of Delaware; Ph.D., 1984, University of Maryland

Terry E. Davis (1968)**Professor of Geology**

B.A., 1959, University of California, Santa Barbara; M.S., 1963, University of Nevada; Ph.D., 1969, University of California, Santa Barbara

Madoka Dawson (1991)**Assistant Professor
of Family Studies and Consumer Sciences**

B.S., M.S., Illinois State University; Ed.D., Pepperdine University; R.D

Ralph W. Dawson (1968)**Counselor**

B.A. 1968, California State College, Los Angeles; M.P.A., 1974, University of California, Los Angeles

Phoebe Dea (1976)**Professor of Chemistry**

B.S., 1967, University of California, Los Angeles; Ph.D., 1972, California Institute of Technology

Evalyn T. Dearmin (1992)**Associate Dean for Academic Programs,**

School of Education and Professor of Education B.A., 1956, University of Nevada, Reno; M.A., 1962, University of California, Berkeley; Ph.D., 1974, University of Nevada, Reno

Cherie De Jong (1989)**Assistant Professor of Curriculum
and Instruction**

B.S., 1971, California State College at San Diego; M.A., 1979, Ph.D., 1989, University of California, Santa Barbara

Patricia A. Delaney (1962)**Professor of Recreation**

B.S., 1952, M.S., 1953, University of California, Los Angeles

Roger Delgado (1979)**Professor of Social Work**

B.S., 1967, Brigham Young University; M.S.W., 1970, University of Texas; Ph.D., 1984, University of Southern California

Robert A. Desharnais (1988) . **Associate Professor of Biology**
B.A. 1976, University of Massachusetts at Boston; M.S., 1979, Ph.D., 1982, University of Rhode Island

Donald O. Dewey (1982) **Dean, School of Natural and Social Sciences and Professor of History**
B.A., 1952, University of Oregon; M.S., 1956, University of Utah; Ph.D., 1960, University of Chicago

Timothy Diamond (1988) **Assistant Professor of Sociology**
B.A., 1969, University of Waterloo, Canada; M.A., 1973, Ph.D., 1977, Ohio State University

Felipe Diaz (1988) **Associate Professor of Spanish**
B.A., 1968, University of Kansas; M.A., 1973, Ph.D., 1978, University of Texas at Austin

Mary L Diaz (1971) **Counselor**
B.A., 1971, San Fernando Valley State College; M.S.W. 1973, San Diego State University

Jim D. Donohoo (1981) **Professor of Accounting**
B.S. 1962 San Fernando Valley State College; M.S., 1970, California State College, Fresno; J.D., 1982, Loyola Marymount University

Daniel Douke (1982) **Professor of Art**
B.A., 1970, M.A., 1971, California State College, Los Angeles

Timothy Downs (1988) **Assistant Professor of Speech Communication**
B.A., 1983, California State University, Sacramento; M.A., 1984, West Virginia University; Ph.D., 1988, University of Oklahoma

Domnita Dumitrescu (1987) **Associate Professor of Spanish**
Diploma, University of Bucharest, Rumania; MA., 1987, Ph.D., 1990, University of Southern California

Carol M. Dunn (1981) **Director of Athletics**
B.S. 1973, M.Ed., 1976, Frostburg State College

Pamela Barragar Dunne (1974) **Professor of Theatre Arts**
B.A., 1967, University of California, Los Angeles; M.A., 1970, University of Washington; Ph.D., 1974, Florida State University

Henry Dyer (1987) **Head Coach, Men's Basketball**
B.S., 1966, Grambling College

Howard H. Earle (1975) **Professor of Criminal Justice**
B.A., 1956, M.A., 1960, D.P.A., 1972, University of Southern California

Stephanie Edwards-Evans (1987) **Professor of Education**
B.A. 1963, Los Angeles State College; M.A., California State College Los Angeles; Ed.D., 1976, University of California, Los Angeles

Annette Ehrlich (1969) **Professor of Psychology**
B.A., 1954, Brooklyn College; M.A., 1956, City College of New York; Ph.D., 1960, McGill University, Canada

John Eichinger (1992) **Associate Professor of Education**

B.S., 1974, M.S., 1980. California State Polytechnic University Pomona; Ph.D., 1990, Claremont Graduate School

Marilyn R. Elkins (1981) **Assistant Professor of English**

B.A., 1964, Tennessee Technological University; M.A.T., 1968 University of Tennessee at Chattanooga; M.A., 1970, Vanderbilt University; Ph.D., 1991, University of North Carolina

Elizabeth L Elrod (1978) **Professor of Music**

B.M., 1960, Georgia State University; M.M.E., 1970. Ed.D., 1971, University of Georgia

George N. Engler (1975) **Acting Associate Dean, School of Business and Economics and Professor of Finance**

B.S., 1965, University of Southern California; M.B.A., 1966, Ph.D., 1969, University of California, Los Angeles

Martin B. Epstein (1970) **Professor of Physics**

B.S., 1963, Columbia University; Ph.D., 1967, University of Maryland

Neda S. Fabris (1979) **Professor of Mechanical Engineering**

Diploma Engineering, 1965, University of Sarajevo, Yugoslavia; M.S., 1972, Ph.D., 1976, Illinois Institute of Technology

Linda LaPlante Fahey (1982) **Professor of Nursing**

B.S.N., 1974, Duke University; M.S.N., 1975, Emory University

Fidel Fajardo-Acosta (1992) **Associate Professor of English**

B.A., 1982, Colby College; M.F.A., 1985, Ph.D., 1988, University of Iowa

Mary A. Falvey (1980) **Professor of Education**

B.A., 1972, California State University, Sacramento; M.A., 1977, San

Francisco State University; **Ph.D., 1980, University of Wisconsin-Madison**

Hsing Fang (1987) **Assistant Professor of Finance**

B.A., 1974, National Taiwan University; M.A., 1977, National Chengchi University; Ph.D., 1986, Arizona State University

Bahram Faraji (1990) **Assistant Professor of Family Studies and Consumer Sciences**

B.S., 1970, Tehran University, Iran; M.S., 1973, Shiraz University, Iran; Dr.P.H., 1982, University of California, Los Angeles

Sarah P. Farnham (1971) **Professor of Nursing**

B.S., 1956, Boston University; M.S., 1968, University of California, Los Angeles

Marlene Farrell (1963) **Professor of Nursing**

B.A. 1956 Mount Saint Mary's College; M.S., 1958, University of California, Los Angeles; R.N., 1956, P.H.N., 1960, California

Rod A. Faurot (1959) **Professor of Physical Education**

B.A., 1958, M.A., 1959, University of Washington

Diane Fazzi (1992) **Assistant Professor of Education**

B.S., 1983. Kutztown University of Pennsylvania; M.Ed., 1984, University of Arkansas

Stephan F. Felszeghy (1979) **Professor of Mechanical Engineering**

B.S., 1961, M.S., 1963, University of California, Los Angeles; Ph.D., 1974, University of California, Berkeley

Eleanor Ferguson-Marshalleck (1991)**Professor of Nursing**

B.S. University of Illinois; MP.H., University of California, Berkeley; M.A., Stanford University; R.N., P.H.N

Robert R. Fiedler (1961)**Professor of Art**

B.S., 1952, Wisconsin State College; M.S., 1958, M.F.A., 1959, University of Wisconsin

Eugene R. Fingerhut (1962)**Professor of History**

B.A., 1954, Queens College; M.A., 1957, Ph.D., 1962, Columbia University

Miles M. Finney (1991)**Assistant Professor
of Economics and Statistics**

B.A., University of Texas, San Antonio; M.A., University of Houston

Stuart P. Fischhoff (1972)**Associate Professor of Psychology**

B.S., 1962, Pennsylvania State University; M.A., 1965, Ph.D., 1972, New School for Social Research

Janet C. Fisher-Hoult (1986)**Professor of Education**

B.A., 1958, University of Washington; M.A., 1972, University of California, Los Angeles; Ed.D., 1980, University of Southern California

David Fitzpatrick (1967)**Professor of Psychology**

B.A., 1962, University of California, Riverside; M.A., 1965, Ph.D., 1968, Claremont Graduate School

Paula Fleming (1991)**Assistant Professor of Political Science**

B.A., University of Washington; M.A., Ph.D., University of California, Berkeley

Richard W. Fleming (1972)**Associate Professor of Microbiology**

B.S., 1966, M.S., 1968, Ph.D., 1970, Iowa State University

Edward C. Forde (1971)**Professor of Art**

B.A., 1968, M.F.A., 1971, University of California, Santa Barbara

Lynn Fox (1991)**Assistant Professor of Education**

B.A., California State University, Long Beach; MA., Claremont Graduate School; M.A., California State University, Chico; Ph.D., Claremont Graduate School

Daniel Frankl (1991)**Assistant Professor of Physical Education**

B.A., State University of New York at Brockport; M.S., Ph.D., Southern Illinois University at Carbondale

Grant A. Fraser (1982)**Professor of Mathematics and Computer Science**

A.B., 1964, M.A., 1969, Ph.D., 1970, University of California, Los Angeles

Anthony Fratiello (1963)**Professor of Chemistry**

B.S., 1957, Providence College; Ph.D., 1962, Brown University

Glenn Freed (1990)**Associate Professor of Accounting**

B.S. 1982, University of Florida; C.P.A., 1983, Florida

Marilyn Friedman (1967)**Professor of Nursing**

B.S., 1959, University of California, Los Angeles; M.S., 1963, University of Minnesota; Ph.D., 1985, University of Southern California; R.N., 1959, California

Norman L. Friedman (1968)**Professor of Sociology**

B.S., 1957, M.A., 1958, Ph.D., 1965, University of Missouri

John Funakura (1988)**Associate Professor of Art**

B.A., 1956, Tokyo Metropolitan University, Japan; M.F.A., 1988, California State University, Los Angeles

Bernardo Gallegos (1987) **Associate Professor of Education**

B.A., 1974, University of Wisconsin-LaCrosse; M.A., 1980, Ph.D., 1988, University of New Mexico

Jose L Galvan (1990) **Assistant Professor of Education**

B.S., 1970, M.A., 1972, Ph.D., 1980, University of Texas

John A. Gamon (1991) **Assistant Professor of Biology**

B.S. Yale University; M.S., Ph.D., University of California

Davis Perry S. Ganas (1970) **Professor of Physics**

B.S., 1960, University of Queensland, Australia; Ph.D., 1968, University of Sydney, Australia

Nandakumar Ganesan (1985) **Professor of Information Systems**

B.Sc., 1975, University of Ceylon, Sri Lanka; M.A., 1977, University of Lancaster, England; Ph.D., 1981, University of Birmingham, England

Gumersindo Garcia, Jr. (1976) **Physician, Student Health Center**

M.D., 1947, University of the Philippines

Raymond E. Garcia (1982) **Associate Professor of Biochemistry**

B.S., 1966, California Polytechnic State College, San Luis Obispo; B.A., 1970, Ph.D., 1976, University of California, Riverside

Ann Garry (1969) **Professor of Philosophy**

B.A., 1965, Monmouth College; M.A., 1966, University of Chicago; Ph.D., 1970, University of Maryland

Neil H. Garston (1975) **Professor of Economics and Statistics**

B.A., 1965, Brooklyn College; Ph.D., 1973, Brown University

Michael G. Gaston (1965) **Professor of Psychology**

B.A., 1961, M.A., 1963, Ph.D., 1966, University of California, Los Angeles

Jeanine S. Gaucher-Morales (1965) **Professor of French and Spanish**

B.A., 1960, University of Nebraska; M.A., 1962, Ph.D., 1965, University of Southern California

Irene M. Girton (1989) **Associate Professor of Music**

B.Mus., 1976, Oberlin College; M.Phil., 1979, Ph.D., 1981, Yale University

Christine Gladish (1988) **Interim Assistant University Librarian and
Associate Librarian, Reference**

B.A., 1970, Ithaca College; M.L.S., 1971, Case Western Reserve University; M.P.A., 1976, University of Southern California

Wayne Gladish (1987) **Associate Librarian, Acquisitions**

B.A., 1970, Kenyon College; M.L.S., 1974, State University of New York at Buffalo

Thell F. Glascock (1971) **Professor of Criminal Justice**

B.S., 1970, California State College, Los Angeles; M.P.A., 1971, University of Southern California

David J. Godoy (1979) **Assistant Vice President for Student
Affairs-Educational Equity Administration**

B.A., 1972, California State University, Los Angeles; M.A., 1987, National University

Phillip I. Gold (1967) **Professor of Mechanical Engineering**

B.S., 1958, M.S., 1959, Ph.D., 1965, University of California, Los Angeles

Edward M. Goldberg (1961)

B.A., 1953, Brooklyn College; M.A., 1956, University of New Mexico; Ph.D., 1965, University of Pennsylvania

Professor of Political Science**Herbert Goldberg (1965)**

A.B., 1958, City College of New York; Ph.D., 1963, Adelphi University; Licensed Psychologist, 1968, California

Professor of Psychology**Alan H. Goldstein (1990)**

B.S., 1977, New Mexico State University; M.S., 1979, Ph.D., 1981, University of Arizona

Associate Professor of Biology**Harold Goldwhite (1962)**

B.A. 1953, Ph.D., 1956, Cambridge University, England

Professor of Chemistry**Ricardo J. Gomez (1983)**

M.A., 1978, Ph.D., 1982, Indiana University

Professor of Philosophy**Alfonso Gonzalez (1975)**

B.A., 1967, M.A., 1968, Ph.D. 1971, University of Kansas

Professor of Spanish**Alfredo G. Gonzalez (1977)**

B.S., 1971, California State Polytechnic College, Pomona; M.S.W., 1973, D.S.W., 1981, University of California, Berkeley

**Dean of Undergraduate Studies
and Professor of Social Work****Jose Cruz Gonzalez (1990)**

B.A., 1980, University of California. San Diego; M.A., 1982, Arizona State University; M.F.A., 1985, University of California, Irvine

Assistant Professor of Theatre Arts**Lawrence R Goodman (1961)**

B.S., 1954, M.A., 1955, Northwestern University; Ph.D., 1968, University of Southern California

Professor of Theatre Arts**Cad E. Gordon (1970)**

B.A., 1965. M.A., 1967, Ph.D., 1968. University of California, Los Angeles

**Professor of Mathematics
and Computer Science****Steven L Gordon (1977)**

B.A., 1967. M.A., 1972. Ph.D., 1979, University of California. Los Angeles

Professor of Sociology**Harold J. Gottlieb (1972)**

B.A., 1960. Michigan State University; M.A., 1963. University of Colorado; M.A., 1965. New School for Social Research; Ph.D., 1972 Yeshiva University

Professor of Psychology**Gregory S. Graham (1968)**

B.S., 1963, Oregon State University; M.A., 1964, San Jose State College; Ed.D., 1971, University of California, Los Angeles

Professor of Technology**David T. Gregorich (1968)**

A.B., 1962, University of California. Los Angeles; M.S., 1964. California State College. Los Angeles; Ph.D., 1968. University of California, Riverside

. Professor of Physics**Estelle H. Gregory (1972)**

B.A. 1966. Ph.D., 1969. University of California. Berkeley

. Professor of Psychology**Scott D. Grover (1983)**

B.A., 1972. University of California. Santa Barbara; Ph.D., 1980 University of California. Los Angeles

Associate Professor of Biochemistry**Carlos G. Gutierrez (1976)**

B.S., 1971. University of California. Los Angeles; Ph.D., 1975 University of California, Davis

Professor of Chemistry

Diane Haager (1992)**Assistant Professor of Education**

B.S.Ed., 1976. Miami University; M.Ed., 1986, University of Miami

Rosemary Hake (1980)**Professor of English**

B.A. 1958. Northern Illinois University; M.A., 1967. Ph.D., 1973 University of Chicago

Edmond C. Hallberg (1965)**Professor of Education**

A.B., 1953, San Jose State College; M.A., 1956. Ed.D., 1961. Stanford University

Judith Hamera (1987)**Associate Professor of
Speech Communication**

B.A., 1980. Wayne State University; M.A., 1982, Ph.D., 1987. Northwestern University

Cynthia Hamilton (1985)**Professor of Pan-African Studies**

B.A., 1970. Stanford University; M.A., 1971. Cornell University; Ph.D., 1980. Boston University

Judd Hammack (1970)**Professor of Economics and Statistics**

B.A. 1965, M.A., 1967, Ph.D., 1969, University of Washington

Sin Fong Han (1971)**Professor of Geography**

Diploma, 1963. Chung Chi College, Chinese University of Hong Kong. Hong Kong; M.A., 1966. McGill University. Canada; Ph.D., 1971, University of Michigan

Timothy Fox Harding (1963)**Professor of History**

A.B., 1956. Harvard University; M.A., 1959. Ph.D. 1973, Stanford University

Clifford D. Harper (1982)**Professor of Theatre Arts**

B.A., 1962. University of Illinois; M.A., 1969. Ph.D., 1972. St. Louis University

Margaret J. Hartman (1970)**. Associate Vice President for Academic
Affairs-Faculty and Administration and Professor of Biology**

B.S. 1966, California Polytechnic State College, San Luis Obispo; M.A., 1968. Ph.D., 1970. Oregon State University

Hassan Hashemian (1980)**Associate Professor of Civil Engineering**

B.S., 1972. M.S., 1974. University of Wisconsin; Ph.D., 1980. University of California. Berkeley

Rick Stephan Hayes (1990)**Associate Professor of Accounting**

B.A., 1969. M.B.A., 1972. University of California. Los Angeles; M.Sc., 1986. Ph.D., 1989. London School of Economics

Peter D. Hechler (1973)**Professor of Management**

B.A. 1963. University of the Pacific; M.S., 1966. San Francisco State College; M.A., 1970, Ph.D., 1973. Case Western Reserve University

J. Dennis Helm (1966)**Professor of Education**

B.S., 1962. California State Polytechnic College. Pomona; M.A., 1966 California State College. Los Angeles; Ed.D., 1970. University of Southern California

W. Keith Henning (1966)**Professor of Speech Communication**

B.A. 1962. Doane College; M.A., 1965. University of Arizona; Ph.D., 1973. University of Southern California; M.A., 1985, California State University, Northridge; Licensed Marriage, Family. and Child Counselor, 1985. California

James Henrickson (1966)**Professor of Biology**

B.S., 1962. Wisconsin State University; M.A., 1964, Ph.D., 1968 Claremont Graduate School

John O. Herbold II (1983)**Head Coach, Men's Baseball**

B.A., 1951. M.A., 1952. Stanford University

Fernando A. Hernandez (1972)**Professor of Education**

B.A., 1969. California State College. Long Beach; M.A., 1971 Occidental College; Ph.D., 1977. United States International University

Grace Shizuko Herrera (1990)**Assistant Professor of Theatre Arts**

B.A., 1979, California State University, Los Angeles

Daniel A. Herwitz (198S)**Associate Professor of Philosophy**

B.A., 1977. Brandeis University; Ph.D., 1984. University of Chicago

E. Anne Hess (1968)**Librarian, Systems**

B.A. 1962. Texas Lutheran College; M.L.S., 1965, University of Texas at Austin

Udo Heyn (1969)**Professor of History**

B.A., 1953, San Diego State College; M.S., 1961, San Francisco State College; M.A., 1965, Ph.D., 1969, University of Wisconsin-Madison

Lawrence S. Hill (1969)**Professor of Management**

B.S., 1947. Purdue University; M.B.A., 1960, M.S.I.E. 1962. Engineering I.E., 1965. Ph.D., 1968. University of Southern California; Registered Professional Industrial Engineer. 1968. California

Raymond E. Hillis (1965)**. Professor of Education**

A.B., 1962. M.A., 1965, Ph.D., 1968. University of California. Los Angeles

Kenneth F. Hird (1974)**Professor of Technology**

A.B., 1960. San Jose State College; MA., 1974. University of Northern Iowa; Ed.D., 1977. Utah State University

Michael J. Hoffman (1981)**. Professor of Mathematics**

B.S., 1970. Massachusetts Institute of Technology; M.A., 1973. Ph.D., 1979, University of California. Berkeley

George K. Hong (1990)**Associate Professor of Education**

B.Soc. Sc., 1974. Hong Kong Chinese University; M.A., 1978, University of North Carolina; M.A., 1979. Ph.D., 1982. Hofstra University

Lawrence K. Hong (1970)**Professor of Sociology**

B.A. 1964. University of Portland; M.A., 1966, Ph.D., 1970. University of Notre Dame

Noriko S. Horgan (1991)**Associate Professor of Education**

B.A., MA., Ph.D., University of Southern California

Robert C. Howard (1986)**Professor of Electrical Engineering**

A.P. 1944. M.S.E.E., 1950. University of London. England; Ph.D., 1953. California Institute of Technology; Registered Professional Nuclear Engineer. 1977; Registered Professional Control Systems Engineer. 1979, California

Lih-Min Hsia (1983)**Professor of Mechanical Engineering**

B.S., 1966. National Taiwan University; M.S., 1973. M.Eng., 1974. Corneli University; Ph.D.. 1979. University of California. Davis

Edward W.T. Hsieh (1989)**Assistant Professor of Economics
and Statistics**

B.A., 1978, National Taiwan University; Ph.D.. 1988. University of Houston

Ron E. Hull (1964)**Assistant Professor of Physical Education**

B.A., 1963, University of California, Los Angeles

Nancy A. Hunt (1981)**Associate Professor of Education**

B.A., 1970, Canisius College; M.A., 1971, Teachers' College, Columbia University; Ph.D., 1982, University of Southern California

Virginia Hunter (1982)**Associate Dean of Undergraduate Studies
and Professor of Nursing**

B.S., 1971, California State College, Los Angeles; MN., 1973, Ph.D., 1982, University of California, Los Angeles

Richard W. Hurst (1978)**Professor of Geology**

B.S., 1970, State University of New York at Stony Brook; Ph.D., 1975, University of California, Los Angeles

Pamela D. Jablonsky (1978)**. Professor of Technology**

B.A., 1973, California State University, Los Angeles; Ph.D., 1980, University of Southern California

Durward R Jackson (1981)**Professor of Information Systems**

B.S., 1964, University of Arizona; M.E.A., 1969, University of Utah; M.B.A., 1978, Golden Gate University; Ph.D., 1983, Claremont Graduate School

George H. Jacobson (1984)**Professor of Information Systems**

B.A., 1962, Columbia University; M.B.A., 1967, D.B.A., 1974, University of Southern California

Colleen B. Jamison (1965)**Professor of Education**

A.B., 1960, M.A., 1962, Ed.D., 1967, University of California, Los Angeles

Margaret Jefferson (1977)**. Professor of Biology**

B.S., 1969, University of Dubuque; M.A., 1971, University of Colorado; Ph.D., 1977, University of Arizona

Raymond I. Jeng (1968)**Professor of Civil Engineering**

B.S., 1962, National Taiwan University, Taiwan; M.S., 1965, Ph.D., 1968, Colorado State University; Registered Professional Civil Engineer, 1973, California

George Jensen (1962)**Associate Professor of Economics
and Statistics**

B.S., 1958, Utah State University; Ph.D., 1968, University of Washington

Nandial Jhunjhunwala (1967)**Associate Professor of Mathematics**

B.S., 1958, Calcutta University, India; M.S., 1963, University of Bombay, India; Ph.D., 1966, Northwestern University

Jo Ann Johnson (1968)**Professor of Nursing**

B.S.N., 1960, Vanderbilt University; M.A., 1962, Teachers College, Columbia University; M.P.A., 1972, D.P.A., 1975, University of Southern California; R.N., P.H.N., 1964, California

Karen M. Johnson (1965)**Associate Dean, School of Health and
Human Services and Professor of Physical Education**

B.A., 1960, College of Idaho; M.A., 1965, California State College, Los Angeles; Ph.D., 1974, University of Southern California

Ruth S. Johnson (1990)**Associate Professor of Education**

B.S., 1961, Springfield College; M.A., 1969, William Patterson University; Ed.D., 1985, Rutgers University

Sharon Kay Johnson (1989)**Associate Professor of Education**

B.S., 1974, University of California, Los Angeles; M.S. 1976, California State University, Fullerton; Ed.D., 1988, Virginia Technical Institute and State College

Steven S. Jones (1983)**Professor of English**

B.A., 1971, Haverford College; M.A., 1974, Ph.D., 1979, University of California, Davis

Gary V. Jorden (1976)

B.S., 1972. M.B.A., 1975, California State University, Los Angeles; C.P.A., 1974, California

Professor of Accounting**Marguerite Joyce (1989)**

B.S., 1973, Missouri Western State College; M.Ed., 1975, Bowling Green State University; Ed.D., 1978, University of Nebraska

**Associate Professor of Office Systems
and Business Education****Terry R. Kandal (1968)**

A.P., 1965, MA., 1967, Ph.D., 1974, University of California, Berkeley

Professor of Sociology**Richard H. Kao (1983)**

B.C., 1964, National Chengchi University, Taiwan; M.B.A., 1971, Michigan State University; Ph.D., 1978, University of Michigan

Professor of Marketing**Kamran Karimlou (1984)**

B.S., 1977, University of Sussex, England; M.S., 1978, University of North Wales; Ph.D., 1983, University of Southern California

Professor of Electrical Engineering**Illias G. Kastanas (1981)**

M.S. 1976, Ph.D., 1981, California Institute of Technology

**Associate Professor of Mathematics
and Computer Science****Richard Katz (1969)**

B.E.E., 1958, City College of New York; Ph.D., 1967, University of California, Los Angeles

Professor of Mathematics**Dorothy L Keane (1973)**

B.S., 1963, College of Mount St. Joseph; M.A., 1971, University of Detroit; Ed.D., 1973, Wayne State University

Professor of Education**Valerie C. Kehm (1979)**

B.S., 1967. M.S., 1971, University of Nebraska; Ph.D., 1977, Pennsylvania State University

**Associate professor of Family Studies
and Consumer Sciences****Barbara Keller (1990)**

B.A., 1969, Northwestern University; J.D., 1977, Loyola University of Chicago; admitted to the bar, California, 1978

Assistant Professor of Finance and Law**Michael R Kelley (1972)**

B.A., 1965, University of Notre Dame; M.A., 1969, Ph.D., 1976 University of Pittsburgh

Professor of Speech Communication**Delos H. Kelly (1976)**

B.A., 1967, M.A., 1968, San Diego State College; Ph.D., 1970 University of Oregon

Professor of Sociology**living Kett (1971)**

B.C.E., 1944, City College of New York; M.C.E., 1949, Polytechnic Institute of Brooklyn; M.B.A., 1954, D. Eng. Sc., 1966, New York University; Registered Professional Engineer, 1949, New York; Licensed Land Surveyor, 1956, New York; Registered Professional Civil Engineer, 1972, California

Professor of Civil Engineering**Richard T. Keys (1959)**

A.P., 1953, Harvard University; Ph.D., 1958, Iowa State College

Professor of Chemistry**Hendrik Keyzer (1967)**

B.S., 1963, Ph.D., 1966, University of New South Wales, Australia

Professor of Chemistry**Rauf-Ur R. Khan (1968)**

B.A., 1953, LI.B., 1955, M.P.A., 1957, University of Karachi, Pakistan; Diploma in Administration, 1958, Institute of Social Studies, Netherlands; M.B.A., 1963, D.B.A., 1971, University of Southern California

Professor of Management

Nazareth Khodiguian (1990)**Assistant Professor of
Physical Education**

Diploma, 1973, Armenian State Institute of Physical Education; Ph.D., 1986, University of Southern California

George B. Killinger (1982)**Associate Professor of
Electrical Engineering**

B.S.E.E., 1955, M.S.EE., 1958, Ph.D., 1968, University of Pittsburgh

Byong-Kon Kim (1968)**Professor of Music**

B.M., 1961, Chosun University, Korea; M.M. 1964, D.M., 1968, Indiana University

Jeong Y. Kim (1990)**Assistant Professor of Accounting**

B. Law. 1977, Yon Sei University; M.B.A., 1984, San Francisco State University; Ph.D., 1989, Washington State University

Lon Yoonkung Kim (1992)**Assistant Professor of Education**

B.S., 1979, University of California, Los Angeles; MS., 1987, University of Southern California

Neung-Jip Kim (1988)**Assistant Professor of Accounting**

B.S., 1975, Seoul National University; M.B.A. 1981, Ph.D., 1987, Temple University

Sun K. Kim (1964)**Professor of Economics and Statistics**

B. Comm., 1956, Seoul National University; A.M., 1959, University of Missouri; Ph.D., 1966, University of Southern California

Taewon Kim (1987)**Associate Professor of Finance and Real Estate**

B.A., 1974, Yonsei University; M.A., 1982, Ph.D., 1986, University of Georgia

Young C. Kim (1965)**Professor of Civil Engineering**

B.S.C.E., 1958, University of Southern California; M.S.C.E., 1959, California Institute of Technology; Ph.D., 1964, University of Southern California

John A. Kirchner (1979)**Professor of Geography and Marketing**

B.A., 1966, San Jose State College; M.A., 1970, Ph.D., 1979, University of Chicago

M. Diane Klein (1981)**Professor of Education**

B.A., 1967, Central Michigan University; M.A., 1969, Western Michigan University; Ph.D., 1980, Michigan State University

Norman Klein (1971)**Professor of Anthropology**

B.A., 1965, California State College, Los Angeles; M.A., 1966, University of California, Los Angeles; Ph.D., 1975, University of Oregon

Dale L Knapp (1959)**Professor of Education**

B.S. 1949, Thiel College; M.A., 1951, Ph.D., 1959, Ohio State University

Nadine Sue Koch (1987)**Assistant Professor of Political Science**

B.A., 1978, San Diego State University; M.A., 1982, Ph.D., 1985, Ohio State University

Grigori Kolesnik (1984)**Professor of Mathematics**

M.S., 1965, Moscow State University, Russia; Ph.D., 1972, Kiev State University, U.S.S.R

Linda I. Kostalik (1986)**Associate Professor of Dance**

B.A., 1971, M.F.A., 1973, University of California, Irvine

Ellen King Kravitz (1987)**Professor of Music**

B.A., 1964, Georgian Court College; M.M., 1966, Ph.D., 1970, University of Southern California

Ita Kreft (1991)**Associate Professor of Education**

Bachelor and master degree equivalents, University of Leiden; Ph.D., University of Amsterdam, Netherlands

Beverly Krilowicz (1990)**Assistant Professor of Biology**

B.S., 1977, California State College at Fullerton; Ph.D., 1984, University of California, Riverside

Antony Kunnan (1992)**Assistant Professor of Education**

B.A. 1974, M.A., 1976, Bangalore University, India; Post-master's Diploma in the Teaching of English, 1980, M. Litt., 1984, Central Institute of English and Foreign Languages, India; Ph.D., 1991, University of California, Los Angeles

JoAn D. Kunselman (1990)**University Librarian**

A.P., 1968, Vassar College; M.L.S., 1974, Louisiana State University; M.M., 1974, University of Maryland; Ph.D., 1976, Louisiana State University

Nancy E. Kupka (1982)**Associate Professor of Dance**

B.A., 1975, California State University, Los Angeles; M.A., 1979, University of California, Los Angeles

Kwok Keung (Kem) Kwong (1986)**Professor of Management**

B.S., 1980, Chinese University of Hong Kong; MBA., 1985, Ph.D., 1986, Georgia State University

Jean P. LaCour (1977)**Associate Professor of Psychology**

B.A., 1967, M.S., 1968, California State College, Los Angeles; M.P.H., 1970, D.P.H., 1974, University of California, Los Angeles

Stephen E.G. LaDochy (1987)**Associate Professor of Geography**

B.A., 1967, University of California, Los Angeles; M.S., 1969, Colorado State University; Ph.D., 1985, University of Manitoba

Kon Sun Lai (1987)**Associate Professor of Economics and Statistic**

B.S.S., 1980, University of Hong Kong; M.S., 1981, London School of Economics; Ph.D., 1987, University of Pennsylvania

Michael (Sung-Chung) Lai (1987)**Assistant Professor of Finance**

B.A., 1975, National Chengchi University; M.B.A., 1982, State University of New York at Buffalo; Ph.D., 1988, University of Southern California

Raymond B. Landis (1905)**Dean, School of Engineering and Technology and Professor of Mechanical Engineering**

B.S., 1962, M.S., 1963, Massachusetts Institute of Technology; Ph.D., 1971, University of California, Los Angeles

Theresa Larkin (1990)**Assistant Professor of Theatre Arts**

B.A., 1977, Loyola-Marymount University; M.F.A., 1983, University of California, Irvine

Tom Edward Larson (1987)**Assistant Professor of Economics and Statistics**

B.A., 1979, University of California, Santa Cruz; Ph.D., 1986, University of California, Berkeley

Christine Pollack Latham (1979)**Professor of Nursing**

B.S., 1974, University of Wisconsin; M.S. 1979, California State University, Long Beach; D.N.Sc., 1990, University of San Diego

Chor Tin Lau (1985)**Professor of Accounting**

B. Com., 1966, Sir George Williams University, Canada; M.B.A. 1968, McMaster University, Canada; Ph.D., 1976, University of Oregon

Richard Lau (1989)

B.S., 1984, University of Southwestern Louisiana; M.Sc., 1986, Ph.D., 1989. Louisiana State University

Assistant Professor of Accounting**June A. Lester (1983)**

B.S., 1970, Memorial University, Canada; M.M., 1972. Ph.D., 1976, University of Waterloo, Canada

Professor of Mathematics**Yuen-Sang (Philip) Leung (1986)**

B.A., 1972, M.Phil., 1974, Chinese University of Hong Kong; Ph.D., 1980, University of California, Santa Barbara

Associate Professor of History**Janet Lever (1990)**

B.A., 1968, Washington University; M.Ph., 1971, Ph.D., 1974, Yale University

Assistant Professor of Sociology**Anson J. Levine (1969)**

B.A., 1963, M.A. 1967, San Fernando Valley State College; Ph.D., 1970, University of Houston

Associate Professor of Psychology**Jack G. Levine (1960)**

B.S. 1958, M.S., 1960, University of California, Los Angeles

Professor of Electrical Engineering**Cheng U (1988)**

B.Engr., 1982, Shanghai institute of Mechanical Engineering; M.B.A., 1986, Ph.D., 1989, Indiana University

Assistant Professor of Management**Roy I. Liebman (1989)**

B.A., 1958, Brooklyn College; M.L.S., 1960, Pratt Institute; M.A., 1978, California State University, Los Angeles

Librarian, Cataloging Services**Randall B. Lindsey (1981)**

B.S. 1964, Western Illinois University; M.A., 1968, University of Illinois; Ph.D., 1975, Georgia State University

Professor of Education**Rina Ling (1976)**

B.S., 1970, M.S., 1972, Ph.D., 1976, University of Illinois

Professor of Mathematics**Ethan Lipton (1984)**

B.A., 1976. M.A., 1983, California State University, Los Angeles; Ph.D., 1990, University of Southern California

Associate Professor of Technology**Daphne Liu (1991)**

B.S., National Central University, Taiwan; Ph.D., University of South Carolina

Assistant Professor of Mathematics**David Liu (1991)**

B.A., University of California, Los Angeles; M.B.A., Pepperdine University; Ph.D., University of California, Los Angeles

Associate Professor of Economics and Statistics**Jun Liu (1992)**

B.A., 1975, Xi'an Foreign Languages University, China; Postgraduate Certificate in Translation (M.A. equivalent), 1981, United Nations Postgraduate Translation Program, Beijing Foreign Languages University, China; M.A., 1987, Ph.D, 1992 University of Massachusetts

Assistant Professor of English**Peter P. Lockett (1969)**

B.S., 1954, University of California, Berkeley; M.Acc., 1958, D.B.A., 1973, University of Southern California; C.P.A., 1960, California

Professor of Accounting**Anthony Longhetti (1989)**

B.A., 1950, University of California, Berkeley

Associate Professor of Criminal Justice**Tony Longson (1986)Associate****Professor of Art**

B.A., 1971, Reading University, England; (M.A. equivalent) Bicentennial Arts Fellow, England, 1981

Ching-Hsing (Jean) Loo (1985)**Professor of Finance**

B.A., 1976, National Taiwan University; M.A., 1978, University of Cincinnati; Ph.D., 1984, Ohio State University

Genero A. Lopez (1961)**Professor of Biology**

B.A., 1963, Pan American College; M.S., 1967, University of Maine; Ph.D., 1973, Colorado State University

Marta C. Lopez-Garza (1989)**Assistant Professor of Sociology**

B.A., 1974, M.A., 1976, Ph.D., 1985, University of California, Los Angeles

Z. Barry Lowenkron (1973)**Professor of Psychology**

B.A., 1962, M.A., 1965, University of California, Los Angeles; Ph.D., 1968, University of New Mexico

Stephen K. Ma (1990)**Assistant Professor of Political Science**

B.A., 1966, Shanghai Institute of Foreign Languages; M.A., 1985, University of Alberta, Canada

G. Grant MacCurdy (1970)**Professor of Spanish**

B.A., 1966, University of New Mexico; M.A., 1967, Ph.D., 1973, University of Arizona

Daniel P. Mahoney II (1972)**Associate Professor of Biology**

B.A., 1964, Grinnell College; M.S., 1968, Ph.D., 1972, University of Wisconsin

Edward S. Malecki, Jr. (1967)**Professor of Political Science**

A.P. 1961, LI.B., 1963, A.M., 1965, Ph.D., 1969, University of Illinois; admitted to the Bar, 1963, Illinois

Ramachendra Manvi (1971)**Professor of Mechanical Engineering**

B.E. 1958, Osmania University, India; Ph.D., 1968, Washington State University; Registered Professional Mechanical Engineer, 1973, California

Demetrius J. Margaziotis (1964)**Professor of Physics**

B.A., 1959, M.A., 1961, Ph.D., 1966, University of California, Los Angeles

Mary Catherine Marks (1990)**Assistant Professor of Physical Education**

B.S., 1975, San Jose State College; M.A., 1985, San Jose State University; Ph.D., 1988, Ohio State University

Chogollah Maroufi (1988)**Associate Professor of Education**

B.S. 1978, M.A., 1979, California Polytechnic State College, San Luis Obispo; Ph.D., 1987, University of California, Los Angeles

Rosemarie Marshall (1978)**Professor of Microbiology**

B.S., 1964, University of Washington; M.S., 1966, Ph.D., 1968, Iowa State University

Catherine Martin (1970)**Professor of Anthropology**

B.A., 1965, Reed College; M.A., 1967, Ph.D., 1971, University of California, Los Angeles

Patricia Martz (1990)**Assistant Professor of Anthropology**

B.A., 1974, California State College, Long Beach; Ph.D., 1984, University of California, Riverside

Susan Mason (1960)**Assistant Professor of Theatre Arts**

B.A., 1979, San Jose State University; M.A., 1973, Idaho State University; Ph.D., 1980, University of Oregon

Mark Massey (1989)**Head Coach, Women's Volleyball**

B.S., 1979, Furman College; M.S., 1981, Ithaca College

Masako M. Matsuda (1977)**Professor of Communication Disorders**

B.A., 1964, California State College, Fresno, M.A., 1973, California State University, Fresno; Ph.D., 1981, Pennsylvania State University

Michael J. Maurer (1970)**Professor of Mechanical Engineering**

B.S., 1959, Illinois Institute of Technology; M.S., 1967, Ph.D., 1970, Tulane University

Don M. Maurizio (1979)**Associate Dean, School of Engineering and Technology and Professor of Technology**

B.A., 1971, California State College, Los Angeles, M.A., 1979, California State University, Los Angeles; Ed.D., 1983, United States International University

Andrea P. Maxie (1986)**Associate Professor of Education**

B.A., 1971, M.S., 1974, University of Southern California; Ph.D., 1987, University of California, Los Angeles

G. Roy Mayer (1969)**Professor of Education**

B.A., 1962, San Diego State College; M.S., 1965, Ed.D., 1966, Indiana University

Vincent G. Mazzucchelli (1971)**Professor of Geography**

B.A., 1950, Fresno State College; M.A., 1951, Syracuse University; Ph.D., 1973, University of California, Los Angeles

Kevin McCarthy (1992)**Head Coach, Men's Track and Field/Cross-Country**

B.S., 1977, University of California, Los Angeles; M.S., 1986, California Polytechnic University, San Luis Obispo

Mary Pat McEnrue (1961)**Professor of Management**

B.A., 1975, Boston College; M.A., 1979, Ph.D., 1980, Wayne State University

Carolyn Yvonne McIntosh (1962)**Associate Librarian, Reference**

A.P., 1964, Clark College; M.L.S., 1974, Indiana University

Carol G. McKenzie (1970)**Professor of Recreation**

B.A., 1963, University of Colorado; M.A., 1965, Indiana University; Ph.D., 1974, University of Southern California

Betty McMicken (1991)**Associate Professor of Communication Disorders**

B.A., 1964, M.A., 1969, Ph.D., 1987, University of Southern California

David McNutt (1969)**Director, Creative Media Services**

B.A., 1967, California State College, Los Angeles; M.A., 1976, California State University, Los Angeles

Nancy L McQueen (1989)**Assistant Professor of Microbiology**

B.S., 1975, California State Polytechnic College, Pomona; Ph.D., 1986, University of California, Los Angeles

Robert F. Meade (1960)**Professor of Geology**

B.S., 1955, California Institute of Technology; Ph.D., 1967, University of California, Los Angeles

Henry R. Mendell (1983)**Associate Professor of Philosophy**

A.B., 1971, Cornell University; M.A., 1974, Cambridge University, England; Ph.D., 1986, Stanford University

Pauline Mercado (1983)**Assistant Professor of Education**

B.A., 1974, M.A., 1976, San Diego State University; Ph.D., 1983, University of California, Santa Barbara

Robert L Meyer (1970) **Associate Professor of Mathematics**
B.S., 1963, M.A., 1964, University of Missouri; Ph.D., 1969, Michigan State University

Hrushikesh N. Mhaskar (1980) **Professor of Mathematics**
B.S., 1974, Nagpur University, India; M.S., 1976, Indian Institute of Technology, India; M.S., 1977, Ph.D., 1980, Ohio State University

Darlene M. Michener (1985) **Associate Professor of Education**
B.S.Ed., 1979, Northern Illinois University; M.A., 1982, Ph.D., 1985, University of South Florida

Milan B. Mijic (1991) **Assistant Professor of Physics**
Diploma in Physics, Belgrade University, Yugoslavia; M.S., Ph.D., California Institute of Technology

June Kim Miller (1989) **Assistant Professor of Nursing**
B.S., 1974, California State College, Los Angeles; M.N., 1978, University of California, Los Angeles; Ph.D., 1988, University of Southern California

Robert A. Miller (1966) **Professor of Physical Education**
B.A., 1952, Occidental College; M.A., 1966, California State College, Los Angeles

Joan Sabrina Mims (1987) **Associate Professor of Education**
B.A., 1977, University of Southern California; M.A., 1980, San Diego State University; Ph.D., 1988, Claremont Graduate School/San Diego State University

Majdedin Mirmirani (1981) **Professor of Mechanical Engineering**
B.S., 1967, Tehran Polytechnic, Iran; M.S., 1971, Ph.D., 1977, University of California, Berkeley

Lynda K. Mitchell (1980) **Professor of Education**
B.A., 1975, University of California, Los Angeles; M.A., 1977, California State University, Northridge; Ph.D., 1980, Stanford University

Thomas Miyake (1988) **Associate Professor of Music**
B.M.E., 1965, M.M., 1972, Adams State College of Colorado; D.M.A., 1985, University of Missouri, Kansas City

Tina Mochizuki (1989) **Head Coach, Men's and Women's Tennis**
B.A., 1974, M.A., 1978, California State College, Los Angeles

Ali Modarres (1990) **Assistant Professor of Geography and Urban Analysis**
B.L.A., 1983, M.L.A., 1985, Ph.D., 1990, University of Arizona

Madhu S. Mohanty (1990) **Assistant Professor of Economics and Statistics**
B.A., 1977, M.A., 1979, M.Phil., 1983, Utkal University, India; Ph.D., 1990, University of Wisconsin-Milwaukee

Genevieve L Monahan (1988) **Assistant Professor of Nursing**
B.A., 1975, University of California, Berkeley; B.S., 1979, Boston University; M.S., 1988, University of Arizona; R.N., P.H.N., 1979, California

Allen A. Mori (1987) **Dean, School of Education and Professor of Education**
B.A., 1969, Franklin and Marshall College; M.Ed., 1971, Bloomsburg State College; Ph.D., 1975, University of Pittsburgh

Ronald H. Morris (1960) **Professor of Physical Education**

B.S., 1957, M.S., 1958, University of Southern California

Alan E. Muchlinski (1979) **Professor of Biology**
B.A. 1975. St. John's University; Ph.D., 1979. Michigan State University

Barry Munitz (1991) **Chancellor, The California State University and
Professor of English**
B.A. 1963. Brooklyn College; M.A., 1965, Ph.D., 1968, Princeton University

Marcia Murota (1992) **Head Coach, Women's Basketball**
B.A., 1980, M.A., 1988, California State University, Los Angeles

Dennis M. Murphy (1975) **Professor of Accounting**
B.A. 1963, Michigan State University; M.B.A., 1965, University of Michigan; M.B.A. (Taxation), 1978, Golden Gate University; C.P.A., 1973, California

Robert R. Nakamura (1981) **Assistant Professor of Biology**
B.S., Stanford University; M.Phil., Ph.D., Yale University

Patricia A. Nava (1988) **Assistant Professor of
Electrical Engineering**
B.S., 1980, M.S., 1982, New Mexico State University

Edward Negrete, Jr. (1985) **Associate Professor of Education**
B.A., 1967, Idaho State University; M.A., 1976, Pepperdine University; Ed.D., 1982, University of California, Los Angeles

Louis R. Negrete (1972) **Professor of Chicano Studies**
B.A., 1957, Los Angeles State College; M.A., 1970, Occidental College; Ph.D., 1976, United States International University

Map/Lou Nevin (1988) **Assistant Professor of Education**
B.A., 1968, MA., 1973.. Ph.D., 1987, Arizona State University

Chorswang Ngin (1993) **Assistant Professor of Anthropology**
B.A., 1972, Wellesley College; MA., 1975, Ph.D., 1985, University of California Davis

Gordon L Nipp (1971) **Professor of Mathematics**
B.A., 1963, Wartburg College; M.A., 1965, University of Wisconsin; Ph.D., 1972, University of Southern California

Gary A. Novak (1970) **Professor of Geology**
B.S., 1965, University of Dayton; M.S., 1967, Pennsylvania State University; Ph.D., 1970, Virginia Polytechnic Institute and State University

Jonathan Nkem Nwomonoh (1970) **Assistant Professor of
Pan-African Studies**
B.A. 1968, California State College, Los Angeles; M.P.A., 1970. M.S., 1973, University of Southern California; Ph.D., 1975, United States International University; Ph.D., 1979, Claremont Graduate School

Freda V. O'Bannon (1968) **Professor of Nursing**
B.S., 1965, M.S., 1966, University of California, Los Angeles; R.N., 1962, California

Eduardo M. Ochoa (1984) **Professor of Economics and Statistics**
B.A., 1973, Reed College; M.A., 1976. M.A., 1980, Columbia University; Ph.D., 1984, New School for Social Research

Moonsong David Oh (1980) **Associate Dean, School of Business
and Economics and Professor of Marketing**

B.A., 1960, M.A., 1962, Seoul National University, Korea; M.B.A., 1964, Cornell University; Ph.D., 1970, University of Pennsylvania

Linda S. O'Hirok (1981) **Assistant Professor of Geography**
B.A., M.A., University of California. Los Angeles

Marjorie Elaine O'Leary (1980) **Associate Professor of Nursing**
B.S.N., 1966, Northwestern State College; M.S.N., 1968, University of Alabama; R.N., 1972, California

Jon L Olson (1970) **Professor of Anthropology**
B.S., 1962, Case Institute of Technology; Ph.D., 1972, Michigan State University

Thomas R Onak (1959) **Professor of Chemistry**
A.B., 1954, San Diego State College; Ph.D., 1958, University of California, Berkeley

Aida Takla O'Reilly (1970) **Professor of Pan-African Studies**
B.A., 1952, Cairo University, Egypt; M.A., 1955, University of California, Los Angeles; Doctorat d'Universite. 1969, University of Paris, France

Elliott Oring (1971) **Professor of Anthropology**
B.A., 1966, Queens College; M.A., 1968, Ph.D., 1974, Indiana University

John Orta (1990) **Associate Professor of Family Studies
and Consumer Sciences**
B.S., 1973, M.S., M.S. Ed., 1975, Florida International University; M.Ed., 1980. M.A., 1983, Ed.D., 1987, Columbia University

Elaine Osio (1970) **Professor of English**
B.A., 1964, Hunter College; M.A., 1965, University of Michigan; Ph.D., 1969, New York University

Joseph C. Otto (1986) **Associate Professor of Office Systems and
Business Education**
B.S., 1978, Iowa State University; M.S., 1982, Eastern Illinois University; Ed.D., 1987, Memphis State University

Clement Padick (1960) **Professor of Geography**
A.P., 1952, M.A., 1956, University of California, Los Angeles

R. Sekhar Pamula (1987) **Assistant Professor of Computer Science**
B.Tech., 1980. Jawaharlal Nehru Technological University. India; M.Tech., 1982. Indian Institute of Technology. India; Ph.D., 1987. Southern Illinois University

Judith L Papenhausen (1972) **Professor of Nursing**
B.S., 1971. California State College. Los Angeles; M.S., 1972 California State University. Los Angeles; R.N.. 1963. California

Leslie Jane Park (1989) **Assistant Professor of Accounting**
B.S., 1960. University of Texas; M.S., 1977. University of Houston; Ph.D.. 1965. University of Illinois

Parviz Partow-Navid (1983) **Professor of Information Systems**
B.B.A., 1973. Tehran Business College, Iran; M.B.A., 1976, Ph.D., 1981, University of Texas. Austin

Behzad Parviz (1986) **Assistant Professor of Computer Science**
B.S., 1974. College of Accounting. Tehran. Iran; M.S., 1976. Marywood College; M.S., 1979. Ph.D., 1986. State University of New York at Binghamton

Dawn M. Patterson (1985) **Dean of Continuing Education**

and Associate Professor of Education

B.S., 1962. State University of New York. College at Geneseo; M.A., 1973, Ph.D., 1977. Michigan State University

Bobby R. Patton (1988)**Dean. School of Arts and Letters
and Professor of Speech Communication**

B.F.A., 1958, Texas Christian University; M.A., 1962. Ph.D., 1966, University of Kansas

Donald R. Paulson (1970)**Professor of Chemistry**

B.A., 1965. Monmouth College; Ph.D., 1968. Indiana University

David Pearson (1984)**Professor of Biology**

B.S., 1966. Muhlenberg College; Ph.D., 1971. Temple University

Thomas H. Peeler (1990)**Associate Professor of Education**

B.S. 1962. M.S. 1964. State University of New York. College at Buffalo; Ed.D. 1969, State University of New York at Buffalo

Betsy Peitz (1977)**Professor of Biology**

B.A., 1970. Carlow College; Ph.D., 1975. Case Western Reserve University

James I. Penrod (1985)**Professor of Education**

B.A., 1965. Harding College; M.S., 1969. Tulane University; Ed.D., 1979. Pepperdine University

David R. Perrott (1968)**Professor of Psychology**

B.A., 1964. Ohio University; M.A., 1966. Ph.D., 1968. Kent State University

Miles Peterson (1987)**Assistant Professor of
Communication Disorders**

B.S., 1980. M.A., 1982. Utah State University; Ph.D., 1987. University of Washington; Certificate of Clinical Competence-Audiology. 1983. American Speech-Language-Hearing Association

Thomas H. Peterson (1970)**Associate Professor of English**

B.A. 1960, University of Wisconsin; M.A., 1965. Ph.D., 1971 University of California. Los Angeles

Maureen Pettitt (1985)**Associate Professor of Technology**

B.S., 1982. M.A., 1984, California State University, Los Angeles; Ph.D., 1990. Claremont Graduate School

Jean S. Phinney (1977)**Professor of Psychology**

B.A., 1955, Wellesley College; M.A., 1969. California State College Los Angeles; Ph.D., 1973. University of California. Los Angeles

Ronald L Pierce (1972)**Associate Professor of Accounting**

B.A., 1963. M.A., 1965. Brigham Young University; C.P.A., 1965. Utah 1976. California

Vicente F.R. Pilapil (1970)**Professor of History**

B.A. 1959. University of San Carlos. Philippines; M.A., 1961. Ph.D., 1964. Catholic University of America

Stanley H. Pine (1964)**Professor of Chemistry**

B.S., 1957. M.S., 1962. Ph.D., 1963. University of California. Los Angeles

Eleni N. Pitsiou-Darrough (1973)**Professor of Sociology**

B.A., 1969. Stetson University; M.S., 1970. Ph.D., 1973. Iowa State University

Stephen K. Pollard (1982)**Professor of Economics and Statistics**

B.A., 1978. Sonoma State College; M.S., 1980. Ph.D., 1982. Ohio State University

Joseph B. Prabhu (1978)**Professor of Philosophy**

B.A., 1966. M.A., 1968. Delhi University. India; M.A., 1975. Cambridge University. England; Ph.D., 1982. Boston University

Jagdish Prasad (1969)**Professor of Mathematics**

B.S., 1960. M.S., 1962. University of Lucknow. India; M.S., 1964 University of Windsor. Canada; Ph.D., 1968. University of Alberta

Nikolai Pulchritudoff (1972)**Associate Professor of and Statistics**

B.A., 1964. Sacramento State College; M.S., 1965. Ph.D., 1971. University of California. Davis

J. Alex Pulido (1989)**Associate Professor of Education**

B.A., 1961. California State College at San Jose; M.A., 1971. Texas Tech University; Ph.D., 1981. University of California. Santa Barbara

Rupa R Purasinghe (1988)**Professor of Civil Engineering**

B.S., 1978. University of Sri Lanka; M.S., 1981. Portland State University; Ph.D., 1985. Case Western Reserve University

Fred Pyrczak. Jr. (1970)**Professor of Education**

B.S., 1966. West Chester State College; Ph.D., 1972. University of Pennsylvania

Ruben Quintero (1988)**Associate Professor of English**

B.A., 1980. California State College. Los Angeles; A.M.. 1983. Ph.D., 1988. Harvard University

Carolyn R. Radakovich (1970)**Professor of Art**

B.A.. 1967, California State College. Long Beach; M.F.A., 1970 Temple University

Raj S. Ramchandani (1976)**Professor of Electrical Engineering**

B.Sc., 1964. Birca Institute of Technology. India; M.S., 1966 Pennsylvania State University; Ph.D., 1975. Ohio State University

John Joseph Ramirez (1989)**Assistant Professor of Broadcasting**

B.A. 1977. M.A., 1980. Ph.D., 1991. University of California. Los Angeles

Pedro C. Ramirez (1991)Assistant**Professor of Geology**

B.A. Ph.D., University of California. Santa Cruz

D. Lynn Rans (1984)**Professor of Accounting**

B.S., 1958. Indiana University; M.B.A., 1963. Michigan State University; D.B.A., 1972. Indiana University; C.P.A., 1967. Virginia

Marshall E. Reddick (1970)**Professor of Marketing**

B.S., 1965. M.S., 1967. Colorado State University; D.B.A. 1971. Texas Technical University

John D. Rees (1968)**Professor of Geography**

B.A., 1955. M.A., 1961. Ph.D., 1971. University of California. Los Angeles

Robert D. Reeser (1971)**Associate Dean. School of Arts and Letters
and Professor of Art**

B.S.. 1953. Northern Illinois University; M.A., 1959. University of Denver; Ph.D., 1974. Ohio State University

James A. Regalado (1987)**Executive Director. Edmund G
"Pat" Brown Institute of Public Affairs and
Associate Professor of Political Science**

B.A., 1971. M.A., 1973. California State University. Los Angeles; Ph.D., 1980. University of California. Riverside

Suzanne F. Regan (1979)**Associate Professor of Broadcasting**

B.A., 1971. Simmons College; M.A., 1974. University of California. Los Angeles; Ph.D., 1981. University of Massachusetts

Edward H. Rezayi (1983) **Associate Professor of Physics**
B.S. 1972. Worcester Polytechnic Institute; Ph.D., 1979. Stanford University

Richard D. Roberto (1966) **Professor of Mechanical Engineering**
B.S., 1961, Los Angeles State College; M.S., 1966, University of California, Los Angeles

Carlos D. Robles (1979) **Professor of Biology**
B.A., 1972, University of California, Santa Barbara; Ph.D., 1979, University of California, Berkeley

Martin S. Roden (1968) **Professor of Electrical Engineering**
B.S.E.E., 1963, M.S.E.E., 1964, Polytechnic Institute of Brooklyn; Ph.D., 1982, Kensington University

Jose R Rodriguez (1992) **Assistant Professor of Physics**
B.S., M.S., Massachusetts Institute of Technology; Ph.D., University of Illinois at Urbana-Champaign

Michael Roffe (1973) **Professor of Psychology**
B.A., 1963, University of California. Los Angeles; M.A., 1965, California State College, Los Angeles; Ph.D., 1970, University of Portland

Gloria J. Romero (1989) **Associate Professor of Psychology**
B.A., 1978, California State College, Long Beach; M.A., 1980, Ph.D., 1983, University of California, Riverside

M. Richard Roseman (1970) **Professor of Economics and Statistics**
B.S., 1953, University of Wisconsin; M.A., 1958, Ph.D., 1969, Harvard University

Howard Rosen (1970) **Professor of Biology**
B.S. 1961, M.A., 1965, Ph.D., 1968, University of California, Los Angeles

Paul Rosenthal (1988) **Professor of Information Systems**
B.S.Ed., 1950, M.A., 1953, Temple University; M.B.A., 1963, University of California, Los Angeles; D.B.A., 1980, University of Southern California

James M. Rosser (1979) **President of the University
and Professor of Management**
B.A., 1962, M.A., 1963, Ph.D., 1969, Southern Illinois University

Sidney Roth (1971) **Associate Professor of Psychology**
B.S., 1960, California Institute of Technology; Ph.D., 1967, University of California, Los Angeles

Mary J. Rotheram (1978) **Associate Professor of Psychology**
B.A., 1971, University of California, Irvine; M.A., 1973, Ph.D., 1977, University of Southern California

Alice M. Roy (1984) **Associate Professor of English**
B.A., 1959, University of Minnesota; M.A., 1963, University of Maryland; M.A., 1973, Ph.D., 1978, University of Michigan

Richard A. Rundall (1976) **Professor of Education**
B.A., 1962, University of Kentucky; M.A., 1965, Eastern Kentucky University; Ph.D., 1970, University of Southern California

J. Greg Ryan (1992) **Head Coach, Women's Track and Field/
Cross-Country and Athletics Academic Advisor**
B.A., 1971 Georgetown University; M.B.A., 1974, Florida State

Kenneth Ryan (1988)**Librarian, Reference**

B.A., 1963, M.A., 1967, University of Texas at Austin; ML.S., 1978, North Texas State University

Harold Sackman (1980)**Professor of Information Systems**

B.A., 1948, City College of New York; M.A., 1949, Columbia University; Ph.D., 1953, Fordham University

David Sandoval (1979)**Director, Educational Opportunity Program**

B.A., 1975, M.A., 1987, California State University, Los Angeles

Rolando A. Santos (1965)**Professor of Education**

A.B., 1955, B.S.E., 1956, Ateneo College, Philippines; M.A., 1958, Ph.D., 1961, George Peabody College for Teachers

Sunil K. Sapra (1991)**Associate Professor
of Economics and Statistics**

M.A., Delhi School of Economics, India; M.Phil., Ph.D., Columbia University

Patricia Savich (1979)**Professor of Communication Disorders**

B.S., 1967, Northern Illinois University; MA., 1971, University of Illinois; Ph.D., 1981, University of Colorado

Deborah Schaeffer (1988)**Associate Librarian, Reference**

B.A., 1977, California State College. Long Beach; M.L.S., 1979, University of California, Los Angeles

Martin J. Schiesl (1979)**Professor of History**

B.A., 1965, M.A. 1968. Ph.D., 1972, State University of New York at Buffalo

Alfredo Schifini (1991)**Associate Professor of Education**

B.A., University of San Diego; MA., University of California. Los Angeles; M.A., California State University, Los Angeles; Ph.D., University of California, Los Angeles

William B. Schneider (1977)**Associate Professor of Accounting**

B.A., 1961. Occidental College; M.B.A., 1973, University of Southern California; Ph.D., 1988, Claremont Graduate School; C.P.A., 1970, California, 1973, Wisconsin

Paul Schnitzel (1974)**Professor of Finance**

B.A., 1964, St. Francis College; M.A., 1967. Ph.D., 1971, New York University

Beverly Jeanne Schnitzier (1959)**Professor of Art**

B.S. 1954, University of Arizona; M.A., 1959, Los Angeles State College

Janet A. Seaman (1972)**Professor of Physical Education**

B.S.E., 1964, University of Omaha; MA., 1967, University of California, Santa Barbara; P.E.D., 1972, Indiana University; M.S., California State University, Los Angeles, 1988

Virgil Seaman (1987)**Associate Professor of Technology**

B.S. 1979, Lake Superior State College; M.A., 1983, Ph.D., 1987 Indiana State University

Carl M. Selkin (1970)**Professor of English**

B.A., 1965, Syracuse University; M.A., 1967, Ph.D., 1974, State University of New York at Binghamton

Penelope Semrau (1988)**Associate Professor of Education**

B.S.E., 1972, University of Wisconsin-Whitewater; M.A., 1980, Illinois State University; Ph.D., 1987, Ohio State University

Bahjat A. Sharif (1991)**Assistant Professor of Health Science**

B.A., Teachers' Training University, Iran; M.S., Southern Illinois University at Carbondale; Ph.D., Texas Women's University; Certified mediator; certified divorce mediator

Sandra B. Sharp (1986) **Assistant Professor of Biology**
B.A., 1967, University of California, Berkeley; Ph.D., 1981, University of California, Los Angeles

Mary Elizabeth Shutler (1988) **Provost and Vice President for
Academic Affairs and Professor of Anthropology**
B.A., 1951, University of California, Berkeley; M.A., 1958, Ph.D., 1967, University of Arizona

Michael J. Siler (1990) **Assistant Professor of Political Science**
B.S., M.S., 1977, University of California, Los Angeles; M.P.A., 1979, University of Washington; Ph.D., 1992, University of Southern California

Charles Simmons (1988) **Associate Professor of Journalism**
B.A., 1968, Langston University; M.S., 1970, Columbia University; J.D., 1983, Georgetown University

Dolls J. Sims (1989) **Associate Professor of Family Studies
and Consumer Sciences**
B.A., 1968, MA., 1970, California State College, Los Angeles; Ph.D., 1978, Claremont Graduate School

Barbara Peterson Sinclair (1961) **Professor of Nursing**
B.S., 1957, University of Maryland; M.N., 1958, Emory University; R.N., 1961, California; ANA/NACOG National Certification, 1978

Constantina Skanavis (1988) **Assistant Professor of Health Science**
B.S., 1980, California State College, Long Beach; M.S., 1982, California State University, Long Beach; Ph.D., 1988, University of California, Los Angeles

Simeon P. Slovacek (1981) **Professor of Education**
B.A., 1971, Syracuse University; M.S., 1974, Ph.D., 1976, Cornell University

Ludwig Slusky (1985) **Professor of Information Systems**
M.S., 1961, Institute of Mechanical Engineering (Bauman), U.S.S.R.; Ph.D., 1968, Academy of Municipal Economy, U.S.S.R

Benjamin W. Smith (1963) **Professor of Political Science**
A.P., 1959, University of Redlands; Ph.D., 1969, University of Texas

Susan Belasco Smith (1992) **Associate Professor of English**
B.A., 1972, Baylor University; M.A., 1982, Leicester University, England; M.A., 1974, Baylor University; Ph.D., 1987, Texas A&M University

Jon Snodgrass (1972) **Professor of Sociology**
B.A., 1965, MA., 1967, University of Maryland; Ph.D., 1972, University of Pennsylvania; Ph.D., 1983, Reiss-Davis Child Study Center

Marguerite Ann Snow (1988) **Associate Professor of Education**
B.A., 1977, M.A., 1979, Ph.D., 1985. University of California, Los Angeles

Donald Snyder (1975) **Professor of Economics and Statistics**
B.A., 1966, University of New Mexico; M.A., 1967, New Mexico State University; Ph.D., 1971, Pennsylvania State University

Sidney Soclof (1960) **Professor of Electrical Engineering**
B.S.E.E., 1958, University of Florida; M.S.E.E., 1959, University of Michigan; Ph.D., 1968, University of California, Los Angeles

Joseph E. Soldate (1966)**Professor of Art**

A.B., 1961, Long Beach State College; M.F.A., 1963, Claremont Graduate School

Marcel Soriano (1990)**Associate Professor of Education**

B.A., 1968, M.A. 1972, University of California. Riverside; Ph.D., 1984, United States International University

Hector Soto-Perez (1971)**Professor of Chicano Studies**

B.A., 1951, M.A., 1954, Mayorde San Jose, Mexico, D.F.; M.A. 1970, University of California, Los Angeles; Ph.D., 1973, University of Southern California

Ralph S. Spanswick (1970)**Professor of Accounting and
Office Systems and Business Education**

B.S., 1959, State University of New York at Albany; M.A., 1961, New York University; Ed.D., 1967, Northern Illinois University

Carole Srole (1984)**Associate Professor of History**

B.A. 1970, M.A., 1973, Ph.D., 1984, University of California, Los Angeles

Patricia H. Stanley (1988)**Associate Professor of Family Studies
and Consumer Sciences**

B.S., 1960, Wittenberg College; M.S., 1972, University of Southern Mississippi; Ed.D., 1985, University of the Pacific

Timothy Steele (1987)**Professor of English**

B.A. 1970, Stanford University; M.A., 1971, Ph.D., 1977, Brandeis University

Alan P. Stein (1977)**Librarian, Reference**

B.A., 1969, M.A., 1970, University of Denver; M.P.A., 1977, University of Arizona; J.D., 1982, Glendale College of Law

John F. Steiner (1973)**Professor of Management**

B.S., 1967, Southern Oregon College; M.A., 1970, Ph.D., 1973. University of Arizona

William L Sternal (1965)**Counselor**

B.A., 1962, University of Minnesota; MA., 1964, University of North Dakota; Ed.D. 1966, Indiana University; Licensed Psychologist, 1968, California; School Psychologist, 1970, California

Judith E. Stevens-Long (1971)**Professor of Psychology**

B.A., 1966, M.A., 1968, Ph.D., 1971, University of California, Los Angeles

Shirley Stretch (1987)**Professor of Marketing**

B.S., 1971, University of Nebraska-Lincoln; M.S., 1972, Kansas State University; M.B.A., 1977. Ph.D., 1982, Ohio State University

Vance Studley (1971)**Professor of Art**

B.A., 1967, San Fernando Valley State College; M.A., 1969, University of California, Los Angeles

Robert J. Stull (1969)**Professor of Geology**

B.S., 1965, Lamar State College of Technology; M.S., 1967, Ph.D., 1969, University of Washington

Pudukkottai K. Subramanian (1985)**Professor of Mathematics
and Computer Science**

B.S., 1957, Delhi University, India; M.S., 1965, Miami University of Ohio; Ph.D., 1971, University of Wisconsin-Milwaukee; Ph.D., 1985, University of Wisconsin-Madison

James T. Sullivan (1969)**Professor of English**

B.A., 1961, Tufts University; M.A., 1964, Ph.D., 1974, Brandeis University

Douglas Sun (1992)**Assistant Professor of English**

B.A., 1985, Yale University; M.A., 1987, University of Chicago

John J. Swain (1984)**Professor of Music**

B.F.A., 1972, M.M., 1977, University of South Dakota; Ph.D., 1985, Michigan State University

R. Carol Sweeney (1986)**Professor of Education**

B.S., 1976, M.S., 1978, Pepperdine University; Ph.D., 1986 Claremont Graduate School

Laura Sweetman (1992)**Assistant Professor of Chemistry**

B.S., 1983, University of California, Riverside; M.S., 1986, California State University, Fullerton; Ph.D. 1989, University of California, Los Angeles

Hershel Swinger (1980)**Professor of Education**

B.A. 1966, M.S., 1968, California State College, Los Angeles; Ph.D., 1978, University of Southern California

Lili Tabrizi (1988)**Professor of Electrical Engineering**

B.S., 1975, Arya-Mehr University of Technology, Iran; M.S., 1978, Ph.D., 1983, Michigan State University

Lillian Taiz (1992)**Assistant Professor of History**

B.A., 1981, M.A. 1983, San Francisco State

Yoji Takata (1981)**Assistant Professor of Japanese**

B.A., M.A., Sophia University (Japan); M.A., Ph.D, 1991, University of Tennessee, Knoxville

Narendra B. Taly (1977)**Professor of Civil Engineering**

B.Sc., 1959, Banaras Hindu University, India; M.S., 1971, Bucknell University; Ph.D., 1976, West Virginia University; Registered Professional Civil Engineer, 1976, West Virginia; Registered Professional Civil Engineer, 1977. California

Chick F. Tam (1982)**Professor of Family Studies
and Consumer Sciences**

B.S., 1967, Chinese University of Hong Kong; M.S., 1971, DR.P.H., 1974, University of California, Los Angeles

Robert K. Tamaki (1969)**Associate Professor of Mathematics**

A.P., 1966, University of California, Los Angeles; MA., 1969, Ph.D., 1970, University of Southern California

Rodolfo G. Tamez (1989)**Assistant Professor of Mathematics**

B.A., 1981. University of California. Santa Barbara; M.A., 1983. Ph.D., 1988, University of California, Berkeley

Le D. Tang (1986)**Professor of Technology**

B. Ed. 1972, National Taiwan Normal University; M.A., 1979, East Tennessee State University; Ph.D., 1981. Ohio State University

Jerry D. Tate (1965) Associate**Professor of Psychology**

A.B., 1958, Southwestern at Memphis; M.A., 1960, Emory University; Ph.D., 1965, Ohio State University

Alison Taufer (1991)**Assistant Professor of English**

B.A., 1980, Loyola-Marymount University; MA., 1984, Ph.D, 1988, University of California, Los Angeles

William A. Taylor (1970) **Associate Vice President for Academic Affairs-Planning and Resources and Professor of Physics**
B.A., 1961, M.A., 1963, Ph.D., 1967, University of California, Riverside

Olga Termini (1972) **Professor of Music**
B.Mus. 1954, M.Mus. 1957, Ph.D., 1970, University of Southern California

Peter Terry (1987) **Assistant Professor of Music**
B.A., 1980, University of Michigan; M.M., 1982, Bowling Green State University; D.M.A., 1986, University of Texas at Austin

David Thomas (1989) **Associate Athletic Director/Internal Operations**
B.S., 1972, M.S., 1979, Morgan State College

John Thornbury (1988) **Associate Librarian, Reference**
B.A., 1963, M.L.S., 1966, M.A., 1968, University of California, Los Angeles

Wayne R. Tikkanen (1986) **Associate Professor of Chemistry**
B.S., 1976, University of Rhode Island; M.A., 1980, Ph.D., 1982, University of California, Santa Barbara

John A. Tomaske (1965) **Professor of Economics and Statistics**
B.A., 1956, Washington State University Ph.D., 1968, University of Washington

Dang Tran (1967) **Associate Professor of Economics and Statistics**
Licence en droit, 1964, Saigon University; B.Ec., 1969, University of Western Australia; M.A., 1975, Ph.D., 1977, Syracuse University

Janet G. Tricamo (1975) **Director, Learning Resource Center**
B.S., 1967, Fordham University; M.A., 1968, George Washington University; Ph.D., 1975, Claremont Graduate School

Nathaniel Trives (1969) **Professor of Criminal Justice**
B.S., 1968, California State College, Los Angeles; M.P.A., 1974, University of California, Los Angeles

Ronald T. Tsukashima (1972) **Professor of Sociology**
B.A. 1965, California State College, Los Angeles; M.A., 1967, Ph.D., 1973, University of California, Los Angeles

Linda Mane Tunstad (1992) **Assistant Professor of Chemistry**
B.S., 1983, California State University, Los Angeles; Ph.D., 1990, University of California, Los Angeles

Carol F. Tuntland (1988) **Assistant Professor of Family Studies and Consumer Sciences**
B.S., 1965, North Dakota State University; M.A., 1987, California State University, Long Beach

John Turek (1989) **Men's Cross Country and Track and Field Coach**
B.S., 1977, California State College, Los Angeles; M.S., 1989, California State University, Fullerton

Mane U. Ubans (1959) **Professor of Theatre Arts**
B.S., 1954, Syracuse University; M.A., 1955, Northwestern University

Donald W. Urquidi (1962) **Professor of Political Science**
A.P., 1950, M.A., 1953, Ph.D., 1961, Columbia University

Connie Utterback (1991) **Assistant Professor of Art**
B.F.A., 1969, Washington University; M.F.A., 1981, University of California, Los Angeles

Nguyen Uy (1984)**Associate Professor of Mathematics
and Computer Science**

B.A., 1968, University of Saigon, Vietnam; M.A., 1972, University of California, Los Angeles; MS. 1973, State University of New York; Ph.D., 1974, University of California, Los Angeles

Ashish K. Vaidya (1961)**Assistant Professor
of Economics and Statistics**

B.A., St. Xavier's College, India; M.A., University of Bombay, India; M.A., Ph.D., University of California, Davis

Trina J. Valencich (1978)**Associate professor of Chemistry**

B.A. 1968, Ph.D., 1974, University of California, Irvine

Doris Van Horn-Christopher (1990)**Associate Professor of
Office Systems and Business Education**

B.S., 1976, University of the Ozarks; M.Ed., 1981, Ed.D., 1989, University of Arkansas

Paul W. Van Ness (1976)**Professor of Music**

B.M., 1969, M.M., 1971, Eastman School of Music

Tomas J. Vasquez (1976)**Acting Director, Office for Students
with Disabilities**

B.A., 1972, California State University, Los Angeles

Stewart M. Venit (1971)**Professor of Mathematics**

B.A., 1966, Queens College; M.A., 1969, Ph.D., 1971, University of California, Berkeley

Diane Vernon (1969)**Professor of Nursing**

B.S., 1963, California State College. Los Angeles; M.N., 1969, University of California, Los Angeles; R.N., 1959, P.H.N., 1963, California

Andrei Verona (1984)**Professor of Mathematics**

MS., 1966, Ph.D., 1971, University of Bucharest, Romania

Robert Vianello (1984)**Associate Professor of Broadcasting**

B.A., 1972, University of Michigan; M.A., 1982, Ph.D., 1988, University of California, Los Angeles

Elizabeth Viau (1992)**Associate Professor of Edu cation**

B.A., 1956, B.Ed., 1963. University of British Columbia, Canada; M.A., 1986. California State University, Chico; Ph.D., 1986, University of Oregon

George R. Vick (1967)**Professor of Philosophy**

B.A. 1953. Yale University; Ph.D., 1968, University of Southern California; Certificat D'Etudes en Philosophie, 1956, Ecole de Theologie, France

Hildebrando Villarreal (1976)**Professor of Spanish**

B.A., 1964, M.A., 1969, University of New Mexico; Ph.D., 1976, University of California, Los Angeles

Richard J. Vogl (1961)**Professor of Biology**

B.S., 1953, M.S., 1955, Marquette University; Ph.D., 1961, University of Wisconsin

Kenneth A. Wagner (1969)**Professor of Political Science**

B.S. 1959, M.Ed., 1964, South Dakota State University; Ph.D., 1970, University of Iowa

Patricia L Wagner (1962)**Professor of Physical Education**

B.A., 1957. M.A., 1962, Los Angeles State College

Wen L Wang (1967)**Professor of Civil Engineering**

B.S.C.E., 1956, Taiwan University, Taiwan, Republic of China; M.S.C.E., 1963, University of Utah; Ph.D., 1968, University of New Mexico; Registered Professional Civil Engineer, 1973, California; Geotechnical Engineer, 1987. California

Michael Louis Wapner (1968) **Associate Professor of Psychology**
B.A., 1957, Reed College; M.A., 1961, Los Angeles State College; Ph.D., 1966, University of California, Los Angeles

Hugh E. Warren (1976) **Professor of Accounting**
B.S., 1963, Stanford University; M.A., 1966, University of Arizona; Ph.D., 1975, University of Michigan

Judith M. Washburn (1974) **Professor of Education**
B.S., 1969, University of Wisconsin; M.A., 1971, Ph.D., 1974, Ohio State University

Paul V. Washburn (1973) **Professor of Management**
B.A., 1969, Wake Forest University; M.A., 1972, Ph.D., 1973, Ohio State University

Knox B. Wasley (1991) **Associate Professor of Information Systems**
B.S., 1972, M.B.A., 1976, University of Colorado

Alice V. Watkins (1999) **Associate Dean, School of Education
and Professor of Education**
B.A., 1955, Pepperdine College; M.S., 1970, California State College, Fullerton; Ph.D., 1975, Claremont Graduate School

Gary Steele Watson (1974) **Professor of Business Law**
A.P., 1964, J.D., 1967, University of California. Berkeley; M.A., 1974, University of Nevada, Reno; admitted to the Bar, 1968, Nevada

Yehudi Webster (1993) **Assistant Professor of Sociology**
M.S., 1970, Warsaw University, Poland; M.A., 1974, University of London; Ph.D., 1977, Warwick University, England

David J. Weiss (1970) **Professor of Psychology**
B.A., 1966, University of Pennsylvania; Ph.D., 1973, University of California, San Diego

Laura L. Whitcomb (1989) **Assistant Professor of Management**
A.P., 1978, M.A., 1985, M.B.A., 1986, Indiana University

James H. Wiebe (1983) **Professor of Education**
B.A., 1967, Fresno Pacific College; M.A., 1974, California State University, Fullerton; Ph.D., 1977, Arizona State University

David W. Wilkinson (1984) **Interim Assistant University Librarian and
Associate Librarian, Reference**
B.A., 1978, California State University, Fresno; M.B.A., 1980, M.L.S., 1984, University of California, Los Angeles

Rhea R. Williams (1989) **Associate Professor of Nursing**
B.S., 1972, California State College, Los Angeles; M.N., 1974, Ph.D., 1987, University of California, Los Angeles; R.N., California, 1962; P.H. Nurse, California

Erika G. Wilson (1968) **Professor of Economics and
Religious Studies**
Degree in Philosophy, 1956, University of Freiburg, Germany; B.A., 1958, Los Angeles State College; M.A. 1962, Ph.D., 1971, University of California, Los Angeles; Ph.D., 1979, University of Southern California

Gay Yuen Wong (1989)**Assistant Professor of Education**

B.A. 1975, University of California, Los Angeles

Ming-Kan Wong (1992)**Senior Assistant Librarian, Serials**

B.E.S., 1979, M.A., 1982, University of Waterloo. Canada; M.L.S., 1986, University of Maryland

Qing-Yun Woo (1991)**Assistant Professor of Chinese**

B.A., 1975, Kaifeng Teachers' University, China; M.A., 1987, Southern Illinois University at Carbondale; Ph.D., 1991, Pennsylvania State University

John B. Wood (1992)**Librarian, Reference**

B.A., 1955, University of Texas; M.A., 1956, University of Denver

John C. Woolum (1970)**Professor of Physics**

B.A., 1960, University of Colorado; Ph.D., 1965, Cornell University

Chivey C. Wu (1983)**Professor of Mechanical Engineering**

B.S.M.E., 1976, National Cheng Kung University, Taiwan; M.S.M.E., 1979. Ph.D., 1983, University of Illinois

Ruth R. Wu (1971)**Dean, School of Health and
Human Services and Professor of Nursing**

B.S., 1946, University of California, Berkeley; M.A., 1952. New York University; M.S., 1958, Wayne State University; Ph.D., 1972, University of California, Los Angeles; R.N., 1946, California

Ying Xu (1992)**Senior Assistant Librarian, Reference**

B.A., 1978, Fudan University, China; M.A. 1985, Leeds University U.K.; M.L.S., 1989, Rutgers University

Fleur B. Yano (1964)**Professor of Physics**

B.S., 1954, Columbia University; M.S., 1958 University of Southern California; Ph.D., 1966. University of Rochester

Eri F. Yasuhara (1982)**Associate Professor of Japanese**

B.A., 1970, MA., 1972, Ph.D., 1982, University of California, Los Angeles

Valerie Yates (1990)**Assistant Professor of Management**

B.S., 1980, Florida State University

Lamont Yeakey (1982)**Associate Professor History**

B.A. 1967, M.A., 1969. Roosevelt University; M.A., 1970. M.Phil. 1978. Ph.D., 1979, Columbia University

Gust A. Yep (1990)**Assistant Professor of Speech Communication**

B.A., 1980. M.A., 1985, Ph.D., 1990, University of Southern California

Killian P.H. Ying (1988)**Associate Professor of Geography
and Urban Analysis**

B.S., 1979, University of Houston; M.A., 1980, Ph.D., 1985, Ohio State University

Mann J. Yoon (1991)**Assistant Professor
of Economics and Statistics**

B.A., Yonsei University, Korea; M.S., Illinois State University

DeAnn Mane Young (1969)**Professor of Nursing**

B.S.N., 1960, Ohio State University; M.S.N. 1969 University of Cincinnati; R.N., 1969, California

Frank W. Young (1969)**Professor of German**

B.S., 1959, Utah State University; Ph.D., 1972. University of Washington

Eli-Young Yu (1968)**Professor of Sociology**

B.A., 1961, Seoul National University, Korea; M.A., 1966, Ph.D. 1969 University of Pennsylvania

Robed Gene Zahary (1985)**Professor of Accounting**

B.S., 1965, Oregon State University; M.B.A. 1972, University of Southern California;
B.A. 1975, California State University, Los Angeles; Ph.D., 1982, University of Southern California;
C.P.A. 1970 California

Segundo V. Zapata (1978)**Associate Professor of Health Science**

M.P.H., 1964, University of Michigan; DR.P.H, 1976, University of California, Los Angeles

Marlene Zepeda (1990)**Assistant Professor of Family Studies
and Consumer Sciences**

B.A, 1972, California State College, Los Angeles; M.A., 1978, Ph.D., 1984, University of
California, Los Angeles

Andrea G. Zetlin (1989)**Associate Professor of Special Education**

B.A., 1972, Queens College, City University of New York; M.A., 1973, New York University; Ed.D.,
1977, Columbia University Teachers' College

EMERITI**(years in parentheses indicate term of service)**

Butrus Abd al-Malik (1969-1990)	Professor of History
Edward Abood (1963-1991)	Professor of English
Leonard Adams (1961-1983)	Professor of Physical Education
Gerhard Albersheim (1966-1970)	Professor of Music
Sidney P. Albeit (1956-1979)	Professor of Philosophy
Laird B. Allison (1956-1983)	Professor of Management
Daniel Amneus (1950-1986)	Professor of English
Constance F Amsden (1961-1984)	Professor of Education
Anthony J. Andreoli (1955-1989)	Professor of Biochemistry
Henry S. Ang (1965-1991)	Professor of Marketing
Thomas Annese (1951-1992)	Professor of Philosophy
Ratna Appadurai (1969-1987)	Professor of Education
Walter M. Askin (1956-1992)	Professor of Art
Richard Arvidson (1968-1989)	Professor of Geography
Alfred F. Michael Atlee (1965-1986)	Professor of Spanish
John M. Austin (1960-1982)	Professor of Education
Jerry R. Bell (1989-1992)	Professor of Physical Education
Cornelia Balogh (1962-1989)	Associate Librarian and Science and Technology Librarian
Richard S. Balvin (1956-1990)	Professor of Psychology
Man/A. Bany (1955-1974)	Professor of Education
Evelyn Malkin Barclay (1957-1969)	Professor of Nursing
Francis H. Baxter (1950-1978)	Professor of Music
Walter S. Beaver (1956-1984)	Professor of Theatre Arts
Charles E. Beckwith (1957-1950)	Professor of English
Eugene Benedetti (1950-1980)	Professor of Education
Robert E. Benoit (1965-1990)	Professor of Education
Arthur Benson (1962-1992)	Associate Professor of Philosophy
Philip D. Bergfield (1966-1982)	Professor of Finance and Business Law
Norman D. Berke (1966-1992)	Professor of Education
Isaac Berman (1965-1988)	Professor of Education
V. Patricia Beyer (1973-1990)	Professor of Education
Nancy J. Billett (1975-1985)	Professor of Business Education and Office Administration
David Bilovsky (1956-1979)	Professor of Education
Donald A. Bird (1956-1977)	Professor of English
Evan E. Black (1983-1991)	Librarian
Hem/Etta Brown Blackmon (1968-1986)	Professor of Nursing
Robert E. Blackmon (1960-1996)	Professor of Journalism
Miriam Blomquist (1966-1980)	Professor of Nursing
Arline Bock (1961-1977)	Librarian
Irvin Borders (1961-1971)	Professor of Journalism
Charles E. Borman (1960-1992)	Professor of Art
Amy G. Brainard (1961-1972)	Professor of Art
Robert V. Brass (1960-1983)	Student Affairs Officer
William H. Bright (1960-1980)	Professor of Economics
Charles E. Brinkley (1961-1991)	Librarian
Allen R Bristow (1959-1983)	Professor of Criminal Justice
Helen Brocklehurst (1960-1971)	Counselor and Associate Professor of Education
Richard K. Brome (1962-1987)	Senior Assistant Librarian
Winona N. Brooks (1959-1983)	Professor of Home Economics
Harold C. Brown (1966-1992)	Professor of Education
Richard D. Bums (1960-1992)	Professor of History
Donald Burrill (1962-1992)	Professor of Philosophy
George Burstein (1979-1992)	Professor of Management

John C. Bushman (1953-1976)	Professor of English
H. Randall Butler (1954-1985)	Associate University Librarian
Robert Bascom Callahan (1960-1983)	Professor of Political Science
Richard G. Cannicott (1959-1983)	Professor of Psychology
Samuel M. Caplin (1960-1980)	Professor of Botany
Brian Capon (1951-1992)	Professor of Biology
Phillip L. Carter (1970-1988)	Associate Professor of Social Work
Matilde O. Castells (1969-1986)	Professor of Spanish
Robert C. Catren (1950-1972)	Professor of History
Emily C. Chang (1969-1983)	Professor of Accounting
Doris C. Ching (1952-1991)	Professor of Education
Charles L. Clark (1957-1981)	Professor of Mathematics
Earl Kennedy Cobb (1958-1987)	Professor of Accounting
Ham/C. Coffin (1960-1950)	Professor of Geography
Irving J. Cohen (1959-1988)	Associate Librarian and Humanities/ Social Sciences Librarian
Ivan P. Colburn (1964-1990)	Professor of Geology
William M. Cole (1964--1992)	Professor of Safety Studies
John P. Cornish (1954-1982)	Professor of Art
Persis H. Cowan (1956-1974)	Professor of Education
John R. Cox (1955-1983)	Professor of Finance
Clifford J. Craft (1977-1987)	Professor of Accounting
Leslie Cromwell (1953-1980)	Dean, School of Engineering and Professor of Electrical Engineering
Morton J. Cronin (1955-1957)	Professor of English
Jack B. Cullen (1955-1982)	Professor of Speech Communication
Douglas L. Currell (1957-1951)	Professor of Chemistry
John A. Dahl (1955-1983)	Professor of Education
Saralyn R. Daly (1962-1988)	Professor of English
Peter M. Damien (1972 -1992)	Professor of Art
Shirlee D. Davis (1967-1992)	Professor of Education
Bruce Dayton (1965-1980)	Professor of Physics
Louis C. De Armond (1950-1979)	Professor of History
Cameron S. Deeds (1951-1985)	Professor of Physical Education
John H. DeHardt (1961-1992)	Professor of Mathematics
Earl W. Denny (1959-1983)	Associate Dean, School of Education and Professor of Education
Harry Diamond (1960-1979)	Professor of Criminal Justice
Robert J. Diamond (1958-1981)	Professor of Mathematics
Solomon Diamond (1949-1971)	Professor of Psychology
Geraldine Dimondstein (1972-1989)	Professor of Art
Wachtang Djobadze (1968-1988)	Professor of Art
Cortland C. Doan (1965-1989)	Professor of Technology
Robert L. Douglass (1951-1987)	Professor of Communication Disorders
James G. Dunkelberg (1958-1997)	Professor of Physical Education
Eugene R. Dvorin (1958-1992)	Professor of Political Science
Leonard Edmondson (1964-1986)	Professor of Art
Louis W. Eggers, Jr. (1962-1991)	Professor of Electrical Engineering
Perry L. Ehlig (1956-1992)	Professor of Geology
Robert A. Eisenberg (1967-1992)	Professor of Education
Norman L. Ellenberg (1969-1992)	Professor of Education
Saxon C. Elliot (1950-1978)	Professor of Health and Safety Studies
Patricia Wright Ellis (1970-1986)	Professor of Family Studies and Consumer Sciences
Ray Engelke (1964-1983)	Associate Librarian
Robert H. Ewald (1957-1986)	Professor of Anthropology
Raymond E. Fausel (1962-1990)	Professor of Technology
Robert Fennessy (1965-1992)	Professor of Health Science
Lloyd N. Ferguson (1965-1986)	Professor of Chemistry
Otto W. Fick (1956-1982)	Professor of English
Anita H. Fisher (1956-1980)	Professor of Physical Education

Robert J. Forbes (1956-1978)	Professor of Education
Robert M. Fowells (1962-1988)	Professor of Music
George N. Francis (1949-1976)	Professor of Accounting
Alfred H. Fritz (1971-1988)	Professor of Mechanical Engineering
Norman Fruman (1959-1980)	Professor of English
Louis G. Gardemal (1950-1981)	Professor of Theatre Arts
Jewell Garner (1951-1982)	Professor of Education
Vincent A. Giroux (1957-1984)	Professor of Electrical Engineering
Ben C. Gmur (1956-1983)	Dean, School of Fine and Applied Arts and Professor of Health and Safety Studies
Herbert Goldenberg (1955-1986)	Professor of Psychology
Leonard Gordon (1962-1987)	Associate Librarian
Mary Gormly (1952-1983)	Librarian
G. Douglas Gourley (1957-1977)	Professor of Criminal Justice
Richard C. Grace (1959-1992)	Professor of Criminal Justice
Gloria S. Graham (1959-1986)	Professor of Education
Thomas Graham (1959-1992)	Professor of Psychology
Evelyn B. Granville (1967-1984)	Professor of Mathematics
Thelma Graves (1951-1963)	Assistant Professor of Home Economics
Marilyn W. Greenberg (197c-1992)	Professor of Education
Emmett A. Greenwalt (1949-1974)	Professor of History
Celeste Griffith (1954-1978)	Professor of Music
Michael F. Grisafe (1956-1975)	Professor of Accounting
Edward O. Guerrant (1954-1980)	Professor of History
Keith E. Gummere (1956-1980)	Professor of Industrial Studies
Reid J. Gunnell (1958-1992)	Professor of Physical Education
George A. Gustafson (1970-1983)	Professor of Accounting
Jessie C. Gustarson (1952-1987)	Professor of Business Education
Byron <i>Guyer</i> (1955-1978)	Professor of English
Iris Timson Gwinn (1956-1972)	Professor of Education
Charles M. Haberman (1959-1991)	Professor of Mechanical Engineering
Martha L Hackman (1960--1977)	Librarian
Robert G. Hadley (1965-1992)	Professor of Education
Donald J. Hager (1957-1981)	Professor of Sociology
Elise S. Hahn (1963-1977)	Professor Speech
Robert O. Hahn (1956-1980)	Professor of Education
Harold D. Hall (1956-1980)	Professor of Education
Ham/Hall (1965-1990)	Professor of Political Science
Lyle Hanna (1960-1974)	Professor of Education
Louis A. Hansen (1956-1980)	Professor of Music
William R. Hanson (1960-1987)	Professor of Biology
John Haralson (1951-1980)	Professor of Psychology
James V. Harvey (1955-1971)	Professor of Botany and Nature Study
Audrey Graft Hawk (1960-1981)	Associate Librarian
Ham/S. Hayashi (1965-1992)	Professor of Mathematics
Leonard W. Hein (1956-1983)	Professor of Accounting
Jack C. Heppe (1949-1977)	Director of Campus Development
John W. Hermann (1986-1990)	Professor of Physical Education
William H. Hill (1973-1992)	Professor of Music
Anthony Hillbruner (1954-1980)	Professor of Speech Communication
Lester Hirsch (1960-1986)	Professor of Physics
Patrlcia M. Hodges (1970-1986)	Professor of Psychology
Virginia Hoffman (1952-1987)	Professor of Art
Howard P. Holladay (1959-1991).	Professor of Speech Communication
Stanley D. Hopper(1957-1991)	Professor of Political Science
John L Houk (1971-1983)	Professor of Political Science
Jackie L Hoyt (1958-1992)	Professor of Physical Education
Ke Ting Hsia (1963-1989)	Professor of Economics and Statistics
Mary W. Huber (1952-1971)	Professor of Speech

Donald E. Hudson (1964-1983)	Professor of Physics
Roland D. Hutchinson (1950-1983)	Associate Professor of Psychology
Charles J. Inacker (1974 -1992)	Dean, School of Business and Economics and Professor of Office Systems and Business Education
Raleigh Jackson (1973-1992)	Professor of Education
David Jacobsohn (1960-1983)	Professor of Health and Safety Studies
Sigmund Jaffe (1958-1986)	Professor of Chemistry
George E. Jakway (1965-1991)	Associate Professor of Biology
Joan D. Johnson (1955-1992)	Professor of Physical Education
Lois V. Johnson (1950-1976)	Professor of Educaton
John O. Jones (1964-1991)	Professor of Education
Kazumitsu Kato (1963-1992)	Professor of Japanese
Donald Kiel (1960-1992)	Professor of Mathematics and Computer Science
Eloise M. King (1960-1988)	Professor of Nursing
Wanda L King (1965-1980)	Professor of Nursing
Donald B. Kinstler (1957-1980)	Professor of Education
Arthur J. Kirsch (1961-1979)	Professor of Economics
Ralph E. Kloeppe (1959-1980)	Professor of Education
William A. Knoke (1970-1982)	Professor of Marketing
Mary A. Kramer (1972-1991)	Associate Professor of Family Studies and Consumer Sciences
Aaron Kriegel (1956-1986)	Associate Professor of Education
Robert D. Kully (1956-1992)	Professor of Speech Communication
David Laird (1958-1990)	Professor of English
H. Landar (1960-1991)	Professor of English
John LaMonica (1956-1980)	Professor of Industrial Studies
Roderick Langston (1952-1982)	Professor of Education
Jean Utley Lehman (1963-1974)	Professor of Education
Vernon Leidig (1950-1982)	Professor of Music
John Leiman (1957-1983)	Associate Professor of Psychology
Marilynn A. Lemon (1966-1988)	Professor of Nursing
Seymour Levitan (1951-1992)	Professor of Psychology
Jane S. Lewis (1968-1991)	Professor of Family Studies and Consumer Sciences
Robert T. Lewis (1952-1982)	Professor of Psychology
Charles F. Leyba (1965-1992)	Professor of Education
Harold E. Lionetti (1956-1982)	Professor of Spanish
Jasper Little (1978-1992)	Professor of Education
William E. Lloyd (1959-1977)	Publications Manager and Professor- Administration
William F. Long (1987-1983)	Associate Director of Institutional Research
Donald C. Lowrie (1956-1972)	Professor of Zoology
Irwin Lublin (1965-1992)	Professor of Psychology
King S. Luk (1960-1983)	Professor of Civil Engineering
Donald G. Malcolm (1972-1981)	Dean, School of Business and Economics and Professor of Management
Edward A. Maljanian (1963-1991)	Professor of Health Science
Jean Maloney (1960-1984)	Professor of English
George F- Mann (1957-1980)	Professor of Mechanical Engineering
M. Morris Mano (1960-1990)	Professor of Electrical Engineering
Judith S. Margolis (1973-1992)	Professor of Education
Mildred G. Massey (1960-1986)	Professor of Economics
Leonard G. Mathy (1950-1983)	Professor of Economics
Jane E. Matson (1958-1980)	Professor of Education
C. Lamar Mayer (1965-1992)	Associate Dean, School of Education and Professor of Education
William A. Mays (1956-1980)	Professor of Industrial Education
Malcolm A. McClain (1965-1988)	Professor of Art

Richard McComb (1979-1992)	Professor of Music
Paul T. McElhiney (1968-1983)	Professor of Marketing
Thomas McEnroe (1960-1985)	Professor of Political Science
Margaret F- McWilliams (1951-1992)	Professor of Family Studies and Consumer Sciences
Jay M. Metcalf (1960-1977)	Professor of Art
Milton W. Mayer (1959-1986)	Professor of History
Maxine L. Miller (1955-1980)	Professor of Home Economics
Frederic E. Mints (1970-1981)	Professor of Accounting
Arthur J. Misner (1955-1983)	Professor of Political Science
Marguerite Mochel (1949-1973)	Professor of Physical Education
Irene M. Molloy (1972-1990)	Professor of Nursing
Lorraine Monnin (1960-1991)	Professor of Communication Disorders
Raquel Montenegro (1969-1992)	Professor of Education
Donald A. Moore (1956-1982)	Professor of Economics and Statistic
Alfredo O. Morales (1965-1989)	Professor of Spanish
Fernando B. Monnigo (1963-1990)	Professor of Physica
Ralph Moritz (1955-1975)	Librarian
Robert R. Morman (1956-1992)	Professor of Education
Robert H. Morneau, Jr. (1977-19 88)	Professor of Cnriminal Justice
Donald G. Mortensen (1949-198)	Dean, School of Fineand Applied Arts and Professor of Education
Herbert Moskowitz (1952-1985)	Professor of Psychology
L.D. Myers (1970-1986)	Professor of Marketing
Edward J. Neale (1949-1974)	Professor of Education
Edward A. Nelson (1959-1980)	Professor of Finance
Leslie W. Nelson (1950-1973)	Professor of Education
Helen Isabel Nicklin (1964-1986)	Professor of Education
Arthur H. Niehoff (1968-1986)	Professor of Anthropology
Donald A. Nielsen (1968-1992)	Professor of Education
Reed E. Nilsen (1955-1985)	Professor of PhysicalEducation
Midori Nishi (1951-1985)	Professor of Geography
Naoma P. Norton (1951-1974)	Professor of Home Economics
Dorothy O'Brien (1951-1989)	Professor of Recreation Education
Helen M. O'Connell (1963-1981)	Professor of Nursing
Marie Ohlsen (1951-1977)	Assistant Professor of English
Robert M. Oldham (1951-1992)	Professor of Physical Education
Marion J. Olson (1958-1975)	Professor of Recreation
Sumiye N. Onodera (1970-1986)	Associate Professor of Family Studies and Consumer Sciences
Selmer Ostlie (1958-1972)	Professor of Education
Jesse L Ott (1957-1977)	Director, Audiovisual Services and Professor-Administration
June DeBode Oxstein (1952-1986)	Professor of Education
Evan K. Oyakawa (1981-1991)	Professor of Biology
Anne M. Palmer (1953-1971)	Assistant Professor of Education
Francoise M. Pasques (1951-1992)	Associate Professor of French
Mona Paulee (1972-1987)	Professor of Music
Victor Payse, Jr. (1959-1983)	Professor of Electrical Engineering
Mary Alice Peairs (1952-1972)	Librarian
Esther Penchef (1948-1973)	Professor of Sociology
Joseph G. Phelan (1959-1983)	Professor of Psychology
Earl O. Phillips (1966-1986)	<i>Professor of History</i>
Gray Phillips (1962-1992)	Professor of Art
Kenneth Phillips (1971-1986)	Professor of Technology
Arnold Pincus (1981-1992)	Assistant Professor of History
William G. Plumtree (198s-1982)	Professor of Civil Engineering
Morris Polan (1955-1988)	University Librarian
Kenneth J. Pratt 0988-1982)	Professor of History
Lamar Price (1964-1986)	Professor of Education
Gerald Prindiville (1949-1976)	Professor of Education

Neil Rabitoy (1988--1991)	Professor of History
Dan R. Rankin (1969-1977)	Professor of Mechanical Engineering
Gerald R. Rasmussen (1964-1989)	Professor of Education
John W. Rathbun (1956-1990)	Professor of English
J.C. Ray (1957-1989)	Professor of Accounting
Rashad E. Razouk (1972-1979)	Professor of Chemistry
Warren W. Reeves (19.50-1982)	Professor of Physical Education
Fred M. Reinman (1967-1989)	Professor of Anthropology
Morton J. Renshaw (1950-1973)	Professor of Education
Lois M. Rhinesperger (1959-1981)	Professor of Home Economics
Fred G. Rhodes (1954-1980)	Professor of Education
Patrlcia Richard-Amato (1984--1981)	Professor of Education
Ann M. Richardson (1959-1980)	Professor of Psychology
James F. Richmond (1955-1970)	Professor of Geology
Edythe Rodriguez (1982-1983)	Associate Professor of Education
George M. Rolling (1989-1988)	Associate Librarian and Humanities/Social Sciences Librarian
Julian B. Roth (1956-1980)	Professor of Education
Paul K. Rowan (1956-1990)	Professor of Sociology
Hudson Roysner (1954-1975)	Professor of Art
Thomas A. Rusch (1989-1980)	Professor of Political Science
Clarence K. Sandelin (1949-1983)	Professor of English
Ake Sandler (1949-1980)	Professor of Political Science
Pauline E. Schatz (1969-1983)	Professor of Home Economics
Ben F. Scherer (1963-1986)	Professor of of Safety Studies
Leonard I. Schneider (1958-1978)	Professor of Psychology
Mary L Schreiber (1987-1992)	Professor of Physical Education
Delwyn G. Schubert (1950-1988)	Professor of Education
Inez Schubert (1955-1983)	Professor of Music
Howard Schug (1988-1971)	Professor of Electrical Engineering
Leon Schwartz (1989-1987)	Professor of French
Burton M. Seidler (1965-1990)	Professor of Physical Education
Randolph G. Service (19571980)	Professor of Education
Joseph T. Seto (1960-1988)	Professor of Microbiology
Gordon B. Severance (1956-1980)	Professor of Business Law
Fred J. Shanley (1965-1980)	Professor of Sociology
Carleton B. Shay (1982-1989)	Professor of Education
Lilly Shen (1963-1992)	Professor of Family Studies and Consumer Sciences
Gunjit Sikand (1988-1981)	Professor of Civil Engineering
Ronald H. Silverman (1955-1988)	Professor of Art
Robert H. Simmons (19621985)	Professor of Political Science
William B. Simpson (1958-1983)	Professor of Economics
Patricia Bates Simun (1968-1991)	Professor of Education
Katherine Sistrom (1956-1971)	Assistant Professor of Education
Carol J. Smallenburg (1950-1985)	Professor of Education
Arthur L. Smith (1957-1992)	Professor of History
Bernice B. Smith (1956-1979)	Associate Professor of Education
Marjorie M. Smith (1989-1979)	Professor of Theatre Arts
Keith D. Snyder (1983-1976)	Professor of Music
Bernard Somers (1980-1983)	Professor of Psychology
Gerald F. Sorrensen (1958-1985)	Professor of Economics
Frieda A. Stahl (1989-1982)	Professor of Physics
Louis W. Steams (1964-1980)	Professor of Biology
Kent L. Steckmesser (1980-1985)	Professor of History
J. Leonard Steinberg (1982-1992)	Professor of Education
Milton Stem (1960-1992)	Professor of Music
Virgil H. Stevens (1963-1985')	Associate Professor of Political Science
Richard L. Stone (1971-1989)	Professor of Anthropology
Harold Storch (1955-1987)	Professor of Electrical Engineering
Martin L. Stout (1960-1990)	Professor of Geology

Robert Strassburg (1971-1983)	Professor of Music
Richard M. Straw (1956-1981)	Professor of Biology
Kenneth S. Stobel (1955-1975)	Associate Director of Photographic Services, Audio-Visual Center
Gaby Stuart (1964-1991)	Professor of English
Joseph Stubbins (1959--1980)	Professor of Education
Leon Surmelian (1981-1974)	Associate Professor of English
Vito G. Susca (1964-1991)	Professor of Music
Rose-Made Swallow (1970-1992)	Professor of Education
Kenneth N. Sweetnam (1957-1983)	Director, Instructional Media services and Professor of industrial Studies
Ellenore C. Takeda (1989-1978)	Librarian
Lydia M. Takeshita (1985-1989)	Professor of Art
Elfleda J. Tate (1966--1983)	Professor of Education
Norwood Teague (1958-1977)	Professor of Industrial Studies
Raymond D. Terrell (1973-1992)	Professor of Education
Annette Tessier (1969-1986)	Professor of Education
Ralph Thomlinson (1959-1988)	Professor of Sociology
Alice C. Thompson (1980-1979)	Professor of Psychology
Ross D.F. Thompson (1989-1980)	Professor of Physics
Roine F. Thorup (1964-1979)	Professor of Home Economics
Ham/K. Thrasher (1966-1976)	Professor of Education
Albert A. Tillman (1956-1984)	Professor of Recreation
Maurine Timmerman (1950-1974)	Professor of Music
William S. 'Ting (1969-1979)	Professor of Geography
Elbe R. Torres de Peralta (1969-1992)	Professor of Spanish
John Townley (1967-1992)	Professor of Education
Roy T. Tozier (1952-1965)	Professor of Education
Alvin E. Tuohino (1956-1976)	Professor of Accounting
Sarah Winifred Utz (1969-1992)	Professor of Nursing
William E. Wilgus (1963-1992)	Professor of Physical Education
Philip D. Vairo (1973-1982)	Dean, School of Education and Professor of Education
Velma J. Vance (1956-1991)	Professor of Biology
MaryoVan Dernan (1960-1977)	Professor of Music
Robert C. Verkler (1970-1988)	Professor of Information Systems
William C. Waddell (1967-1992)	Professor of Management
Marian F- Wagstaff (1952-1976)	Professor of Education
Roy H. Walden (1967-1992)	Professor of Art
H. Jean Waldrop (1962-1986)	Professor of Marketing
Ham/V. Wall (1963-1990)	Professor of Education
Edwin Wandt (1954-1983)	Professor of Education
Beverly Warner (1953-1975)	Professor of Physical Education
Lee J. Wexler (1959-1986)	Professor of Art
Patricia M. White (1962-1982)	Professor of Physical Education
Patti W. Schliestett Wiggins (1956-1990)	Professor of Music
William E. Wilgus (1963-1992)	Professor of Physical Education
Howard E. Wilkening (1948-1974)	Professor of Psychology
George W. Willott (1950-1977)	Professor of Recreation
Eleanore C. Wilson (1956-1970)	Assistant Professor of Education
Joan B. Wilson (1981-1992)	Professor of Education
Hubert C. Winkler (1968-1979)	Professor of Physics
Jeannette R. Witucki (1967-1986)	Professor of Anthropology
Emil Wroblicky (1956-1987)	Professor of Physical Education
Kenneth Wynsma (1962-1980)	Associate Professor of Art
Paul M. Zall (1957-1986)	Professor of English
Kenneth ;Zimmer (1961-1983)	Professor of Business Education
Wayne S. Zimmerman (1961-1980)	Professor Counseling Center
Wanna M. Zinsmaster (1962-1992)	Professor of Education
Jay Ziskin (1961-1979)	Professor Counseling Center
Marie-Antoinette U. Zrimc (1964-1992)	Professor of French

THE CALIFORNIA STATE UNIVERSITY

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 (CSUC) and in 1982 the system became The California State University (CSU). Today, all 20 campuses have the title "*university*."

The oldest campus-San Jose State University-was rounded as *normal school* in 1857 and became the first institution of public higher education in California. The newest campus-California State University, San Marcos-began admitting students in Fall 1990.

Responsibility for The California State University is vested in the Board of Trustees, consisting of ex-officio members, alumni and faculty representatives, and members 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. Although 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 broad liberal education. All of the campuses require, for graduation with the baccalaureate, a basic program of general education requirements regardless of the type of bachelor's degree or major field selected by the student.

The CSU offers more than 1,500 bachelor's and master's degree programs in some 200 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. In addition, a variety of teaching and school service credential programs are available. A limited number of doctoral degrees are offered jointly with the University of California and with private institutions in California.

In Fall 1992, the system enrolled approximately 347,000 students, taught by more than 17,000 faculty. Last year the system awarded more than 50 percent of the bachelor's degrees and 30 percent of the master's degrees granted in California. More than 1.2 million persons have been graduated from the 20 campuses since 1960.

Officials of The California State University

OFFICE OF THE CHANCELLOR

The California State University

400 Golden Shore
Long Beach, CA 90802-4275
(310) 590-5506

Dr. Barry Munitz

Dr. Lee R. Kerschner

Ms. Molly Corbett Broad

Dr. June Cooper

Mr. Bruce M Richardson

Mr. Louis V. Messner

Chancellor

Senior Vice Chancellor, Academic Affairs

Senior Vice Chancellor, Administration
and Finance

Vice Chancellor, Human Resources June Cooper
and Operations

Acting General Counsel

Vice Chancellor, Business Affairs

TRUSTEES OF THE CALIFORNIA STATE UNIVERSITY

EX OFFICIO TRUSTEES

The Honorable Pete Wilson
Governor of California

State Capitol
Sacramento, CA 95814

The Honorable Leo T. McCarthy
Lieutenant Governor of California
State Capitol
Sacramento, CA 95814

The Honorable Willie L. Brown, Jr.
Speaker of the Assembly
State Capitol
Sacramento, CA 95814

The Honorable William D. Dawson
State Superintendent of Public Instruction (Acting)
721 Capitol Mall
Sacramento, CA 95814

Dr. Barry Munitz
Chancellor of The California State University
400 Golden Shore
Long Beach, CA 90802-4275

OFFICERS OF THE TRUSTEES

Governor Pete Wilson	<i>President</i>
Anthony M. Vitti	<i>Chair</i>
R.J. Considine, Jr	<i>Vice Chair</i>
Chancellor Barry Munitz	<i>Secretary-Treasurer</i>

APPOINTED TRUSTEES

Appointments are made for a term of eight years, except for a student trustee, alumni trustee, and faculty trustee, whose terms are for two years. Terms expire in the year in parentheses. Names are listed in order of appointment to the board

Dr. Claudia H. Hampton	(1994)
Mr. Roland E. Arnall	(1998)
Ms. Marian Bagdasarian	(1996)
John E. Kashiwabara, M.D	(1994)
Ms. Martha C. Falgatter	(1995)
Mr. William D. Campbell	(1995)
Mr. Ralph R. Pesqueira	(1996)
Mr. Ted J. Saenger	(1997)
Ms. Rosemary Thakar	(2000)
Mr. James H. Gray	(1998)
Mr. Terrance W. Flanigan	(1999)
Mr. Ronald L. Cedillos	(1999)
Mr. Arneze Washington	(1993)
Dr. Bernard Goldstein	(1993)
Mr. William Hauck	(2000)
Ms. Joan Otomo-Corgel	(2000)

Correspondence with trustees should be sent:
c/o Trustees Secretariat
The California State University
400 Golden Shore, Suite 322
Long Beach, CA 90802-4275

Campuses of The California State University

California State College, Bakersfield
9001 Stockdale Highway

Bakersfield, CA 93311-1099
Tomas A. Arciniaga, President
(805) 664-2011

California State University, Chico
First and Normal Streets Chico, CA 95929
Robin S. Wilson, President (916) 898-6116

California State University, Dominguez Hills
1000 East Victoria Street Carson, CA 90747
Robert C. Detweiler, President (213) 516-3300

California State University, Fresno
5241 North Maple Avenue
Fresno, CA 93740
John Welty, President
(209) 278-4240

California State University, Fullerton
800 North State College Boulevard
Fullerton, CA 92634
Milton A. Gordon, President
(714) 773-2011

California State University, Hayward
Hayward, CA 94542
Norma S. Rees, President
(510) 881-3000

Humboldt State University
Arcata, CA 95521
Alistair W. McCrone, President
(707) 826-3011

California State University, Long Beach
1250 Bellflower Boulevard
Long Beach, CA 90840
Karl W.E. Anatol, Acting President
(310) 985-4111

California State University, Los Angeles
5151 State University Drive
Los Angeles, CA 90032
James M. Rosser, President
(213) 343-3000

California State University, Northridge
18111 Nordhoff Street
Northridge, CA 91330
Blenda J. Wilson, President
(818) 885-1200

California State Polytechnic University, Pomona
3801 West Temple Avenue
Pomona, CA 91768
Bob H. Suzuki, President
(909) 869-7659

California State University, Sacramento
6000 J Street

APPENDIX C	AVERAGE ANNUAL COSTS AND SOURCES OF FUNDS PER FULL-TIME EQUIVALENT STUDENT
APPENDIX D	STUDENT DISCIPLINE
APPENDIX E	PRIVACY RIGHTS OF STUDENTS IN EDUCATION RECORDS
APPENDIX F	INSTITUTIONAL AND FINANCIAL ASSISTANCE INFORMATION
APPENDIX G	PROCEDURE FOR THE ESTABLISHMENT OR ABOLISHMENT OF A STUDENT BODY FEE
APPENDIX H	LOCATION AND TRANSPORTATION

APPENDIX A ELIGIBILITY INDEX

The following table is used in determining the eligibility of graduates of California high schools or California legal residents for admission as a freshman at a California State University campus. For an explanation of how the eligibility index works, see *Eligibility Index* in the *Admission* chapter. Applicants whose grade point average is 3.0 or higher (3.6 for nonresidents) are eligible for admission and exempted from the test requirement, but are urged to take the SAT or ACT because all campuses use the test results for advising and placement purposes. Applicants whose grade point average is lower than 2.0 are not eligible.

The minimum eligibility index for California residents and California high school graduates is 2800 using the SAT and 694 using the ACT score. If you neither graduated from a California high school nor are a legal resident of California for tuition purposes, you need a minimum index of 3402 (SAT) or 842 (ACT). The method used to compute the index is explained below:

- * SAT: Multiply the grade point average by 800 and add it to the total SAT score.
- * ACT: Multiply the grade point average by 200 and add it to 10 times the composite ACT score.

3.00 qualifies with any score

GPA	ACT Score	SAT Score
2.99	10	410
2.98	10	420
2.97	10	430
2.96	11	440
2.95	11	440
2.94	11	450
2.93	11	460
2.92	11	470
2.91	12	480
2.90	12	480
2.89	12	490
2.88	12	500
2.87	12	510
2.86	13	520
2.85	13	520
2.84	13	530
2.83	13	540
2.82	13	550
2.81	14	560
2.80	14	560
2.79	14	570
2.78	14	580
2.77	14	590
2.76	15	600
2.75	15	600
2.74	15	610
2.73	15	620

2.72	15	630
2.71	16	640
2.70	16	640
2.69	16	650
2.68	16	660
2.67	16	670
2.66	17	680
2.65	17	680
2.64	17	690
2.63	17	700
2.62	17	710
2.61	18	720
2.60	18	720
2.59	18	730
2.58	18	740
2.57	18	750
2.56	19	760
2.55	19	760
2.54	19	770
2.53	19	780
2.52	19	790
2.51	20	800
2.50	20	800
2.49	20	810
2.48	20	820
2.47	20	830
2.46	21	840
2.45	21	840
2.44	21	850
2.43	21	860
2.42	21	870
2.41	22	880
2.40	22	880
2.39	22	890
2.38	22	900
2.37	22	910
2.36	23	920
2.35	23	920
2.34	23	930
2.33	23	940
2.32	23	950
2.31	24	960
2.30	24	960
2.29	24	970
2.28	24	980
2.27	24	990
2.26	25	1000
2.25	25	1000
2.24	25	1010
2.23	25	1020
2.22	25	1030
2.21	26	1040
2.20	26	1040
2.19	26	1050
2.18	26	1060
2.17	26	1070
2.16	27	1080
2.15	27	1080
2.14	27	1090
2.13	27	1100
2.12	27	1110

2.11	28	1120
2.10	28	1120
2.09	28	1130
2.08	28	1140
2.07	28	1150
2.06	29	1160
2.05	29	1160
2.04	29	1170
2.03	29	1180
2.02	29	1190
2.01	30	1200
2.00	30	1200

Below 2.00 does not qualify for regular admission

APPENDIX B

DETERMINATION OF RESIDENCE FOR NONRESIDENT TUITION PURPOSES

The campus Admissions Office determines the residence status of all new and returning students for nonresident tuition purposes. Responses on the application for admission 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 a right to classification as a California resident will be classified as a nonresident.

The following statement of the rules regarding residence 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 *Education Code* Sections 68000-68090, 68121, 68123, 68124, and 89705-89707.5, and in Title 5 of the *California Code of Regulations*, Sections 4190041912. A copy of the statutes and regulations is available for inspection at the campus Admissions Office.

Legal residence may be established by an adult who is physically present in the state and who, at the same time, intends to make California his or her permanent home. *Steps must be taken at least one year prior to the residence determination date to show an intent to make California the permanent home with concurrent relinquishment of the prior legal residence.* The steps necessary to show California residence intent will vary from case to case. Included among the steps may be registering to vote and voting in elections in California; filing resident California state income tax forms on total income; ownership of residential property or continuous occupancy or renting of an apartment on a lease basis where one's permanent belongings are kept; maintaining active resident memberships in California Professional or social organizations; maintaining California vehicle plates and operator's license; maintaining active savings and checking accounts in California banks; maintaining permanent military address and home of record in California if one is in the military service, etc.

The student who is within the state for educational purposes only does not gain the status of resident regardless of the length of the student's stay in California.

In general, the unmarried minor (a person under 18 years of age) derives legal residence from the parent with whom the minor maintains or last maintained his or her place of abode. The residence of a minor cannot be changed by the minor or the minor/ guardian, so long as the minor's parents are living.

A married person may establish his or her residence independent of his or her spouse.

An alien may establish his or her residence, unless precluded by the Immigration and Nationality Act from establishing domicile in the United States. An unmarried minor alien derives his or her residence from the parent with whom the minor maintains or last maintained his or her place of abode.

Nonresident students seeking reclassification are required by law to complete a supplemental questionnaire about financial independence.

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 are:

Quarter Term Campuses

Fall Quarter	September 20
Winter Quarter	January 5
Spring Quarter	April 1
Summer Quarter	July 1

Semester Term Campuses

Fall Semester	September 20
Winter Semester (Stanislaus only)	January 5
Spring Semester	January 25

Questions regarding residence determination dates should be directed to the campus Admissions Office which can give you the residence determination date for the quarter for which you are registering.

There are several 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 for one year to enable the student to qualify as a resident student.
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.
3. Persons below the age of 19 who have lived with and been under the continuous direct care and control of an adult, 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.
4. Dependent children and spouses of persons in active military service stationed in California on the residence determination date. This exception applies only for the minimum time required for the student to obtain California residence and maintain that residence for a year. The exception, once attained, is not affected by retirement or transfer of the military person outside the state.
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.
6. Dependent children of a California resident 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 the student has maintained continuous attendance at an institution.
7. 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.
8. Certain credentialed, full-time employees of California school districts.
9. Full-time California State University employees and their children and spouses; state employees assigned to work outside the state and their children and spouses. This exception applies only for the minimum time required for the student to obtain California residence and maintain that residence for a year.
10. Certain exchange students.

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.

Any student, following a final decision on campus on his or her residence classification, only may make written appeal to:

The California State University
Office of General Counsel
400 Golden Shore
Long Beach, CA 90802-4275

within 120 calendar days of notification of the final decision on campus of the classification. The Office of General Counsel may make a decision on the issue, or it may 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, and nonresident students qualifying for exceptions whose basis for so qualifying changes, must immediately notify the Admissions Office. Applications for a change in classification with respect to a previous quarter are not accepted.

The student is cautioned that this summation of rules regarding residence determination is by no means a complete explanation of their meaning. The student should also note that changes may have been made in the rate of nonresident tuition, in the statutes, and in the regulations between the time this catalog is published and the relevant residence determination date.

APPENDIX C

AVERAGE ANNUAL COSTS AND SOURCES OF FUNDS PER FULL-TIME EQUIVALENT STUDENT

The 20 campuses and the Chancellor's Office of The California State University are financed primarily through funding provided by the taxpayers of California. The total state appropriation to the CSU for 1992-93, including capital outlay and employee compensation increases, is \$1,741,478,000. However, the total cost of education for CSU, however, is \$2,112,024,000 which provides support for a projected 274,194 full-time equivalent (FTE) students.

The total cost of education in the CSU is defined as the expenditures for current operations, including payments made to the students in the form of financial aid, and all fully reimbursed programs contained in State appropriations, but excluding capital outlay appropriations. The average cost of education is determined by dividing the total cost by the total FTEs. The average cost is further differentiated into three categories: State Support (the State appropriation, excluding capital outlay), Student Fee Support, and Support from Other Sources (including federal funds).

Thus, excluding costs that relate to capital outlay (i.e., building amortization), the average cost of education per FTE student is \$8,544. Of this amount, the average student fee support per FTE is \$1,989. The calculation for this latter amount includes the amount paid by nonresident students.

SOURCE OF FUNDS AND AVERAGE COSTS FOR 1992/93 CSU BUDGET (PROJECTED ENROLLMENT: 247,194 FTE)

	Amount	Average Cost per Student (FTE)	Percentage
Total Cost of Education ^b	\$2,112,024,000	\$8,544	100.0
-State Appropriation ^c	1,516,908,000	6,137	71.8
-Student Fee Support ^d	491,678,000	1,989	23.3
-Support from Other Sources	103,438,000	418	4.9

a For budgetary purposes, full-time equivalent (FTE) translates total head count into total academic student load equivalent to 15 units per term. Some students enroll for more than 15 units; some students enroll for fewer than 15 units.

b The total cost of education does not include the amount related to lottery and the capital investment of the CSU. The estimated replacement cost of all the system's permanent facilities and equipment on the 20 campuses is currently valued at \$6.5 billion, excluding the cost of land.

c This figure does not include the capital outlay appropriation of \$224,570,000.

d The average costs paid by a student include the State University fee, application fee, catalog fee, and nonresident tuition. Individual students may pay less than \$1,989 depending on whether they are part-time, full-time, resident, or nonresident students.

APPENDIX D STUDENT DISCIPLINE

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:

ARTICLE 1.1, TITLE 5, California Code of Regulations

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, of 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 nonaccidental 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 that 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, nonacademic 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, sand club, 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 an 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 that 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 the 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 impose immediately 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 ensure 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 or she enrolled as a student, would be the basis for disciplinary proceedings pursuant to Section 41301 or 41302. Admission or readmission may be qualified or denied any person who, while a student, commits acts that 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 of discipline under Section 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 his or her actions taken under this section.

APPENDIX E

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) and *California Education Code*, Section 67100 et seq., set out requirements designed to protect the privacy of students concerning their records maintained by the campus. Specifically, the statute and regulations govern access to records maintained by the campus and the release of such records. In brief, the law provides that the campus must provide students access to official records directly related to the student and an opportunity for a hearing to challenge such records on the grounds that they are inaccurate, misleading, or otherwise inappropriate. The right to a hearing under the law does not include any right to challenge the appropriateness of a grade as determined by the instructor. The law generally requires that written consent of the student be received before releasing personally identifiable data about the student from records to other than a specified list of exceptions.

Cal State L.A. has adopted a set of policies and procedures concerning implementation of the statutes and the regulations on the campus. Copies of these policies and procedures may be obtained at the Dean of Students Office, Student Affairs 117. Among the types of information included in the campus statement of policies and procedures are: (1) the types of student records and the information contained therein; (2) the official responsible for the maintenance of each type of record; (3) the location of access lists that indicate persons requesting or receiving information from the record; (4) policies for reviewing and expunging records; (5) the access rights of students; (6) the procedures for challenging the content of student records; (7) the cost that will be charged for reproducing copies of records; and (8) the right of the student to file a complaint with the Department of Education. An office and review board have been established by the Department of Education to investigate and adjudicate violations and complaints. The office designated for this purpose is: The Family Educational Rights and Privacy Act Office (FERPA), U.S. Department of Education, 330 "C" Street, Room 4511, Washington, D.C. 20202.

Cal State L.A. is authorized under the act to release "directory information" about students. "Directory information" includes the student's name, address, telephone listing, 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, degrees 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 that the student requests not be released. Such written objections should be sent to the Office of the Dean of Students.

Cal State L.A. is authorized to provide access to student records to campus officials and employees who have legitimate educational interests in such access. These persons are those who have responsibilities in connection with the campus' academic, administrative, or service functions and who have reason for using student records connected with their campus or other related academic responsibilities. Disclosure may also be made to other persons or organizations under certain conditions (e.g., as part of 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).

APPENDIX F

INSTITUTIONAL AND FINANCIAL ASSISTANCE INFORMATION

The following information about student financial assistance may be obtained from the Center for Student Financial Services, located in Student Affairs 124, phone (213) 343-3240:

- (1) Student financial assistance programs available to students who enroll at Cal State L.A.
- (2) The methods by which such assistance is distributed among recipients who enroll at Cal State L.A.
- (3) The means, including forms, by which application for student financial assistance is made and requirements for preparing such application accurately;
- (4) The rights and responsibilities of students receiving financial assistance; and
- (5) The standards the student must maintain to be considered to be making satisfactory progress for the purpose of establishing and maintaining eligibility for financial assistance.

The following information about the cost of attending Cal State L.A. is available from the Center for Student Financial Services, located in Student Affairs 124, phone (213) 343-3240.

- (1) Fees and tuition (when applicable);
- (2) Estimated costs of books and supplies;
- (3) Estimates of typical student room and board costs and typical commuting costs; and
- (4) Any additional costs of the program in which the student is enrolled or expresses a specific interest.

Information about the refund policy of Cal State L.A. for the return of unearned tuition and fees or other refundable portions of costs is available from the Accounting Office, located in Administration 513, phone (213)343-3550.

Information about Cal State L.A. policies about any refund because of the federal Title IV student assistance programs as required by the regulations is available from the Center for Student Financial Services, (213) 343-3240.

Information about the academic programs of Cal State L.A. may be obtained from the Dean of Undergraduate Studies, located in Administration 725, phone (213) 343-3830, or the Dean of Graduate Studies and Research, located in Administration 714, phone (213) 343-3820, as appropriate.

This information may include:

- (1) The current degree programs and other educational and training programs;
- (2) The instructional, laboratory, and other physical plant facilities that relate to the academic program;
- (3) The faculty and other instructional personnel;
- (4) Data regarding student retention at Cal State L.A. and, if available, the number and percentage of students completing the program in which the student is enrolled or expresses an interest; and
- (5) The names of associations, agencies, or governmental bodies that accredit, approve, or license the institution and its programs, and the procedures under which any current or prospective student may obtain and review upon request a copy of the documents describing the institution's accreditation, approval, or licensing.

Information about special facilities and services available to disabled students may be obtained from the Office for Students with Disabilities, located in Student Affairs 115, phone (213) 343-3140, (TDD 3139).

APPENDIX G PROCEDURE FOR THE ESTABLISHMENT OR ABOLISHMENT OF A STUDENT BODY FEE

The law governing The California State University provides that a *student body fee* may be established by student referendum with the approval of two thirds of those students voting. The *student body fee* was established at Cal State L.A. by student referendum in June, 1947. The same fee can be abolished by a similar two thirds approval of students voting on a referendum called for by a petition signed by 10% of the regularly enrolled students (*Education Code*, Section 89300). The level of the fee is set by the chancellor. An increase in the student body fee may be approved by the chancellor only following a referendum on the fee increase approved by a majority of students voting. Student body fees support a variety of cultural and recreational programs, child care centers, and special student support programs.

APPENDIX H

Public transportation to and from Cal State L.A. is excellent. In addition to being easily accessible by freeway, the campus also is served by more than 20 bus lines from all parts of the greater Los Angeles area and portions of the Riverside and San Bernardino counties. Most bus lines come directly onto the campus; a few run along surface streets north and south of the campus. Detailed information about all bus lines that serve the campus appears each quarter in the *Schedule of Classes* and is available at the *Student Union's Information and Ticket Service Counter*. As of December of 1993 the Metrolink rail system will operate a station at Cal State L.A.

Cal State L.A. participates in efforts to improve the air quality in the South Coast Air Basin by encouraging employees and students to use alternative modes of transportation such as joining a carpool, public transit, walking or riding a bicycle. Students and employees may visit the Commuter Services Office located in Building C for more information or call (213) 343-KARS.