Moorpark College General Catalog and Announcement of Courses 1989-1990

A Public Community College Accredited by
the Western Association of Schools and Colleges

7075 Campus Road, Moorpark, CA 93021
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College Administrators

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President, Moorpark College

Dr. Elise D. Schneider
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Dr. Robert W. Long
President, Ventura College

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Administrative Services

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Vice Chancellor
Instructional Services

Dr. Stanley L. Bowers
President, Moorpark College

Barbara A. Derryberry
Chancellor

1989-90 COLLEGE CALENDAR

Fall Semester, 1989 — September 11, 1989 - February 1, 1990

See Class Schedule	Fall Semester Registration
September 11	First day of instruction
	First day of late registration
September 15	Last day of late registration
September 22	Last day to add semester-length classes
	Last day to apply for enrollment fee and/or parking fee refunds
October 6	Last date to drop classes without a permanent record entry
October 18	Last date to declare Credit/No Credit grading option
November 10	Veterans Day — legal holiday
November 23-24	Thanksgiving vacation
December 8	Last day to apply for Fall 1989 graduation or Certificate of Achievement
December 15	Last date to drop class with a "W" grade
December 18-January 1	Winter vacation
January 2	Classes resume
See Class Schedule	Spring Semester Registration
January 15	Martin Luther King's Birthday — legal holiday
January 25-February 1	Final examinations, Fall semester
February 1	End of Fall semester

Spring Semester, 1990 — February 5 - June 15, 1990

February 5	First day of instruction
	First day of late registration
February 9	Lincoln's Birthday — legal holiday
February 12	Last day of late registration
February 19	Washington's Birthday — legal holiday
February 20	Last day to add semester-length classes
	Last day to apply for enrollment fee and/or parking fee refunds
March 2	Last date to drop classes without a permanent record entry
March 14	Last date to declare Credit/No Credit grading option
April 6	Last day to apply for Spring 1990 or Summer 1990 graduation or Certificate of Achievement
April 9-13	Spring vacation
May 18	Last date to drop class with a "W" grade
May 28	Memorial Day — legal holiday
See Class Schedule	Summer Session Registration
June 8-15	Final examinations, Spring semester
June 15	Graduation
	End of Spring semester

Summer Session, 1990 — June 18 - August 31, 1990

Please consult the Summer Session Class Schedule for beginning and ending dates of specific classes. A registration calendar and deadline dates for Summer classes will also be found in the Class Schedule.

Table of Contents

INTRODUCTION

History

Moorpark College was legally established by the Governing Board of the Ventura County Community College District on March 19, 1963. On September 11, 1967, the first classes were offered to 2,500 students. Dr. John J. Collins was appointed by the Governing Board as President of Moorpark College in 1966, followed by Dr. Robert A. Lombardi in 1971 and Dr. W. Ray Hearon in 1974. Dr. Stanley L. Bowers became Moorpark College's Acting President in July 1988.

The original campus housed the Administration Building, Library, Science Building, Technology Building, and Campus Center. Built later were the Applied Arts Building, Creative Arts Building, Humanities-Social Science Building, Music Building, and Student Services Building.

The Moorpark College Foundation was formed in 1980 and spearheaded the construction of Griffin Stadium, the Charles Temple observatory and the Carlsberg Amphitheater. The Foundation Board of Directors is comprised of over 30 community leaders who are interested in helping the college through fund-raising activities, faculty grants, and student scholarships.

Located at the eastern edge of the city of Moorpark, Moorpark College is one of the most beautiful in California. The 150-acre campus is a short drive from the Thousand Oaks/Agoura Hills areas and is situated near the city of Simi Valley.

Today, Moorpark College has approximately 11,000 students — ranging in age from 16 to 70 — who are enrolled in day, afternoon and evening courses. Fifty-seven percent of the students are women and 43 percent are men. Moorpark College has a minority population of 14 percent. Our students come from the Conejo Valley (Newbury Park, Thousand Oaks, Westlake Village), Simi Valley, Camarillo, Agoura/Calabasas, Somis, Fillmore, west San Fernando Valley, and Moorpark. With more than 1,100 classes offered, the community college has expanded to five off-campus locations — including a working ranch located in the Santa Monica Mountains where students receive training in equine and ranch management.

Some of the diverse programs offered at Moorpark College include a full range of general education transfer classes as well as vocation areas such as Administration of Justice, Child Development, Graphic Arts, Interior Design, Exotic Animal Training and Management, Equine Training and Management, Radio/Television, Nursing, Electronics, and Laser/Electro-Optics. The college has recently added a Learning Assistance Resource Center where students receive personalized help in reading, English, and math skills as well as computer techniques. Work is currently underway for the relocation of the Exotic Animal Compound to a larger on-site facility. By late 1990, the college will add a new Graphic Arts Building.

Moorpark College Foundation

The Moorpark College Foundation is a nonprofit, tax-exempt corporation organized to accept and solicit gifts, donations, trusts, and bequests for college related use. It provides tax deductible advantages to the donor. It also provides a method for the college to interact with businesses, government, and other nonprofit agencies in the broader Southern California community.

Though public funds provide support for most of the instructional and related activities and facilities at the college, donations, gifts and bequests provide a significant addition to institutional accomplishments. Private contributions are essential for the support of creative faculty efforts which extend beyond normal institutionally supported areas, including scholarships for incoming honor students, and needed physical facilities such as the Charles Temple Observatory, Griffin Stadium, and special instructor-created projects which enhance a student's learning experience.

Other facilities which cannot be provided for through available public funding also depend upon outside contributions. The Carlsberg Amphitheater and the development of Ventura County's first public zoo are outstanding examples of vital donations which enhance the college and enrich the community.

Because Foundation resources can be allocated with greater flexibility than those of the college itself, they possess an added potential for responding to the changing needs of the college and the community, including the financing of innovative projects.

Information can be secured from the Executive Vice President of the Foundation at (805) 378-1409, or by addressing a letter to the Moorpark College Foundation, 7075 Campus Road, Moorpark, CA 93021, a 501(c)(3) nonprofit corporation recognized by the Internal Revenue Service.

Philosophy and Goals

Moorpark College is dedicated to meeting the educational needs of the community it serves. It is the primary objective of the College to provide educational experiences beyond the high school level that will assist students in realizing their greatest potential. To achieve this goal, the College accepts the responsibility for providing programs that will:

1. Cultivate individual cultural and vocational abilities.
2. Assist students in perceiving and utilizing the resources in order to achieve a richer and more productive life.
3. Prepare students for citizenship in a free society.

The guiding philosophy of Moorpark College is based on an enduring belief that all people want to realize their own potential; armed with this powerful motivating force, they have the capacity to learn and to direct their own destiny. To make progress toward this major objective, it is essential that all members of the college community:

1. Have access to information about the natural environment, about themselves, about society and about their heritage.
2. Be provided an opportunity to gain understanding of important issues, concepts and relationships.
3. Enjoy freedom to inquire, to explore, to take issue and to choose.
4. Develop a level of competency that gives them a chance to become self-sustaining and discerning.

Objectives

Because the College is committed to fulfilling the varying individual educational needs of the high school graduates and the adults in the community, the following programs are provided by the College:

- General Education which offers intellectual and cultural experiences for the personal development needed by students to realize their full potential as individuals in a free society.
- Occupational programs to provide students with the skills and related instruction necessary for beginning employment, advancement, and retraining in a number of semi-professional, industrial, business, and technical fields. The employ-

ment opportunities and needs of the area served by the College are emphasized.

- Developmental programs designed to make up students' inadequacies in certain areas in order to prepare them to undertake successfully further education and training at the college level.
- Guidance planned to make individual students aware of their abilities and opportunities in order that they may make suitable educational-vocational choices and may realize maximum benefit from their college experiences.
- Community Service and *Continuing Education* programs to provide for the cultural, social, intellectual and recreational needs of the area which the College serves.
- Co-curricular programs that provide students with opportunities for participation in creating activities that lead to their personal growth in leadership and in social and civic responsibility.

Accreditation

Moorpark College is accredited by the Western Association of Schools and Colleges, and copies of the most recent accreditation reports are on file in the President's Office for review upon request.

ADMISSIONS INFORMATION

Eligibility

Admission to Moorpark College is open to any high school graduate, anyone possessing a high school proficiency certificate, or any adult eighteen years of age or older and capable of profiting from instruction.

Moorpark College offers specialized programs in Exotic Animal Training/Management, Equine Management/Training, and Nursing, which require special admissions procedures. For further information refer to respective catalog sections.

A student is eligible to attend Moorpark College if his/her legal residence is within California. Students entering any of the public community colleges of California are subject to the residency requirements as determined by the State of California.

Students whose legal residence is in another state or in a foreign country may be admitted under conditions stipulated by the Governing Board and on payment of tuition fees, a schedule of which appears in Appendix VII.

Further information regarding residence requirements may be obtained from the Office of Admissions and Records.

Special Part-Time High School Admissions

In accordance with the California Education Code, high school students who are juniors and seniors are permitted to enroll in college courses. Enrollment fees are exempt for students concurrently enrolled in a high school.

An approved special part-time high school admissions form, signed by the student's parent/guardian and school principal (or designee) is required before a student is permitted to register.

Students under 18 years of age not enrolled in a public school may have their parents/guardian petition the President for admission as a special full-time student.

Foreign Students

Definitions

A foreign student is a person enrolled at one of the colleges who is in the United States on an F-1 visa.

Persons who hold other types of visas may be eligible for admission as a regular student, resident or nonresident, depending on their visa status.

Persons holding alien status may establish residency if they are in the following classifications:

1. Career Diplomat visa - "A"
2. Foreign Investor visa - "E"
3. International Treaty Organization - "G"
4. Foreign Press visa - "I"
5. Finance visa - "K"
6. Refugees

Aliens precluded by the Immigration and Nationality Act from establishing residence in the United States are those with B, C, D, F, H, J, and L visas; however, students can be admitted if their visa extends beyond the last day of the semester in which they wish to enroll.

Prior approval by the Dean of Admissions must be gained in order to enroll in successive semesters.

Those holding Resident Immigrant visas are not foreign students. They are residents with all the privileges and responsibilities of other residents.

Foreign students enrolled on Student visas are required to be full-time students (12 units).

Limitations on Enrollments (F-1 visa only)

Due to the district's limited financial resources and space, and due to special educational needs of foreign students, the Ventura County Community College District reserves the right to limit the number of foreign students (F-1) admitted each year.

In order to foster cultural exchange, the district encourages ethnic and national **diversity** among the foreign students admitted.

With the above statements in mind, it is the policy of the Ventura County Community College District that the number of foreign students enrolled at a particular college of the district shall not exceed 2% of the established full-time equivalent day enrollment at the college. Further, no more than 20% of the 2% total of foreign students at any one college of the district shall be admitted from one particular country.

Admission Requirements (F-1 visa only)

Prior to the completion of the registration process, foreign students must follow the procedure outlined below:

1. Submit a completed application form and declare an educational objective (major).
2. Provide evidence of adequate proficiency in the use of English. Where English was not the language in which their education was earned, by submitting a Test of English as a Foreign Language (TOEFL) score of 505 or above. For information regarding TOEFL, students are advised to write to:
   Educational Testing Service
   P.O. Box 6151
   Princeton, New Jersey 08541-6151
3. Submit a confidential statement of finance that verifies financial capability for the costs of attending one of the colleges of the district, or affidavits guaranteeing financial support from responsible resident citizens of the United States.
4. Before registration is validated, foreign students must pay the entire nonresident tuition fee and the state enrollment fees for the semester.
5. Provide certified translated transcripts from secondary schools and colleges previously attended. In general, it is expected that applicants will have completed secondary school with a satisfactory academic record.
6. Submit a health statement signed by a **licensed American physician** that verifies general good health and freedom from communicable disease.
7. Foreign students are required to provide proof of major medical insurance coverage. If needed, the college can provide information on policies available to them.

Other requirements upon arrival:

1. Interview and clear with the Dean of Admissions and Records.
2. Submit proof of major medical insurance.
3. Payment of tuition fee prior to enrollment is required. Tuition is $94.00 per unit. Contact the Dean of Admissions and Records for detailed instructions.

Immigration Department Form I-20A will be issued only after all prerequisites for admission have been met.

Moorpark College attempts to select for admission only those

foreign students who are above average in scholastic achievement and personal qualifications. (Additional information concerning Foreign Students' Policy and Procedures may be found in the Ventura County Community College District Policy Manual, Appendix C.I.)

Residency Requirements

The right of a student to attend any public community college in California is conditioned by certain residence qualifications as set forth in the California Education Code as follows:

1. To qualify as a state resident, a student must have legally resided in California continuously for one year and one day prior to the beginning of the semester he/she is planning to attend. (Students who have resided in California for more than one year but less than two years, see item 6 below.) Students who meet residence requirements are not subject to nonresident fees.
2. A nonresident is a student who has not legally resided in California for one year and one day prior to the beginning of the semester in which he/she plans to enroll. Students classified as nonresidents shall be required to pay nonresident tuition fees in addition to the mandatory enrollment and health fees. A schedule of nonresident tuition fees is shown in Appendix VII.
3. Military personnel and/or their dependents are advised to check with the Office of Admissions and Records for additional information pertaining to the determination of their legal residence.
4. Foreign students are classified as nonresidents and shall be required to pay nonresident tuition fees in addition to the mandatory enrollment and health fees for each semester of attendance.
5. Persons residing in the United States on Department of Immigration & Naturalization approved visas may be eligible for admission, as well as residence classification. Such eligibility is determined by the type and status of the visa issued. Proof of current visa status must be submitted to the Office of Admissions and Records in order to determine eligibility.
6. Students who have lived in California for more than one year but less than two years will be asked to show proof of California legal residence. The burden of proving eligibility for residence status lies with the student. Failure to present such proof will result in a nonresident classification. A complete listing of acceptable proofs of residence is available from the Office of Admissions and Records.

Admission Procedures

A student who is enrolling for the first time must complete an application for admission. Former students who attended prior to 1982 must also complete the admission application. Students who attended between 1982 and the present may update their enrollment status by contacting the Office of Admissions and Records.

The application for admission may be obtained by contacting the Office of Admissions and Records in person, by writing to the Office of Public Information, Moorpark College, 7075 Campus Road, Moorpark, CA 93021, or by phoning (805) 378-1410 or (805) 986-5858. The application for admission is also printed in the Schedule of Classes.

Completed application forms should be submitted to the Office of Admissions and Records as early as possible. Applications may be filed at any time.

Transcripts

Students who have attended any accredited college or university or military service school and who wish to enroll in Moorpark College must have official transcripts of all previous college or university work or military service school on file at the college if they fall into any of the following categories:

1. Plan to work for a degree or certificate;
2. plan to participate in inter-collegiate athletics;
3. plan to apply for veteran's benefits (see "special note" below); or
4. were placed on academic probation or dismissed from the last institution of attendance.

These transcripts must be sent directly from the institutions(s) previously attended to Moorpark College.

Special Note: To comply with Veterans Administration regulations, veterans claiming benefits must have all previous college, university, or military service school transcripts on file before subsistence benefits can begin. This requires that all units, not just those acquired under previous VA benefits, be claimed.

Registration Procedures

Detailed registration instructions and procedures for all methods of registration are printed in the Schedule of Classes which is available approximately one month prior to the beginning of the semester. Forms for mail registration are printed in the Schedule of Classes. The Schedule of Classes also contains the calendar of registration dates and the location of off-campus registration sites.

Late registration is permitted into open classes during the first week of the semester. Adds into full classes require the written consent of the instructor. During the second week of the semester, students may add classes with the written approval of the instructor. After that time, class adds and registration require written approval of both the instructor and the Division Director.

Students receive credit for classes attended only if officially enrolled.

Fees

Fees are all subject to change by the Governing Board of the Ventura County Community College District.

Enrollment Fee

A mandatory enrollment fee of $5.00 per unit is charged with a maximum of $50.00. This fee is waived for high school Admissions Program students.

Health Fee

A mandatory $7.50 per semester Health Fee is charged.

Parking Fee

The Governing Board of the Ventura County Community College District has established a parking fee for those students who wish to park vehicles on campus. The fee schedule for the 1989-90 school year is as follows for all vehicles parked on campus:

Regular Semester Fee:

Car	$20.00
Motorcycle	$14.00
Second vehicle	$4.00
Replacement permit	$2.00

In no case will a combination of two permits (one car and one motorcycle) cost less than $24.00.

Short-Term Parking Fees:

12 weeks or longer	Full Fee
6 to 11 weeks	Car - $14.00
	Motorcycle - $8.00
1 to 5 weeks	Car - $7.00
	Motorcycle - $4.00

Summer Intersession:

Car	$10.00
Motorcycle	$7.00
Second vehicle	$2.00
Replacement permit	$1.00

In no case will a combination of two permits (one car and one motorcycle) cost less than $12.00.

Traffic citations will be issued to students parking on campus without valid permits. For those persons who do not drive cars to campus regularly, but may do so occasionally, there is a coin-operated lot, with a limited number of spaces.

Nonresident Tuition Fee

Tuition is required of nonresident and foreign students. The 1989-90 tuition schedule has been established at $94.00 per unit.

Parking Fee Refunds

Students who *officially* withdraw from the college by the end of the second week of classes during the regular semester (or end of the first week of summer session) may request a refund of parking fees paid. Refunds require that the validated student registration receipt showing fees paid be turned in at the time of withdrawal. No parking refund can be made without return of the parking sticker.

Nonresident Tuition Refunds

Eligibility and amount of nonresident tuition fee refund are determined by the date the student officially applies for a refund through the Office of Admissions and Records. Refunds require the approval of the Registrar's Office.

Refunds are determined by the number of units for which there were original financial charges. *NO* refunds shall be authorized beyond the third week of summer session or beyond the fourth week of the regular semester.

The Registrar's Office shall compute the amount of refund and notify the Campus Business Office in writing as to the amount of the refund. The refund will be made by check from the District Administrative Services within a reasonable time following official notification.

The following schedule of refunds will be in effect for nonresident tuition students who withdraw from college:

Fall or Spring Semester

1st week	100% of Tuition less $50 Admin. fee charge
2nd week	75% of Tuition less $50 Admin. fee charge
3rd week	50% of Tuition less $50 Admin. fee charge
4th week	25% of Tuition less $50 Admin. fee charge

Summer Session

1st week	100% of Tuition less $50 Admin. fee charge
2nd week	50% of Tuition less $50 Admin. fee charge
3rd week	25% of Tuition less $50 Admin. fee charge

A complete table of refunds appears in Appendix VII.

Enrollment Fee Refunds

Students who officially drop or withdraw from classes by the end of the second week of classes during the regular semester (or end of the first week of summer session) may request a refund of enrollment fees paid. Refund request forms are available at the Student Business Office. A $10.00 administrative fee will be subtracted from each refund. Proof of enrollment fees paid must accompany the refund request. There are no cash refunds.

Transcript

Two transcripts are furnished to each student free of charge. A $3.00 fee is charged for each additional transcript. A $5.00 fee is charged for rush transcripts. Rush transcripts are provided within 24 hours of submission of a signed student request.

Expenses

Moorpark College, as one of California's public community colleges, charges resident students enrollment fees. The maximum enrollment fee prescribed by law shall equal fifty dollars ($50.00) per semester.

Other expenses students must consider in attending a community college include housing, food, and transportation. These costs may vary greatly from one student to another, depending on individual circumstances, i.e., whether the student is living with his/her parents or is living independently, is married or single, etc. It is estimated that the total annual cost of attendance at a community college to a full-time student and/or his/her parents could range from about $1,000.00 to as much as $7,000.00 for a resident and as much as $10,000.00 for a nonresident.

Full-Time Student

A student is defined as full time if carrying 12 or more units in the regular semester or 4 units in the summer session. While students may qualify for benefits if enrolled in 12 units, 15 units is the minimum units per semester for traditional transfer and graduation-bound students.

Policy on Educational Workload

A student's educational workload generally consists of fifteen (15) units of work per semester in order to make normal progress toward the AA/AS degree and/or transfer requirements. Students desiring to take an overload — more than eighteen (18) units but less than twenty-two (22) — must have a counselor's approval. Students desiring to take twenty-two (22) units or more must have the approval of the Dean of Student Services in addition to the counselor's approval.

Unit Requirements for Benefits

In order to qualify for certain benefits, minimum unit requirements must be maintained as follows:

Veteran and war orphan benefits under GI Bill —	
Full subsistence	12.0 or more units
¾ subsistence	9.0 - 11.0 units
½ subsistence	6.0 - 8.0 units
Social Security Benefits	12.0 units
Automobile & Medical Insurances	12.0 units
Athletic Eligibility	12.0 units
Student Government	12.0 units

ACADEMIC POLICIES

Grading Practices

Work in all courses acceptable in fulfillment of the requirements for associate degrees, certificates, diplomas, licenses, or baccalaureate-level work shall be graded in accordance with the provisions adopted by the District Governing Board for the following sections which relate to the letter grading scale, the Credit/No Credit options, or Credit by Examination.

Grading System

Letter Grading Scale

The quality of a student's work will be measured by the following letter grades:

Symbol	Definition	Grade Points/Semester Unit
A	Excellent	4 points per semester unit
B	Good	3 points per semester unit
C	Satisfactory	2 points per semester unit
D	Passing, less than satisfactory	1 point per semester unit
F	Failing	0 points per semester unit
CR	Credit (at least satisfactory)	Units awarded not counted in GPA
NC	No Credit (less than satisfactory, or failing)	Units not counted in GPA

Grades from the letter grading scale shall be averaged on the basis of the numerical grade point equivalencies to determine a student's grade point average (GPA).

Non-evaluative Symbols

The District Governing Board has authorized the use of only the non-evaluative symbols I, IP, RD and W which are defined in the following paragraphs:

I - Incomplete

Students who are at the end of a term and have failed to complete the required academic work of a course because of unforeseeable, emergency, and justifiable reasons may receive a symbol "I" (Incomplete) on their records. The conditions for receiving a letter grade and for the removal of the "I" must be stated by the instructor in a written record which must also state the grade to be assigned in lieu of the removal of the "I." This record must be given to the student and a copy is to be placed on file with the Registrar until the conditions are met (the "I" is made up) or the time limit is passed. A final grade shall be assigned when the work stipulated has been completed and evaluated, or when the time limit for completing the work has passed. The "I" may be made up no later than one year following the end of the term for which it was assigned.

The "I" symbol shall not be used in calculating units attempted nor for grade points.

IP - In Progress

The "IP" symbol shall be used **only in those courses which** extend beyond the normal end of an academic term. It indicates that work is "in progress," but that assignment of a substantive grade must await its completion. The "IP" symbol shall remain on the student's permanent record in order to satisfy enrollment documentation. The appropriate evaluative grade and unit credit shall be assigned and appear on the student's record for the term in which the **required work of the** course is completed. The "IP" shall not be used in calculating grade point averages. **If a student enrolled in an "open-entry, open-exit" course is assigned an "IP" at the end of an attendance period and does not re-enroll in that course during the subsequent attendance period, the appropriate faculty will assign an evaluative symbol (grade) from the letter-grading scale, to be recorded on the student's permanent record for the course.**

RD - Report Delayed

The "RD" symbol may be assigned by the Registrar only. It is to be used when there is a delay in reporting the grade of a student due to circumstances beyond the control of the student. It is a temporary notation to be replaced by a permanent symbol as soon as possible. "RD" shall not be used in calculating grade point averages.

W - Withdrawal

A student may withdraw from a class through the last day of the fourteenth week of instruction for full semester classes or through seventy-five percent (75%) of a class less than a semester in length. The academic record of a student who remains in a class beyond this time limit must reflect a grade other than a "W." No notation ("W" or other) shall be made on the academic record of the student who withdraws during the first four weeks of a term or thirty percent (30%) of a term, whichever is less. Withdrawal between the end of the fourth week and the last day of the fourteenth week of instruction for full semester classes or through seventy-five percent (75%) of a class less than a semester in length shall be recorded as a "W" on the student's record.

Forms for this purpose are available in the Records Office.

Credit/No Credit Options

Colleges of the Ventura County Community College District may offer courses in two Credit/No Credit (CR/NC) options; 1. Courses which are offered on a Credit/No Credit basis only; and 2. Courses in which students may elect the Credit/No Credit option.

The first category includes those courses in which all students in the course are evaluated on a Credit/No Credit (CR/NC) basis as indicated in the course description in this catalog. This CR/NC grading option shall be used to the exclusion of all other grades in courses for which there is a single satisfactory standard of performance and for which unit credit is assigned. Credit shall be assigned for meeting that standard, No Credit for failure to do so.

The second category of Credit/No Credit options is comprised of courses designated by the college wherein each student may elect by no later than the end of the first thirty percent (30%) of the term or length of the class whether the basis of evaluation is to be Credit/No Credit or a letter grade. Once the thirty percent (30%) deadline has passed, the request cannot be withdrawn and the student becomes ineligible to petition to change a grade. It is the student's responsibility to notify the instructor of his or her intent to be graded on a Credit/No Credit basis and to file the appropriate form, otherwise a letter grade will be assigned. The petition for this purpose, "Request for Credit/No Credit," is available in the Records Office.

All units earned on a Credit/No Credit basis in accredited California institutions of higher education or equivalent out-of-state institutions shall be counted in satisfaction of community college curriculum requirements.

A student may apply a maximum of 20 units of credit earned under the Credit/No Credit option to an AA or AS degree or Certificate of Achievement. Exceptions to this unit limitation will be

granted only to students enrolled in the designated occupational programs specified in the Credit by Examination policy of this catalog. Credit (CR) is used to denote "passed with credit" when no letter grade is given. Credit is assigned for work of such quality as to warrant a letter grade of C or better.

Units earned on a Credit/No Credit basis shall not be used to calculate grade point averages. However, units attempted for which NC is recorded shall be considered in probation and dismissal procedures.

Students should be aware that other colleges and universities may restrict the acceptance of courses taken on a Credit/No Credit basis, especially for satisfaction of major requirements.

Auditing Policy

Auditing enables a student to attend a class without receiving a grade, taking an exam, or earning unit credit. Students enrolled in classes to receive ten or more semester units shall, with instructor consent, be allowed to audit three or fewer semester units without a fee. Students not enrolled in ten semester credit units may, with instructor consent, audit three or fewer units with a fee for auditing of fifteen dollars ($15.00) per unit per semester.

Priority in class enrollment shall be given to students desiring to take the course for credit towards a certificate or degree. Therefore, students wishing to audit may register for classes in audit status by special petition only in the last two days of the add/drop period. This petition requires permission of the instructor. Laboratory classes are not normally available for audit. Students auditing a course shall not be permitted to change their enrollment in that course to receive credit for the course. Petitions for this purpose, Petition to Audit a Course, are available in the Office of Instruction.

Students auditing a course are not permitted to take exams in class, nor are they permitted to challenge the course at a later date. Instructors are under no obligation to grade assignments of students auditing a course. Attendance requirements for students auditing courses are the same as for all other students as stated elsewhere in this college catalog. This policy will sunset June 30, 1991.

Credit by Examination

Granting unit credit for a course by examination is based on the principle that previous experience, training, or instruction is the equivalent of a specific course taught by the college. If an examination indicates that the student possesses adequate equivalency and mastery of the subject, credit may be granted. All courses shall be open to credit by examination unless specifically exempted. Each division of the college shall determine the courses for which credit by examination may be granted and the Office of Instruction shall maintain a current list of courses excluded from this policy. For the purpose of this policy, a course shall mean an organized area of instruction as described in the college catalog. A student should be advised that the use of units given by credit by exam to establish eligibility for athletics, financial aid, and veterans benefits are subject to the rules and regulations of the external agencies involved.

Exceptions to the above may be made when necessary to meet provisions of California state law or the rules and regulations of state agencies governing programs of the California Community Colleges.

Credit by examination may be granted only to a student who: is currently enrolled in at least one course in the college; has completed at least 12 units in residence in the colleges of the Ventura County Community College District; is not on academic probation; has submitted transcripts of all previous course work; has not earned college credit in more advanced subject matter; and, has not received a grade (A, B, C, D, F, CR, NC) or equivalent, in the course for which he or she is seeking credit by examination at this or any other educational institutions. A student seeking credit by examination will receive a CR (credit) if he or she satisfactorily passes the examination; no other grade will be recorded. Students who are unsuccessful in an attempt to challenge by examination will not receive a NC (no credit) and no record of the attempt for credit by examination will appear on a student's transcript. However, students may challenge a course only once. A student may challenge no more than 12 units (or 4 courses) under the Credit by Examination policy towards an Associate degree or Certificate of Achievement. The amount of unit credit granted by examination to an individual shall not count towards the minimum 12 units required for residency. Credit by examination may be granted in only one course in a sequence of courses, as determined by prerequisites and may not be granted for a course which is prerequisite to the one in which the student is currently enrolled.

Exceptions to the proposed statement are permitted for each college in those occupational programs where curriculum makes this necessary. The exceptions are as follows:

1) The 12 unit residency requirement is suspended, permitting students to petition for Credit by Examination prior to completion of that requirement; when the residency requirement has been met, the course(s) successfully challenged shall be added to the student's record.
2) Credit by Examination may be granted for more than one course in a sequence of required courses, when approved by the administrator responsible for vocational programs.

The petition for this purpose, "Petition for Credit by Examination," is initiated in the Counseling Office. Approved petitions must be on file with the administering instructor by Friday of the tenth week of the semester. The examination is to be administered prior to the last day of the final examination period.

Credit (CR) is assigned for work of such quality as to warrant a letter grade of C or better. Transcript entries shall distinguish credits obtained by examination from credits obtained as a result of regular course enrollment. The student's academic record shall be clearly annotated to reflect that credit was earned by examination. Students should be aware that other colleges may not accept credit by examination for transfer purposes.

The following courses may not be taken under the "Credit by Examination" option: Anth 5, Hist 60T, Phil 1, 2, 3, 11, Photo 4, 9, all PE activity courses, and all "49" and "79" numbered courses.

Credit for Military Service

The colleges of the Ventura County Community College District will recognize and grant credit to service personnel for formal educational training completed in the United States armed forces provided such credit is not a duplication of work taken previously.

Service personnel may be allowed credit for formal service school courses offered by the United States Military Service recommended in the Guide to the Evaluation of Educational Experiences in the Armed Services of the American Council on Education. The credit allowed will be based upon the recommendations specified in the Guide. The maximum amount of credit which may be allowed toward satisfaction of college requirements shall be 12 units.

Service personnel will be allowed full advanced standing credit for college-level courses completed under the auspices of the Defense Activity for Nontraditional Education Support (DANTES) or the United States Armed Forces Institute (USAFI) as recommended in the Guide to the Evaluation of Educational Experiences in the Armed Services of the American Council on Education. Service personnel will be allowed full advanced standing credit for college-level courses completed at the Naval Construction Training Center (NCTC) at Port Hueneme based upon the recommendations of the Accredited Institutions of Postsecondary Education of the American Council of Education. Such credit will be treated in the same manner and under the same policies as allowing credit from regionally accredited colleges and universities.

Any work taken by service personnel while in military service at a regionally accredited college or university and for which the college or university issues a regular transcript showing the credits allowable towards its own degrees, will be allowed advanced standing credit toward the Associate Degree in the same manner as if the student had pursued the courses as a civilian.

Transfer Credit from Regionally Accredited Colleges and Universities

Students transferring to the Ventura County Community Colleges from colleges accredited by the recognized regional accrediting associations will normally be granted lower division credit for courses entered on officially certified transcripts. These transcripts must be sent to the Office of Admissions. They will be evaluated based upon the current Transfer Credit Practices of appropriate associations.

Students transferring to the Ventura County Community College District from other regionally accredited colleges and universities, are required to declare all previous college work. Failure to provide complete information may result in dismissal from the Ventura County Community Colleges.

Transfer Credit from Foreign Colleges and Universities

Students transferring to the Ventura County Community Colleges from foreign colleges or universities must have their transcripts evaluated by an agency approved by the College District.

Course work from non-English speaking countries must be evaluated by approved translating agencies. Students must submit their official transcripts to an approved agency and request that the agency forward the official evaluation to the college.

Course work attempted will normally be lower division unit credit only. Requests for equivalent course credit are evaluated on an individual basis by the Office of Admissions. This review is based upon considerations of the recommendations of the transcript evaluation service and by the appropriate college discipline.

College Board Advanced Placement

Moorpark College grants college credit for successful completion of Advanced Placement Program examinations of the College Board. Students who complete special advanced placement courses in high school and who present scores of three or higher (3, 4, or 5) for the Advanced Placement Examinations to the College's Office of Admissions will receive credit for specific college courses. A student may not enroll in any course for which Advanced Placement exam credit has been allowed. The following table indicates equivalencies and credit allowances. (The applicability of these courses to General Education requirements may be found in the Degree Requirements and Transfer Information section of the catalog):

Examination	Reguired Score	College Credit	M.C. Course Equivalencies
American Government	3, 4, 5	3 Units	Pol Sc 3
American History	3, 4, 5	6 Units	Hist 7A, 7B
Biology	3, 4, 5	6 Units*	Bio 2A, 2B (No lab Units)
Chemistry	3, 4, 5	10 Units*	Chem 1A, 1B (No lab Units)
English Language and Composition	3, 4, 5	6 Units	Engl 1A, 3 Units of elective credit
English Literature and Composition	3, 4, 5	6 Units	Engl 1A, 1B
European History	3, 4, 5	3 Units	Hist 1B
French Language	3, 4, 5	8 Units	French 1, 2
French Literature	3, 4, 5	8 Units	French 3, 4
German Language	3, 4, 5	8 Units	German 1, 2
German Literature	3, 4, 5	8 Units	German 3, 4
Mathematics Calculus AB	3, 4, 5	5 Units	Math 25A
Mathematics Calculus BC	3, 4, 5	5 Units	Math 25B
Physics B	3, 4, 5	6 Units*	Ph 10A/10B (No lab Units)
Physics C Mechanics	3, 4, 5	3 Units*	Ph 20A (No lab Units)
Physics C Elec. & Magnetism	3, 4, 5	3 Units*	Ph 20B (No lab Units)
Spanish Language	3, 4, 5	8 Units	Spanish 1, 2
Spanish Literature	3, 4, 5	8 Units	Spanish 3, 4

*Does not meet lab requirement for General Education.

Admission, Probation, Dismissal, and Readmission

Admission, probation, dismissal, and readmission policies and procedures are designed to assist students in making progress toward realistic academic career and personal goals. Admission to designated instructional programs, as identified by each college, is conditional until complete official transcripts have been received from previous institutions attended.

Standards for Probation

A student who has attempted at least twelve (12) semester units as shown by the official academic record shall be placed on **academic probation** if the student has earned a grade point average below 2.0 in all the units which were graded on the basis of the grading scale established by this District.

A student who has enrolled in a total of at least twelve (12) semester units as shown by the official academic record shall be placed on **progress probation** when the percentage of all units in which the student has enrolled and for which entries of "W," "I," and "NC" are recorded reaches or exceeds fifty percent (50%).

A student transferring to the Ventura County Community College District from another college is subject to the same probation and dismissal policies as students of the Ventura County Community College District.

Note: Probationary status is computed using only courses taken since Fall, 1981. Courses taken prior to Fall, 1981, are **not** in the computer data file and are not included in the calculation of probation. This may alter your probationary status.

Notification of Probation

Each college in this District shall make a reasonable effort to notify a student subject to probation at or near the beginning of the semester in which it will take effect but, in any case, no later than the start of the fall semester. A student placed on probation is, as a condition of continuing enrollment, to receive individual counseling, including the regulation of his or her academic program. Each student shall also receive any other support services to help the student overcome any academic difficulties. A student on probation must have counselor approval prior to registration of his or her educational program.

Removal from Probation

A student on **academic probation** for a grade point deficiency shall be removed from probation when the student's accumulated grade point average is 2.0 or higher.

A student on **progress probation** because of an excess of units for which entries of "W," "I," and "NC" are recorded shall be removed from probation when the percentage of units in this category drops below fifty percent (50%).

Standards for Dismissal

A student who is on **academic probation** shall be subject to

dismissal if the student earned a cumulative grade point average of less than 1.75 in all units attempted in each of three consecutive semesters which were graded on the basis of the grading scale established by this District.

A student who has been placed on **progress probation** shall be subject to dismissal if the percentage of units in which the student has been enrolled for which entries of "W," "I," and "N" are recorded in at least three consecutive semesters, reaches or exceeds fifty percent (50%).

Notification of Dismissal

Each college in the Ventura County Community College District shall make a reasonable effort to notify a student subject to dismissal at or near the beginning of the semester in which it will take effect but, no later than the start of the fall semester. A student subject to dismissal has the right of appeal. An exception to dismissal may be made in the event of extreme and unusual circumstances that can be supported by evidence provided by the student. Requests for appeal shall be submitted to the Dean of Admissions and Records.

Readmission

A student applying for readmission shall not be reinstated until a minimum of one semester has elapsed after dismissal. A student applying for readmission must submit a written request to the Dean of Admissions and Records. The request shall explain what circumstances or conditions would justify readmission. A student who is readmitted shall receive individual counseling to assess his or her academic and career goals. A readmitted student must have counselor approval of his or her educational program prior to registration.

Cheating or Plagiarism

Instructors have the responsibility and authority for dealing with any cheating or plagiarism which may occur in their classes. It is the policy of the Ventura County Community College District that the instructor may dismiss a student involved in such dishonest behavior from class with a grade of "F." In addition, the faculty member may direct the matter to the Vice President, Student and Educational Services for further disciplinary action.

Course Repetition

A course in which a grade of C or better has been earned may not be repeated except as identified in the catalog course description or as stated below. Courses taken at any college in which a grade of D, F, NC or other substandard grade has been earned may be repeated for the purpose of improving a recorded grade. This policy may apply more than once to any particular course. A course taken at another institution, in which a substandard grade was earned, may be repeated at the colleges of the Ventura County Community District, subject to this policy. In order to identify acceptable equivalencies, course equivalency shall be determined chiefly by content, as defined in the catalog course description, and not by course title or units. Prior approval for course repetition shall be required. The petition for this purpose, "Petition for Course Repetition," is available in the Counseling Office.

Upon completion of the repeated course, the previous grade earned shall be omitted from the computation of the cumulative grade point average and lined through on the permanent record. The permanent record shall be annotated in such a manner that all work remains legible, insuring a true and complete academic history.

Students should understand that other colleges or universities may not accept credit for work which represents a repetition of high school work. In addition, there is no assurance that repeated courses resulting in an improvement in grade will be accepted by other colleges or universities.

Academic Renewal Without Course Repetition

Students may petition to have a portion of previous college work disregarded in meeting academic requirements in the colleges of the Ventura County Community College District. Academic Renewal is intended to facilitate the completion of requirements necessary for an academic degree or certificate.

A student may petition, once only, to eliminate grade point calculations and credits from selected portions of previous college work which is not reflective of the student's present demonstrated ability and level of performance. The student may petition for Academic Renewal to disregard previous substandard college work by selecting one of the following options: I. Disregard a maximum of 15 or fewer semester units of any courses with less than a C or equivalent grade taken during any one or two terms (maximum two terms), not necessarily consecutively; or 2. Disregard all courses from two consecutive terms (one summer or intersession may be regarded as equivalent to one semester at the student's discretion). Courses and units taken at any institution may be disregarded.

Academic renewal may be granted only to a student who: is currently enrolled in at least one credit course in the college; has completed at least 12 units in residence in the colleges of the Ventura County Community College District; has submitted transcripts of all College work; has waited two years since the course work to be disregarded was completed; and, has subsequently completed at least 30 semester units with a minimum 2.40 GPA.

The colleges of the Ventura County Community College District will honor similar actions by other accredited colleges and universities in determining grade point averages and credits. The petition for this purpose, "Petition for Academic Renewal," is available in the Counseling Office. Upon granting the petition of Academic Renewal, the student's permanent academic record shall be annotated in such a manner that all work remains legible, insuring a true and complete academic history.

The student should be aware that other colleges or universities may have different policies concerning Academic Renewal and may not honor this policy.

Withdrawal from Class

It is the student's responsibility to initiate a withdrawal when the withdrawal is desired by the student. Forms for this purpose are available in the Records Office.

Students or instructors may initiate a withdrawal through the end of the fourth week of instruction for full-semester classes or during the first thirty percent (30%) of a class less than a semester in length. This action results in no record of dropped classes on students' academic records (grade card or transcript).

Students or instructors may initiate a withdrawal between the end of the fourth week and the last day of the fourteenth week for full-semester classes, or through the first seventy-five percent (75%) of a class less than a semester in length. Withdrawal shall be authorized after informing the appropriate faculty. This action shall be recorded as "W" on students' academic records.

The academic record of a student who remains in a class beyond this time must reflect a grading symbol other than "W."

The "W" shall not be used in calculating grade point averages, but excessive "W's" shall be used as factors in probation and dismissal procedures.

Withdrawal from a class may be authorized after the designated time limit by petition only in extenuating circumstances of verified cases of accidents, illnesses or other circumstances beyond the control of the student. Approved petitions shall result in a "W" recorded on a student's academic records. The petition for this purpose, "Peti-

tion to Change Grade to Withdrawal," is available in the Office of Instruction.

Withdrawal from College

It is the student's responsibility to formally withdraw from all classes if he or she intends to withdraw from college. A student who withdraws after the end of the fourth week of instruction for full-semester classes or after the end of the first thirty percent (30%) of a term for short-term or less than full-semester classes shall have an entry made on his or her permanent record in accordance with the regulations specified in the Withdrawal from Class policy.

Forms for this purpose are available in the Records Office.

Grade Changes

In any course of instruction in a college of the Ventura County Community College District for which grades are awarded, the instructor of the course shall determine the grade to be awarded each student in accordance with the grading system dealing with academic record symbols and grade point average. The determination of the student's grade by the instructor shall be final in the absence of mistake, fraud, bad faith or incompetency. Procedures for the correction of a grade given in error shall include expunging the incorrect grade from the record. The petition for this purpose, "Petition to Change Grade," is available in the Office of Instruction.

Withdrawal from a class may be authorized after the designated time limit by petition only in extenuating circumstances of verified cases of accidents, illnesses or other circumstances beyond control of the student. Approved petitions shall result in a "W" recorded on a student's academic record. The petition for this purpose, "Petition to Change Grade to Withdrawal," is available in the Office of Instruction. When grade changes are made, the students' permanent academic record shall be annotated in such a manner that all work remains legible, insuring a true and complete academic history.

Class Attendance

Students are responsible for maintaining regular class attendance. It is also the responsibility of students, at the beginning of the semester, to become aware of the attendance and absence policies of the instructor for each class in which they are enrolled. When a student's absence exceeds in number 1/9 of the total class contact hours for the session (e.g., absence from a semester-long class equal to twice the number of hours the class meets in one week), the instructor may, after due warning, request that the Office of Admissions and Records drop such student from the class and that a grade be recorded in accordance with the policy for "Dropping a Course."

If other eligible students are present and seeking admission to a class, failure of a student to be present at the first scheduled meeting of that class may result in exclusion from that class.

In the event of being dropped or excluded, the student may petition for reinstatement when just cause for absence exists. Such petition must be presented in writing to the Office of Admissions and Records for administrative review. The faculty member involved will be consulted prior to any action upon a student petition for reinstatement.

Offering of Course as Described in Catalog

Occasionally there may be course changes concerning prerequisites, contents, hours, or units of credit made after publication of catalog. Efforts will be made through the class schedules, public media, and at time of registration to notify students of any changes in the course descriptions as presented in this catalog.

Field Trips

Field trips are required activities for a number of courses in the college curriculum. For any such courses it is intended that they be clearly identified in the college catalog and in the schedule of classes. For other courses, a field trip may be an optional activity for the students enrolled. According to policy adopted by the college district's Governing Board, all persons making any type of field trip or excursion shall be deemed to have waived all claims for injury, accident, illness, or death occurring during or by reason of the field trip or excursion.

Dean's List

Special recognition is accorded students who complete a program of 12 or more units in letter grades with a 3.50 grade point average or higher during a semester. These students are placed on the Dean's List and given appropriate recognition on campus and in the community. Students attending Moorpark College and concurrently enrolled at Oxnard and/or Ventura College may request that the units be combined for eligibility for the Dean's List. Students attending more than one campus during any semester may choose one campus for placement on the Dean's List.

Use of Listening or Recording Devices

State law in California prohibits the use by anyone in a classroom of any electronic listening or recording device without prior consent of the teacher and school administration. Any student who has need to use electronic aids must secure the consent of the instructor. If the instructor agrees to the request, the notice of consent will be filed with the Vice President, Instructional Services.

Availability of District Library Resources

The libraries at Moorpark, Oxnard and Ventura College are available to a student enrolled at any of the three colleges. The appropriate college identification card may be used at the college libraries. In addition, the Total Interlibrary Exchange (TIE) and the Black-Gold Exchange Systems permit a student to request materials from the other two libraries as well as from all members of the systems. This greatly increases the access students have to library resources.

Please see your college libraries for further details.

Extension Course Credit

Normally credit is not granted for extension course work, including correspondence courses. The acceptance of such units for credit by the college will depend on the treatment of the particular course by the institution which offered the course. A petition for acceptance of such course work should be accompanied by material which explains the course content and indicates the kind of credit given by the offering institution.

In cases where the granting of credit for extension or correspondence courses is petitioned, it may be required that the student's competency in such course work be validated according to credit-by-examination procedures, as explained elsewhere in this section.

Repetition of General Education Credit

Lower division credit units previously earned by a student to fulfill general education requirements for a baccalaureate degree may be

accepted to fulfill general education requirements for a designated associate degree only.

Campus Solicitation

The solicitation, selling, exposing for sale, offering to sell, or endorsing any goods, articles, wares, services or merchandise of any nature whatsoever for the purpose of influencing lease, rental or sale at a college is prohibited except by written permission of the District Chancellor, President of the college or the President's designee. This policy applies to all students, staff and citizens.

See Appendix IV.

STUDENT SUPPORT SERVICES

Student Support Services

Counseling and Guidance Services

A variety of counseling services is available on a day and evening basis to Moorpark College students. Through a coordinated guidance program, counselors assist students with their academic planning and also in social and personal matters. An outgrowth of these services is the group of counselor-taught Personal Growth courses.

Counselors representing major areas of study perform four principal functions: (1) assistance in planning academic programs for transfer; (2) aiding the student to insure progress toward the A.A./A.S. Degree; (3) assistance in the selection of courses which meet the requirements of a specific major; and (4) assessment/testing and interpretation as related to career development.

The Personal Growth classes conducted by members of the counseling staff are designed to fulfill two primary purposes; (1) to aid students in personal and social adjustment; (2) to provide guidance in the matter of career development.

Assessment/Testing Center Information

Moorpark College has an open admissions policy and requires no entrance examination. However, to enroll in most English, reading and/or math classes, an appropriate VCCCD Placement Test score is required or satisfactory completion of a prerequisite college course. Placement testing is for advisement purposes in order to achieve proper placement.

For your information, the College Catalog identifies course prerequisites. Please consult the testing schedules which appear in the semester Schedule of Classes. Students who have earned prior college credit ("C" or higher grade) for an English Composition or Math course may be exempt from placement tests. Students must provide a transcript of previously completed course work **prior** to enrollment. For meeting graduation competency requirements in English, Reading and/or Math, please contact the college Counseling Office.

The Assessment Center maintains records of all test results, makes specific referrals to classes and programs, provides counseling and instructional staff with test information, and supervises standardized testing at Moorpark College.

Academic Counseling

Accurate information about program requirements and course prerequisites is essential for planning courses of study. Counselors serve as valuable resource people in helping to select appropriate classes. It is their concern to keep abreast of any changes that may affect completion of majors, general education and/or transfer requirements.

If a student has not selected a major field of study, a counselor will be assigned to assist him/her in making the choice and in selecting suitable courses.

Students interested in transferring to four-year colleges and universities are assisted in selecting appropriate courses and majors that fulfill lower division transfer requirements.

Students may arrange for academic advising through the Counseling Center in the Administration Building. It is advisable to call for a counseling appointment, particularly during the periods of time preceding and during registration. For students who may drop in for help with an academic problem, there is usually a counselor available at the counter in the Counseling Center. In addition, counselors attempt to keep open some hours in their schedules for students who may come to the Counseling Center for immediate assistance.

Career Counseling

The Career Development program offers a variety of services and resources designed to aid students in the process of choosing, changing or confirming career goals. Professional career counseling is available during the day Monday through Friday and selected evenings. Students are advised to make counseling appointments in advance, although every effort is made to accommodate students on a drop-in basis.

A series of occupational interest and aptitude assessments are available at a nominal cost, when it is agreed that such a series would be beneficial to the student's progress.

Students are encouraged to use the career resources in the college library in researching chosen or tentative career goals. These materials, written as well as audio visual, represent the local, state and national job markets and are constantly updated in order to provide current and relevant planning aids.

Personal Counseling

Moorpark College, consistent with its stated philosophy of providing a comprehensive education, one backed by supportive services, offers its students a unique opportunity to explore concerns and life situations which affect learning and personal growth with a professional counselor. A pleasant, confidential, and unhurried environment is provided.

Getting the maximum benefit out of going to college sometimes involves complications that influence direction. Students are encouraged to come to the counseling area where a concerned, professional counselor will be there to assist with non-academic concerns. The services of a licensed psychologist are available to students on a limited basis. Contact the Drop-in Center or the Counseling Office for further information.

Health Services

The Student Health Center is located in the Administration Building, Ext. 1413. A registered nurse is available daily and during evening hours on a walk-in basis. For a complete list of services, please refer to the Student Health Brochure.

Doctor Services include a General Practitioner, a Dermatologist, a Gynecologist, and a Clinical Psychologist during specified hours as posted in the Health Center and by appointment only.

Student Accidents must be reported within 72 hours of occurrence. It is the student's responsibility to report any accidents to the instructor, college trainer, or Health Center. All student accident reports and insurance claims are processed through the Health Center. A Health Office assistant will help you with your accident

report, insurance claims, and answer any questions.

Optional Health Insurance and **Optional Dental Insurance** applications may be obtained from the Health Office.

Women's Center

The Women's Center, located upstairs in the Library Building (L-241), is a place for students, women and men, to meet people and obtain services and support. Comfortable chairs and a library of books, magazines, and pamphlets on a wide variety of women's issues are available. The Center also contains a bulletin board with up-to-date information on meetings, groups, and events of interest to women. A current research file on women's issues is maintained.

The Center, open from 9 a.m. to 2 p.m. Monday through Friday, is staffed by volunteer students. Information on Center-sponsored activities and referrals to other campus services (counselors, health services, library resources) as well as community services (welfare agencies, lawyers, health clinics) is provided by the volunteers.

The Center has noon-time lectures and discussions on topics of interest and controversy.

Student Financial Support Services

Financial Aid Programs

Financial assistance is based on the student's need for help in successfully pursuing an educational program. Eligibility for financial aid is determined by a Department of Education-approved needs analysis system which calculates the difference between the ability of students and their families to provide for their financial needs and the amount required to meet educational expenses while attending college. Students interested in applying for financial aid should visit or write the Student Financial Services Office to obtain the CSS Financial Aid Application Form, the Ventura County Community College District Student Data Form (SDF), and detailed application process instructions.

The policy of the Ventura County Community College District is in compliance with the provisions of the Civil Rights Act of 1964 in Title IX of the Educational Amendments of 1972 in that no financial aid applicant will be discriminated against on the basis of race, religion, color, national origin, marital status, age, sex, or physical impairment.

Financial aid recipients must be enrolled for a minimum of 12 units each semester in order to receive full benefits. Continued eligibility requires successful completion of not less than 12 units each semester with a minimum 2.0 grade point average. A student may receive a maximum of 6 semesters of aid while attending this institution.

Various programs are available, including grants, loans, scholarships, and part-time employment support. These programs may be funded partially or totally by various levels of government, by the college district, by the student body and faculty, and by community donors. The financial aid programs are subject to change due to the fact that funds may become depleted or the level of participation by the various funding agencies may be reduced.

Grants

Grants are awarded to students who meet specific requirements for eligibility. Grants are available in varying amounts of assistance and, they may be considered gifts since they do not call for repayment. The grant programs are the Pell Grant, the Educational Opportunity Grant (EOPG), and the Supplemental Education Opportunity Grant (SEOG).

Loans

Students with financial aid eligibility may qualify for loans through Moorpark College, where loans are incorporated as a part of the regular financial aid package. The loans bear simple 5% to 9% interest on the unpaid balance. Interest is not charged nor payment required until six months after the borrower ceases to be at least a half-time student. Repayment of loans may be scheduled over a 10-year period.

Work Study Program

A limited number of part-time jobs on and off campus are available to students who qualify on the basis of need. Under this program students are assigned work which is often in the nature of on-the-job training; the pay for the work is a portion of the students' financial aid packages.

Extended Opportunity Program and Services (EOPS)

Moorpark College conducts an EOPS Program that offers two basic types of assistance to students from low-income families: (1) financial assistance in the form of grants and loans, including summer grants and short-term emergency loans, and (2) educational support services. The support services include the following:

- Academic advisement and assessment
- Specialization counseling
- Early registration
- Educational plan
- Tutoring referrals
- Job placement
- Health services
- Transfer assistance

The goals of the EOPS Program are to motivate economically and socially disadvantaged students to pursue higher education at Ventura County community colleges and to assist them in transferring to four-year colleges and universities. The EOPS staff is comprised of a coordinator, a secretary, and a retention clerk, all of whom are dedicated to the program's goals of providing services.

There are four steps to the application procedure:

Step 1: Complete the Student Aid Application for California (SAAC) and/or Pell Grant applications for financial assistance. Apply early. (See the following section for financial aid information.) Assistance in filling out these forms is available at the EOPS Office.

Step 2: Complete the EOPS Form 1 information sheet at the EOPS Office.

Step 3: Make an appointment for an interview at the EOPS Office.

Step 4: Provide proof of family income. A copy of Federal Income Tax Form 1040A or 1040 is required in order to document parents' past year income.

In order to qualify and be eligible for EOPS, a student must meet the following conditions:

1. Be a resident of California,
2. Be a full-time student,
3. Be eligible to receive a Board of Governors (A or B) Grant
   A. Be on AFDC or SSI/SSP or General Relief or be eligible for Deceased/Disabled Veterans' Dependent Fee Waiver or
   B. Or if employed last year's family income can not exceed $17,000 for a family of four (add $1,000 for each additional dependent).
4. Have not completed more than 70 units,
5. Be educationally disadvantaged by at least one of the following criteria:
   a. High school G.P.A. below 2.50
   b. Been peviously enrolled in remedial courses
   c. Not eligible to enroll in Math 3 or

d. Not eligible to enroll in Engl 2 or
e. Non high school graduate
f. Member of underrepresented group or
g. First generation college student

6. The student must be making normal progress towards a goal, certificate, or degree as determined by the college, with a satisfactory average of "C" or better for each semester.
7. Each EOPS student must regularly attend tutorial counseling, vocational orientation, and EOPS general meetings.

Further program details and advisement on application procedures are available from the EOPS Office.

Veteran's Services

The programs of Moorpark College are approved for veterans educational benefits.Please contact the Veterans Clerk in the Records Office located in the Administration Building for information and eligibility requirements.

Student Activities

Student Activities Provide Enrichment

Involvement in student activities and student government is an important part of the educational experience. At Moorpark College, the Student Activities program provides students with the opportunity to develop their leadership skills as well as citizenship. Opportunities for involvement include, but are not limited to student government, clubs and organizations, pep squad and intramurals. Students interested in participating in any of the programs listed below should contact the Student Activities Office located in the Campus Center.

Associated Student Body

The organization, known as the Associated Student Body, is responsible for conducting the business of government and representing the students at large. It provides a means of input to faculty and administration concerning issues affecting student life.

The structure of student government and the duties of its officers are specified in the constitution. The ASB handles sales of student activity cards which are the major source of income each year. The student organization provides a means of input to faculty and administration through assignment of members to various campus governance committees. Students interested in participating in student government should contact the Student Activities Specialist Office located in the Campus Center.

Campus Clubs and Organizations

Involvement in a club offers the incoming student an opportunity to associate with others who have common interests. Students who would like to form new clubs, to meet interests not presently being served, are encouraged to do so.

Alumni Association

Graduates, current students and interested parties who support Moorpark College are eligible to join the Alumni Association. Several categories of membership are available for fees ranging from $10 per year to $100 per year. Additional information can be obtained by calling the college Student Activities Office.

Pep Squad

Promoting enthusiasm and school spirit at athletic events is the objective of the Moorpark College Pep Squad. These dedicated students invest their time and talent in supporting both the men's and women's teams.

Scholarships

A number of scholarships are available to Moorpark College students through community, state and campus organizations. The qualifications that a student must meet to be eligible for receiving one of these scholarships depend on a number of conditions, which include scholastic achievement, need, residence, and field of study. All students are encouraged to check the scholarship possibilities; there are a number of donors who give to scholars regardless of family income, primarily to recognize diligence and past academic achievement. Announcement of available scholarships is made in the college newspaper and through periodic bulletins produced by the Student Activities Office. For more information call 378-1434.

The Student Activities Office Provides Services

Job Placement

The Student Activities Office maintains listings of available employment opportunities in the community. If you are seeking full-time, part-time, temporary or vacation work, stop by for information.

Housing

Moorpark is strictly a commuter college and has no campus housing. The Student Activities Office attempts to provide help by listing available living accommodations in the community, but this does not imply that the college has approved the housing that is listed. Making arrangements for housing is the responsibility of the student.

Transportation

The Student Activities Office maintains a bulletin board on which ride-sharing or carpooling information is posted. Also available are bus schedules for the Thousand Oaks, Moorpark and Simi Valley areas.

Poster Regulations

Any posters, flyers, or other printed materials which advertise programs or events that are CLEARLY IDENTIFIED as having Moorpark College sponsorship may be circulated and posted without bearing an "approved for posting" stamp. All other printed materials must be approved for posting in the Student Activities Office.

Bookstore

The Raider Bookstore carries in stock the textbooks and supplies needed in all the classes offered each semester. Used texts can be purchased at considerable savings. Students may return books for refunds, provided they follow a clearly specified policy which is well publicized. There are book buy-back periods offered each semester when books in usable condition may be sold back by students. The bookstore also stocks a variety of goods and sundries most used by college students.

Cafeteria

The school cafeteria service is planned to satisfy a variety of appetites and pocketbooks. The food available ranges from quick snacks to complete hot meals.

Lost and Found

Students who lose belongings on campus should check for possible recovery of missing items. The switchboard in the Administration Building serves as a collection point for lost and found items.

Student Grievance Policy

A complete description of the College Grievance Policy and the Student Conduct Code are contained in Appendices V and VI. Students seeking information about this policy should consult the Vice President, Student and Educational Services.

Forensics Program

Moorpark College has established a reputation for having an excellent forensics program. The College's forensics teams consistently give outstanding performances in speech and debate tournaments at regional, state and national meets; Moorpark has earned championships at all levels repeatedly for several years. Students who are interested in participation in this program should contact one of the forensics coaches, either Mr. Richard Strong or Mr. James Wyman.

Musical Groups

There are both vocal and instrumental music performing groups at Moorpark College which invite student participation. Performances consisting of a wide variety of music are presented on campus each semester. The Choir also participates in several choral festivals each year.

The Moorpark Masterworks Chorale, comprised of experienced adult singers from many local communities, performances include campus concerts, community seasonal concerts and special choral events. The repertoire includes selections from the great choral masterpieces which are often accompanied by orchestral instruments. Membership is by audition.

Two other vocal groups are available to students who are interested in opera and musical theater. The Opera Workshop presents a varied program of opera masterpieces each year. The Summer Musical Theater provides an excellent opportunity to students who wish to continue vocal training during the summer. Both groups are open to students by audition.

The newly organized orchestra is open to all students who wish to rehearse and perform music for the orchestra.

Intercollegiate Athletics

Moorpark College offers a wide variety of sports programs to men and women who are interested in competing on an intercollegiate athletic level.

The college fields teams in volleyball, tennis, basketball, softball, track, and cross country for women and in football, basketball, wrestling, cross country, track, baseball, golf, and tennis for men. The Raider athletic teams compete in the Western State Conference, one of the finest conferences in California.

It is significant to note that every sport — minor as well as major — enjoys equal status at Moorpark College. This philosophy is clearly demonstrated by the college's success in the Western State Conference Athletic Supremacy race, which awards the conference's best overall athletic program. Moorpark has been a consistent winner in this competition, with outstanding records of performance in all sports.

Raider athletes are fortunate to attend a college which boasts both a beautiful campus and first-rate athletic facilities. Among the facilities are the Raider Pavilion, home of the Raider basketball, volleyball, and wrestling teams; a driving range and putting green for golf; ten tennis courts; many challenging cross country courses; excellent baseball and softball diamonds; and a comprehensive track and field stadium. The new Griffin Stadium high-lights the community-wide effort to give the Moorpark College gridiron squad a great home field.

To compete in intercollegiate athletics, students must meet the eligibility requirements of the Western State Conference, which includes enrollment and attendance in 12 units of study and a 2.0 grade point average. Varsity sports are competitive and require an advanced degree of skill. Students must be willing to devote extra time to traveling to matches and practicing.

The intercollegiate sports teams are all under the supervision of the college Athletic Director.

SPECIAL PROGRAMS

Community Campus

The Moorpark College Satellite program was established to provide opportunities for higher education for the residents of the Conejo and Simi Valleys. Since many residents of these two communities are unable to take advantage of the educational opportunities provided on the main campus, the community campus concept provides immediate access to both certificate and degree programs at local schools, shopping centers, churches, and recreation facilities.

The Satellite program operates as an extension of the main campus. The community campus instructional program, scheduled primarily at night, consists mainly of college credit classes that meet degree requirements. These classes are designed to meet the specific interests of the students in the Moorpark College service area.

The primary locations of these teaching facilities are as follows: Simi Valley High School in Simi Valley; Newbury Park High School in Newbury Park; and Westlake High School in Westlake Village.

Community Services

The Community Services Program, as an integral part of the comprehensive college, strives to meet the lifelong learning needs of citizens it serves through a diversity of educational activities: short-term courses, cultural and special events, seminars, travel-lecture films, real estate continuing education units (CEUs) and public use of campus facilities. The program is totally self-supporting through assessment of student and user fees.

Disabled Students Program

Moorpark College offers a special program for students who have permanent physical disabilities. The purpose of the program is to provide an equal opportunity in the educational process and to help disabled students to become integrated into the total student body.

The college is free of architectural barriers and thus provides physical access to all areas of the campus. Elevators have been installed in all two-story buildings. Special ramps, handrails and automatic doors have been installed. In addition to the removal of architectural barriers, every effort has been made to remove educational barriers and provide open access to students with disabilities to all educational programs.

Towards this end, a variety of special services are provided through the Special Education Office in the Student Services Building.

The following special services are offered:

Interpreter services for the deaf
Notetaking services
Mobility assistance
Reader services
Speech and language development
Transcribing services
Specialized tutoring
Peer advising
Registration assistance
Vocational skills assessment
Special parking areas
Transportation
Academic and career guidance
Special equipment including:

- tape recorders
- talking calculator
- print magnifiers
- large print materials
- closed circuit television
- electric typewriters
- calculators
- speech compressors

Learning Disabilities Program

The Learning Disabilities Program can assist college students with the essential tools needed for success in their classes. Many students need help in basic reading, spelling and arithmetic skills as well as individualized special techniques for the realization of their full potential academically or vocationally.

The student's problems are diagnosed and an individual program is designed to meet their needs. Students advance at their own rate using a large variety of instructional materials. Special classes and tutorial sessions provide assistance. Specialized tutoring in regular classes can be provided by arranging for individualized adaptations with instructors.

An educational program is planned at the Learning Disabilities Office in the Student Services Building.

High Tech Center for the Disabled

The High Tech Center uses adapted computer technology to give disabled students access to both Apple and IBM personal computers. Special adaptations have been made to the equipment to provide access to physically disabled, blind, and deaf students. Special computer programs are available for students with acquired brain injuries and learning disabilities. The center provides individualized instructional programs on the computer in the areas of memory, critical thinking, learning strategies, keyboarding, use of the word processor, language skills, math skills, spelling, career interest areas, and vocational advisement. The High Tech Center is located in the Learning Resources Center on the second floor of the library.

Learning Resources Center

The Learning Resources Center, the focal point of the campus for instructional support, combines the services of the College Library, the Audio-visual Services, and the Center for Learning Assistance Services (CLAS).

The College Library and Audio-visual Services

The College Library, in conjunction with the Audio-visual Services facility, occupies the main floor of this centrally-located building and encompasses a large collection of learning materials which include: over 60,000 books, 260 periodicals (magazines, newspapers, and journals), government documents, pamphlet files, microforms, audio tapes and records, video tapes, 16 mm films, and film-strip kits. A number of services are available to students and staff: microform readers and printers, an Infotrac System, the Electronic Encyclopedia, A/V equipment and an inter-library loan

service. In the Reference Area can be found materials for research, including Career Center information on both occupational and academic fields, catalogs for colleges and universities, and scholarship information.

Center for Learning Assistance Services (CLAS)

The educational philosophy that characterizes CLAS, the Center for Learning Assistance Services is one that focuses on the individual. It is one that not only allows, but also requires, the learner to participate in the learning process. It accommodates all students regardless of their learning rates, styles, strengths, or weaknesses. The Center is located on the second floor of the Library room L-222.

There are three main service areas: Essential Skills, Academic Skills Materials, and Tutorials.

ESSENTIAL SKILLS

Small group and individualized instruction are provided through Essential Skills (ES) laboratory courses provided by the Essential Skills Lab instructors. Diagnostic assessment, advisement, and specialized assistance is provided and multi-media and computer-aided instructional techniques and materials are assigned. Courses are offered in reading, writing, math, and study skills.

Enrollment in Essential Skills courses is on an Easy Entrance/Easy Exit credit/no credit basis any time during the semester. The descriptions of these classes are presented in the Essential Skills course descriptions appearing in the Program/Announcement of Courses section of the catalog.

ACADEMIC SKILLS MATERIALS

Course-related materials for supplemental use are available in multi-media format including the use of computers.

TUTORIALS

This service offers one-on-one and small group, course-related tutoring by qualified, instructor-referred tutors at no charge. The tutors are well-qualified student peers who have been referred by instructors from the specific disciplines.

Interdisciplinary Courses

Interdisciplinary courses are designed to provide the student with credit meeting general education requirements in more than one area of study. These courses are team-taught by two or more teachers and present the student with ideas from different points of view by individuals who have studied and been trained in the particular disciplines included in the course. Different combinations of courses are available for varying units of credit. Consult the class schedule for particulars.

Vocational Work Experience

Moorpark College offers a program in Vocational Work Experience for students desiring the opportunity to receive credit for "hands-on" job experiences related to their vocational major. These opportunities are developed for students through close cooperation with local business and industry. Specific information on this program may be obtained from the Office of Vocational Education.

Women's Studies Program

The Moorpark Women's Studies Program is a selection of outstanding courses dealing with various issues and concerns of women in today's society. These courses will assist women in obtaining a college degree, developing employable skills, increasing personal growth, and encouraging career options in non-traditional vocations. Units earned are credited toward the AA degree as well as toward transfer to a four-year college.

The Women's Studies Program emphasizes freedom of choice and provides an academic setting to explore the varied options available to women today. The Women's Studies Program offers the students an opportunity to enjoy the company and support of other women while taking classes of special interest.

Courses offered in the program cover a wide range of interest. Included in the offerings are Psychology, History, Humanities, Film, Sociology, Physical Education, Health Science, Personal Growth, and other subjects that emphasize the woman's perspective. Consult the most recent schedule of classes for the current offerings.

Television Courses

Ventura County residents have the unusual opportunity to enroll in televised college credit courses offered by the Southern California Consortium for Community College Television. Students may enroll in these courses at Moorpark College. An instructor of record on campus will serve as a personal contact for each course to answer questions, to conduct review sessions and study projects, and to administer the midterm and final examinations. Students must view the telecasts, attend designated meetings, perform required projects, and take the midterm and final examinations to earn credit for the course. The credit granted for these courses is in semester units; the courses are normally transferable.

Company Specific Education and Training Program

Moorpark College offers special education programming through its Company Specific Education and Training efforts. Specifically the college works directly with business and industry in eastern Ventura County in the offering of educational programs designed to the direct specifications of business and industry needs. Most of the courses offered provide elective college credit. Those employees of the companies taking these courses are also encouraged to enroll in the regular college programs to earn certificates and degrees.

DEGREE REQUIREMENTS AND TRANSFER INFORMATION

Graduation Requirements

As authorized by the Education Code and Title 5 of the Administrative Code of the State of California, Moorpark College and the Ventura County Community College District Governing Board confers the Associate in Arts Degree, the Associate in Science Degree, and Certificates of Achievement on students who provide the required transcripts, meet the respective requirements as shown below, and file with the appropriate college official a notice of intent to graduate or receive a certificate.

The graduation requirements shown below became effective on July 1, 1983, and will apply to all new students and to returning students who have not maintained continuous enrollment.

A student remaining in continuous enrollment at one or more of the colleges in the Ventura County Community College District (VCCCD) or at any other accredited college or university may meet the VCCCD graduation requirements in effect at the time of his or her entering or at any time thereafter. This applies only to graduation requirements and not to policies, procedures, or other regulations. Any academic record symbol entered on a transcript (A through F, CR, NC, I, IP, RD, W) shall constitute enrollment.

Associate Degrees

A. BASIC REQUIREMENTS

I. Completion of at least 60 semester units of college course work with a cumulative Grade Point Average (GPA) of not less than 2.00.

II. Completion of all courses (at least 18 semester units) required for a major in a specified field of study (curriculum pattern) as described in the catalog.

III. Completion of the last 12 semester units in residence at the college granting the degree selected from courses required for graduation, if in attendance at the time of qualifying for graduation. If the student designates a specific major, then at least 6 of the 12 units must be selected from major courses.

If not in attendance at the time of qualifying for graduation, completion of 24 units in residence at the colleges of the Ventura County Community College District to include at least 12 semester units in residence at the college granting the degree, selected from courses required for graduation. If the student designates a specific major, then at least 6 of the 12 units must be selected from major courses.

The Governing Board may make exceptions to the residency requirements in any instance in which it is determined that an injustice or hardship would otherwise be placed upon an individual student.

IV. Demonstrated competency in reading, written expression, and math.

a. Reading - Satisfactory completion of Reading 1 or satisfactory score on TASK II test.

b. Written Expression - Satisfactory completion of English 2 or English 1A or satisfactory score on the VCCCD English test.

c. Math - Satisfactory completion of Math 1 or higher level course or satisfactory score on the VCCCD math test.

B. GENERAL EDUCATION REQUIREMENTS

I. Specific Associate in Arts and Associate in Science Degrees.

a. Natural Sciences - a minimum of 6 units

(1) One course in a Biological Science

(2) One course in a Physical Science

b. Social Sciences - a minimum of 6 units

(1) One course in American History or Institutions

(2) One other course in Social and Behavioral Sciences

c. Humanities - a minimum of 6 units

(1) One course in Fine or Performing Arts

(2) One other course in Humanities

d. Language and Rationality - a minimum of 6 units

(1) One course in English Composition

(2) One course in Communication or Analytical Thinking

e. Health/Physical Education - a minimum of two courses

(1) One course in the area of health

(2) One course in Physical Education activity

II. General Liberal Arts and Sciences AA Degree.

In addition to the General Education requirements shown above for the specific AA/AS degree, students are required to complete an additional 12 units, selecting courses from areas A through D. These General Education requirements shall include one course in Ethnic/Women's Studies. Courses meeting this requirement are: Anth 2, 4, 6, 9; Bus 41; ChSt 1, 2, 4; Fr 1; Ger 1; Hist 4, 6, 8, 12; Hum 18, 19; Ital 1; Soc 2, 6, 8; Spn 1. Completion of the degree requires a total of at least 36 units in the four areas as well as one course from Physical Education and one course in Health Science. The boldface courses are those acceptable for Ethnic/Women's Studies credit.

Transfer Students

All transfer students may earn a General Liberal Arts and Science AA degree by completing one of the following patterns:

I. Completing the Associate degree pattern specified.

II. Completing at least 36 units of course work selected from the General Education/Breadth pattern of a transfer institution, plus the Physical Education/Health requirements specified.

a. If the General Education/Breadth pattern of a transfer institution requires fewer than 36 units, additional courses may be selected from courses required in preparation for the students selected major.

b. If the General Education/Breadth pattern of a transfer institution and the units required for the transfer major total fewer than 36 units, the student must select additional course work from the approved course lists of General Education courses specified for either the Associate or the transfer degree.

Courses Designated to Meet Associate Degree Requirements

A. Natural Sciences

(1) Biological Science: Anth 1; Biol 1, 2A, 3, 5, 16, 17; Bot 1; EnvSc 2; Zoo 1.

(2) Physical Science: Astron 1, 1L, 2; Chem 1A, 12, 13; EnvSc 1, 3, 20; Geog 1, 5; Geol 1, 2, 2L, 3, 5, 21, 41, 61; PhySc 1/1L; Ph 1, 1L, 10A/10AL, 12, 20A/20AL.

B. Social Sciences

(1) American History or Institutions: ChSt **4**; Hist **4**, 5, **6**,

7A, 7B, **12**; Hum 1; PolSc 1, 3; Urban 1A.

(2) Social and Behavioral Sciences: Anth **2**, 3, **4**, **6**, **9**; Bus **41**; ChSt **1**, **2**, **4**; Econ 1, 30; EATM 4; Geog 2, 3, 4, 7, 10; Hist 1A, 1B, **4**, 5, **6**, 7A, 7B, **8**, 9, **12**; Hum **19**; PolSc 1, 2, 3, 4; Psych 1A, 3, 4, 5, 7, 8, 9, 10, **11**, 12, 30; Soc 1, **2**, 4, 5, **6**, **8**; Urban 1A, 1B.

C. Humanities

(1) Fine or Performing Arts: Art 1A, 2, 4A, 8A, 12A, 14A, 15A; Engl 10A; Hum 2, 3, 4; Mus 1, 7, 8, 9A, 9B, 10, 12, 15; Photo 1A, 2; RT 9; ThA 1, 2A, 4A, 4B, 9.

(2) Humanities: Art 1A, 2; Engl 1B, 13A, 13B, 14, 15A, 15B, 17, 18, 19, 20, 21, 29A, 29B, 30, 31, 33; Fr **1**, 2, 3, 4; Ger **1**, 2, 3, 4; Hum 1, 2, 3, 4, 5, **18**, **19**; Ital **1**, 2; Journ 1; Mus 7, 8, 9A, 9B; Phil 1, 2, 3, 11; Photo 1A, 2; RT 1; Spn **1**, 2, 3, 4; Spch 1; ThA 1.

D. Language and Rationality

(1) English Composition: Bus 28; Engl 1A, 2; Hum 1, 2; Journ 2.

(2) Communication or Analytical Thinking: CIS 3A, 4A; CS 10/10L, 18/18L; Hum 1, 2; Journ 2; Math 3, 5, 6, 7, 10, 12, 15, 16A, 25A; Phil 7, 9; Spch 1, 7.

E. Health/Physical Education

(1) HS 1, 2, 5, or 7 or NtS 1.

(2) Any PE activity course.

NOTE: Double Counting: When a course(s) required for a specific major is also on the list of approved general education courses, the course(s) may be used to satisfy both major and general education requirements, after the student satisfies the minimum 18-unit requirement for the major.

Moorpark College offers designated Associate in Arts degrees in the following program areas:

Archaeology
Art
Behavioral Science
Biology
Chemistry
International Studies
Mathematics
Music
Social Science
Theatre Arts - Acting
Theatre Arts - Directing

Moorpark College offers designated Associate in Science degrees in the following program areas:

Accounting Technician
Administration of Justice - Corrections
Administration of Justice - Law Enforcement
Biology
Business Management
Chemistry
Child Development
Commercial Art
Computer Information Systems
Computer Science
Computerized Composition - Phototypesetter
Computerized Composition - Sales
Computerized Composition - Technical Representative
Electronics Engineering Technology
Electronics Technology
Engineering
Exotic Animal Training and Management
Geology
Graphic Design
Graphic Production
Interior Design
Journalism
Laser/Electro-Optics Technology
Marketing
Nursing Science
Photography
Photojournalism
Physics
Radio/Television
Real Estate
Supervision

Major Requirements Under Which a Student Graduates

A student remaining in continuous attendance and pursuing the same major at Moorpark College may elect to meet the major in effect either at the time of his or her entering the major, or at the time of his or her graduation from Moorpark College. This policy applies only to the requirements for courses in a major (Certificates of Achievement and designated Associated degrees) and does not apply to General Education requirements.

Variance in Major Requirements

Occasionally a student may have difficulty in completing exact major requirements as specified in the Moorpark College catalog due to circumstances beyond control of the student. Under exceptional circumstances, a student may file a Petition for Substitution or Waiver to seek approval from the appropriate college officials to substitute courses in designated major or in general education. The petition forms are available in the Counseling Center.

Guidelines for Additional Degrees

Any college in the Ventura County Community College District will award an additional associate degree under the following conditions:

A. A student who has earned an associate degree at any accredited institution may earn an additional associate degree.

B. A student who holds a higher degree may earn an additional associate degree in a specific major.

C. General Education requirements earned for one degree may be applied toward another degree; any deficiencies in the current general education must be completed.

D. A candidate for an additional degree must complete twelve or more units of credit, in residence, concurrent with or after completion of requirements for the first associate degree. In addition, a candidate must be in attendance in the semester during which graduation requirements for the additional degree are completed.

E. A student must complete all the required courses listed in the catalog for the specific majors. In the event that unmet requirements for a specific major do not total 12 units, a student must complete the remaining units from electives listed under the major or courses as approved by the appropriate division. All general education courses required for the specific degree must be completed.

F. In the case of degrees offering two or more options, a student may earn an additional degree within the same field by completing the requirements for that option (the additional degree) and all other requirements specified herein.

Appeals to the above policy may be submitted on a petition available in the Counseling Office for approval by the Dean of Counseling. Waivers may be granted under extenuating circumstances or when there has not been sufficient opportunity to enroll in required courses.

Certificates of Achievement

A Certificate of Achievement will be granted in specific vocational areas to any student who meets the following requirements:

1. SCHOLARSHIP - A cumulative grade point average of not less than 2.0 in all college and university work attempted.
2. MAJOR - Completion of all courses required in a curriculum specified in the college catalog.

3. RESIDENCY - Completion of at least 12 semester units in residence at the college granting the certificate.

Moorpark College offers Certificates of Achievement in the following program areas:

Accounting Technician
Business Management
Computer Information Systems
Electronics Technology
Equine Management/Training Program
Exotic Animal Care and Handling
Interior Design
Laser/Electro-Optics Technology
Marketing
Music
Nursery Education
Offset Lithography
Real Estate
Supervision

Certificates of Completion

Instructional divisions may award Certificates of Completion to students who have satisfactorily completed a course or a sequence of courses designed to lead them to specific types of employment, or upgrading of their skills.

Moorpark College offers Certificates of Completion in the following program areas:

Drafting Technology/CAD
School Age Child Care

Information for Transfer Students

Admission with advanced standing to the California public four-year colleges and universities is guaranteed to all students of this state who meet the specified minimum requirements. These requirements are, basically, the completion of 56 acceptable[1] units of college level courses with a minimum overall grade point average (GPA) of 2.0, that is, a "C" average.

California's public four-year institutions are organized into two state-wide systems: nine campuses make up the University of California (UC) System and nineteen campuses make up the California State University (CSU) System.[2] To insure admission to either of the systems students are advised to make application during the announced application-filing periods. Admission is not guaranteed to any particular campus of either system; nor is acceptance in the major area of the student's first choice assured. Because specific majors at some campuses may be impacted or may allow only limited enrollment, students may be re-directed to campuses of their second choice for certain majors, or may need to change to a different major. Consequently, students are advised, and in some cases are required, to complete both the general education, or breadth, requirements and the lower division courses required in the major before transferring to a four-year school. It is advantageous for students to choose the college or university of transfer as early in their educational careers as possible.

Private and out-of-state colleges and universities each have their own admission requirements which ordinarily differ from those of California's public institutions. Students who plan to transfer to any school whether public or private, in-state or out-of-state, should refer to the catalog of that particular school and consult with a counselor.

[1]The transfer credit for each Moorpark College course is shown with the course description in the Course Announcement section of this catalog.

[2]The UC system campuses: Berkeley, Davis, Irvine, Los Angeles, Riverside, San Diego, San Francisco, Santa Barbara, Santa Cruz. The CSU system campuses: Bakersfield, Chico, Dominquez Hills, Fresno, Fullerton, Hayward, Humboldt, Long Beach, Los Angeles, Northridge, Pomona, Sacramento, San Bernardino, San Diego, San Francisco, San Jose, San Luis Obispo, Sonoma, Stanislaus.

Transfer Requirements in General Education

General education, or breadth, requirements for a few of the four-year colleges and universities are shown on the immediately succeeding pages of this catalog. The requirements are shown for those institutions to which a majority of Moorpark College students ultimately transfer. Consequently, the patterns of courses selected are those which satisfy the schools of the California State University system, in particular the campus at Northridge, and the closest campuses of the University of California, along with nearby California Lutheran University at Thousand Oaks.

Students are cautioned to refer to the catalogs of the colleges or universities to which they intend to transfer and to consult with a counselor, particularly for schools in California's public systems not shown here and for private and out-of-state institutions.

California State University System

The California State University system has recently revised its minimum General Education-Breadth Requirements, with the new requirements which became effective for fall semester, 1981. The changes in the requirements will effect the academic programs of those students who will be enrolling in the college for the first time in the 1981 fall semester or after and who will ultimately be graduated from one of the nineteen campuses of the CSU system. Those students who have been enrolled prior to the above date, and remain continuously enrolled, will be able to complete their General Education-Breadth program for the baccalaureate degree under the requirements that were in effect at the time of their initial enrollment.

Another condition is that students admitted to the CSU system will be expected to possess basic competence in the English language and in mathematical computation. Each campus of that system must define appropriate entry level skills in the two subject areas and institute means for determining whether entering students possess such skills.

The new CSU General Education-Breadth program calls for each student to complete a minimum of 48 semester units of requirements. Nine of those units must be after upper division status is attained. At least nine of the 48 units must be earned at the campus granting the baccalaureate degree. Students should be aware that the 48-unit total is a minimum; some campuses of the CSU system may elect to exceed this minimum in their General Education-Breadth Requirements.

The minimum 48 semester units for General Education-Breadth Requirements are distributed according to the following pattern:

Area A: A minimum of nine (9) semester units in communication in the English language, to include both oral and written communication, and in critical thinking, to include consideration of common fallacies in reasoning.

Area B: A minimum of twelve (12) semester units to include inquiry into the physical universe and its life forms, with some immediate participation in laboratory activity, and into mathematical concepts and quantitative reasoning and their applications.

Area C: A minimum of twelve (12) semester units among the arts, literature, philosophy and foreign language.

Area D: A minimum of twelve (12) semester units dealing with human social, political, and economic institutions and behavior and their historical background.

Area E: A minimum of three (3) semester units in study designed to equip human beings for life-long understanding and development of themselves as integrated physiological and psychological entities.

The required pattern is briefly summarized as:

Minimum CSU General Education Requirements

Area A:	Communication/ Critical Thinking	9 units
Area B:	Natural Sciences/ Mathematical Concepts	12 units

Area C:	Humanities	12 units
Area D:	Social Sciences	12 units
Area E:	Self Understanding/ Development	3 units

Each campus of the CSU system will be adopting its own pattern of requirements to be met for graduation, consistent with the minimum of 48 semester units. All students who intend to transfer to one of the CSU campuses have the responsibility to become acquainted with the General Education pattern for the schools to which they intend to transfer. The General Education-Breadth requirements at California State University, Northridge, vary from the basic CSU system pattern in total minimum units (52 rather than 48) and in the number of areas of study (6 rather than 5).

The six areas of the CSU Northridge General Education requirements are defined as follows:

Section A: Basic Subjects, includes those areas of study which develop skills which are essential in pursuing a university education.

Section B: Social Sciences, has as its purpose to familiarize the student with the kinds of questions to which social scientists address themselves and with the nature, scope and limits of the social science disciplines.

Section C: Natural Sciences, is designed to introduce the student to some of the fundamental scientific principles and to an understanding of the scientific method of inquiry.

Section D: Humanities, is designed to acquaint the student with the study of literature, the fine arts, and philosophy and religion.

Section E: Applied Arts and Sciences, is designed to develop the students' perspective of the role of the applied arts and sciences in the solution of current issues and problems.

Section F: Comparative Cultural Studies, is designed to give students an acquaintance with their own cultural heritage and also to give them a sympathetic understanding of the cultures of other nations and of minority groups within this nation.

Students will select a minimum of 52 units at CSUN in accordance with the pattern below:

Minimum CSUN General Education in the above areas are:

Section A:	Basic Subjects	12 units
Section B:	Social Sciences	9 units
Section C:	Natural Sciences	9 units
Section D:	Humanities	9 units
Section E:	Applied Arts and Sciences	4 units
Section F:	Comparative Cultural Studies	9 units

Moorpark College may certify a maximum of 39 semester units of lower division General Education-Breadth requirements, with course work to be taken in five discrete areas that parallel the CSU pattern of distribution. The Moorpark College pattern of distribution maintains equal units among Areas A through D.

It is important that students understand that they are not required to follow Moorpark College's pattern of area units in order to satisfy the requirements at the CSU campus to which they transfer.

Because there are upper division as well as lower division units required for the baccalaureate degree **students may find more flexibility in their courses of study by not following Moorpark College's pattern but rather by following the pattern of a particular CSU campus.**

The Moorpark College distribution of the 39 lower division units which may be certified follows the pattern shown below:

Area A:	Communication/ Critical Thinking	9 units
Area B:	Natural Sciences/ Mathematical Concepts	9 units
Area C:	Humanities	9 units
Area D:	Social Sciences	9 units
Area E:	Self Understanding/ Development	3 units

The list of Moorpark College courses which may be used to satisfy the General Education requirements in the above five areas are shown following these important points to be kept in mind:

Pertinent points to keep in mind are:

1. No more than 39 semester units may be certified by Moorpark College. Should a student satisfy all the requirements in the five areas of the Moorpark College pattern, the college will certify to CSU institutions that the student has completed the minimum 39 lower division units of the General Education-Breadth requirements.
2. Under the limitations set down by the CSU system, Moorpark College may certify no more than thirty (30) semester units in areas B through D inclusive.
3. Courses used to certify must be baccalaureate level and should have been completed at Moorpark College. However, Moorpark College may report completion of courses taken at other participating institutions provided all such courses would be certified by the institution offering them. Such courses shall be deemed to have been certified.
4. Although only 39 units may be certified by Moorpark College for the CSU General Education requirements, students may transfer a total of 70 units of baccalaureate level course work to any CSU system campus.
5. Students who plan to attend one of the campuses of the University of California or a private or out-of-state school consult the catalog of the particular school to determine the course work needed to meet General Education requirements at that institution.
6. Although it is not necessary for a student to complete an Associate Degree in order to transfer to a four-year school, many of the courses taken to satisfy Associate Degree requirements are transferable and, in many cases, may be used to meet transfer General Education requirements.
7. For additional information regarding California State University system general education requirements students should consult a counselor and check the CSUN Transfer Card.
8. Courses taken in the discipline of a student's major normally may not be used to fulfill General Education requirements.
9. The courses listed are subject to potential challenge by any of the schools of the CSU system.

Area A: Communication/Critical Thinking
9 units: One course from each group.

A1 - Oral Communication
Spch 1, 2.

A2 - Written Communication
Engl 1A.

A3 - Critical Thinking
Phil 7, 9.
Spch 7.

Area B: Natural Sciences/Mathematical Concepts
9-12 units: One course from each group, including one laboratory course. (Note: (L) following a course number indicates the course includes a laboratory and meets the lab requirement.)

B1 - Physical Science
Astron 1, 1L, 2.
Chem 1A(L), 12(L), 13(L).
EnvSc 1(L), 3.
Geog 1, 1L, 5, 5L.
Geol 1(L), 2, 2L, 3, 5, 21, 41, 61.
PhySc 1/1L.

Ph 1, 1L, 10A/10AL, 12, 20A/20AL.

B2 - Life Science
Anth 1.
Biol 1(L), 2A(L), 3(L), 5(L), 16, 17.
Bot 1(L).
EnvSc 2(L).
Zoo 1(L).

B3 - Mathematical Concepts
Math 4, 5, 6, 7, 10, 12, 15, 16A, 25A.

Area C: Humanities
9 units: Three courses from three of the six sub-areas below.

C1 - Fine Arts
Art 1A, 2, 3, 4A, 8A, 12A.
Hum 2, 3, 4, 5, 18.
Mus 1, 7, 8.
Photo 1A, 2.
ThA 1, 4A, 4B.

C2 - Literature
Engl 1B, 13A, 13B, 14, 15A, 15B, 17, 18, 19, 20, 21, 29A, 29B, 30, 31, 33.

C3 - Philosophy
Phil 1, 2, 3.

C4 - Foreign Language
Fr 1, 2, 3, 4.
Ger 1, 2, 3, 4.
Ital 1, 2.
Spn 1, 1A, 1B, 2, 3, 4.

C5 - Active Participation
Art 4A, 8A, 12A, 15A, 16A.
Engl 10A.
Mus 10, 12, 18, 21.
Photo 1A.
PE 46A, 48A, 49A, 53A.
ThA 2A.

C6 - Western and Non-Western Cultures
Engl 33.
Hist 1A, 1B.

Area D: Social Sciences
9 units: Three courses from three of the six sub-areas below.

D1 - Social Institutions
ChSt 1.
Geog 3, 4, 7.
Hum 18, 19.
Journ 1.
Phil 3.
Psych 1A, 3, 4, 5, 7, 8, 9, 10, 30.
RT 1.
Soc 1, 2, 4, 5, 6, 8.

D2 - Political Institutions
Geog 10.
PolSc 1, 2, 3, 4.
Urban 1A, 1B.

D3 - Economic Institutions
Econ 1, 2.
Geog 4.

D4 - Contemporary
Anth 2, 6, 9.
ChSt 1.
Geog 2, 3, 4, 7, 10.
Hum 19.
Journ 1.
PolSc 2, 4.
Psych 1A, 3, 4, 5, 7, 8, 9, 10, 11, 30.
RT 1.
Soc 1, 2, 4, 5, 6, 8.
Urban 1A, 1B.

D5 - Historical
ChSt 4.
Hist 4, 5, 6, 7A, 7B, 8, 9, 12.

D6 - Western and Non-Western Context
Anth 2, 3, 6, 9.
Geog 2, 3, 4, 7.
Hist 1A, 1B.
PolSc 2, 4.

Area E: Self Understanding/Development
3 units.
CD 30.
HS 1, 2, 5, 7.
Hum 1.
NtS 1, 4.
PG 2.
PE (All P.E. Activity Courses)
Psych 1A, 3, 4, 5, 7, 8, 9, 10, 11, 30.
Soc 5.
Spch 4.

Satisfaction of Title V, Section 40404, requirements in United States History, Constitution and American Ideals. (One course is to be taken from the area of History and one course from the area of Government.)

History
Hist 4, 5, 6, 7A, 7B, 12.

Government
PolSc 1, 3.
Urban 1A.

University of California System

TRANSFER CORE CURRICULUM — The Transfer Core Curriculum specifies a series of subject areas and types of courses which, **if completed prior to transfer,** will satisfy the lower division Breadth and General Education (B/GE) requirements at any campus of the University of California.

The purpose of the Transfer Core is to facilitate the transfer of qualified students to the University. It provides students with one clear set of requirements which satisfy the breadth and general education requirements, and a framework of fundamental subject areas within which to pursue an adademic program at a community college.

The Transfer Core is not an admission requirement; however, completion of the Transfer Core Curriculum prior to transfer may improve students' chances for admission to impacted campuses and/or programs.

The student has the option of completing either the Transfer Core Curriculum (B/GE) or the campus-specific lower division breadth and general education requirements. If a student does not complete either the Transfer Core Curriculum or the UC campus-specific general education requirements prior to transfer, the student will be subject to the regulations regarding breadth and general education requirements of the school or college of the campus to which the student has been admitted. Students should be aware that by not completing the Transfer Core B/GE or the campus-specific B/GE requirements prior to transfer, they may be at a disadvantage when competing for admission to impacted programs and/or campuses.

FOREIGN LANGUAGE REQUIREMENT — This requirement may be fulfilled by completing the first college semester in one foreign language or by completing two years of one foreign language in high school (with grades of C or better). This requirement may also be fulfilled through demonstrated proficiency by earning a minimum score of: 3 on a foreign language examination of the College Board Advanced Placement Test (AP); or 550 on a foreign language examination of the College Board Achievement Test.

MATHEMATICS/QUANTITATIVE REASONING — This requirement may be fulfilled by completing a one semester course noted on the approved list or through demonstrated proficiency by earning a minimum score of: 3 on a mathematics examination of the

College Board Advanced Placement Test (AP); or 600 on the Mathematics section of the Scholastic Aptitude Test (SAT); or 550 on the College Board Achievement Test in Mathematics (Level I or Level II).

AMERICAN HISTORY AND INSTITUTIONS REQUIREMENT — The Transfer Core specifies courses which may be used to satisfy the general education/breadth requirements. Completion of the Core will not automatically exempt students from the UC requirement in American History and Institutions (AH&I). However, if one or more of the courses used to satisfy the subject areas of the Core are also acceptable for fulfilling the AH&I requirement, students may double count the course(s) in satisfaction of both Core requirements and AH&I requirements.

CERTIFICATION — Moorpark College will certify the completion of the Transfer Core B/GE. Moorpark College will also certify proficiency requirements in foreign language and/or mathematics for students who earn acceptable scores on approved tests. Moorpark College will not certify coursework completed at high schools (for proficiency requirements) at this time.

Certification will occur for a student-initiated request only if all B/GE Core requirements are met. Certification is not possible for partial completion of these requirements. A statement of certification will be entered on the student transcript for those who qualify.

USE OF CREDIT/NO CREDIT — Courses used to fulfill the Transfer Core must be completed with a letter grade of C or better or an academic record symbol of CR. A transcript entry of CR (credit) is acceptable as Moorpark College defines the symbol CR as satisfactory (equivalent to a grade of C or better).

USE OF MAJOR COURSES — Courses in the student's major can also be used to fulfill any area of these Core general education requirements.

COURSE RESTRICTIONS — A single course may count only once; it cannot be used to fulfill course requirements in two areas simultaneously.

TRANSFER LIMITATIONS — All transfer limitations applying to courses taken at Moorpark College also apply to these general education requirements. Consult the UC course articulation list and your counselor at Moorpark College concerning these limitations.

MAJOR PREPARATION — Satisfaction of lower division courses required for selected majors is generally required in those majors which are over-subscribed or impacted. UC prefers students to complete prerequisite major courses before completing general education courses. Of course, all requirements for admission (minimum units, GPA, and subject area requirements) must be completed prior to transfer.

SEQUENTIAL COURSES — Most institutions recommend that students complete sequential courses at the college where the series started. This is especially recommended for a sequence of two or more courses which require the preceding course(s) as prerequiste to advancement.

These courses and requirements are subject to change.

UC TRANSFER CORE

1. **FOREIGN LANGUAGE:** This requirement may be fulfilled by completion of two years of a foreign language in high school with a grade of "C" or better, or equivalent proficiency demonstrated by college courses or performance on tests, such as earning a minimum score of 550 on an appropriate College Board Achievement Test in a foreign language. If you are not able to demonstrate proficiency as indicated above you can fulfill the requirement by completing one of the following:
   French 1
   German 1
   Italian 1
   Spanish 1
2. **ENGLISH COMPOSITION:** (6 units) The English Composition requirement must be fulfilled by completion of a one-year lower division English composition sequence. Courses designed exclusively for satisfaction of remedial composition CANNOT be counted toward fulfillment of this requirement.
   English 1A
   English 1B
3. **MATHEMATICS/QUANTITATIVE REASONING:** (3 units) One-semester or two-quarter courses in mathematics or mathematical statistics. This requirement may be fulfilled by earning a minimum score of 600 on the Mathematics section of the Scholastic Aptitude Test (SAT), or 550 on the College Board Achievement Test in Mathematics (Level I or Level II). Courses on the application of statistics to particular disciplines may not be used to fulfill this requirement.
   Math 5, 7, 12, 14, 15, 16A, 16B, 25A, 25B
4. **ARTS AND HUMANITIES:** (9 units) One course must be in humanities. One course must be in arts. Third course in either.
   ARTS:
   Art 1A, 1B, 2
   Humanities 3, 4, 18
   Music 1, 7, 8, 9A, 9B
   Photo 2
   ThA 1, 4A, 4B
   HUMANITIES:
   History 1A, 1B
   Literature: English 13A, 13B, 15A, 15B, 17, 18, 19, 29A, 29B, 30, 31
   Philosophy 1, 2, 3, 11
5. **SOCIAL AND BEHAVIORAL SCIENCES:** (9 units)
   Anthropology 2, 3, 4, 6, 9
   Chicano Studies 2, 4, 8
   Economics 1, 2
   Geography 2, 3, 4
   History 3, 4, 5, 6, 7A, 7B, 8, 9, 10, 12, 15, 16
   Political Science 1, 2, 3, 4, 8, 11
   Psychology 1A, 4, 5, 7, 8, 9
   Sociology 1, 2, 5, 8
6. **PHYSICAL AND/OR BIOLOGICAL SCIENCES:** (7 units minimum) At least one of the courses must include a laboratory.
   Anatomy 1
   Anthropology 1
   Astronomy 1, 1L
   Biology 1, 2A, 2B, 16, 17
   Botany 1
   Chemistry 1A, 1B, 12, 13
   Environmental Science 1, 2
   Geography 1, 1L, 5, 5L, 7
   Geology 1, 2, 2L, 3, 5
   Microbiology 1
   Physical Science 1, 1L
   Physics 1, 1L, 10A, 10AL, 12, 20A, 20AL
   Physiology 1
   Psychology 1B

University of California, Santa Barbara College of Letters and Sciences

GENERAL EDUCATION REQUIREMENTS — General education courses do not have to be completed prior to transfer to UCSB. Students who were first-term freshmen before Fall 1985, may fulfill the General Education program in effect before Fall 1985 (the old General Education program). Beginning Fall 1988, *all* transfer students entering UCSB must fulfill this new General Education program.

SUBJECT REQUIREMENTS — UCSB has a Subject A requirement which may be satisfied by the completion of English 1A with "C" grade or better prior to transfer. Students who do not complete this course prior to transfer must pass an examination or enroll in English 1 Subject A at UCSB prior to enrollment in English 2A at UCSB.

AMERICAN HISTORY AND INSTITUTIONS REQUIREMENT —

Courses used to fulfill the American History and Institutions requirement may also be applied to General Education Requirements or major requirements or both, where appropriate.

*__American History__ and __Institutions__ Requirement: Two courses from the following list or in combination with any of the boldface courses listed in areas D and F.

AJ 1; Anthro 6; ChSt 1, 2, 4, 8; Econ 4; Engl 13A, 13B, 18; Hist 3, 4, 5, 6, 7A, 7B, 8, 12; Pol Sci 1, 3, 7, 8, 11; Soc 2, 6, 8; Urban St 1A

University of California, Los Angeles
College of Letters and Science

Students who completed less than twelve semester (16 quarter) units before the Fall 1983 term must meet the requirements which follow. Those who completed twelve or more units before Fall 1983 may meet either these requirements or those in the 1982-83 general catalog. Effective Fall, 1986, all entering students must fulfill the general education requirements.

BASIC PROFICIENCY LEVELS

ENGLISH COMPOSITION — English 1A or 1B with a grade of at least C.

QUANTITATIVE REASONING — One course from: Computer Science 10, 18; Mathematics 14, 15, 16A, 16B, 25A, 25B, 25C, 30, 31, 33, 35; Philosophy 9.

FOREIGN LANGUAGE — One course from: French 2; German 2; Spanish 2.

GENERAL EDUCATION REQUIREMENTS

PHYSICAL SCIENCES — *Three courses or eight semester units* (for Physical Science majors, only one course is required).

Astronomy 1; Chemistry 1A, 1B, 12, 13; Geography 1, 5; Geology 1, 2, 3, 5; Mathematics 14, 16A, 16B, 25A, 25B, 25C; Physical Science 1/1L; Physics 1, 10A/10AL, 10B/10BL, 12, 20A/20AL, 20B/20BL, 20C/20CL.

LIFE SCIENCES — *Three courses or eight semester units* (for Life Science majors, only one course is required).

Anatomy 1; Anthropology 1; Biology 1, 2A, 2B, 16, 17; Botany 1; Geography 7; Microbiology 1; Physiology 1; Psychology 1B.

SOCIAL SCIENCES — *Four courses:* Two from Historical Analysis and two from Social Analysis.

Historical Analysis — (Historical Analysis majors are not required to satisfy this area.)

History 1A, 1B, 5, 7A, 7B, 9, 10, 15, 16.

Social Analysis — (Social Analysis majors are not required to satisfy this area.)

Anthropology 2, 3; Economics 1, 2; Geography 2, 3, 4; Political Science 2, 3, 4; Psychology 1A; Sociology 1.

HUMANITIES — *Four courses:* One from Literature. No more than two from any other subgroup. (Humanities majors are required to take only one course, in addition to a literature course, for a total of 2 courses.)

Literature — English 13A, 13B, 15A, 15B, 17, 18, 19, 30, 31.

Philosophy — Philosophy 1, 2, 3, 11.

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

	BACHELOR OF SCIENCE DEGREE	BACHELOR OF ARTS DEGREE
Reading and Composition **Area A:** English 1A, 1B	Two courses	Two courses
Foreign Language **Area B:** Fr 2; Ger 2; Ital 2; Spn 2	One course	One course
Science **Area C:** C-1: Anat 1; Biol 1, 2A, 3, 16; Botany 1; Physio 1; Zoo 1 C-2: Astron 1, 1L, 2; Chem 1A, 12; Geog 1; Geol 1, 2, 5; Physics 1, 10A/10AL, 12	If your major is in this category, no course work is required.	C-1: one course C-2: one course (One additional course from C-3 after transfer to UCSB.)
Social Science **Area D:** D-1: Psych 1A, 4, 5 D-2: Anthro 2, 3, 4, **6***; ChSt **2***; Geog 2, 3, 4; Hist **3***, **5***, **6***, **7A***, **7B***, **12***; Soc 1, 5 D-3: Econ 1, 2 D-4: Pol Sci **1***, 2, **3***, 4, **11***	Two courses One course must be taken from D-3 or D-4. If your major is in this category, no course work is required.	Two courses One course must be taken from D-3 or D-4.
Western Civilization **Area E:** History 1A, 1B	Two courses from Area E *or* two courses courses from Area F-1 and two courses from F-2 as described below.	Two courses
Arts and Literature **Area F-1:** Art 1A, 1B, 2, 3; Hum 3, 4; Music 8, 9A, 9B; ThArts 1, 4A, 4B	Two courses, each from a different discipline	Two courses, each from a different discipline
Humanities **Area F-2:** 2-A: Engl **13A***, **13B***, 15A, 15B, 17, **18*** 2-B: Engl 29A, 29B, 30, 31, 33	One course from Area 2A; and one course from Area 2B	One course from Area 2A; and one course from Area 2B

Language and Linguistics — One semester of foreign language course 3 or above.

Arts — Art 1A, 1B; English 20; Humanities 3; Music 8, 9A, 9B; Theatre Arts 4A, 4B.

AMERICAN HISTORY AND INSTITUTIONS — This requirement does not count as part of the 32-unit minimum. One of the following courses:

Chicano Studies 8; History 3, 4, 5, 6, 7A, 7B; Political Science 3.

32 SEMESTER UNITS MUST BE COMPLETED. *Courses from the major department are not applicable.* Required major preparatory courses from departments other than the major may be applied. Students need not take *two* from the group or subgroups which includes their major.

University of California, Los Angeles College of Fine Arts

(For majors in: Art, Dance, Music, Theatre Arts, Ethnic Arts)

ENGLISH COMPOSITION AND RHETORIC (3 units)

English 1A.

CRITICAL READING AND WRITING (3 units)

English 1B.

FOREIGN LANGUAGE (Minimum 8 units)

Two semesters of one college language other than high school or college-level 2 of the same language taken in high school. No credit will be given for duplication of native tongue. Proficiency exams MAY NOT be used to complete this requirement.

French 1, 2; German 1, 2; Italian 1, 2; Spanish 1, 2.

SCIENCE/MATHEMATICS (Minumum 6 units; no lab required)

Physical or Biological Sciences:

Anatomy 1; Astronomy 1, 1L; Biology 1, 2A, 2B, 16, 17; Botany 1; Chemistry 1A, 1B, 8, 9, 12*, 13; Environmental Science 1; Geography 5; Geology 1, 2, 3, 4, 5, 21; Microbiology 1; Physical Science 1/1L; Physics 10A/10AL, 10B/10BL, 20A/20AL, 20B/20BL, 20C/20CL; Physiology 1.

Natural Science or Mathematics:

Anthropology 1; Geography 1, 7; Geology 41; Mathematics 5, 7, 10, 12, 13, 14, 16A, 16B, 20, 25A, 25B, 25C, 30, 31, 35; Physics 1, 12; Psychology 1B.

*Students who have had one year of high school chemistry with a grade of "C" or better may not receive college credit for Chemistry 12.

SOCIAL SCIENCE (9 units - 3 units in each category)

History #1

History 1A, 10.

History #2

Chicano Studies 4; History 1B, 3, 4, 5, 6, 7A, 7B, 8, 9, 12, 15, 16, 60H.

Social Science Elective*

Anthropology 2, 3, 6, 9; Chicano Studies **4**, **8**; Economics 1, 2, 4; Geography 2, 3, 4, 10; History **3**, **4**, **5**, **6**, **7A**, **7B**; Political Science 1, 2, **3**, 4, 7, **8**, 10, 11; Psychology 1A, 3, 7, 8; Sociology 1, 2, 3.

*Students may fully satisfy Social Science elective and American History and Institutions requirements by completing any boldface course.

HUMANITIES (9 units - 3 units in each category)

Theatre Arts

Art 1A, 1B, 2, 3; Music 8, 9A, 9B; Theatre 4A, 4B.

Literature

English 13A, 13B, 15A, 15B, 17*, 18, 19, 21, 29A, 29B, 30, 31, 33.

*Not for Theatre majors.

Philosophy

Philosophy 1, 2, 3, 7, 9, 11.

University of Southern California College of Letters, Arts, and Sciences

(See Counselor to determine the number of courses from each area for degrees in the Schools of Fine Arts, Music, and Business.)

SKILLS LEVELS

I. **Freshman Composition:** English 1AB and pass USC's Skill Level Examination.

II. **Foreign Language:** Pass USC's Skill Level Examination. (A passing score on the Foreign Language Skill Level Examination is usually achieved after three semesters of one language or the equivalent. Some majors do not require foreign language. For more information, consult USC's current bulletins.)

III. **Math Skill Level:** Pass USC's Math Skill Level Examination. The best preparation for a passing score is course work in algebra, geometry and intermediate algebra (Math 3). Intensive review prior to the test is highly recommended.

Private or Out-of-State Schools

Students who are planning to enter one of California's many private four-year schools, or an out-of-state public or private school, should carefully check the general education requirements for that particular school. It is doubtful that either of the requirement patterns outlined for the two California public systems would be completely applicable at other institutions.

Transfer information, including general education requirements, for California Lutheran University at nearby Thousand Oaks is shown here:

California Lutheran University

GENERAL TRANSFER INFORMATION

1. A 2.0 (C) grade on all work attempted is required for transfer. For purposes of calculation, all grades are counted, including repeated courses. A repeated course does not "erase" an earlier grade.
2. Maximum of 70 credits are transferable from a community college.
3. "D" grades are granted transfer credit *except* in major or required preparation for major.
4. Both BA and BS degrees are offered. The essential difference in the two degrees which applies to community college transfers is item 3 below.
5. Most majors require at least 32 credits with 20-24 credits at the upper division level. Consult the CLU catalog for specific departmental requirements.
6. Prospective transfer students are encouraged to schedule an appointment with the Director of Transfer Services for counseling and preliminary transcript evaluation. Students should call the Admissions Office at 492-2411.
7. No General Ed. may be taken Credit/No Credit.
8. Courses required for the major or prep for the major (in Bus and Psy) may not be counted to fulfill General Education requirements.

GENERAL EDUCATION REQUIREMENTS

1. **CREATIVE ARTS** — 6 credits required. 3 credits in Art, Music, or Theatre Arts. 3 credits in Speech (required but may be waived, by proficiency examination).

   Recommended Moorpark College courses:

   Art 1A, 1B, 2, 4A, 4B

Music: Any Music course
Speech 1, 2
Theatre Arts: Any Theatre Arts course

2. **ENGLISH** — 6 credits required. 3 credits of English Composition and 3 credits of Literature.

   Recommended Moorpark College courses:

   English 1A, 1B, 13A, 13B, 15A, 15B, 17, 18, 19, 21, 30, 31, 33

   NOTE: English majors may take English 30 or 31 but should not take English 17.

3. **FOREIGN LANGUAGE** — 8 credits required.

   Bachelor of Arts required: two sequential courses in one language.

   Recommended Moorpark College courses:

   French 1, 2, 3, 4
   German 1, 2, 3, 4
   Spanish 1, 2, 3, 4

BACHELOR OF SCIENCE OPTION. BS majors may substitute 8 credits in Mathematics, Statistics, Logic, Computer Science: Scientific methods.

Recommended Moorpark College courses:

Computer Information Systems 1, 4A, 4B
Computer Science 10/10L, 20/20L, 30/30L
Mathematics 5, 6, 7, 12, 13, 14, 15, 16A, 16B, 20, 25A, 25B, 25C, 30, 31, 33, 35
Philosophy 7, 9

4. **NATURAL SCIENCE** — 7 credits required, including 4 laboratory science course credits and 3 credits in mathematics or science without laboratory.

   Recommended Moorpark College courses:

   a. Laboratory Science

   Anatomy 1
   Astronomy 1, 1L
   Biology 1, 2A, 2B, 5

UNIVERSITY OF SOUTHERN CALIFORNIA

AREAS OF EXPOSURE	BACHELOR OF ARTS DEGREE: Any major in the Division of Humanities	BACHELOR OF ARTS DEGREE: Division of Social Sciences; Division of Natural Science	BACHELOR OF SCIENCE DEGREE
The Natural World: **List A:** Anatomy 1; Anth 1; Astronomy 1, 1L; Biol 1, 2A, 2B, 3, 5, 16, 17; Botany 1; Environmental Science 1, 2; Geography 1, 5; Geology 1, 2, 3, 4, 5, 21, 41, 61; Microbiology 1; Physical Science 1/1L; Physics 1, 12; Physiology 1, 2. **List B:** Astronomy 1, 1L; Biology 2B; Chemistry 1A, 1B, 8, 12, 13; Physics 1, 10A/10AL, 10B/10BL, 12, 20B/20BL, 20C/20CL.	3 courses, one from List A, one from List B, one additional course from either A or B	3 courses, one from List A, one from List B, one additional course from either A or B	0 courses
Representative Cultures:			
a. **American Public Life:** Chicano Studies 1, 8; History 3, 5, 7B, 12; Political Science 1, 3, 7, 8, 11; Sociology 2, 6, 8; Urban Studies 1A.	a. One course	a. One course	One course
b. **Foundations of Western Culture I:** Art 1A; English 29A, 30; History 1A, 60H; Philosophy 11; Theatre Arts 4A.	b. One course	b. One course	Three courses each from a different category
c. **Foundations of Western Culture II:** Art 1B, 2, 3; English 31, 33; History 1B; Humanities 1, 3; Philosophy 1, 3; Theatre Arts 4B.	c. One course	c. One course	
d. **Non-Western Culture** Anthropology 2, 6; History 6, 10, 15, 16; Philosophy 11.	d. One course	d. One course	
Representative Approaches to the Study of the Individual, Culture and Society			
a. **Empirical Approaches:** Anthropology 2, 3, 5, 9; Chicano Studies 1, 8; Child Development 30; Economics 1, 2, 4; Geography 2, 3, 4, 7, 10; Political Science 1, 2, 4, 7, 8, 11; Psychology 1A, 1B, 3, 4, 5, 7, 8; Sociology 1, 2, 3, 4, 5, 6, 8; Urban Studies 1A.	a. Two courses	a. One course	
b. **Aesthetic Approaches: Literature** English 13A, 13B, 14, 15A, 15B, 17, 18, 19, 20, 21, 29A, 29B, 30, 31, 33.	b. One course	b. One course	Two courses, each course from a different category
c. **Aesthetic Approaches: The Arts** Art 1A, 1B, 2, 3; English 20; Humanities 2, 3; Music 8, 9A, 9B; Theatre Arts 1, 4A, 4B.	c. One course	c. One course	
d. **Ethical Approaches:** Philosophy 2, 3.	d. One course	d. One course	

Botany 1
Chemistry 1A, 1B, 12, 13
Environmental Science 1, 2
Geology 1, 2 plus 2L
Physical Science 1/1L
Physics — any course
Physiology 1

b. Mathematics or science without laboratory

Astronomy 1
Biology 16, 17
Geology 2, 3, 5, 41
Mathematics 5, 6, 7, 12, 13, 14, 15, 16A, 16B, 20, 25A, 25B, 25C, 30, 31, 33, 35
Physics 12

5. **PHYSICAL EDUCATION** — 3 credits of activity courses required.

A transfer student with any three different activities will satisfy entire requirement. A junior transfer with no PE credits, must take one activity and Lifetime Physical Fitness. Only one credit per activity will transfer and no more than 3 credits will apply toward graduation.

Students over the age of 25 at entrance will have the PE requirement waived.

6. **RELIGION AND PHILOSOPHY** — 6-9 credits required.

Sophomore transfers — 6 credits in Religion at CLU plus 3 credits in Philosophy or upper division Religion.

Junior transfers — 3 credits of Religion at CLU; 3 additional credits of Religion or Philosophy.

Recommended Moorpark College courses:

Philosophy 1, 3, 11

7. **SOCIAL SCIENCE** — 6 credits required from the following areas.

Recommended Moorpark College courses:

Administration of Justice 1, 2, 3, 4, 5
Anthropology 1, 2, 3, 4, 5, 6, 9
Business 1A, 1B, 30, 31, 32, 33A, 33B
Economics 1, 2, 4, 30
Geography 2, 3, 4
Political Science 1, 2, 3, 4, 11
Psychology 1A, 1B, 3, 4, 5, 7, 8
Sociology 1, 2, 3, 4, 5, 6, 8

8. **HISTORY** — 3 credits required.

Recommended Moorpark College courses:

Any History course except History 22A/B

9. **AMERICAN INSTITUTIONS** — 3 credits required or completion of A.A.

Recommended Moorpark College courses:

Any course meeting this requirement at Moorpark College.

University of La Verne
Point Mugu Residence Center

GENERAL TRANSFER INFORMATION

Students who have a high school diploma, or equivalent, are eligible for admission to La Verne. Transfer students may enter La Verne at the beginning of any semester. A total of 128 semester units are required for the B.S. degree, 44 of which must be upper division, plus the completion of a specific major, and the General Education requirements. The Residence Center at Point Mugu will accept up to 84 semester units of lower division transferable credit. These may include military credit and credit by C.L.E.P. examination. All courses completed under the Associate degree will be acceptable to La Verne. Students without the Associate degree will have their work evaluated on a course-by-course basis for transferabiity. Without an AA or AS degree, courses with a grade of "D" will not transfer. With an AA or AS, courses with a grade of "D" will transfer; however, courses with a grade of "D" cannot be used to satisfy General Education and/or major requirements.

GENERAL EDUCATION REQUIREMENTS

GENERAL EDUCATION COURSES (for the B.S. Degree)*

1. **ENGLISH** 1A and 1B
2. **FINE ARTS**

Any course from:

Art 1A, 2, 3, 4AB, 8AB, 12AB, 13ABCD, 16AB
English 10AB
Music 8, 9AB
Photography 1AB, 3
Theatre Arts 1, 2ABC, 4AB

Or any two courses (or two semesters) from:

Music 10, 12, 13ABCD, 15, 16, 17, 18, 19, 20, 25ABC, 27

Courses taken to satisfy the Fine Arts requirement may not be used to satisfy the Humanities requirement.

3. **HUMANITIES**

Any course from each of two different areas:

a) Philosophy
b) English 15AB, 17, 30, 31
French 3, 4
German 3, 4
Spanish 3, 4
c) Art 1A, 2, 3, 4AB, 8AB
History 1AB
Humanities 1, 2
Music 8, 9AB
Theatre Arts 1, 4AB

Courses taken to satisfy the Humanities requirement may not be used to satisfy the Fine Arts requirement.

4. **SOCIAL SCIENCE**

Any course from each area:

a) Economics 1, 2
Geography 1, 2
Political Science 3
b) Anthropology 1, 2
Psychology
Sociology
c) History 7AB

5. **NATURAL SCIENCE**

Any course (minimum 2 units per course) from each of two different areas to include a laboratory from:

a) Anatomy
Biology
Microbiology
Physiology
b) Astronomy
Chemistry
Geology
Physics

6. **SYMBOLIC MODE**

Any course from:

Computer Information Systems 3A, 4AB, 7
Computer Science 18/18L
French 1, 2, 3, 4
German 1, 2, 3, 4
Mathematics 5, 25ABC
Music 2ABCD
Philosophy 7
Spanish 1, 2, 3, 4

*Courses taken in preparation for the major may be used to satisfy General Education requirements.

MOORPARK COLLEGE COURSES REQUIRED IN PREPARATION FOR A MAJOR

Accounting major; Business Management major; Economics/Business Administration major:

Business 1AB; Economics 1, 2.

Behavioral Science major; Criminology major; Psychology major; Sociology major:

Psychology 1A; Sociology 1.

Math major:
Math 25AB; one course from Computer Information Systems 1, 3A, 7, or Computer Science 18/18L.

Seaver College of Pepperdine University

Most transfer students with a 2.5 grade point average in at least 30 semester units will be admitted if they are making normal academic progress.

GENERAL EDUCATION REQUIREMENTS

A. English Composition (2 courses)
1. Engl 1A
2. Engl 1B

B. Religion (to be completed at Seaver College)

C. Western Heritage (4 courses)
1. One course from: Art 1A, 2; Mus 8, 9A, 9B
2. One course from: Hist 1A, 1B
3. Two courses from: Engl 30, 31; Hist 1A, 1B

D. Non-Western Heritage (1 course)
1. Hist 15, 16

E. American Heritage (2 courses)
1. One course from: Econ 1, 2
2. One course from: Hist 5; Pol Sci 1, 3

F. Behavioral Science (1 course)
1. Psych 1A; Soc 1

G. Foreign Language (1 course)
1. Fr 3; Ger 3; Span 3

H. Laboratory Science (1 course)
1. Anat 1; Astron 1w/1L; Bio 1, 2A, 3, 5; Bot 1; Chem 1A, 12, 13; Env Sci 1, 2; Geog 1w/1L, 5w/5L; Geol 1, 2w/2L; Micro 1; Ph 1w/1L, 10Aw/10AL, 20Aw/20AL; Phy Sci 1w/1L; Phisio 1; Zoo 1

I. Mathematics (1 course)
1. Math 4, 5, 6, 7, 12, 14, 15, 16A, 25A

J. Speech and Rhetoric (1 course)
1. Speech 1, 2

K. Freshman Seminar
1. At Seaver
   Waived if more than 30 tr. units

L. Physical Education
1. Any 3 P.E. activity courses

Transfer Curricula

The information on the following pages shows the requirements for advanced standing in selected majors at nearby public four-year institutions to which Moorpark College students normally transfer. Major requirements at other colleges and universities will be similar, but **students should refer to the catalogs of the schools to which they expect to transfer and consult with a counselor for more complete information.**

Each of the nineteen campuses of the California State Universities and Colleges and the nine campuses of the University of California accepts the maximum of 70 semester units in transferable courses completed in a community college.

The curricula show those Moorpark College courses which may be used to meet the lower division requirements for most of the majors selected by Moorpark students. Listed below are those majors for which curricula are shown.

Administration of Justice
Anthropology
Art
Biology
Business Administration
Business Education
Chemistry
Chicano Studies
Child Development
Computer Science
Earth Science
Economics
Electronics Technology
Engineering
English
Environmental Science
French
Geography
Geological Sciences
German
Health Science
History
Humanities
Interior Design
Journalism
Liberal Studies
Mathematics
Music
Nutritional Science
Philosophy
Physical Education
Physical Science
Physics
Political Science
Predental
Premedical
Prenursing
Preveterinary
Psychology
Radio-Television-Film
Religious Studies
Sociology
Spanish
Speech
Theatre Arts
Urban Studies

In addition to satisfying requirements in the major, students must meet the general education requirements for the transfer school. Listed earlier in this section are the general education requirements which apply to particular four-year schools where many Moorpark College students transfer.

PROGRAMS, TRANSFER MAJORS AND ANNOUNCEMENT OF COURSES

ANNOUNCEMENT OF COURSES

In the section that follows there appears a brief description of every course in the Moorpark College curriculum. Included with each description is information regarding the unit value of the course, the weekly hours or total hours of the course meetings, and the transfer status of the course. In the case of those courses for which there are prerequisites (i.e., previous preparation of some nature is required), such prerequisites are stated before the course description is given.

The transfer status of the course with regard to the California State University and College system (CSU) and the University of California system (UC) is indicated following the course description. The course may be accepted for credit by the CSU system only, by both the CSU and UC systems, or by neither system. For some courses there are limitations to the credit granted in the UC system. It is emphasized that the limitations apply to the UC system only; each credit limitation is explained. In those instances where UC transfer credit is shown as pending, a counselor should be consulted. Should no transfer credit statement appear following a course description, that course is not acceptable for credit at any of the California public four-year institutions and, normally, not acceptable at private or out-of-state institutions as well.

Special Note:

1) The designations (F) indicates that the class is offered in the Fall only; the designations (S) indicates that the class is offered in the Spring only.
2) ★Denotes course must be taken for Credit/No Credit.

Administration of Justice

Public concern with rising crime rates and the increasing role of law enforcement in public service work has contributed to the growth of criminal justice agencies throughout the nation.

There is a broad range of opportunities for men and women in all branches of law enforcement and corrections. Never beforehas there been such a demand for qualified persons in these occupational fields as now.

The Administration of Justice Program offers an education to students in the varied aspects of law enforcement and correctional work. A foundation of knowledge is provided for those interested in becoming competitive candidates for these interesting and challenging careers.

Career Opportunities

Municipal Police Officer
Group Supervisor & Counselor
State Traffic Officer (CHP)
State University Police Officer
County and State Park Ranger
County Marshall
Border Patrol Agent
Deputy Sheriff
Security Officer
Private Detective

Faculty

Full-Time	Part-Time	Counselors
Tom Cochee	Jon Ainsworth	Rick Cardoni
Mitchell Smith	Philip Anderson	Don Henderson
	Clifton Hodge	
	James Murphy	
	Michael Sayre	
	Michael Webb	

Transfer Information

Certification and approval of the Administration of Justice curriculum has been given by the California State Commission of Peace Officers Standards and Training.

Major requirements for upper division standing at:

California Lutheran University:
AJ 1, 2.
California State University, Hayward:
AJ 1, 2, 4, 11.
California State University, Los Angeles:
AJ 1, 2, 3, 4, 5, 11.
California State University, Sacramento:
AJ 1, 2, 3, 11.

■ Administration of Justice Corrections

Occupational
Associate in Science Degree

This program is designed to meet the continuing need for law enforcement specialists in the field of corrections.

Required Courses:		Units
AJ 1	Intro to Administration of Justice	3
AJ 2	Concepts of Criminal Law	3
AJ 3	Community Relations	3
AJ 4	Legal Aspects of Evidence	3
AJ 5	Principles and Procedures of the Justice System	3
AJ 6	Criminal Justice Report Writing	3

Required Additional Courses:
Select nine (9) units from the following courses:

AJ 14	Juvenile Procedure	3
AJ 41	Intro to Probation, Parole and Corrections	3
Bus 50	Elements of Supervision	3
Psych 3	Psychology of Interpersonal Relationships	3

Total minimum units required in major area — 27
Recommended Courses: Pol Sc 3; Psych 1A; Soc 1

See Degree Requirements and Transfer Information section for General Education requirements.

■ Administration of Justice Law Enforcement

Occupational
Associate in Science Degree

This program offers training of students in the varied aspects of law enforcement work. Background is provided for those interested in being recruited by law enforcement agencies as well as upgrading of skills for those already employed in law enforcement.

Required Courses:		Units
AJ 1	Intro to Administration of Justice	3
AJ 2	Concepts of Criminal Law	3
AJ 3	Community Relations	3
AJ 4	Legal Aspects of Evidence	3
AJ 5	Principles and Procedures of the Justice System	3
AJ 6	Criminal Justice Report Writing	3
AJ 41	Intro to Probation, Parole and Corrections	3

Required Additional Courses:
Select six (6) units from the following courses:

AJ 10	Patrol Procedures	3
AJ 11	Criminal Investigation	3
AJ 14	Juvenile Procedure	3
AJ 18	Narcotics Investigation	3
AJ 19	Vice Control	3

Total minimum units required in major area — 27
Recommended Courses: AJ 12; Pol Sc 3; Psych 1A; Soc 1
Suggested Course Sequence:

First Semester		Third Semester	
AJ 1	3	AJ 4	3
AJ 2	3	AJ 41	3
	6	Any Elective Course	3
			9
Second Semester		**Fourth Semester**	
AJ 3	3	AJ 6	3
AJ 5	3	Any Elective Course	3
	6		6

See Degree Requirements and Transfer Information section for General Education requirements.

Administration of Justice Courses

AJ 1 — 3 Units
Introduction to the Administration of Justice
Class Hours: 3 lecture

Basic topics covered in this class include: the history and philosophy of administration of justice in America; recapitulation of the system; identifying of the various sub-systems, role expectations, and their interrelationships; theories of crime, punishment and rehabilitation; ethics, education and training for professionalism in the system. *Transfer credit: CSU; UC. CAN: AJ 2*

AJ 2 — 3 Units
Concepts of Criminal Law
Class Hours: 3 lecture
This class deals with the following major topics: historical development and philosophy of law, including constitutional provisions, definitions, classification of crime, and their application to the system of Administration of Justice; legal research, study of case law, methodology, and concepts of law as a social force. *Transfer credit: CSU; UC. CAN: AJ 4*

AJ 3 — 3 Units
Community Relations
Class Hours: 3 lecture
Students in this course make an in-depth exploration of the Administration of Justice practitioners and their agencies. Through interaction and study the student will become aware of the interrelationship and role expectations among the various agencies and the public. Principal emphasis will be placed upon the professional image of the system, Justice Administration and the development of positive relationships between members of the system and the public. *Transfer credit: CSU; UC*

AJ 4 — 3 Units
Legal Aspects of Evidence
Prerequisites: AJ 1 and AJ 2
Class Hours: 3 lecture
The student becomes acquainted with the origin, development philosophy and constitutional basis of evidence in this class. Other topics to be covered include constitutional and procedural considerations affecting arrest, search and seizure; kinds and degrees of evidence and rules governing admissibility; judicial decisions interpreting individual rights and case studies. *Transfer credit: CSU. CAN: AJ 6*

AJ 5 — 3 Units
Principles and Procedures of the Justice System
Class Hours: 3 lecture
The course provides an in-depth study of the role and responsibilities of each segment within the administration of justice system: law enforcement, judicial, and corrections. The student also learns about each sub-system procedure, from initial entry to final disposition, as well as the relationship each segment maintains with its system members. *Transfer credit: CSU; UC*

AJ 6 — 3 Units
Criminal Justice Report Writing
Prerequisite: Engl 2 or eligibility for Engl 1A
Class Hours: 3 lecture
This course, designed for criminal justice practitioners, emphasizes the mastery of report writing skills to record crime scenes, emergency response situations, and routine occurrences. Its goal is to help students translate observation into accurate, clear, concise, complete and acceptable standard written English so that documents are appropriate for court presentation. *Transfer credit: CSU*

AJ 10 — 3 Units
Patrol Procedures *(S)*
Class Hours: 3 lecture
Responsibilities, techniques, and methods of police patrol are emphasized in this class. The student learns about the handling of complaints, mechanics of arrest, preliminary investigations, field note taking, and report writing. *Transfer credit: CSU*

AJ 11 — 3 Units
Criminal Investigation *(F)*
Prerequisites: AJ 1 and AJ 2
Class Hours: 3 lecture
Instruction covers the fundamentals of investigation including crime scene search and recording; collection and preservation of physical evidence; scientific aids, modus operandi; source of information; interviews and interrogation; follow-up and case preparation. *Transfer credit: CSU*

AJ 12 — 1½ Units
Body Conditioning for Law Enforcement
Corequisite: PE 2A
Class Hours: 1 lecture, 2 activity
This class is designed to prepare students to compete successfully in the physical selection portion of civil service tests for Police Officer and Correctional Officer. If successfully completed, the student will also be prepared to endure the physical training inherent in an 18-week law enforcement academy. May be taken four (4) times for credit.

AJ 14 — 3 Units
Juvenile Procedure *(S)*
Class Hours: 3 lecture
The course focuses upon the organization, functions, and jurisdiction of juvenile agencies. Other topics include the processing and detention of juveniles; juvenile case disposition; juvenile statutes and court procedures. *Transfer credit: CSU*

AJ 18 — 3 Units
Narcotics Investigation *(S)*
Class Hours: 3 lecture
Students learn to identify marijuana, opiates, dangerous drugs, hallucinogens, and their paraphernalia. Principles of identifying and dealing with the "user" are also delineated. Other topics include: laws and court decisions relating to the offender, fundamentals of arrest, search, report writing, and court testimony. The prevention and control of drug abuse as it relates to society. *Transfer credit: CSU*

AJ 19 — 3 Units
Vice Control *(F)*
Class Hours: 3 lecture
This course covers the detection, repression and control of vice. Topics include gambling, prostitution, liquor, sex offender violations, vice law, and court procedures. The course is intended to provide knowledge and skill in the recognition, investigation, and control of vice offenders. *Transfer credit: CSU*

AJ 22A/B — 1-3/1-3 Units
Independent Studies in Administration of Justice
Prerequisite: A previous course in Administration of Justice
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of administration of justice on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU*

AJ 41 — 3 Units
Introduction to Probation, Parole and Corrections
Class Hours: 3 lecture
An introduction to the legal and practical aspects, practices, and procedures of probation, this course includes an analysis of both, with emphasis on rehabilitation and classification methods in criminology. *Transfer credit: CSU*

AJ 49A-D — 1-4 Units
Cooperative Work Experience — Administration of Justice★
Prerequisite: Placement at a work station
Class Hours: 5-20 employment, 1 by arrangement
Students employed in a field related to Administration of Justice will design a learning contract in conjunction with their employer that will involve expanded responsibilities and/or the opportunity to learn new job experiences beyond those required in the existing job duties. Direct coordination with the employer in question will be a part of this learning experience.

AJ 60A-Z — 1-3 Units
Topics in Administration of Justice
Prerequisites: To be determined with each Topic
Class Hours: To be determined with each Topic
This is a special series of courses each of which deals with a specific topic in Administration of Justice not covered in detail in the general Administration of Justice course offerings. Topics courses are announced on a semester basis in the schedule of classes.

Topics which have been developed include:

60A — 2 Units
Arson Investigation I
Prerequisites: Completion of AJ 1, 2, 3, 4, 5
Class Hours: 40 lecture total
Fundamentals of fire investigation; motives; fire scene search and documentation; collection and preservation of physical evidence; sources of information; case preparation and follow-up. (This is a P.O.S.T. certified course designed to upgrade police/fire personnel.)

AJ 89A-Z — ½-3 Units
Institutes in Law Enforcement★

Prerequisites: AJ 1,2,3,4, and 5 (Core) or possession of P.O.S.T. Basic Certificate.
Class Hours: Variable

This short term lecture series concentrates on specialized law enforcement technology designed for criminal justice personnel.

Agriculture

The Moorpark College Agriculture Program is offered at Rancho Sierra Vista in Newbury Park. This National Park Service facility is the site of a "model ranch" program featuring the Equine Management and Training Program.

Career Opportunities

Equine Management and Training Program

Horse Ranch Manager
Horse Trainer
Artificial Insemination Specialist
Entertainment Park — Horse Specialist
Horse Specialist — Marketing
Horse Conditioner — Shows, Track, Eventing

Faculty

Full-Time	Part-Time	Counselor
Donald Anderson	Edythe Anderson	Donna Allyn
Thomas McAdam	Sandra Charnow	
	Susan Postel	

Equine Management and Training Program Admission to Program

Students desiring to qualify for admission to the Equine Management and Training Program must first complete an application for screening. Applications may be obtained at the Rancho Sierra Vista site in Newbury Park or at the Technology Division Office at the Moorpark College campus. Deadlines for submission of applications and pertinent data are established and published each year. Applicants are encouraged to complete required materials and submit them to the Rancho Sierra Vista location prior to the conclusion of classes in the spring semester. A committee will review all applications and will notify those selected during the summer. Students will be notified of their selection by mail.

■ Equine Management/Training Program

Certificate of Achievement

This program is designed to train people for employment on horse ranches, animal entertainment centers, and related equine industries.

Required Courses:		Units
Ag 23A	Special Projects in Agriculture	3
Ag 23B	Special Projects in Agriculture	3
Ag 40	Horse Husbandry I	3
Ag 41	Horse Husbandry II	3
Ag 43	Training for Instructors in Horsemanship	2
Ag 44	Equine Schooling Techniques	2
Ag 45	Intro to Horse Training	3
Ag 46	Advanced Horse Training Techniques	3
Ag 47	Artificial Insemination of Horses	3
Ag 48A	Principles of Horse Ranch Management	2
Ag 79A	Equine Management and Training Program Internship	4
Ag 79B	Equine Management and Training Program Internship	4

Total minimum units required — 35

Recommended Course: Engl 2

Agriculture Courses

AG 1 — 3 Units
Introduction to Horticulture
Class Hours: 3 lecture
The landscape industry, floral industry, turf industry, nurseries and pest control field will be studied. Emphasis will be placed on local applications and examples. Careers and areas where further education will be needed will be pointed out. Recruiters from several horticulture programs will be invited to speak. Students will interview professionals in one or more fields of interest. *Transfer credit: CSU*

AG 12 — 3 Units
Landscape Gardening and Management
Class Hours: 3 lecture
Students learn about the planting and care of lawns, ground covers, flowers, trees and shrubs, including proper pruning and training; plant growth, weed, insect and disease control; irrigation and fertilization principles; identification and uses of landscape plants; garden maintenance problems of landscape properties, with field laboratory in proper care and use of garden equipment. This is primarily an evening course. *Transfer credit: CSU*

AG 13 — 3 Units
Landscape Design for Homes
Class Hours: 3 lecture
This course deals with the principles of landscape planning and design for residential properties, with emphasis on the location of lawns, trees, shrubs, walks, driveways, patios, planters and other landscape structures for home and commercial landscaping; laboratory in practical drafting and landscaping design problems. This is primarily an evening course. *Transfer credit: CSU*

AG 22A/B — 1-3/1-3 Units
Independent Studies in Agriculture
Prerequisite: A previous course in Agriculture
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of agriculture on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU*

AG 23A/B — 1-3 Units
Special Projects in Agriculture
Prerequisite: Previous or concurrent enrollment in Agriculture class.
Class Hours: 3-9 laboratory
Interested students may further their knowledge and skills beyond those offered in scheduled classes. May be taken four (4) times for credit. Lab work can be done by arrangement. *Transfer credit: CSU*

AG 31 — 3 Units
Feeds and Feeding
Class Hours: 2 lecture, 3 laboratory
The nutritional requirements of livestock, the balancing of feed rations, and the costs of feed rations are the focus of this course. *Transfer credit: CSU*

AG 40 — 3 Units
Horse Husbandry I
Class Hours: 2 lecture, 3 laboratory
Horse selection, nutrition, internal and external parasite control, and disease control programs are covered in this course. *Transfer credit: CSU*

AG 41 — 3 Units
Horse Husbandry II
Prerequisite: AG 40
Class Hours: 2 lecture, 3 laboratory
Students learn horse ranch management, breeding and care of the mare and the foal, as well as basic training techniques. Course includes field trips to local equine centers. *Transfer credit: CSU*

AG 43 — 2 Units
Training for Instructors in Horsemanship
Prerequisite: Entrance into Equine Management and Training Program.
Class Hours: 1 lecture, 3 laboratory
The course is designed to prepare students to teach basic horseback riding and horsemanship using both English and Western tack.

AG 44 — 2 Units
Equine Schooling Techniques
Prerequisite: Entrance into Equine Management and Training Program.
Class Hours: 1 lecture, 3 laboratory
Students will be instructed in giving advanced equitation and horsemanship lessons using both English and Western tack.

AG 45 — 3 Units
Introduction to Horse Training
Prerequisite: Entrance into Equine Management and Training Program.
Class Hours: 9 laboratory
The class will concentrate on the halter training of foals, beginning training of yearlings and two-year-olds, lounging techniques, ground driving and training to the saddle. Both Western and English tack will be used.

AG 46 — 3 Units
Advanced Horse Training Techniques
Prerequisite: Entrance into Equine Management and Training Program.
Class Hours: 9 laboratory
Students will learn to train the horse to walk, trot and canter with leg aids. They will learn to take leads on cue, side pass, back, ground tie, work trail obstacles, work cavallettes and beginning jumps, turn on forehand and haunches, lead change and figure eight.

AG 47 — 3 Units
Artificial Insemination of Horses
Prerequisite: Current enrollment in Equine Internship Program or Horse Husbandry I.
Class Hours: 1 lecture, 6 laboratory
The course covers the breeding of horses utilizing artificial insemination techniques. The student will learn the advantages and disadvantages of using this method for breeding horses. Experience will be gained in the artificial collection and evaluation of semen, insemination of the mare, use of frozen semen, determination of estrus, and the use of the Prognosticator in the determination of pregnancy. The College equine laboratory, equipment and horse herd are used in this course.

AG 48A — 2 Units
Principles of Horse Ranch Management
Prerequisite: Entrance into Equine Management and Training Program.
Class Hours: 1 lecture, 3 laboratory
This course is designed to teach management and supervision skills as they relate to a modern equine operation. The IBM XT Computer will be used with the Ranger and Horse power software programs with an emphasis on record keeping. *Transfer credit: CSU; UC*

AG 48B — 2 Units
Practical Application of Ranch Management
Prerequisite: AG 48A
Class Hours: 1 lecture, 3 laboratory
This course uses an IBM XT Computer with the Ranger software program; its emphasis is on the breeding program. *Transfer credit: CSU; UC*

AG 49A-D — 1-4 Units
Cooperative Work Experience — Agriculture★
Prerequisite: Placement at a work station
Class Hours: 5-20 employment, 1 by arrangement
Students employed in a field related to Agriculture will design a learning contract in conjunction with their employer that will involve expanded responsibilities and/or the opportunity to learn new job experiences beyond those required in the existing job duties. Direct coordination with the employer in question will be a part of this learning experience.

AG 50 — 3 Units
Food Crop Production
Class Hours: 2 lecture, 3 laboratory
Students study plant structures and their functions; crop ecology and basic factors affecting crops and crop production. They also develop skill in identification of crops, seeds and weeds, as well as in weed control in this locality and seed production, including certified seed. *Transfer credit: CSU*

AG 53 — 3 Units
Practical Horse Management I
Class Hours: 3 lecture
In this series on the selection, health and care of horses, topics include: quarter horse selection, Arabian horse selection, thoroughbred selection,

saddle breeds and selection, inoculations, safety, common diseases, feeds, and colt care.

AG 54 — 3 Units
Practical Horse Management II
Prerequisite: AG 53
Class Hours: 3 lecture
This course covers the reproductive system, breeding methods, and the fetal development of horses. Other topics covered include stallion management, foaling, and breeding farm economics.

AG 60A-Z — 1-3 Units
Topics in Agriculture
Prerequisites: To be determined with each Topic
Class Hours: To be determined with each Topic
This is a special series of courses each of which deals with a specific topic in Agriculture not covered in detail in the general Agriculture course offerings. Topics courses are announced on a semester basis in the schedule of classes. *Transfer credit: See counselor.*

AG 65 — 3 Units
Introduction to Agri-Business
Class Hours: 3 lecture
The course focuses upon business principles as they apply to agriculture business enterprises in related agricultural areas that service and supply production agriculture, i.e., agricultural chemical sales and services, agricultural equipment sales and service to others. *Transfer credit: CSU*

AG 66 — 3 Units
Record Keeping
Class Hours: 2 lecture, 3 laboratory
This required course for all Agriculture students is the study of basic record keeping procedures used in production agriculture. *Transfer credit: CSU*

AG 71 — 3 Units
Natural Resources
Class Hours: 3 lecture
This study of the economic and social values of our natural resources, includes the history of man in relation to land use, human population in relation to resources, history of the conservation movement, present-day conservation practices. *Transfer credit: CSU; UC*

AG 72 — 3 Units
Park Site Development
Class Hours: 2 lecture, 3 laboratory
Construction of systems necessary to development of park sites — concrete block wall, brick, watering systems and carpentry. Use of tools required. *Transfer credit: CSU*

AG 73 — 3 Units
Nature Plant Structures
Class Hours: 2 lecture, 3 laboratory
This is an introduction to understanding plant structure as it relates to the natural resources environment. Focus will be upon stems, leaves, flowers, fruits, seeds and inflorescences. Gross structure is emphasized rather than microscopic analysis. Actual on-site experiences in a natural park setting will be provided. *Transfer credit: CSU*

AG 74 — 3 Units
Insect and Disease Management
Class Hours: 2 lecture, 3 laboratory
Common insects that attack agricultural crops and stored products are studied, including: basic taxonomy of the major orders; identification, life cycles, habits, hosts, economic importance, and control of the principal insects in agriculture; identification and evaluation of beneficial insects. Insect collection required. *Transfer credit: CSU; UC*

AG 79A — 4 Units
Equine Management and Training Program Internship
Prerequisite: Entrance into Equine Management and Training Program.
Class Hours: 12 laboratory
Students will use the management skills and techniques learned in Equine Management and Training. Classes will operate the Rancho Sierra Vista horse ranch. Students will receive practical experience in operating a modern horse ranch.

AG 79B — 4 Units
Equine Management and Training Program Internship
Prerequisite: AG 79A
Class Hours: 12 laboratory
Students use the management skills and techniques learned in Equine Management and Training classes to operate the Rancho Sierra Vista horse ranch. Students will receive practical experience in operating a modern horse ranch.

AG 81 — 2 Units
Horseshoeing and Trimming
Prerequisites: Entrance into Equine Management and Training Program, AG 45, AG 79A.
Class Hours: 1 lecture, 3 laboratory
This course will offer instruction in the anatomy and physiology of horses' legs, pastern and feet. The proper trimming and care of horses' front and hind feet, normal and corrective shoeing of the front and hind feet will also be covered.

ANATOMY

All Anatomy courses are listed with the Biology courses. Refer to that section alphabetically for full course information.

Amnesty Assistance Program

The Amnesty Assistance Program is designed to meet the educational needs of adult, eligible legalized aliens (ELAS) who have applied to the Immigration and Naturalizatiion Service (INS) for legal residency under the provisions for the Immigration Reform & Control Act of 1986. This program is also designed for alien residents who apply for US Naturalization.

Amnesty Assistance Program Courses

AAP I — 2 Units
Amnesty Assistance Program I★
Class Hours: 1 lecture, 3 laboratory
This course will emphasize oral/aural and minimal written coping skills in English proficiency. Focus will be on reading, writing, and speaking in the acquisition of basic English proficiency. May be taken four (4) times for credit.

AAP II — 2 Units
Amnesty Assistance Program II★
Prerequisite: AAP I or CASAS score of 180-200
Class Hours: 1 lecture, 3 laboratory
This course will emphasize basic skills in understanding, reading, writing, and speaking English. Focus will be on listening skills and the total physical response method of learning. May be taken four (4) times for credit.

AAP III — 2 Units
Amnesty Assistance Program III★
Prerequisite: AAP II or CASAS score of 201-214
Class Hours: 1 lecture, 3 laboratory
The course will emphasize additional skills in acquiring English proficiency and will introduce basic concepts in U.S. government and history. May be taken four (4) times for credit.

AAP IV — 2 Units
Amnesty Assistance Program IV★
Prerequisite: AAP III or CASAS score of 215+
Class Hours: 1 lecture, 3 laboratory
Emphasis in this course will be on communication in English and on fundamentals of U.S. history and government. May be taken four (4) times for credit.

Anthropology

Training in anthropology will prepare one for any career that involves working on the interface between two cultures. Specialized preparation in this subject can lead to some of the world's most interesting work — the study of existing life-ways, archaeological excavation and interpretation, primate behavior, and social research into economics, politics, law, religion, art and music.

Career Opportunities

Careers in anthropology are diverse, specialized, and related to the various areas of concentration which are offered at four-year colleges and universities:

Archaeologist-Federal/State/Private
Environmental Impact Analyst
Health Researcher
Urban Planner Assistant
Exhibit Designer
Cultural Resource Management
Expedition Guide
Population Analyst
Recreation Specialist
Travel Consultant
Tour Guide
Museum Curator

Faculty

Full-Time
Robert Lopez
Jack Reynolds

Part-Time
Linda Cervantes
John Greer
Diane Heiken
Jeffrey Rigby
David Schutzer

Counselor
Bud Long

Transfer Information

Anthropology is a study of humans and their learned social behavior — their cultures — at all times and all over the world. Most graduates with a degree in Anthropology are likely to pursue careers in teaching, government service, research, law, or business.

Major requirements for upper division standing at:

California State University, Northridge:
Anthro 1, 2.
University of California, Davis:
Anthro 1, 2, 3.
University of California, Santa Barbara:
(Cultural) Anthro 1, 2, 3.
(Physical) Anat 1; Anthro 1, 2, 3.

■ Archaeology

Associate in Arts Degree

This is a specialized program designed to award a designated associate degree to those students who have completed a course of specialization in Archaeology. At no time is this program intended to be used as a license for independent unsupervised archaeological research. Rather it is a program designed to introduce the student to archaeological research and to give them the opportunity to actively participate in supervised archaeological research. These requirements were also chosen to optimize students' preparation for upper division course work in Anthropology/Archaeology offered by four-year institutions. Since course work in Anthropology/-Archaeology is somewhat sequential at most four-year institutions, students may spend less time earning an Associate in Arts Degree and/or Bachelor of Arts Degree by deferring some of the university general education requirements until their Junior and Senior years and giving priority to the requirements for a major in Archaeology.

In addition, the earning of this degree will be evidence of achievement of technical skills which may be helpful towards active participation in archaeological research projects.

Required Courses:		**Units**
AREA A: Core courses in Anthropology, in the order recommended, for a total of 9 units.		
Anth 3	Archaeology	3
Anth 2	Cultural Anthropology	3
Anth 1	Physical Anthropology	3
AREA B: Practical courses in Archaeological methodology for a total of 18 units. Courses in this area may be repeated two times.		
Anth 5	Archaeological Field Methods	3
Anth 10	Archaeological Reconnaissance	3
Anth 60R	Archaeological Research Methods	3
AREA C: Electives for a total of 18 units selected from the following courses. Those courses indicated by (2X) may be repeated two times in this area.		
Anth 5	Archaeological Field Methods (2X)	3
Anth 10	Archaeological Reconnaissance (2X)	3
Anth 60C	Indians of California	3
Anth 60I	The Chumash and Their Neighbors	3
Anth 60R	Archaeological Research Methods (2X)	3
Anth 60S	Introductory Archaeological Field Methods Supervision (2X)	3
Biol 5	Field Biology	3
Engl 11	Report and Technical Writing	3
Geog 6	Map Use and Interpretation	2
Geol 4	Mineralogy	4
Geol 21	Geology of California	3
Photo 1A	Beginning Photography	3
Total minimum units required in major area — 45		

See Degree Requirements and Transfer Information section for General Education requirements.

Anthropology Courses

ANTH 1 — 3 Units
Physical Anthropology
Class Hours: 3 lecture
This course on human evolution and diversity includes such areas as genetics, evolution, primatology, paleontology, human variation and biocultural adaptation. *Transfer credit: CSU; UC. CAN: ANTH 2*

ANTH 2 — 3 Units
Cultural Anthropology
Class Hours: 3 lecture
This course focuses upon the basic concepts and methods for analyzing cultural systems, illustrated with examples drawn largely from non-western societies. Emphasis will be on the structure and evolution of human behavior in all major aspects of cultures. *Transfer credit: CSU; UC. CAN: ANTH 4*

ANTH 3 — 3 Units
Archaeology
Class Hours: 3 lecture
This is an introduction to the history, goals and methods of Archaeology. Emphasis will be on methods of interpreting and dating the prehistoric past through the rise of complex societies. Special emphasis will be placed on the archaeology of the New World and Ventura County in particular. *Transfer credit: CSU; UC*

ANTH 4 — 3 Units
Chicano Culture*
Class Hours: 3 lecture
This study of the social and cultural heritage of the Chicano emphasizes middle American civilizations, and includes the cultural evolution of the Chicano, from the Spanish conquest to present-day America. The course is concerned with the contributions made by the Chicanos to the United States culture, especially in the fine arts, literature, and orally-transmitted heritage. (co-numbered Ch St 2) *Transfer credit: CSU; UC*

ANTH 5 — 3 Units
Archaeological Field Methods
Prerequisite: Anth 3 or concurrent enrollment in Anth 3 or equivalent
Class Hours: 1 lecture, 6 laboratory
This is a course in practical archaeology that is intended for students who desire to expand their existing knowledge of archaeological inquiry. The emphasis of this course will be on actual site excavation and primary sorting of artifactual materials. May be taken four (4) times for credit. *Transfer credit: CSU*

ANTH 6 — 3 Units
Introduction to Native American Studies*
Class Hours: 3 lecture
This course will be a broad survey of the origins, development, and attainments of Native Americans within the United States. *Transfer credit: CSU; UC*

ANTH 9 — 3 Units
Female of the Species
Class Hours: 3 lecture
An exploration of human female nature and cultural experience in anthropological perspective. A survey of the evolution of female anatomy and behavior, and an examination of the variety of women's roles and stereotypes in different types of cultures, including our own. *Transfer credit: CSU; UC*

ANTH 10 — 3 Units
Archaeological Reconnaissance
Prerequisite: Anth 3 or concurrent enrollment in Anth 3 or its equivalent
Class Hours: 1 lecture, 6 laboratory
This is a course in the practical application of a specific aspect of archaeological field research: the discovery, evaluation and recording of cultural resources. Students will be exposed to the use of a compass, evaluation of soil and terrain formations, plant resources, urban disturbance and various data reporting techniques. May be taken four (4) times for credit. *Transfer credit: CSU*

ANTH 22A/B — 1-3/1-3 Units
Independent Studies in Anthropology
Prerequisite: A previous course in Anthropology
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of anthropology on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

ANTH 60A-Z — 1-3 Units
Topics in Anthropology*
Prerequisites: To be determined with each Topic
Class Hours: To be determined with each Topic
This is a special series of courses each of which deals with a specific topic in Anthropology not covered in detail in the general Anthropology course offerings. Topics courses are announced on a semester basis in the schedule of classes. *Transfer credit: CSU; UC maximum credit 3 units.*

Topics which have been developed include:

60C — 3 Units
Indians of California
Class Hours: 3 lecture
This course offers students a multidimensional look at the aboriginal inhabitants of California before and since European contact.

60I — 3 Units
The Chumash and Their Neighbors
Class Hours: 3 lecture
This will be an in-depth look at the Chumash, the major aboriginal population to occupy Ventura County in pre-contact times. Major consideration will be given to their social, political, and economic structure and to their relations with their aboriginal neighbors and the later Spanish Colonial establishment.

60J — 3 Units
Egyptology: Archaeology of the Land of the Pharaohs
Class Hours: 3 lecture
This course will emphasize the archaeological contributions to a better understanding of the historical and cultural development of anicient Egypt.

60R — 3 Units
Anthropological Research Methods
Prerequisite: A previous course in Anthropology
Class Hours: 2 lecture, 3 laboratory
A course in the method and madness of undertaking various selected aspects of anthropological research. Students will be taught to use the tools of research through their explanation and application on actual research projects. May be taken four (4) times for credit.

60S — 3 Units
Introductory Archaeological Field Methods Supervision★
Prerequisite: 12 units of Anth 5
Class Hours: 1 lecture, 6 laboratory
This course is designed to introduce an advanced student of Archaeology Field Methods to the training and management of an inexperienced "Pit Crew." May be taken four (4) times for credit.

*These courses are offered periodically.

Art

The students who elect to major in the field of art have a variety of opportunities open to them. Choices include careers in teaching, art criticism, journalism, historic preservation, or work as practicing artists in ceramics, painting, sculpture, drawing, commercial art, and photography.

Career Opportunities

Painter
Sculptor
Paper Maker
Printmaker
Ceramicist
Jeweler
Water Color Artist
Moldmaker
Art Dealer
Gallery Owner
Artist's Agent
Museum Worker
Art Researcher
Fashion Designer
Cartoonist
Art Restorer
Illustrator
Advertising Assistant

Faculty

Full-Time
Kirk Aiken
William Dodgen
Jack Noyes
Frank Sardisco

Part-Time
Paul Anderson
Lynn Creighton
Richard Flores
Christine Marx
Gulhis Monezis
Eugena Sumnik-Dekovich
Gerald Swigger
Bonese Turner

Counselor
Don Henderson

Transfer Information

Major requirements for upper division standing at:
California State University, Northridge:
Art 1A, 1B, 4A, 4B, 12A, 13A, and 6-10 units of Art electives. (exclude Art 2)
University of California, Santa Barbara:
Art History: Art 1A, 1B; Hist 1A, 1B; Photo 2

■ Art

Associate in Arts Degree

This program provides students with a curriculum design that is preparatory for transfer to most universities and professional schools of art.

Required Courses:		**Units**
Art 1A	Art History	3
Art 1B	Art History	3
Art 4A	Color and Design	3
Art 4B	Three-Dimensional Design	3

Art 12A	Drawing and Composition	3
Art 12B	Drawing and Composition	3

Required Additional Courses:
Select ten (10) additional units of any other art or commercial art courses.

Total minimum units required in major area — 28

Recommended Courses: Art 2; Hist 1AB; Mus 8; Photo 1A

See Degree Requirements and Transfer Information section for General Education requirements.

Art Courses

Students planning to take more than 16 units of Art courses marked with * and/or more than 12 units of those marked with † should consult a counselor. The UC system accepts only that limited number of units in the respective cases.

ART 1A — 3 Units
Art History *(F)*
Class Hours: 3 lecture

This survey of the history of art of the western world, from prehistoric times to the middle ages, includes ancient, medieval, classic, early Christian and Byzantine art. Emphasis is placed on techniques in architecture, painting and sculpture as well as an examination of the key figures in art history. This course is required for art majors. *Transfer credit: CSU; UC*

ART 1B — 3 Units
Art History *(S)*
Prerequisite: Art 1A
Class Hours: 3 lecture

The history of art of the western world from the middle ages to modern times continues an emphasis on the techniques of producing art as well as examination of the key figures in art history. This course is required for art majors. *Transfer credit: CSU; UC*

ART 2 — 3 Units
Art Appreciation
Class Hours: 3 lecture

A one semester survey acquaints the student with the major periods and styles of art of the western world and develops understanding of the visual arts. *Transfer credit: CSU; UC (not recommended for Art majors)*

ART 3 — 3 Units
Modern Art Forms
Prerequisite: Art 2 or Art 1B
Class Hours: 3 lecture

Modern art forms build upon the foundation of art appreciation to investigate many of the movements, events and personalities of twentieth-century painting, sculpture and architecture. Special emphasis is placed on current developments and exhibitions. *Transfer credit: CSU; UC*

ART 4A — 3 Units
Color and Design
Class Hours: 2 lecture, 3 laboratory

This basic course provides background in the use of design principles. Students are given specific problems in line, shape, texture, form, and the principles of abstraction. Emphasis is placed on color theory and its practical applications. Weekly projects will be introduced by one hour of lecture and the results will be evaluated by a one-two hour critique. *Transfer credit: CSU; UC*

ART 4B — 3 Units
Three-Dimensional Design
Prerequisite: Art 4A
Class Hours: 2 lecture, 3 laboratory

Aspects of 3D design will be studied including the application of 2D design principles to the third dimension. Students will create form through interaction with various materials including clay, plaster, wire, found objects, papermache, and cardboard employing additive and subtractive techniques and various construction methods. *Transfer credit: CSU; UC*

ART 8A† — 3 Units
Beginning Ceramics
Class Hours: 1 lecture, 6 laboratory

Students receive practice in the techniques of elementary clay construction, including pinch, coil and slab methods, as well as an introduction to the potter's wheel, glazing and firing techniques. *Transfer credit: CSU; UC credit limitations. See counselor.*

ART 8B† — 3 Units
Beginning Ceramics
Prerequisite: Art 8A
Class Hours: 1 lecture, 6 laboratory

In addition to practicing the techniques of elementary clay construction, including pinch, coil and slab methods, students experiment in sculptural forms and in the development of glazes, decoration and firing methods. *Transfer credit: CSU; UC credit limitations. See counselor.*

ART 9A† — 3 Units
Ceramic Design
Prerequisites: Art 8B and Art 4A
Class Hours: 1 lecture, 6 laboratory

This is an advanced study in ceramics, with emphasis on exploration of clay bodies, glaze materials, glaze calculations, firing, and independent projects. The course is designed to develop growth and individual creative expression. *Transfer credit: CSU; UC credit limitations. See counselor.*

ART 9B† — 3 Units
Ceramic Design
Prerequisite: Art 9A
Class Hours: 1 lecture, 6 laboratory

Students make a more in-depth study of ceramics, with emphasis on clay bodies, glaze materials, glaze calculations, firing, and independent projects. *Transfer credit: CSU; UC credit limitations. See counselor.*

ART 12A* — 3 Units
Drawing and Composition
Class Hours: 1 lecture, 6 laboratory

Basic drawing experience stresses graphic representation of objects through a variety of media and techniques; particular emphasis is placed on the fundamental means of pictorial composition, depth perception, perspective and rendering. *Transfer credit: CSU; UC credit limitations. See counselor.*

ART 12B* — 3 Units
Drawing and Composition
Prerequisite: Art 12A
Class Hours: 1 lecture, 6 laboratory

The drawing media of pen and ink and watercolor washes are further explored. Advanced problems in rendering, concepts of illustrative drawing and concepts of analytic abstraction will also be dealt with. *Transfer credit: CSU; UC credit limitations. See counselor.*

ART 13A* — 3 Units
Life Drawing
Prerequisite: Art 12A or equivalent
Class Hours: 1 lecture, 6 laboratory

Students will learn to draw the human figure from the live model. Emphasis is placed on structure, proportion, form and composition, as well as on practice in the use of linear and tonal concepts. Many different media will be explored, including charcoal, conte crayon, pencil, pen and ink. *Transfer credit: CSU; UC credit limitations. See counselor.*

ART 13B* — 3 Units
Life Drawing
Prerequisite: Art 13A
Class Hours: 1 lecture, 6 laboratory

Exercising freedom of expression, students learn how to draw the human figure from the live model. Emphasis is placed upon structure, proportion form and composition. The student will be expected to have mastered the elements of Art 13A. *Transfer credit: CSU; UC credit limitations. See counselor.*

ART 13C/D* — 3/3 Units
Life Drawing
Prerequisites: Art 13B for 13C; 13C for 13D
Class Hours: 1 lecture, 6 laboratory

Students will draw the human figure, beginning with a skeletal structure, using many media, including charcoal, pencil, pen and ink, conte crayon and pastels. Emphasis is placed on structure, proportion, form and composition, as well as on practice in the use of linear and tonal concepts. *Transfer credit: CSU; UC credit limitations. See counselor.*

ART 14A† — 2 Units
Silkscreen-Serigraph Printmaking
Class Hours: 6 laboratory
In this introduction to and study of silkscreen as an artist's tool in printmaking, students will construct a silkscreen and learn basic techniques. Particular emphasis is given to various inks, stopouts and their solvents. Group and individual critiques are made. *Transfer credit: CSU; UC credit limitations. See counselor.*

ART 14B† — 2 Units
Advanced Silkscreen-Serigraph Printmaking
Prerequisite: Art 14A
Class Hours: 6 laboratory
Emphasis is on individual development of expression in printmaking. The student should expect to produce multi-color runs and is encouraged to develop a personal approach to silkscreen. May be taken two (2) times for credit. *Transfer credit: CSU; UC credit limitations. See counselor.*

ART 15A† — 3 Units
Beginning Printmaking
Prerequisite: Art 4A
Class Hours: 1 lecture, 6 laboratory
This introduction to and exploration of the printmaking media available to the artist includes work in relief (wood block and linocut), as well as intaglio (etching, engraving, etc.), with emphasis on relief, collograph and embossed print. *Transfer credit: CSU; UC credit limitations. See counselor.*

ART 15B† — 3 Units
Beginning Printmaking
Prerequisite: Art 15A
Class Hours: 1 lecture, 6 laboratory
An in-depth exploration of the intaglio techniques includes line etching, aquatint, sugar lift, experimental techniques. *Transfer credit: CSU; UC credit limitations. See counselor.*

ART 15C† — 3 Units
Advanced Printmaking
Prerequisite: Art 15B
Class Hours: 1 lecture, 6 laboratory
Advanced work in intaglio and relief print instruction places particular emphasis on individual solutions and in-depth exploration of experimental techniques. *Transfer credit: CSU; UC credit limitations. See counselor.*

ART 15D† — 3 Units
Advanced Printmaking
Prerequisite: Art 15C
Class Hours: 1 lecture, 6 laboratory
Advanced work in intaglio or relief printmaking places particular emphasis on individual solutions and in-depth exploration of experimental techniques. *Transfer credit: CSU; UC credit limitations. See counselor.*

ART 16A* — 3 Units
Painting
Prerequisite: Art 12B or Art 4B or equivalent
Class Hours: 1 lecture, 6 laboratory
Beginning course deals with the nature of structural and expressive values in contemporary painting. Students receive practice in the building of form, control or pictorial order, and the uses of color and light. It is designed to give beginning students a thorough background in the fundamental skills necessary to mastery of the basic techniques of painting. *Transfer credit: CSU; UC credit limitations. See counselor.*

ART 16B* — 3 Units
Painting
Prerequisite: Art 16A
Class Hours: 1 lecture, 6 laboratory
The class continues to develop the skills and concepts necessary for a solid foundation in painting. Emphasis is placed on technical competence and individual concepts. Students experiment with both traditional and newer painting materials. *Transfer credit: CSU; UC credit limitations. See counselor.*

ART 16C* — 3 Units
Advanced Painting
Prerequisite: Art 16B
Class Hours: 1 lecture, 6 laboratory
The class deals with more advanced painting concepts and techniques. The student will now attempt to build on the foundation laid in the first two semesters. The search will now be aimed at a more personal and unique form of self-expression in painting. The student will be encouraged to experiment more with subject matter that lends itself to more personal interpretations. The student teacher relationship will be on a one-to-one basis. *Transfer credit: CSU; UC credit limitations. See counselor.*

ART 16D* — 3 Units
Advanced Painting
Prerequisite: Art 16C
Class Hours: 1 lecture, 6 laboratory
The class deals with advanced painting concepts and techniques. The search will now be aimed at a more personal and unique form of self-expression in painting. *Transfer credit: CSU; UC credit limitations. See counselor.*

ART 17A* — 3 Units
Landscape Painting
Prerequisite: Art 4B or Art 12B or equivalent
Class Hours: 1 lecture, 6 laboratory
Painting from nature out of doors in various media, such as acrylics, oils, water color, and pastels. The course is designed to acquaint the student with painting skills and concepts as they apply to landscape. NOT ALL OUTDOORS. *Transfer credit: CSU; UC credit limitations. See counselor.*

ART 17B* — 3 Units
Landscape Painting
Prerequisite: Art 17A
Class Hours: 1 lecture, 6 laboratory
The course is designed to further expand the skills and concepts of painting as they apply to landscape. More emphasis will be placed on a more personal and creative approach to landscape painting. *Transfer credit: CSU; UC credit limitations. See counselor.*

ART 18A* — 3 Units
Water Color
Prerequisites: Art 4A, Art 12A or equivalent
Class Hours: 1 lecture, 6 laboratory
The course deals with a thorough understanding of the water color media. The class begins with simple water color exercises leading to more complex problems to be solved in a personal and creative way. *Transfer credit: CSU; UC credit limitations. See counselor.*

ART 18B* — 3 Units
Water Color
Prerequisite: Art 18A or equivalent
Class Hours: 1 lecture, 6 laboratory
The course deals with more advanced water color techniques. The student will experiment with the use of the multiple image in subject matter. Both landscape and still life subjects will be explored. *Transfer credit: CSU; UC credit limitations. See counselor.*

ART 18C* — 3 Units
Water Color
Prerequisite: Art 18B
Class Hours: 1 lecture, 6 laboratory
The course deals with more advanced water color techniques. The student will continue to experiment with the use of the multiple image in subject matter. Both landscape and still subjects will be explored as well as more advanced and personal areas of investigation that the student will bring to the course. *Transfer credit: CSU; UC credit limitations. See counselor.*

ART 18D* — 3 Units
Water Color
Prerequisite: Art 18C
Class Hours: 1 lecture, 6 laboratory
The course deals with more advanced water color techniques. The student will continue to experiment but will be expected to bring something new, personal, and unique to the class. The emphasis will be on the personal growth and development of the individual. *Transfer credit: CSU; UC credit limitations. See counselor.*

ART 22A/B — 1-3/1-3 Units
Independent Studies in Art
Prerequisite: A previous course in Art
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of art on an independent study basis. The project selected must be approved

by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

ART 60A-Z — 1-3 Units
Topics in Art
Prerequisites: To be determined with each Topic
Class Hours: To be determined with each Topic
This is a special series of courses each of which deals with a specific topic in Art not covered in detail in the general Art course offerings. Topics courses are announced on a semester basis in the schedule of classes. *Transfer credit: CSU; UC maximum credit 3 units.*

Topics which have been developed include:

60A — 1 Unit
Art Gallery Practices
Prerequisite: Art 4A or Photo 1B or Cm Art 2
Class Hours: 1 lecture
Art 60A offers the student an introduction to gallery practices relating to exhibition selection, design, budgeting and installation techniques.

60C/D/E — 1/2/3 Units
Printmaking Studio Practices
Prerequisite: Art 15A or 15B or 15C or 15D or equivalent
Class Hours: 3/6/9 laboratory
An in-depth exploration of intaglio, relief, pantographs or experimental techniques, geared to the individual student's needs. Work will be done under instructor's supervision.

60F — 3 Units
Glaze Chemistry
Prerequisite: A previous course in ceramics
Class Hours: 2 lecture, 3 laboratory
Introduction into glaze formulations and ceramic technology, including clays, kilns, firing, and continuation of wheel form, technique and design. May be taken four (4) times for credit.

Astronomy

Astronomers use the principles of physics and mathematics to answer questions about the fundamental nature of the universe, and about celestial bodies such as the sun, moon, planets, and stars. They may apply their knowledge to problems in navigation and space flight.

Career Opportunities

(Post bachelors degree necessary)
Astronomer
Astrophysicist

Faculty

Full-Time
Balazs Becht

Part-Time
Hal Jandorf
Dennis Leatart
Gregory Mauer
Charles Townsend
Ronald Wallingford

Counselor
John Heydenreich

Transfer Information

See Physics.

Associate in Science Degree

See Physics. Same as Physics option or Applied Physics option.

Astronomy Courses

ASTRON 1 — 3 Units
An Introduction to Astronomy
Class Hours: 3 lecture
This course is a survey of modern astronomy. The fundamental principles are presented in a nonmathematical, descriptive way. Topics include: our solar system, stars, galaxies, and the origin and evolution of the universe. *Transfer credit: CSU; UC*

ASTRON 1L — 1 Unit
An Introduction to Astronomy Laboratory
Prerequisite: Astron 1 or 2, may be taken concurrently
Class Hours: 3 laboratory
This laboratory course reinforces some of the principles and techniques studied in Astron 1 or Astron 2. The student will obtain hands-on experience with telescopes, star charts, and other devices commonly used in astronomy. Observation and measurements are made of the moon, the planets, and the stars. *Transfer credit: CSU; UC*

ASTRON 2 — 3 Units
Our Solar System: The Next Frontier
Class Hours: 3 lecture
This course includes a brief introduction to observational astronomy, followed by a review of the history of astronomy. The planets, satellites, asteroids, comets, and the sun are studied in detail. The laws of motion and the law of gravitation are discussed in connection with space travel. Space missions of the past, present and the future are reviewed and the question of colonization of other planets is explored. *Transfer credit: CSU*

ASTRON 10 — 2 Units
Observational Astronomy
Prerequisites: Astron 1, 1L or Astron 2 and Math 6 or Math 7, or equivalent college course, or a satisfactory score on the Math Placement Exam.

Class Hours: 1½ lecture, 1½ laboratory

This course is an introduction to tools, techniques, and practices of observational astronomy through lectures, laboratory exercises and observing sessions. Topics covered include: data acquisition and reduction, motions, position and brightness of celestrial objects, and use of data banks via computer access. *Transfer credit: CSU*

ASTRON 22A/B — 1-3/1-3 Units
Independent Studies in Astronomy
Prerequisite: A previous course in Astronomy
Class Hours: 1-3 tutorial

This course is for students who are interested in furthering their knowledge of astronomy on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

Public Programs

The Community Service office at Moorpark College arranges for public programs in astronomy. These monthly programs are held at Moorpark College in the Charles Temple Observatory and the adjacent 150-seat Richard Carlsberg Amphitheater. For information call (805) 378-1408.

Astronomy Hotline

For current information on astronomy news, call the 24-hour hotline (starline) (805) 529-7813 operated by the Ventura County Astronomical Society.

Behavioral Science

■ Behavioral Science
Associate in Arts Degree

Areas of Emphasis: Anthropology, Psychology, Sociology

This program is recommended not only for students wishing an A.A. degree, but also for those who intend to transfer to a four-year institution or university with a major in Behavioral Science emphasizing Anthropology, Psychology or Sociology. Transfer students should consult the transfer requirements section as additional courses are required by transfer institutions.

AREA A: Required Courses:		**Units**
Anth 2	Cultural Anthropology	3
Psych 1A	Intro to Psychology	3
Soc 1	Intro to Sociology	3

AREA B: Required Courses for Emphasis:
Anthropology Emphasis:
Any other two (2) Anthropology courses except Anth 1, 22 or 60 series courses.
Psychology Emphasis:
Any other two (2) Psychology courses except the 22 or 60 series courses.
Sociology Emphasis:
Any other two (2) Sociology courses except the 22 or 60 series courses.

AREA C: One additional required three-unit course outside the student's area of emphasis from the following courses:
Anthropology: any course other than Anth 1, 22 or 60 series courses.
Psychology: any course other than the 22 or 60 series courses.
Sociology: any course other than the 22 or 60 series courses.
Chicano Studies: 1, 2, 4.
History: 3, 4, 6, 8, 12.
Humanities: 18, 19.
Total minimum units required in major area — 18

See Degree Requirements and Transfer Information section for General Education requirements.

NOTE: Refer to individual course listings by discipline appearing in alphabetical order: Anthropology, Psychology, Sociology.

BOTANY

All Botany courses are listed with the Biology courses. Refer to that section alphabetically for full course information.

Biological Sciences

Study in biology leads to a wide range of careers upon the attainment of the baccalaureate degree. Many students prepare for entry into graduate or professional schools upon graduation; programs in dentistry, medicine, nursing, pharmacy, and similar professions depend upon emphasis in biological sciences. Careers are found in teaching, research, government service.

Career Opportunities

(Most careers require a bachelor and advanced degree)

Biological Technician
Public Health Biologist
Cytologist
Clinical Lab Technologist
Museum Curator
Health Technician
Science Librarian
Ecologist
Food and Drug Agency Trainee
Genetic Engineering Technician
Waste Management Technician
Laboratory Technician
Research Assistant
Plant Ecologist
Physical Therapist
Athletic Trainer
Food Processing Technician

Faculty

Full-Time

David Bishop
Thomas McAdam
Larry Miller
Gary Ogden
Jack Reynolds
Arthur Schechter

Part-Time

Gerald Lasnik
Christopher Royce

Counselors

Frank Bianchino
Diane Sukiennik

Transfer Information

Biology

Major requirements for upper division standing at:

California State University, Northridge:
Bio 2A, 2B; Chem 1A, 1B, 8; Math 7; Physics 10A/10AL, 10B/10BL

California State University, Sacramento:
Bio 2A, 2B; Chem 1A, 1B, 8; Physics 10A/10AL, 10B/10BL. Math proficiency at Math 7 level required. One of the following: Math 16A or 25A.

University of California, Davis:
Bio 2A, 2B, 17; Bot 1; Chem 1A, 1B, 8, 9; Math 25A, 25B, 25C; Physics 10A/10AL, 10B/10BL

University of California, Santa Barbara
Bio 2A, 2B; Chem 1A, 1B; Math 16A, 16B or 25A, 25B; Physics 20A/20AL, 20B/20BL, 20C/20CL

Predental

Moorpark College offers courses which will meet the basic educational requirements for admission to several dental schools. Students are advised to determine and to satisfy specific requirements of the dental schools to which they expect to apply by consulting the specific catalog. General requirements of dental schools are shown below.

Bio 2A, 2B; Chem 1A, 1B; plus one year of organic chemistry; Math 7; Physics 10A/10AL, 10B/10BL.

The dental schools in California are:
Loma Linda University.
University of California, Los Angeles
University of California, San Francisco
University of Pacific
University of Southern California

For complete information on individual dental schools, consult a counselor and the school catalog.

Premedical

"Pre-med" is **not** a major, but simply refers to a series of classes required for admission to medical school. A student must first obtain a bachelor's degree before going on to medical school. **Any** major is acceptable and all majors are given equal consideration by admissions committee as long as the required premedical courses have been completed. The courses generally required for admission include:

REQUIRED: Bio 2A, 2B; Chem 1A, 1B; one year organic chemistry; Physics 10A/10AL, 10B/10BL.

HIGHLY RECOMMENDED: Math 16AB or 25AB.

Because admission to medical school is highly competitive, a student must be willing and prepared to attend any approved medical school. The medical schools in California are:
Loma Linda University
Stanford University
University of California, Davis, Irvine, Los Angeles, San Diego, San Francisco
University of Southern California

For complete information on individual medical school requirements, consult a counselor and the school catalog.

Prenursing

Students wishing to apply for admission to a four-year program leading to a Bachelor of Science degree in Nursing have two options:

a. Complete the Moorpark College Associate Degree Nursing Program with eligibility for Registered Nurse Licensure (refer to Nursing Science section of this catalog) and then apply to an accepting institution for the remaining upper division nursing science requirements.
b. Satisfy the transferrable lower division science and general education requirements only and then apply to a four-year Bachelor of Science in Nursing Program.

Since each institution providing a Bachelor of Science Degree in Nursing has specific and varying requirements, it is advisable to determine the specific requirements for the institution to which it is intended that an application be made. For complete information on individual institutional requirements, consult a counselor and the school catalog.

Preveterinary

Students may meet the lower division requirements in preparation for admission to schools of veterinary science by taking specific courses at Moorpark College. It is advisable for students to learn the lower division requirements at the schools to which they intend to apply.

Major requirements for upper division standing at:

University of California, Davis:
Bio 2A, 2B; Chem 1A, 1B, 8, 9; Engl 1A, 1B; Physics 10A/10AL, 10B/10BL; Physio 1.

■ Biology

Associate in Arts Degree

This program is designed to award a designated associate degree to those students who have completed a course of specialization

in Biology. These requirements were chosen by faculty to optimize students' preparation for upper division course work for Bachelor of Arts degrees in Biology offered by four-year institutions. Since the course work in biology is sequential, students may spend less time earning an Associate in Arts Degree and/or Bachelor of Arts Degree by deferring some of the university general education requirements until their Junior and Senior years and giving priority to the requirements for a major in biology. In addition, the earning of this degree will be evidence of achievement of technical skills which may be helpful towards the seeking of immediate employment.

Preparation for the Major:

Mathematics — two years high school algebra plus trigonometry or Math 1, 3, and 7 or equivalent.

Chemistry — one year high school chemistry or Chem 12 or equivalent.

Biology students are strongly encouraged to take advantage of summer school class offerings.

Required Courses:		**Units**
Biol 2AB	General Biology	8
Chem 1AB	General Chemistry	12
Math 16AB	Applied Calculus I/II	6
Ph 10A/10AL	General Physics I/Lab	4
Ph 10B/10BL	General Physics II/Lab	4

Total minimum units required in major area — 34

Suggested Course Sequence:

First Semester		**Third Semester**	
Chem 1A	6	Biol 2A	4
		Math 16A	3
		Ph 10A/10AL	4
	6		11
Second Semester		**Fourth Semester**	
Chem 1B	6	Biol 2B	4
		Math 16B	3
		Ph 10B/10BL	4
	6		11

See Degree Requirements and Transfer Information section for General Education requirements.

■ Biology

Associate in Science Degree

This program is designed to award a designated associate degree to those students who have completed a course of specialization in Biology. These requirements were chosen by faculty to optimize students' preparation for upper division course work for Bachelor of Science degrees in Biology offered by four-year institutions. Since the course work in biology is sequential, students may spend less time earning an Associate in Science Degree and/or Bachelor of Science Degree by deferring some of the university general education requirements until their Junior and Senior years and giving priority to the requirements for a major in biology. In addition, the earning of this degree will be evidence of achievement of technical skills which may be helpful towards the seeking of immediate employment.

Preparation for the Major:

Mathematics — two years high school algebra plus trigonometry or Math 1, 3, and 7 or equivalent.

Chemistry — one year high school chemistry or Chem 12 or equivalent.

Physics — one year high school physics or Ph 12 or equivalent.

Biology students are strongly encouraged to take advantage of summer school class offerings.

Required Courses:		**Units**
Biol 2AB	General Biology	8
Chem 1AB	General Chemistry	12
Math 25AB	Calculus with Analytic Geometry I/II	10
Ph 20A/20AL	Mechanics of Solids and Fluids/Lab	4
Ph 20B/20BL	Electricity and Magnetism/Lab	4

Total minimum units required in major area — 38

Recommended Courses: Chem 8, 9; Ph 20C/20CL

Suggested Course Sequence:

First Semester		**Third Semester**	
Chem 1A	6	Biol 2A	4
		Math 25B	5
		Ph 20A/20AL	4
	6		13
Second Semester		**Fourth Semester**	
Chem 1B	6	Biol 2B	4
Math 25A	5	Ph 20B/20BL	4
	11		8

See Degree Requirements and Transfer Information section for General Education requirements.

Anatomy Courses

AN 1 — 4 Units
General Human Anatomy
Prerequisite: Biol 1 or Biol 2A or equivalent
Class Hours: 2 lecture, 6 laboratory

This is a study of the functional anatomy of human organs and organ systems with some histological studies, using non-human mammals for dissection, but with emphasis on the human structure and demonstrations on human cadavers. *Transfer credit: CSU; UC*

AN 22A/B — 1-3/1-3 Units
Independent Studies in Anatomy
Prerequisite: A previous course in Anatomy
Class Hours: 1-3 tutorial

This course is for students who are interested in furthering their knowledge of anatomy on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

Biology Courses

BIOL 1 — 4 Units
Principles of Biology
Class Hours: 3 lecture, 3 laboratory

This is introductory biology for students *not majoring* in the natural sciences. Emphasis is on basic concepts, especially biological chemistry, cell biology, genetics, evolution and ecology. Particular attention will be given to the implications of biological areas in human affairs. Students planning to major in biology or related subject matter areas should enroll in Biol 2A. **NOTE:** Biol 1 is not a prerequisite for Biol 2B. *Transfer credit: CSU; UC*

BIOL 2A — 4 Units
General Biology
Prerequisite: Chem 12 or high school chemistry
Class Hours: 3 lecture, 3 laboratory

This course is the first semester of a two-semester sequence. This course covers biological chemistry, cell structure; function and regulation; bioenergetics, classical and molecular genetics, plant and animal development, and an introduction to evolution. *Transfer credit: CSU; UC*

BIOL 2B — 4 Units
General Biology
Prerequisite: Biol 2A or equivalent college course
Class Hours: 3 lecture, 3 laboratory

This course is the second semester of a two-semester sequence. The course covers diversity and function of living systems, survey of five kingdoms; mammalian physiological processes including neural, hormonal, muscular, immune response and behavior; ecology, ecosystems, pollution and evolution. *Transfer credit: CSU; UC*

BIOL 3 — 3 Units
Marine Life and Its Environment
Class Hours: 2 lecture, 3 laboratory
This course is the study of marine life to include algae, microorganisms, and animal life. Inshore and offshore habitats will be studied. Students will visit local tidepools, beach, mudflat and fouling communities. Emphasis will be on integration of organisms within their habitat. Students will see the effect of human population on the local marine environment. The place of the ocean in our worldwide habitat will be discussed. Field trips will be required. *Transfer credit: CSU; UC*

BIOL 5 — 3 Units
Field Biology
Class Hours: 2 lecture, 3 laboratory
This course is an introduction to the ecology, taxonomy, and natural history of plant life. Lecture topics include ecosystems, community structure, energy flow, nutrient cycling, evolution, and organismic adaptations to environment. Laboratories and field trips will stress plant identification and plant-animal-environment interactions as they occur in California: geological concepts are covered as they relate to vegetational processes in nature. Field trips will be required. *Transfer credit: CSU*

BIOL 14 — 3 Units
Natural History of Ventura County
Class Hours: 2 lecture, 3 laboratory
In this study of the natural features, animals and plants of Ventura County, the local ecological communities are visited and described. Attention is given to cultivated areas, Chumash culture, Channel Islands. Human impact on the environment, and basic geological concepts are covered. Field trips will be required. *Transfer credit: CSU*

BIOL 16 — 3 Units
Human Biology
Class Hours: 3 lecture
This course explores the human species as an animal and the place of the species in the biosphere. Especially considered are population, energy and agronomy, genetics, behavior, normal human physiology, stress, nutrition, fitness, aging and death. *Transfer credit: CSU; UC*

BIOL 17 — 3 Units
Heredity, Evolution and Society
Class Hours: 3 lecture
This is an introduction to the basic principles of modern genetics and evolutionary theory with specific references to the human species. Through the study of mechanisms of human inheritance and the influence of the environment, the origin and nature of human differences will be examined. The emphasis will be upon the social, political and psychological ramifications of the biological laws governing heredity and organic evolution. These laws will be applied to analyze the world's economic, demographic, and poltical problems with emphasis on future solutions. *Transfer credit: CSU; UC*

BIOL 22A/B — 1-3/1-3 Units
Independent Studies in Biology
Prerequisite: A previous course in Biology
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of biology on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

Botany Courses

BOT 1 — 5 Units
General Botany
Class Hours: 3 lecture, 6 laboratory
This introductory study of morphology; anatomy and physiology of plants emphasizes the biological principles of physical and chemical aspects of life. Cellular organization, reproduction, heredity, ecology, plant kingdom survey, with emphasis on seed plant anatomy and physiology will also be studied. *Transfer credit: CSU; UC*

BOT 22A/B — 1-3/1-3 Units
Independent Studies in Botany
Prerequisite: A previous course in Botany
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of botany on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

Microbiology Courses

MICRO 1 — 5 Units
Principles of Microbiology
Prerequisites: Chem 12 and Biol 2A
Class Hours: 3 lecture, 6 laboratory
The major groups of microbes are reviewed and sections on microbial structure, physiology, growth, genetics and control are included. The last third of the course deals with various aspects of pathobiology and includes immunity, mechanisms of pathogenicity and a review of infectious diseases and their control. The laboratory deals with standard methods of staining and culture of microbes, the solving of an unknown and growth requirements of many bacteria. *Transfer credit: CSU; UC*

MICRO 22A/B — 1-3/1-3 Units
Independent Studies in Microbiology
Prerequisite: A previous course in Microbiology
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of microbiology on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

Physiology Courses

PHYS 1 — 5 Units
Human Physiology
Prerequisites: Chem 12 or equivalent and Biol 2A
Class Hours: 4 lecture, 3 laboratory
Students will study functions of the human organism; and basic structure as necessary to understand the physiological principle involved; laboratory experiments and/or demonstrations to illustrate basic physiological principles, techniques and instruments. *Transfer credit: CSU; UC*

PHYS 2 — 3 Units
Physiology of Nutrition
Prerequisite: NtS 1
Class Hours: 3 lecture
This course is designed to offer an introduction to the physiological and molecular aspects of nutrition as opposed to a consumer orientation. The various systems of the body will be analyzed regarding the roles of nutrition and nutrients in normal function. *Transfer credit: CSU; UC*

PHYS 22A/B — 1-3/1-3 Units
Independent Studies in Physiology
Prerequisite: A previous course in Physiology
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of physiology on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

Zoology Courses

ZOO 1 — 5 Units
General Zoology
Class Hours: 3 lecture, 6 laboratory
This is a general zoology course covering cell biology, genetics, evolution, taxonomy, physiology, behavior and ecology of animals. *Transfer credit: CSU; UC*

ZOO 22A/B — 1-3/1-3 Units
Independent Studies in Zoology
Prerequisite: A previous course in Zoology
Class Hours: 1-3 tutorial

This course is for students who are interested in furthering their knowledge of zoology on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

Business

The major in Business Administration is designed to prepare students for a wide range of careers in the world of business. The areas of specialization available include accounting, (which may include "computer information systems") finance, investments, real estate, marketing, office administration, management, production, operations management, operations research, and statistics. Computer information systems may be a separate option in the Business Administration major. See Computer Information Systems and Computer Science.

Career Opportunities

Associate Degree Level

Accounting

Bookkeeping
Junior Accountant
Payroll Clerk
Insurance Clerk
Accounts Payable Clerk

Business Management

Small Business Manager
Administrative Assistant
Assistant Manager

Marketing

Sales Representative
Market Research Assistant
Manufacturers Representative
Sales Trainee
Survey Interviewer
Buyer Trainee/Assistant
Real Estate Sales

Supervision

Production Supervisor
Field Representative
Production Planner
Material Scheduler
Retail Assistant Manager
Personnel Assistant
Line Supervisor
Office Manager

Bachelors Degree Level

Accounting (B.A./B.S. level)

Cost Accountant
Assistant Controller
Controller
Treasurer
Government Accountant
Budget Analyst
Credit Analyst
Appraiser
Tax Specialist/Accountant
City or County Auditor
Revenue Agent
Bank Examiner
Credit Counselor
Estimator
Investment Planner

Business Management (B.A./B.S. level)

Administrative Assistant
Office Manager
Administrative Specialist
Contract Specialist
Small Business Owner
Small Business Manager
Management Trainee
Supervisor
Area Manager
Store Manager
Branch Manager
Personnel Assistant

Marketing (B.A./B.S. level)

Product Planner
Advertising Assistant
Account Executive
Market Specialist
Communications Consultant
Sales Executive
Sales Management
Sales Campaign Planner
Manufacturers Representative
Sales Representative
Advertiser
Retail Merchandiser

Promotion Manager
Advertising Manager
Merchandising Manager
Package Designer
Consumer Research Analyst
Industrial Marketing Manager
Product Specialist
Media Analyst
Customer Relations Manager

Faculty

Full-Time
Donald Bowen
Gerald Fecht
Janice Feingold
Marshall Keyser
Raymond MacTague
Thomas Spraggins
James Wyman
Kathleen Young

Part-Time
N. Dina Adler
Ronald Boots
Jerry Bruton
Lody Burt
Sydney Burton
David Cihon
Peter DiGiampietro
Joseph Dion
Jack Eberts
Melvin England
Rene Folse
William Furrell
Rollyn Habeck
Carole Hagel
John Handlos
Abdelaziz Hanif
Timothy Hansen
Richard Hoffing
Thomas Kinsey
Russell Kleber
Thomas LaMantia
Joseph Martin
Carl Olson
Paul Ratzi
Harvey Richelson
Sharon Rippon
Jean Scott
Frances Sheppard
Richard Siedlecki
John Walker
Timothy Weaver

Counselors
John Heydenreich
Bud Long

Transfer Information

Business Administration

Major requirements for upper division standing at:
California State University, Northridge:
Core of course requirements* for the available options. Bus 1A, 1B, 33A; CIS 1, 3A; Econ 1, 2; Math 12 or 16A or 25A.

*Business majors who have not completed Math 12 or an equivalent course are required to take a mathematical placement test during their first semester at CSUN. They should enroll in the mathematics course in which the test places them as soon as possible.

Accounting option complete Math 12 and 16A or 25A. Management Information Systems option complete CIS 4A; CS 10/10L; Math 16A or 25A. Management Systems Analysis option complete CS 10/10L; CIS 4A or CS 18/18L.

Students preparing for Office Administration option need to demonstrate proficiency at prescribed levels in typing, shorthand and business machines. For further information consult counselor.

Consult a counselor and the CSUN catalog for requirements in sub-options under the Accounting and Office Management Systems Analysis.

See also the AS degree and certificate programs in Accounting Technician, Business Management, Marketing, Computer Information Systems.
California State University, Sacramento:
Bus 1A, 1B, 33A; Econ 1, 2; Math 14, 15.

Business Education

The curriculum in Business Education is intended primarily to prepare students for teaching in the business area. Careers in teaching in business education programs are usually found at the secondary level.

Major requirements for upper division standing at:
California State University, Northridge:
Bus 1A, 1B, 33A; CIS 1, 3A; Econ 1, 2; Math 12.

Consult a counselor and the CSUN catalog for proficiency requirements in the areas of specialization with this major.

■ Accounting Technician

Occupational

Associate in Science Degree

This program is designed to provide comprehensive training that will enable students to enter accounts clerk positions in industry and government. It is also designed to permit employed persons to gain skills leading to promotions in the accounting field.

Required Courses:		**Units**
BIS 1	Beginning Typewriting/Keyboarding I	1
BIS 8	Computerized Accounting	2
BIS 10A	Intro to the Personal Computer	.5
Bus 1A	Accounting Principles I	3
Bus 1B	Accounting Principles II	3
Bus 7	Income Tax Law	3
Bus 14	Calculating Machines	1
Bus 30	Intro to Business and Economics	3
Bus 31	Business Organization and Management	3
	or	
Bus 32	Small Business Operation	3
Bus 33A	Business Law I	3
Bus 39	Business Communications	3
CIS 1	Intro to Information Systems	3

Total minimum units required in major area — 28.5

See Degree Requirements and Transfer Information section for General Education requirements.

■ Business Management

Occupational

Associate in Science Degree

This program is designed to provide students with the job skills necessary for performance in management positions in business or industry.

Required Courses:		**Units**
BIS 1	Beginning Typewriting/Keyboarding I	1
BIS 10A	Intro to the Personal Computer	.5
Bus 30	Intro to Business and Economics	3
Bus 31	Business Organization and Management	3
	or	
Bus 32	Small Business Operation	3
Bus 33A	Business Law I	3
Bus 37	Marketing	3
Bus 39	Business Communications	3
Bus 50	Elements of Supervision	3
Bus 51	Personnel Management	3
CIS 1	Intro to Information Systems	3

Total minimum units required in major area — 25.5

Recommended Courses: Bus 3, 56; Psych 3; Soc 8

See Degree Requirements and Transfer Information section for General Education requirements.

■ Marketing
Occupational
Associate in Science Degree

This program is designed to prepare students for opportunities in marketing occupations in business and industry. A foundation in business and economic function is provided with an understanding of specialized skills common to marketing activities.

Required Courses:		Units
BIS 1	Beginning Typewriting/Keyboarding I	1
BIS 10A	Intro to the Personal Computer	.5
Bus 30	Intro to Business and Economics	3
Bus 31	Business Organization and Management	3
	or	
Bus 32	Small Business Operation	3
Bus 33A	Business Law I	3
Bus 35	Sales Techniques	3
Bus 36	Retail Merchandising	3
Bus 37	Marketing	3
Bus 38	Advertising	3
Bus 39	Business Communications	3

Total minimum units required in major area — 25.5

See Degree Requirements and Transfer Information section for General Education requirements.

■ Supervision
Occupational
Associate in Science Degree

This program is designed both for students wishing to qualify for opportunities in supervision as well as those currently employed in an industrial supervisory position. It provides assistance to management in the development of qualified supervisors for industry.

Required Courses:		Units
BIS 1	Beginning Typewriting/Keyboarding I	1
BIS 10A	Intro to the Personal Computer	.5
Bus 30	Intro to Business and Economics	3
Bus 31	Business Organization and Management	3
	or	
Bus 32	Small Business Operation	3
Bus 33A	Business Law I	3
Bus 39	Business Communications	3
Bus 50	Elements of Supervision	3
Bus 51	Personnel Management	3
Bus 54	Human Relations for Supervisors	3
Bus 56	Business and Professional Speech	3
CIS 1	Intro to Information Systems	3

Total minimum units required in major area — 28.5

Recommended Courses: Psych 3; Soc 8

See Degree Requirements and Transfer Information section for General Education requirements.

■ Accounting Technician
Certificate of Achievement

This program offers basic training in accounting for both students seeking employment and those already employed but needing skills improvement. Successful program completion should qualify individuals for beginning positions in accounting occupations.

Required Courses:		Units
BIS 1	Beginning Typewriting/Keyboarding I	1
BIS 8	Computerized Accounting	2
BIS 10A	Intro to the Personal Computer	.5
Bus 1A	Accounting Principles I	3
Bus 1B	Accounting Principles II	3
Bus 7	Income Tax Law	3
Bus 14	Calculating Machines	1
Bus 30	Intro to Business and Economics	3
Bus 31	Business Organization and Management	3
	or	
Bus 32	Small Business Operation	3
Bus 33A	Business Law I	3
Bus 39	Business Communications	3
CIS 1	Intro to Information Systems	3

Total minimum units required — 28.5

■ Business Management
Certificate of Achievement

This program offers skill training for management positions in business and industry. Individuals already employed may improve their abilities toward promotion through this curriculum.

Required Courses:		Units
BIS 1	Beginning Typewriting/Keyboarding I	1
BIS 10A	Intro to the Personal Computer	.5
Bus 30	Intro to Business and Economics	3
Bus 31	Business Organization and Management	3
	or	
Bus 32	Small Business Operation	3
Bus 33A	Business Law I	3
Bus 37	Marketing	3
Bus 39	Business Communications	3
Bus 50	Elements of Supervision	3
Bus 51	Personnel Management	3
CIS 1	Intro to Information Systems	3

Total minimum units required — 25.5

■ Marketing
Certificate of Achievement

This program offers a basic education for students desiring to enter marketing positions or for those individuals already employed and seeking improvement of sales related skills.

Required Courses:		Units
BIS 1	Beginning Typewriting/Keyboarding I	1
BIS 10A	Intro to the Personal Computer	.5
Bus 30	Intro to Business and Economics	3
Bus 31	Business Organization and Management	3
	or	
Bus 32	Small Business Operation	3
Bus 33A	Business Law I	3
Bus 35	Sales Techniques	3
Bus 36	Retail Merchandising	3
Bus 37	Marketing	3
Bus 38	Advertising	3
Bus 39	Business Communications	3

Total minimum units required — 25.5

■ Supervision
Certificate of Achievement

This program is planned for students seeking to qualify for supervisory positions as well as those already employed who wish to improve their abilities.

Required Courses:		Units
BIS 1	Beginning Typewriting/Keyboarding I	1
BIS 10A	Intro to the Personal Computer	.5
Bus 30	Intro to Business and Economics	3
Bus 31	Business Organization and Management	3
	or	
Bus 32	Small Business Operation	3
Bus 33A	Business Law I	3
Bus 39	Business Communications	3
Bus 50	Elements of Supervision	3

Bus 51	Personnel Management	3
Bus 54	Human Relations for Supervisors	3
Bus 56	Business and Professional Speech	3
CIS 1	Intro to Information Systems	3

Total minimum units required — 28.5

Business Courses

BUS 1A — 3 Units
Accounting Principles I
Prerequisite: None (Bus 3 recommended)
Class Hours: 3 lecture
Basic principles of accounting are studied as a foundation for advanced study, and as a vocational skill. Areas of emphasis in the course are the accounting cycle, internal control; methods of accounting for assets, liabilities, expenses, revenues, owner's equity (sole proprietorships, partnerships and corporations. *Transfer credit: CSU; UC. CAN: BUS 2*

BUS 1B — 3 Units
Accounting Principles II
Prerequisite: Bus 1A
Class Hours: 3 lecture
Basic principles of accounting are studied as a foundation for advanced study; and as a vocational skill. Areas of emphasis in the course are accounting principles for partnerships and corporations. Other topics include manufacturing enterprises, cost accounting, department and branch accounting, accounting data for management uses, financial statement analysis, statement of changes in financial position, and investments. *Transfer credit: CSU; UC. CAN: BUS 4*

BUS 3 — 3 Units
Preparation for Accounting
Class Hours: 3 lecture
This course covers the fundamentals of double-entry bookkeeping theory and application; the bookkeeping cycle and its application to sole proprietorship in trading concerns and service enterprises, financial statements; accounting for notes and securities; banking and petty cash transactions. Not open to students who have passed Bus 1A.

BUS 4 — 3 Units
Business Mathematics
Class Hours: 3 lecture
This review of fundamental arithmetic and algebraic processes, with application to business problems, includes fractions, decimals, skills in areas of mark-up, discounts, interest, installment debt and other business practices.

BUS 7 — 3 Units
Income Tax Law
Class Hours: 3 lecture
This course is designed to help students to understand the federal and California principles of income tax law as they relate to individual income taxes and for sole proprietorships. The preparation of federal and state income tax forms will be covered. *Transfer credit: CSU*

BUS 14 — 1 Unit
Calculating Machines
Class Hours: 2 lecture/laboratory
Skill in the operation of the 10-key adding machine is developed by the "touch" method. The course includes practical business problems that can be solved on most office calculators. *Transfer credit: CSU*

BUS 22A/B — 1-3/1-3 Units
Independent Studies in Business
Prerequisite: A previous course in Business
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of business on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU*

BUS 28 — 3 Units
Business English
Class Hours: 3 lecture
Competency in the fundamentals and mechanics of business English usage is developed. Study includes grammar, sentence structure, punctuation, proofreading and written expression. Students are provided a background to write business letters and business reports. *Transfer credit: CSU*

BUS 30 — 3 Units
Introduction to Business and Economics
Class Hours: 3 lecture
This course presents basic concepts and functions of business and economics and the application of economic thinking to the operation and evolution of business. It also explores business organization and finance, demand and supply, money and banking, business decision making, and inflation. Emphasis is placed on the practical use of business and economic understanding. (co-numbered Econ 30) *Transfer credit: CSU*

BUS 31 — 3 Units
Business Organization and Management
Prerequisite: Bus 30
Class Hours: 3 lecture
Instruction focuses upon the manager's responsibility for planning, organizing, directing, controlling and coordinating, including basic functions of an organization and responsibility for carrying out objectives in accordance with the organization's plan. *Transfer credit: CSU*

BUS 32 — 3 Units
Small Business Operation
Prerequisite: Bus 30
Class Hours: 3 lecture
Students learn how to establish and operate a small business. Topics include planning, financing, staffing, marketing, site selection, budgeting and record keeping. *Transfer credit: CSU*

BUS 33A — 3 Units
Business Law I
Class Hours: 3 lecture
This course deals with the fundamental principles of law pertaining to business transactions, including origins of the legal systems and present-day court systems and procedures. Topics covered include law of contracts, sales, real and personal property, bailments and consumer protection. *Transfer credit: CSU; UC. CAN: BUS 8*

BUS 33B — 3 Units
Business Law II
Prerequisite: Bus 33A
Class Hours: 3 lecture
This course covers the principles of law as it applies to agencies, negotiable instruments, corporations, partnerships, business transactions, trusts, wills, and insurance. Also covered is the interrelationship between the government and business entities. *Transfer credit: CSU; UC*

BUS 35 — 3 Units
Sales Techniques
Prerequisite: Bus 30
Class Hours: 3 lecture
This course covers the fundamental principles of personal selling. Emphasis is placed on sales techniques, sales personality, sales planning, securing prospects, counseling buyers, handling objections, public relations and business ethics. Students will participate in the planning and presentation of actual sales demonstrations. *Transfer credit: CSU*

BUS 36 — 3 Units
Retail Merchandising
Prerequisite: Bus 30
Class Hours: 3 lecture
Management and merchandising activities in small and large retail operations are presented from the standpoint of the retail manager or owner. The course includes topics such as business plan, budgeting, buying behaviors, site selection, hiring, competition, pricing, management techniques, marketing, merchandising and selling. *Transfer credit: CSU*

BUS 37 — 3 Units
Marketing
Prerequisite: Bus 30
Class Hours: 3 lecture
A review of marketing from production to consumer, this course includes such topics as market research, marketing strategy, product development, environmental constraints, pricing, promotion and selection of appropriate channels of distribution. *Transfer credit: CSU*

BUS 38 — 3 Units
Advertising
Prerequisite: Bus 30
Class Hours: 3 lecture
Students examine the role of advertising in the marketing programs in business and industry. Topics include consumer analysis, ad media, budgeting, market research, layout, copy-writing, typography, advertising agencies and opportunities in advertising. *Transfer credit: CSU*

BUS 39 — 3 Units
Business Communications
Class Hours: 3 lecture
This practical course helps students develop communication skills through business correspondence. It provides training in writing various types of letters commonly used in business such as inquiries, sales, collections, credit, customer relations, and employment appropriation techniques; reviews communication theory, human relations motivational effects of correspondence; develops further skills in listening and speaking. *Transfer credit: CSU*

BUS 41 — 3 Units
Women and the Law
Class Hours: 3 lecture
An in-depth study of various areas of law affecting the past and current legal status of women. Included in the study are topics of employment, property rights, credit opportunity, education, health issues, Equal Pay Act, and Affirmative Action. State and federal statutes and case laws are analyzed. *Transfer credit: CSU*

BUS 49A-D — 1-4 Units
Cooperative Work Experience — Business★
Prerequisite: Placement at a work station
Class Hours: 5-20 employment, 1 by arrangement
Students employed in a field related to Business will design a learning contract in conjunction with their employer that will involve expanded responsibilities and/or the opportunity to learn new job experiences beyond those required in the existing job duties. Direct coordination with the employer in question will be a part of this learning experience.

BUS 50 — 3 Units
Elements of Supervision
Class Hours: 3 lecture
This course covers the responsibilities of a supervisor. Topics covered are organization, duties and responsibilities, human relations, grievances, training, rating, and promotion. *Transfer credit: CSU*

BUS 51 — 3 Units
Personnel Management
Class Hours: 3 lecture
Personnel management is studied as a staff function in the process of manpower administration in the organization. The course includes such topics as policies and methods of obtaining and developing an efficient work force, including manpower planning, recruitment, selection, placement, training, management, development, performance, evaluation, compensation practices, safety, benefits, and administration. *Transfer credit: CSU*

BUS 54 — 3 Units
Human Relations for Supervisors
Prerequisite: Bus 50 or equivalent
Class Hours: 3 lecture
Designed to help the supervisor improve techniques of dealing with others, this course emphasizes understanding human behavior, individualizing contacts with subordinates and applying management principles to interpersonal relationships. *Transfer credit: CSU*

BUS 56 — 3 Units
Business and Professional Speech
Class Hours: 3 lecture
Designed to hone the speech skills of business and industrial personnel in leadership positions, this course covers topics as presentation techniques, group and meeting dynamics, argumentation and persuasion, and structure content and organizations. Individual attention will be given to the needs and interests of the student. (co-numbered Spch 56) *Transfer credit: CSU*

BUS 60A-Z — 1-3 Units
Topics in Business
Prerequisites: To be determined with each Topic
Class Hours: To be determined with each Topic
This is a special series of courses each of which deals with a specific topic in Business not covered in detail in the general Business course offerings. Topics courses are announced on a semester basis in the schedule of classes.

BUS 89A-Z — ½-3 Units
Institutes in Business★
Class Hours: Variable
This is a series of special lectures and discussions on selected topics to be chosen as demand and opportunities arise. These will be of great interest to the business/economics student.

Business Information Systems

Instruction is provided for those interested in office occupations. Emphasis is placed on state-of-the-art automated office applications leading to skill attainment needed in today's modern office environment.

Career Opportunities

A.S. Level

Office Manager
Word Processor
Office Clerk
Administrative Aide
Data Entry Clerk
Receptionist
Data Entry Operator

Faculty

Full-Time

Shay Collier
Marjorie Corbell
Louis Wolff
Kathleen Young

Part-Time

Stephen Abrams
Lana Antillon
Joan Cantrell
Jan Cobian
Maria Ellis
Mar Jean Lewis
Delores Moon
Manfred Schweda
Kathleen Thomas
Julie Tormey

Counselors

John Heydenreich
Bud Long

Special Note: Many of the BIS courses that follow are applicable toward the Computer Information Systems Certificate of Achievement and Associate in Science Degree programs.

Business Information Systems Courses

BIS 1 — 1 Unit
Beginning Typewriting/Keyboarding I
Class Hours: 6 laboratory for 8 weeks
This course is for the student who has never had a typing course, or who prefers to start at the very beginning. Instruction includes mastery of the alphabetic/numeric keyboard, fundamental operation of the typewriter, building typing speed and accuracy.

BIS 2 — 1 Unit
Beginning Typewriting/Keyboarding II
Prerequisites: BIS 1 or equivalent. Ability to type 20 wpm.
Class Hours: 6 laboratory for 8 weeks
This course is for the student who has a basic knowledge of the alphabetic keys. Instruction includes centering, figure and symbol key reaches, as well as speed building and accuracy development.

BIS 3 — 1 Unit
Typewriting: Speedbuilding
Prerequisites: Knowledge of keyboard and ability to type 35 wpm.
Class Hours: 6 laboratory for 8 weeks
This course is designed for the student who has the ability to type at least 35 wpm accurately and the desire to work on speed and accuracy. The course consists of a series of timings and drills designed to build speed and improve accuracy. May be taken two (2) times for credit.

BIS 4 — 1 Unit
Data Entry
Prerequisites: BIS 1 (35 wpm typing speed); BIS 10A
Class Hours: 8 lecture, 24 laboratory total
This course prepares the student for an entry-level position in data entry. It provides familiarization and practive in entering data for a typical micro computer database application with an on-line computer text editor.

BIS 8 — 2 Units
Computerized Accounting
Prerequisites: Bus 1A; BIS 10A
Class Hours: 1 lecture, 3 laboratory
Basic principles of accounting are studied and related to computerized accounting. Students become acquainted with the use of microcomputers in the field of accounting. Areas of emphasis are computerized general ledger, depreciation, accounts receivable, accounts payable, payroll and financial statements.

BIS 9 — ½ Unit
Microcomputer Applications in Business
Prerequisite: BIS 10A
Class Hours: 24 laboratory total
Students will gain experience in operation of microcomputers in business applications in accounting, management, and general business. Software programs will be selected in accordance with class assignments or student interest. Scheduling is self-paced and class may be entered at any time during the semester. May be taken four (4) times for credit.

BIS 10A — ½ Unit
Introduction to the Personal Computer
Class Hours: 4 lecture, 12 laboratory total
This course is an introduction to the IBM Personal Computer hardware and operating system. Covered will be hardware components, power-up sequence, insertion and removal of diskettes, use of operating system commands, use of common system utilities, and the loading of prepackaged applications.

BIS 10B — 1½ Units
Advanced DOS Functions
Prerequisite: BIS 10A
Class Hours: 12 lecture, 36 laboratory total
An in-depth study of the advanced features of MS-DOS. Adds to the essential basics from BIS 10A; explores inner workings of DOS nucleas; more on subdirectories; customizing DOS; file management; backup and recovery. Explores DOS version differences.

BIS 11A — 1 Unit
WordStar I
Prerequisites: BIS 10A; knowledge of the keyboard (May be taken concurrently)
Class Hours: 8 lecture, 24 laboratory total
This is an introduction to one of the most popular word processing software programs in use today. This course will provide basic editing instructions and is appropriate for the non-major student. Taught on IBM or compatible computers.

BIS 11B — 1 Unit
WordStar II
Prerequisites: BIS 10A; knowledge of the keyboard; BIS 11A
Class Hours: 8 lecture, 24 laboratory total
This course is a continuation of WordStar I, including search and replace, block moves, and columns. Class is taught on IBM or compatible computers.

BIS 12A— 1 Unit
MultiMate I
Prerequisites: BIS 10A or concurrent enrollment, knowledge of the keyboard
Class Hours: 1 lecture, 3 laboratory for 8 weeks
This is an introduction to a popular word processing software program. Course provides basic editing instructions and is appropriate for the non-major. Taught on IBM or compatible computers.

BIS 12B — 1 Unit
MultiMate II
Prerequisites: BIS 10A or concurrent enrollment; knowledge of the keyboard; BIS 12A
Class Hours: 1 lecture, 3 laboratory for 8 weeks
This is a continuation of MultiMate I and will include search and replace, block moves, and SPELL CHECK. Class is taught on IBM or compatible computers.

BIS 13A — 1 Unit
Lotus 1-2-3 I
Prerequisites: BIS 10A; knowledge of the keyboard

Class Hours: 8 lecture, 24 laboratory total

Introduction to the spreadsheet aspect of this program will be studied. The course is appropriate for the non-major student. Taught on IBM or compatible computers. No credit for this course if taken after BIS 18.

BIS 13B — 1 Unit
Lotus 1-2-3 II
Prerequisites: BIS 10A; knowledge of the keyboard; BIS 13A
Class Hours: 8 lecture, 24 laboratory total

This is a continuation of Lotus 1-2-3 I covering graph creation and data base operations. Course is taught on IBM or compatible computers. No credit for this course if taken after BIS 18.

BIS 14A — ½ Unit
Introduction to Database III+
Prerequisite: BIS 10A
Class Hours: 4 lecture, 12 laboratory total

Introduction to the microcomputer database application program such as dBASE III+. Introductory lecture, intensive computer assisted instruction, practice lessons, practical use of the processor to generate a formal database and to prepare reports using the data therein.

BIS 14B — 1½ Units
Programming dBASE III+
Prerequisites: BIS 14A and CIS 2
Class Hours: 12 lecture, 36 laboratory total

Advanced course for those who need more elaborate data manipulation, calculations, logical operations than can be accomplished by making requests via query language. Includes error detection, menu driven programs, formatting screens, using subroutines, dBASE III+ advanced features.

BIS 15A — 1 Unit
WordPerfect I
Prerequisites: BIS 10A or concurrent enrollment and knowledge of the keyboard
Class Hours: 1 lecture, 3 laboratory for 8 weeks

This is an introduction to this widely-used word processing program. The course covers document creation, text enhancement, block functions, windows, Speller, and Thesaurus.

BIS 15B — 1 Unit
WordPerfect II
Prerequisite: BIS 15A
Class Hours: 1 lecture, 3 laboratory for 8 weeks

This is a continuation of WordPerfect I, including newspaper-style columns, printing mailing labels, using Math, and macros.

BIS 16 — 2 Units
BASIC for the PC★
Prerequisites: BIS 10A/PC-DOS background
Class Hours: 1½ lecture, 1½ laboratory

This is an introduction to BASIC language (MicroSoft) as used on the PC. Includes typical mathematical problems, logic problems, simple numeric/random number games, elementary business problems. Intended for home PC user; not for CIS majors. (co-numbered CIS 16)

BIS 17 — 2 Units
Microcomputer Literacy (TV)
Class Hours: 4 lecture/laboratory

This course describes the functions and major applications of the microcomputer. A survey course with hands-on experience using a word processor, spreadsheet, and database application. (co-numbered CIS 17)

BIS 18 — 3 Units
Microcomputer Applications: Lotus 1-2-3
Prerequisites: BIS 10A; knowledge of the keyboard
Class Hours: 2 lecture, 3 laboratory

This course is an in-depth look at Lotus 1-2-3. Multiple spreadsheet operations will be discussed, as well as graphics, database applications, and Lotus macros.

BIS 22A/B — 1-3/1-3 Units
Independent Studies in Business Information Systems
Prerequisite: A previous course in Business Information Systems
Class Hours: 1-3 tutorial

This course is for students who are interested in furthering their knowledge of business information systems on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units.

BIS 49A-D — 1-4 Units
Cooperative Work Experience — Business Information Systems★
Prerequisite: Placement at a work station
Class Hours: 5-20 employment, 1 by arrangement

Students employed in a field related to Business Information Systems will design a learning contract in conjunction with their employer that will involve expanded responsibilities and/or the opportunity to learn new job experiences beyond those required in the existing job duties. Direct coordination with the employer in question will be a part of this learning experience.

Chemistry

A wide range of opportunities awaits the chemist in business, industry, government, and in the field of education. Approximately three-fourths of all chemists are employed by private industry in such fields as petroleum, primary metals, electrical equipment, aerospace, paper, food, and rubber.

Career Opportunities

B.S. Level

(Most careers require bachelors or graduate degree)

Chemist
Research Assistant
Chemical Analyst
Laboratory Technician
Science Writer
Genetic Engineering Technician
Restoration Technician, Museum
Food and Drug Agency Trainee
Sanitatian
Research Scientist
Biochemist
Art Restoration Specialist
Patent Research
Science Abstractor
Pharmacy Assistant

Faculty

Full-Time

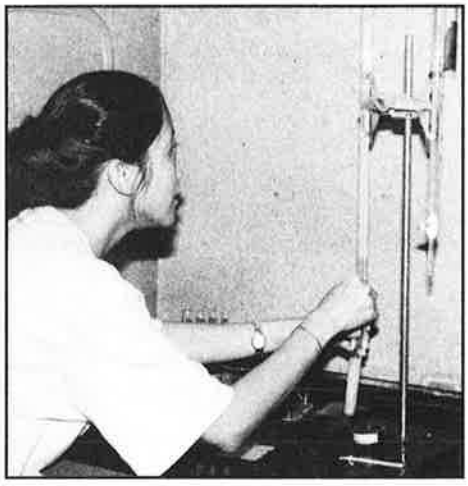
Eugene Berg
Richard Kurtik
Robert Miller
David Murphy
Arthur Schechter

Part-Time

Hyla Acheson
Sue Eggling

Counselor

Diane Sukiennik



Transfer Information

Major requirements for upper division standing at:

California State University, Northridge:

(BA): Chem 1A, 1B; Math 16A, 16B; Physics 10A/10AL, 10B/10BL.
Biochemistry Option: Add Biol 2A, 2B.
(BS): Chem 1A, 1B; Math 25A, 25B, 25C, 35; Physics 20A/20AL, 20B/20BL, 20C/20CL.

California State University, Sacramento:

Chem 1A, 1B; Math 25A, 25B, 25C; Physics 10A, B with Labs or 20A, B, C with Labs.

■ Chemistry

Associate in Arts Degree

This program is designed to award a designated associate degree to those students who have completed a course of specialization in Chemistry. These requirements were chosen by faculty to optimize students' preparation for upper division course work for Bachelor of Arts degrees in Chemistry offered by four-year institutions. Since the course work in chemistry is sequential, students may spend less time earning an Associate in Arts Degree and/or Bachelor of Arts Degree by deferring some of the university general education requirements until their Junior and Senior years and giving priority to the requirements for a major in chemistry. In addition, the earning of this degree will be evidence of achievement of technical skills which may be helpful towards the seeking of immediate employment.

Preparation for the Major:

Mathematics — two years high school algebra plus trigonometry or Math 1, 3, and 7 or equivalent.

Chemistry — one year high school chemistry or Chem 12 or equivalent.

Chemistry students are strongly encouraged to take advantage of summer school class offerings.

Required Courses:		**Units**
Chem 1A	General Chemistry	6
Chem 1B	General Chemistry	6
Chem 8	Elementary Organic Chemistry	4
Chem 9	Organic Chemistry Lab	2
Math 16A	Applied Calculus I	3
Math 16B	Applied Calculus II	3
Ph 10A/10AL	General Physics I/Lab	4
Ph 10B/10BL	General Physics II/Lab	4

Total minimum units required in major area — 32

Suggested Course Sequence:

First Semester		**Third Semester**	
Chem 1A	6	Math 16A	3
	6	Ph 10A/10AL	4
			7
Second Semester		**Fourth Semester**	
Chem 1B	6	Chem 8	4
	6	Chem 9	2
		Math 16B	3
		Ph 10B/10BL	4
			13

See Degree Requirements and Transfer Information section for General Education requirements.

■ Chemistry

Associate in Science Degree

This program is designed to award a designated associate degree to those students who have completed a course of specialization in Chemistry. These requirements were chosen by faculty to optimize students' preparation for upper division course work for Bachelor of Science degrees in Chemistry offered by four-year institutions. Since the course work in chemistry is sequential, students may spend less time earning an Associate in Science Degree and/or Bachelor of Science Degree by deferring some of the university general education requirements until their Junior and Senior years and giving priority to the requirements for a major in chemistry. In addition, the earning of this degree will be evidence of achievement of technical skills which may be helpful towards the seeking of immediate employment.

Preparation for the Major:

Mathematics — two years high school algebra plus trigonometry or Math 1, 3, and 7 or equivalent.

Chemistry — one year high school chemistry or Chem 12 or equivalent.

Physics — one year high school physics or Ph 12 or equivalent.

Chemistry students are strongly encouraged to take advantage of summer school class offerings.

Required Courses:		**Units**
Chem 1A	General Chemistry	6
Chem 1B	General Chemistry	6
Chem 8	Elementary Organic Chemistry	4
Chem 9	Organic Chemistry Lab	2
Math 25A	Calculus/w Analytic Geometry I	5
Math 25B	Calculus/w Analytic Geometry II	5
Math 25C	Calculus/w Analytic Geometry III	5

Ph 20A/20AL	Mechanics of Solids and Fluids/Lab	4
Ph 20B/20BL	Electricity and Magnetism/Lab	4
Ph 20C/20CL	Wave Motion, Heat, Optics and Modern Physics/Lab	4

Total minimum units required in major area — 45

Recommended Course: Math 35

Suggested Course Sequence:

First Semester		Third Semester	
Chem 1A	6	Math 25C	5
Math 25A	5	Ph 20B/20BL	4
	11		9
Second Semester		**Fourth Semester**	
Chem 1B	6	Chem 8	4
Math 25B	5	Chem 9	2
Ph 20A/20AL	4	Ph 20C/20CL	4
	15		10

See Degree Requirements and Transfer Information section for General Education requirements.

Chemistry Courses

CHEM 1A — 6 Units
General Chemistry

Prerequisites: Chem 12 or equivalent college course or satisfactory score on Chemistry Placement Exam and Math 3 or equivalent college course or eligibility for Math 5 or higher on the Math Placement Exam.
Class Hours: 5 lecture, 3 laboratory

LECTURE: Topics covered include: atomic theory and stoichiometry; thermochemistry; quantum theory and electronic structure of atoms; chemical bonding and molecular structure; physical behavior of gases; states of matter and phase equilibria; solutions; titrations and qualitative analysis.

LABORATORY: Use of analytical balance; spectroscopy; Gravimetric and volumetric analysis; stoichiometry; thermochemistry; solutions; titrations; qualitative analysis; colligative properties and distillations. *Transfer credit: CSU; UC. CAN: CHEM 2*

CHEM 1B — 6 Units
General Chemistry

Prerequisite: Chem 1A and Math 5 or equivalent college course, or a satisfactory score on the Math Placement Exam.
Class Hours: 5 lecture, 3 laboratory

LECTURE: Topics covered include: phase equilibria; equilibria in gases and solutions; thermodynamics; chemical kinetics; precipitation reactions; acids and bases; complex ions; oxidation-reduction and electrochemistry; quantitative and qualitative analysis, and nuclear chemistry.

LABORATORY: Equilibria; thermodynamics; chemical kinetics; electrochemistry; titrations and qualitative analysis. *Transfer credit: CSU; UC. CAN: CHEM 4*

CHEM 8 — 4 Units
Elementary Organic Chemistry

Prerequisite: Chem 1B (may be taken concurrently)
Class Hours: 4 lecture

A study of the properties and reactions of carbon compounds with emphasis on structure and mechanism. Topics covered include: synthesis and characterization of organic compounds; nomenclature; spectroscopic analysis; biochemistry. *Transfer credit: CSU; UC*

CHEM 9 — 2 Units
Organic Chemistry Lab

Prerequisite: Chem 8 (may be taken concurrently)
Class Hours: 6 laboratory

This lecture-laboratory course deals with the synthesis, characterization and spectroscopic analysis of organic compounds. *Transfer credit: CSU; UC*

CHEM 12 — 4 Units
Introductory Chemistry I

Prerequisite: Math 1 or equivalent college course, or eligibility for Math 3 or higher on the Math Placement Exam.
Class Hours: 3 lecture, 3 laboratory

This course is designed for non-science majors and emphasizes principles of inorganic chemistry, structure of atoms and molecules, periodic table and chemical calculations. It fulfills prerequisite requirements for Chem 1A. *Transfer credit: CSU; UC credit limitations. No credit at UC if taken after Chem 1A/1B. See counselor.*

CHEM 13 — 4 Units
Introductory Chemistry II

Prerequisite: Chem 12 or one year of high school chemistry.
Class Hours: 3 lecture, 3 laboratory

This is an introduction to the fundamental concepts of organic chemistry and biochemistry with applications to agriculture, industry, earth science, and nutrition. Electrochemistry and equilibria will also be discussed. *Transfer credit: CSU; UC credit limitations. No credit at UC if taken after Chem 1A/1B. See counselor.*

CHEM 22A/B — 1-3/1-3 Units
Independent Studies in Chemistry

Prerequisite: A previous course in Chemistry
Class Hours: 1-3 tutorial

This course is for students who are interested in furthering their knowledge of chemistry on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

Chicano Studies

The Chicano Studies curriculum examines the ethnic experience in America from historical, social, cultural, and political perspectives. Study of the Chicano enables the student to better understand the rich heritage of the American Southwest as well as providing a baseline for further study of other ethnic groups.

Career Opportunities

B.A. Level

Diplomat Corps
Foreign Office
Foreign Correspondent
News Analyst
Writer
Import-Export Trade
Social Worker
Travel Guide
Translator
Company Representative
Advertising
Community Development

Faculty

Full-Time
Frank Fierro

Counselor
Bud Long

Transfer Information

Successful completion of the Chicano Studies program prepares students for work in the Barrio, education, politics, social services, and various other positions in government service and private industry.

Major requirements for upper division standing at:

California State University, Northridge:
Ch St 2 (or Anth 4)

University of California, Santa Barbara:
Ch St 1, 2, 4; Spn 4

Chicano Studies Courses

CH ST 1 — 3 Units
The Chicano in Contemporary Society
Class Hours: 3 lecture

This course is an analysis of the socio-economic and political problems confronting the Chicano with emphasis on proposed solutions. Similarities to other ethnic groups will be incorporated in this analysis. Particular focus is placed on the effects that social institutions have had on the ethnic communities of the Southwest. (co-numbered Soc 6) *Transfer credit: CSU; UC*

CH ST 2 — 3 Units
Chicano Culture
Class Hours: 3 lecture

This study of the social and cultural heritage of the Chicano emphasizes middle American civilizations, and includes the cultural evolution of the Chicano, from the Spanish conquest to present-day America. The course is concerned with the contributions made by the Chicanos to the United States culture, especially in the fine arts, literature, and orally-transmitted heritage. (co-numbered Anth 4) *Transfer credit: CSU; UC*

CH ST 4 — 3 Units
History of the Southwest
Class Hours: 3 lecture

This course surveys the history of the Chicano from pre-Columbian period to the present. Emphasis will be on the Mexican settlement of the American Southwest and the contributions of the Chicano to the development of the five Southwestern states (Arizona, California, Colorado, New Mexico, and Texas) in the context of American History. (co-numbered Hist 4) *Transfer credit: CSU; UC*

CH ST 8 — 3 Units
Political Patterns in the U.S.
Class Hours: 3 lecture

Fundamental principles of U.S. Government: federal, state and local are studied in theory and practice. Emphasis is on state and local government of the Southwest, with particuliar attention given to the legislative process, political parties, pressure groups, and implementation of policy at county and municipal levels. Special emphasis is placed on the participation of the Mexican-American in our political institutions. (co-numbered Pol Sc 8) *Transfer credit: CSU; UC*

CH ST 22A/B — 1-3/1-3 Units
Independent Studies — The Chicano
Prerequisite: A previous course in Chicano Studies
Class Hours: 1-3 tutorial

This course is for students who are interested in furthering their knowledge of Chicano studies on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

Child Development

The Child Development Program prepares students for completion of the certificate in Nursery Education or an AS Degree in Child Development. Students develop subject matter, knowledge, and skills needed for success in occupational areas as well as transfer to a college or university. This program will be of interest to students who wish to seek work in any of a variety of positions such as teacher or administrator in preschool settings, playground and recreation supervisors, parent educators, and other positions involving work with children and their families.

Career Opportunities

Preschool Teacher
Teacher's Aide
Parent Educator
Residential Care Worker
Preschool Director
Camp Counselor
Children's Book Author
Children's Television Producer
Children's Toy Designer
Children's Toy Marketer

Faculty

Full-Time

Linda Cravens

Part-Time

Rosalie Bergman
Phyllis Click
Dianne Cohn
Dolores Deutsch
Joan Fasken
Bonnie Hoult
Kathleen Reiter
Christabel Schadt
Maria Smith

Counselors

Donna Allyn
Rick Cardoni

Transfer Information

Major requirements for upper division standing at:

California State University, Northridge:

Math 15; Physio 1 or Psych 1B.

Up to 12 units of approved electives may apply in the major. See counselor.

California State University, Sacramento:

Bio 1 or Bio 16; CD 30 or Psych 4 or Psych 7.

See also the Liberal Studies transfer major.

■ Child Development
Occupational
Associate in Science Degree

This program offers comprehensive training of teachers and aides for work with young children in Nursery School settings. Career opportunities for both full and part-time work are increasing and are available to both men and women.

Required Courses:		**Units**
CD 30	Human Development	3
CD 38	Observation in the Nursery School	3
CD 39A	Supervised Participation in the Nursery School	3
CD 39B	Supervised Field Experience in the Nursery School	3
CD 40	Child, Family and Community	3
CD 41	Nursery School Programs	3
CD 43	Parent and Teacher Communications and Conferencing	3
HS 5	Safety and First Aid	2
Required Additional Courses:		
Select six (6) units from the following courses:		
CD 51	Music in the Nursery School	3
CD 52	Art in the Nursery School	3
CD 53	Science in the Nursery School	3
CD 54	Literature in the Nursery School	3
Select one (1) of the following courses:		
Psych 1A	Intro to Psychology	3
Psych 3	Psychology of Interpersonal Relationships	3
Total minimum units required in major area — 32		

See Degree Requirements and Transfer Information section for General Education requirements.

■ Nursery Education
Certificate of Achievement

This program offers training to students interested in working with young children in Nursery School settings.

Required Courses:		**Units**
CD 30	Human Development	3
CD 38	Observation in the Nursery School	3
CD 39A	Supervised Participation in the Nursery School	3
CD 39B	Supervised Field Experience in the Nursery School	3
CD 40	Child, Family and Community	3
CD 41	Nursery School Programs	3
CD 43	Parent and Teacher Communications and Conferencing	3
General Education Courses*		6
Required Additional Courses:		
Select one (1) of the following courses:		
Psych 1A	Intro to Psychology	3
Psych 3	Psychology of Interpersonal Relationships	3
Total minimum units required — 30		

Courses are to be selected from those that meet the General Education requirements for the Associate Degree.

■ School Age Child Care
Certificate of Completion

Primary Employability Skills to be Developed:

Students completing this certificate will obtain the necessary skills required to work successfully in programs held in before-and-after school centers.

Required Courses:		**Units**
CD 30	Human Development	3
CD 40	Child, Family and Community	3
CD 45	Programs for the School Age Child	3
HS 5	Safety and First Aid	2
Psych 3	Psychology of Interpersonal Relationships	3
Total minimum units required — 14		

Child Development Courses

CD 22A/B — 1-3/1-3 Units
Independent Studies in Child Development
Prerequisite: A previous course in Child Development
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of child development on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU*

CD 30 — 3 Units
Human Development (DS1) *(F/S)*
Class Hours: 3 lecture
This course is a chronological survey of human development from prenatal to adolescence. Cognitive, social, physical and emotional development is investigated. Application of research and principles of growth to resolution of developmental tasks at each age level is studied. *Transfer credit: CSU; UC credit limitations.*

CD 31 — 3 Units
Infant Studies (DS4) *(S)*
Class Hours: 3 lecture
This course covers the requirements for infant-toddler care based on developmental needs of the child. Planning curriculum, designing an environment and observation of existing programs are included.

CD 38 — 3 Units
Observation in the Nursery School *(F/S)*
Class Hours: 2 lecture, 3 laboratory
This course is an introduction to observation techniques in a school setting. Students will observe children's activities, classroom materials and environment and teacher planning and interaction within the nursery school setting. Extended experiences are gained in community observation at other Early Childhood Programs. *Transfer credit: CSU*

CD 39A — 3 Units
Supervised Participation in the Nursery School *(F/S)*
Prerequisites: CD 30 and CD 38 previous or concurrent. Verification of annual tuberculin test required.
Class Hours: 2 lecture, 3 laboratory
This course provides training in nursery school procedures and practices for students who will be teaching young children and for those who are presently employed in nursery schools, Head Start Centers, and day-care facilities. Students will gain practical experience while actually working with the young children in the nursery school setting. *Transfer credit: CSU*

CD 39B — 3 Units
Supervised Field Experience in the Nursery School *(S)*
Prerequisites: CD 39A. Verification of annual tuberculin test required.
Class Hours: 2 lecture, 3 laboratory
Students are given extended training in observation-participation and planning of the nursery education experiences of young children in community nursery school settings; i.e., child care facility, private and church programs, Head Start and special education. *Transfer credit: CSU*

CD 40 — 3 Units
Child, Family and Community (DS2) *(F/S)*
Class Hours: 3 lecture
Students in this course study the patterns of child-rearing in contemporary society, as well as interaction of family and community: significance of personal and social values in family life and community; individual and social resources for family health and welfare and improving child development. *Transfer credit: CSU; UC credit limitations.*

CD 41 — 3 Units
Nursery School Programs (DS3) *(F/S)*
Class Hours: 3 lecture
This course provides a survey of philosophies and programs in the field of nursery education, as well as experience in planning a curriculum for a nursery school program. Special emphasis is provided for selection and arrangement of equipment and materials to furnish a rich environment for the mental and physical growth of nursery school children. *Transfer credit: CSU*

CD 42 — 3 Units
Nursery School Administration (DS6) *(F)*
Prerequisite: None. CD 40 and CD 41 recommended
Class Hours: 3 lecture
Class content covers the origin of nursery school movement in California, types of nursery schools, licensing requirements, legislation standards, daily routines, teacher responsibility, and public relations. This course will also include principles and practices of communication skills for the teacher and administrator with other staff members in the Nursery School and between the school and the home. *Transfer credit: CSU*

CD 43 — 3 Units
Parent and Teacher Communications and Conferencing *(S)*
Class Hours: 3 lecture
The course is intended to increase knowledge and effectiveness in parent-teacher conferencing with an emphasis on techniques that facilitate skillful communication. Understanding of parental and teacher goals and of expectations in relationship to the young child is also emphasized.

CD 44 — 3 Units
Parent-Child Relationships *(F)*
Class Hours: 3 lecture
The course is designed to provide present and future parents with the skills necessary to foster successful parent-child interaction. There will be a focus on verbal and non-verbal communication. Learning concepts, materials and discussion of the parents' role as the child's most significant "teacher" will be included in course experience. May be taken two (2) times for credit.

CD 45 — 3 Units
Programs for the School Age Child (DS5) *(F)*
Class Hours: 3 lecture
This course introduces the student to the care of school age children. It is designed for those planning to work in before and after school programs with the school age child. It will help the student develop an appropriate curriculum to meet the developmental and emotional needs of this age child. It will also provide the student with information about support for the family and how to make use of community resources.

CD 51 — 3 Units
Music in the Nursery School *(S)*
Class Hours: 3 lecture
This course is designed to help teachers in understanding the growth and development of children in relation to music at home and at school, this course can also help prospective teachers of young children gain skill in conducting a music program in the Nursery School. In particular, emphasis will be placed on skill, construction and playing of simple musical instruments, creative rhythm, singing, and composing songs. *Transfer credit: CSU*

CD 52 — 3 Units
Art in the Nursery School *(F/S)*
Class Hours: 3 lecture
This course is designed to provide opportunities for teachers to learn how to help their children in the field of art, also on assistance to teachers in understanding the growth and development of children's creative experience both at home and at school. Teachers also learn how to develop practical materials in the creative arts and how to understand the individual child relative to his own creative expression. *Transfer credit: CSU*

CD 53 — 3 Units
Science in the Nursery School *(F)*
Class Hours: 3 lecture
This course provides opportunities for parents to learn how to help their children in the field of science, and to help teachers in understanding the growth development of children in relation to science and mathematics both at home and at school. Practical materials in a science area are also developed. *Transfer credit: CSU*

CD 54 — 3 Units
Literature in the Nursery School *(S)*
Class Hours: 3 lecture
Students explore various experiences appropriate to the development of young children including picture books, flannel graphs, poetry, puppetry, records, television, and dramatic play. Emphasis is placed on developing language concepts and skills. *Transfer credit: CSU*

CD 60A-Z — 1-3 Units
Topics in Child Development *(F/S)*
Prerequisites: To be determined with each Topic
Class Hours: To be determined with each Topic
This is a special series of courses each of which deals with a specific topic in Child Development not covered in detail in the general Child Development course offerings. Topics courses are announced on a semester basis in the schedule of classes. *Transfer credit: See counselor.*

Topics which have been developed include:

60A — 1½ Units
Programs for Toddlers *(F)*
Class Hours: 24 lecture total
This course is designed to include an environment for college students where they have access to toddlers and their parents, gain an in-depth understanding of developmental growth patterns of 2 and 3 year olds and become familiar with the philosophy programs and materials appropriate to an educational experience for this age group. May be taken four (4) times for credit.

60E — 1½ Units
Language Development in Young Children *(F)*
Prerequisite: None. CD 30 recommended
Class Hours: 24 lecture total
This short-term lecture-workshop series is designed primarily for nursery school personnel in teaching and administrative roles. This series will provide opportunity to gain understanding and skills in the areas of communication with children, parents, staff, and community agencies.

CD 89A-Z — ½-3 Units
Institutes in Child Development★
Class Hours: Variable
This short-term lecture-workshop series is designed primarily for nursery school personnel in teaching and administrative roles. This series will provide opportunity to gain understanding and skills in the areas of communication with children, parents, staff, and community agencies.

Commercial Art

The Commercial Art program is designed to prepare students for entry-level employment in advertising agencies, printing and publishing, department stores, television and motion picture studios, advertising departments of large companies, or commercial art studios. For some the training offered at Moorpark College may prepare them for a free lance career. Students will learn to draw, paint, plan, design, think two-dimensionally and three-dimensionally, and to satisfy art directors and clients.

Career Opportunities

Advertising Artist
Illustrator
Designer
Graphic Artist
Mural Artist
Type Designer
Graphic Arts Technician
Showcard Artist
Sign Painter
Silk Screen Artist
Sketch Artist
Title Designer
Stencil Maker
Commercial Artist
Paste-Up Camera Artist

Faculty

Full-Time
John Grzywacz-Gray
Jack Noyes

Part-Time
Sol Dember
Dean Detrick
Joseph Martin

Counselor
Don Henderson

■ Commercial Art
Occupational
Associate in Science Degree

This program provides a comprehensive understanding of the job requirements in commercial art occupations and related careers. Graduates of this program will have a knowledge of composition, design, perspective, lettering and advertising layout.

Required Courses:		**Units**
Art 12A	Drawing and Composition	3
Cm Art 1A	Intro to Commercial Art	2
Cm Art 2	Commercial Design	3
Cm Art 3	Lettering and Typography	2
Cm Art 4	Advertising Design	2
Cm Art 5	Marker Techniques	2
Cm Art 12A	Beginning Illustration	3
Cm Art 12B	Beginning Illustration	3
GC 4	Layout and Paste-up Techniques	3
Photo 1A	Beginning Photography	3

Total minimum units required in major area — 26

Recommended Courses: Art 3, 4B, 12B, 13A/B; GC 11A; Photo 3

See Degree Requirements and Transfer Information section for General Education requirements.

Commercial Art Courses

Cm Art 1A — 2 Units
Introduction to Commercial Art
Class Hours: 1 lecture, 3 laboratory
This course provides the student with experience in projects involving conceptual, production, and visual design methods. Emphasis directed toward the visual communication field (commercial art). *Transfer credit: CSU*

Cm Art 2 — 3 Units
Commercial Design
Class Hours: 2 lecture, 3 laboratory
Emphasizing typographic design and experimental media as they affect graphic communications, the course also includes logotype concepts, letterheads, poster design, book jackets, magazine and book layouts and package design. *Transfer credit: CSU*

Cm Art 3† — 2 Units
Lettering and Typography
Class Hours: 1 lecture, 3 laboratory
Students learn basic lettering with pen and brush and construction of letters in Gothic, Roman, Italic, Script, Text and Modern type essentials underlying character form and distribution of the pages for layouts. *Transfer credit: CSU*

Cm Art 4 — 2 Units
Advertising Design
Class Hours: 1 lecture, 3 laboratory
Students gain experience in rendering, type specifications and figure indication which lead into advertising layouts and their translation into pasteup and camera-ready art. They will also learn how to execute comprehensive presentations, flat ads, packaging, point-of-sale displays, and how to develop a photographic unit. *Transfer credit: CSU*

Cm Art 5 — 2 Units
Marker Techniques
Prerequisite: Art 12A or Cm Art 12A
Class Hours: 1 lecture, 3 laboratory
Felt tip markers are used extensively by both design and illustration professionals for planning and presentation art. This course will provide thorough training in beginning marker techniques, quick sketch development, and comprehensive layouts. Projects will involve illustration, graphic design and advertising.

Cm Art 12A — 3 Units
Beginning Illustration
Class Hours: 1 lecture, 6 laboratory
Topical themes and individual story lines will be analyzed as potential subject matter for weekly drawings. Pen and ink, water color, collage and colored pencil techniques will be developed as principle means of self-expression. *Transfer credit: CSU*

Cm Art 12B — 3 Units
Beginning Illustration
Prerequisite: Cm Art 12A
Class Hours: 1 lecture, 6 laboratory
Advanced studies in pen and ink, water color washes and mixed media will encourage exploration of individual style as it may pertain to magazine, newspaper and book illustration. *Transfer credit: CSU*

Cm Art 12C — 3 Units
Advanced Illustration
Prerequisite: Cm Art 12B
Class Hours: 1 lecture, 6 laboratory
Emphasis will be placed on the development of individual style in advanced techniques of illustration. Individual projects will be required of the student. May be taken two (2) times for credit. *Transfer credit: CSU*

Cm Art 20 — 3 Units
Airbrush Techniques for Advertising & Industry (Basic)
Prerequisite: Cm Art 1A or 12A or suitable portfolio
Class Hours: 2 lecture, 3 laboratory
The basic course presents the use of the airbrush for preparing illustrations and photo retouching in black and white for advertising, commercial art, and industrial use. The basic course covers the introduction of the airbrush and maintenance, through airbrush rendering and photo retouching with refurbishing of old photographs covered. All assignments are demonstrated and critiqued. Students must have access to an airbrush for the duration of the class.

Cm Art 21 — 3 Units
Airbrush Techniques for Advertising & Industry (Advanced)
Prerequisite: Cm Art 20
Class Hours: 2 lecture, 3 laboratory
The advanced class introduces color in the airbrush to students using transparent dyes, transparent colors and opaque designers colors for preparing full color art illustrations and color photo retouching. Many techniques and treatments are presented with "tricks of the trade" for producing highly acceptable commercial and industrial illustrations. All techniques and assignments are demonstrated by the instructor. Critiques are offered on all assignments. Students must have access to an airbrush for the duration of the class.

Cm Art 22A/B — 1-3/1-3 Units
Independent Studies in Commercial Art
Prerequisite: A previous course in Commercial Art
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of commercial art on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units.

Cm Art 23 — 3 Units
Airbrush Painting
Prerequisite: Cm Art 20 or equivalent
Class Hours: 2 lecture, 3 laboratory
This course provides specialized training in a variety of common airbrush applications in black and white and color. Students learn techniques which will be very helpful in preparing commercial, industrial and high tech presentations.

Cm Art 30 — 1 Unit
Introduction to Computer Design and Illustration
Class Hours: ½ lecture, 1½ laboratory
This course will survey various computer systems and their applications in commercial art, computer-assisted design and illustration. Hands-on experience will be provided on the Macintosh Computer. No prior computer knowledge is necessary for this course.

Cm Art 31 — 2 Units
Computer-Assisted Graphic Design
Prerequisite: Cm Art 30 or equivalent. May be taken concurrently.
Class Hours: 1 lecture, 3 laboratory
This course is a hands-on course using the Macintosh Computer to explore the fundamentals of design. Students will learn to organize visual material in a coherent way. Students will learn principles of typography, design, shape, line and texture.

Cm Art 32 — 2 Units
Computer Desk Top Publishing
Prerequisite: Cm Art 30 or equivalent
Class Hours: 1 lecture, 3 laboratory
This course is a practical introduction to publications design which will provide students with the necessary expertise to develop newsletters and publications on a Macintosh or other user friendly computers with appropriate software and printers. Students will explore informational graphics, alternatives for designing and redesigning publications with an emphasis on communicating information in the most efficient manner. In addition, type, graphic elements, screens, photographs, illustrations, captions, drop initials, subheads and text will be discussed.

Cm Art 60A-Z — 1-3 Units
Topics in Commercial Art
Prerequisites: To be determined with each Topic
Class Hours: To be determined with each Topic
This is a special series of courses each of which deals with a specific topic in Commercial Art not covered in detail in the general Commercial Art course offerings. Topics courses are announced on a semester basis in the schedule of classes.

Topics which have been developed include:

60A — 1 Unit
Airbrush Practice

Prerequisite: A previous airbrush course
Class Hours: 3 laboratory
May be taken four (4) times for credit.

60B — 1 Unit
Computer Graphics Practice
Prerequisite: Cm Art 30, 31 or 32
Class Hours: 3 laboratory
May be taken four (4) times for credit.

Computer Information Systems

This program is designed for students interested in employment in business and industry using computer applications. Emphasis is placed upon business computer information systems for training entry-level programmers and related management personnel.

Career Opportunities

A.S. Level in Business Data Processing

Junior Programmer
Computer Operator
Programmer Trainee
Applications Specialist
Tape Librarian
Systems Analyst
Computer Programming Coordinator
Information Center Manager
Information Systems Manager
Data Processing Sales Representative
Technical Information Specialist
Technical Services Manager

A.S. Level in Microcomputer Data Processing

Office Manager
Word Processor
Office Clerk
Administrative Aide
Data Entry Clerk
Receptionist
Data Entry Operator

Faculty

Full-Time
David Kay
Louis Wolff

Part-Time
Ko-Chieh Chi
David Delacalzada
Wilton Helm
Richard Hillery
Steven Kang
George Kurata
Robert Steiger
Raymond Tafoya
Edward Voyek

Counselors
John Heydenreich
Bud Long

■ Computer Information Systems
Occupational
Associate in Science Degree

Students learn basic skills of computer information systems with the goal of immediate employment in business or industry utilizing computer information systems techniques and equipment.

Business Data Processing Option

Required Courses:		**Units**
Bus 1A	Accounting Principles I	3
Bus 1B	Accounting Principles II	3
Bus 30	Intro to Business and Economics	3
CIS 1	Intro to Information Systems	3
CIS 1L	CIS Introduction Lab	1
CIS 2	Computer Program Design	3
CIS 2L	CIS Program Design Lab	1
CIS 3A	Computer Programming BASIC I	3
CIS 3AL	CIS BASIC I Lab	1
CIS 4A	Computer Programming I: COBOL	3
CIS 4AL	CIS COBOL I Lab	1
CIS 4B	Computer Programming II: COBOL	3
CIS 4BL	CIS COBOL II Lab	1
CIS 6	Systems Analysis	3

Total minimum units required in major area — 32

Recommended Courses: CIS 5, 8; CS 18/18L; Econ 1, 2

Microcomputer Data Processing Option

Required Courses:		
BIS 10A	Intro to the Personal Computer	.5
BIS 10B	Advanced DOS Functions	1.5
BIS 13A	Lotus 1-2-3 I	1
BIS 13B	Lotus 1-2-3 II	1
BIS 14A	Intro to Database III+	.5
BIS 14B	Programming dBASE III+	1.5
Bus 1A	Accounting Principles I	3
Bus 30	Intro to Business and Economics	3
CIS 1	Intro to Information Systems	3
CIS 1L	CIS Introduction Lab	1
CIS 2	Computer Program Design	3
CIS 2L	CIS Program Design Lab	1
CIS 3A	Computer Programming BASIC I	3
CIS 3AL	CIS BASIC I Lab	1
CIS 3B	Computer Programming BASIC II	3
CIS 3BL	CIS BASIC II Lab	1
Required Additional Courses:		
Select one (1) of the following courses:		
BIS 8	Computerized Accounting	2
Bus 1B	Accounting Principles II	3
Select one (1) pair from the following courses:		
BIS 11A	WordStar I	1
BIS 11B	WordStar II	1
BIS 12A	MultiMate I	1
BIS 12B	MultiMate II	1
BIS 15A	WordPerfect I	1
BIS 15B	WordPerfect II	1

Total minimum units required in major area — 32-33

Recommended Courses: Bus 1B; CIS 4A; Econ 1, 2

See Degree Requirements and Transfer Information section for General Education requirements.

■ Computer Information Systems
Certificate of Achievement

This program is designed for students interested in learning some basic skills of computer information systems with the goal of immediate employment in business or industry utilizing computer information systems techniques and equipment.

Business Data Processing Option

Required Courses:		**Units**
Bus 1A	Accounting Principles I	3
Bus 1B	Accounting Principles II	3
Bus 30	Intro to Business and Economics	3
CIS 1	Intro to Information Systems	3
CIS 1L	CIS Introduction Lab	1
CIS 2	Computer Program Design	3
CIS 2L	CIS Program Design Lab	1
CIS 3A	Computer Programming BASIC I	3
CIS 3AL	CIS BASIC I Lab	1
CIS 4A	Computer Programming I: COBOL	3
CIS 4AL	CIS COBOL I Lab	1
CIS 4B	Computer Programming II: COBOL	3
CIS 4BL	CIS COBOL II Lab	1
CIS 6	Systems Analysis	3

Total minimum units required — 32

Microcomputer Data Processing Option

Required Courses:		
BIS 10A	Intro to the Personal Computer	.5
BIS 10B	Advanced DOS Functions	1.5
BIS 13A	Lotus 1-2-3 I	1
BIS 13B	Lotus 1-2-3 II	1
BIS 14A	Intro to Database III+	.5
BIS 14B	Programming dBASE III+	1.5
Bus 1A	Accounting Principles I	3
Bus 30	Intro to Business and Economics	3
CIS 1	Intro to Information Systems	3
CIS 1L	CIS Introduction Lab	1
CIS 2	Computer Program Design	3
CIS 2L	CIS Program Design Lab	1
CIS 3A	Computer Programming BASIC I	3
CIS 3AL	CIS BASIC I Lab	1
CIS 3B	Computer Programming BASIC II	3
CIS 3BL	CIS BASIC II Lab	1
Required Additional Courses:		
Select one (1) of the following courses:		
BIS 8	Computerized Accounting	2
Bus 1B	Accounting Principles II	3
Select one (1) pair from the following courses:		
BIS 11A	WordStar I	1
BIS 11B	WordStar II	1
BIS 12A	MultiMate I	1
BIS 12B	MultiMate II	1
BIS 15A	WordPerfect I	1
BIS 15B	WordPerfect II	1

Total minimum units required — 32-33

Computer Information Systems Courses

Students planning to take more than 9 units of Computer Information Systems courses marked * should consult a counselor; the UC system allows credit for the first 9 units only.

CIS 1* — 3 Units
Introduction to Information Systems
Prerequisite: None. Basic typing/keyboarding skills will be helpful.
Corequisite: CIS 1L
Class Hours: 3 lecture
This introductory course covers the history, development and application of information processing system principles and their functions from all aspects: manual, mechanical, electromechanical and electronic systems. Course will include an overview of applications of computer languages in solving business problems with hands-on experience solving problems, designing program logic, writing and executing BASIC-language computer programs. It will provide hands-on experience with microcomputer applications including a word processor, a spreadsheet, and a database program. This course is designed to meet the requirements of the Data Processing Management Association (DPMA) Model curriculum. *Transfer credit: CSU; UC credit limitations. See counselor.*

CIS 1L — 1 Unit
CIS Introduction Lab
Corequisite: CIS 1
Class Hours: 3 laboratory
This course provides hands-on laboratory experience to accompany CIS 1. Problems in BASIC will be run on the HP/3000 Minicomputer. Microcomputer applications will be run on IBM PC or equivalent. *Transfer credit: CSU; UC*

CIS 2 — 3 Units
Computer Program Design
Prerequisite: CIS 1 or concurrent enrollment or equivalent.
Corequisite: CIS 2L
Class Hours: 3 lecture
This course is an introduction to structured problem-solving techniques using digital computers. Includes design and documentation methods; implementation of algorithms. No knowledge of programming language required. *Transfer credit: CSU*

CIS 2L — 1 Unit
CIS Program Design Lab
Corequisite: CIS 2
Class Hours: 3 laboratory
This course provides hands-on experience in the Lab, using terminals operating in an interactive mode, in support of CIS 2. Provides additional exposure and experience with computers and allows proof of algorithm designs created in CIS 2. *Transfer credit: CSU*

CIS 3A — 3 Units
Computer Programming BASIC I

Prerequisite: CIS 1. For CIS majors, concurrent enrollment in or prior completion of CIS 2 is recommended.
Corequisite: CIS 3AL
Class Hours: 3 lecture

Topics include console procedures and an overview of computer hardware organization, data representation internally, instruction forms, flowcharting problems and logic/solutions, algorithms for problem solutions and demonstrations of interactive terminals. Concepts and definitions include labels, variables, subscripts and scientific notation, as well as debugging of basic statements and elementary coding. (formerly CIS 14) *Transfer credit: CSU; UC. CAN: CSCI 6*

CIS 3AL — 1 Unit
CIS BASIC I Lab
Corequisite: CIS 3A
Class Hours: 3 laboratory

This course provides hands-on laboratory experience to accompany CIS 3A. Problems in BASIC will be run on a time-shared HP/3000 Minicomputer using an interactive (interpretive) BASIC. *Transfer credit: CSU; UC*

CIS 3B — 3 Units
Computer Programming BASIC II *(F-evening; S-day)*
Prerequisite: CIS 3A
Corequisite: CIS 3BL
Class Hours: 3 lecture

This is a continuation of CIS 3A intended for those students who wish to attain greater proficiency in the BASIC programming language. Emphasis on table processing, sorting, multiple file processing. Students will develop a system of sequential and random file handling programs in the BASIC language for business applications.

CIS 3BL — 1 Unit
CIS BASIC II Lab
Corequisite: CIS 3B
Class Hours: 3 laboratory

This course provides supervised hands-on laboratory experience to accompany CIS 3B. Problems in BASIC will be analyzed; solution algorithms will be designed and implemented, including debug and full documentation.

CIS 4A* — 3 Units
Computer Programming I: COBOL
Prerequisite: CIS 1. For CIS majors, concurrent enrollment in or prior completion of CIS 2 is recommended.
Corequisite: CIS 4AL
Class Hours: 3 lecture

Students become familiar with basic computer programming concepts used in the solving of business computer information systems problems. Completion of assigned class problems provides experience in actual programming using COBOL language. *Transfer credit: CSU; UC credit limitations. See counselor.*

CIS 4AL — 1 Unit
CIS COBOL I Lab
Corequisite: CIS 4A
Class Hours: 3 laboratory

This course provides hands-on laboratory experience to accompany CIS 4A. Problems in COBOL will be run in the Lab on the HP/3000 Minicomputer or on suitable microcomputer hardware. *Transfer credit: CSU; UC*

CIS 4B* — 3 Units
Computer Programming II: COBOL *(F-evening; S-day)*
Prerequisite: CIS 4A or equivalent.
Corequisite: CIS 4BL
Class Hours: 3 lecture

A study of advanced COBOL programming techniques, with particular emphasis on disk file concepts, for solving business computer information systems problems such as payroll, accounts payable, inventory, etc. *Transfer credit: CSU; UC credit limitations. See counselor.*

CIS 4BL — 1 Unit
CIS COBOL II Lab
Corequisite: CIS 4B
Class Hours: 3 laboratory

This course provides supervised hands-on laboratory experience with a set of interrelated COBOL programs that utilize the more advanced capabilities of the language in a realistic business-like process. Includes all aspects of design, development and documentation. *Transfer credit: CSU; UC*

CIS 5* — 3 Units
Database Management Systems *(F-evening only)*
Prerequisites: CIS 1 plus either CIS 4A or CS 18/18L.
Class Hours: 3 lecture

Introduction to application program development in a database environment, with an emphasis on loading, modifying, and querying the database using a host language (COBOL or FORTRAN). Compounds the students' existing programming knowledge with a knowledge of DBMS systems to make them more marketable as a computer programmer. *Transfer credit: CSU*

CIS 6* — 3 Units
Systems Analysis *(F-day; S-evening)*
Prerequisites: CIS 1 and a programming class or equivalent.
Class Hours: 3 lecture

Study includes computer information systems systems and procedures, analysis of various existing business computer information systems principles. Required of most business and economics departments for non-data and data systems concepts. *Transfer credit: CSU*

CIS 7* — 3 Units
Computer Programming RPG II *(F-evening only)*
Prerequisites: CIS 1 and CIS 2 or equivalent.
Corequisite: CIS 7L
Class Hours: 3 lecture

Instruction is given in basic computer programming concepts and development techniques. Laboratory development and problem solving utilize the Report Program Generator. Completion of assigned class problems provides experience in actual programming using RPG II language.

CIS 7L — 1 Unit
CIS RPG II Lab
Corequisite: CIS 7
Class Hours: 3 laboratory

This course provides hands-on experience using RPG II to build skills in support of information gained in CIS 7. Students will code, debug, test, and document a number of typical business problems of varying complexity.

CIS 8* — 3 Units
Operating Systems *(S-evening only)*
Prerequisites: CIS 1 or equivalent and at least one semester of computer programming.
Class Hours: 3 lecture

Designed to acquaint students with the concepts, techniques and use of operating systems and Job Control Language (JCL). This course also emphasizes methods of coding and maintenance of operating systems for computers with multi-processing capabilities. *Transfer credit: CSU; UC credit limitations. See counselor.*

CIS 9 — 1 Unit
Computer Programming Laboratory★
Corequisite: CIS 22AB with subject that requires extensive lab work/computer usage.
Class Hours: 3 laboratory

This course allows for laboratory experience credit, when deemed appropriate by the instructor, for an Independent Study contract. May be taken two (2) times for credit. *Transfer credit: CSU; UC*

CIS 16 — 2 Units
BASIC for the PC★ *(F-evening; S-evening)*
Prerequisites: BIS 10A/PC-DOS background
Class Hours: 1½ lecture, 1½ laboratory

This is an introduction to BASIC language (MicroSoft) as used on the PC. Includes typical mathematical problems, logic problems, simple numeric/random number games, elementary business problems. Intended for home PC user; not for CIS majors. (co-numbered BIS 16)

CIS 17 — 2 Units
Microcomputer Literacy (TV) *(F-day; S-day)*
Class Hours: 4 lecture/laboratory

This course describes the functions and major applications of the microcomputer. A survey course with hands-on experience using a word processor, spreadsheet, and database application. (co-numbered BIS 17)

CIS 22A/B — 1-3/1-3 Units
Independent Studies in Information Systems
Prerequisite: A previous course in Computer Information Systems
Class Hours: 1-3 tutorial

This course is for students who are interested in furthering their knowledge of computer information systems on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

CIS 49A-D — 1-4 Units
Cooperative Work Experience — Computer Information Systems★
Prerequisite: Placement at a work station
Class Hours: 5-20 employment, 1 by arrangement
Students employed in a field related to Computer Information Systems will design a learning contract in conjunction with their employer that will involve expanded responsibilities and/or the opportunity to learn new job experiences beyond those required in the existing job duties. Direct coordination with the employer in question will be a part of this learning experience.

CIS 60A-Z — 1-3 Units
Topics in Computers
Prerequisites: To be determined with each Topic
Class Hours: To be determined with each Topic
This is a special series of courses each of which deals with a specific topic in Computer Information Systems not covered in detail in the general Computer Information Systems course offerings. Topics courses are announced on a semester basis in the schedule of classes.

Computer Science

This program prepares students for further study in Computer Science and can lead to careers in such fields as technical applications programming, design of computer operating systems and related software, systems analysis and design, etc.

Career Opportunities

B.S. Level
(Requires bachelors or graduate studies)

Computer Programmer
Applications Engineer, Computer
Business Programmer
Microprocessing Technologist
Process Control Programmer
Operational Research Manager
Computer Service Technician
System Designer
Scientific Programmer
Forms Analyst
Computer Lab Technician
Coder
Software Analyst
Software Engineer
Naval Research Logistics
Systems Analyst

Faculty

Full-Time	Part-Time	Counselors
Christine Aguilera	Thomas Becker	John Heydenreich
David Murphy	James Garon	Edna Ingram
Susan Murphy	Larry Lace	

Transfer Information

Major requirements for upper division standing at:
California State University, Northridge:
CS 10/10L, 20/20L, 30/30L, 50; Math 25AB, 31; Phil 9; competency in FORTRAN, COBOL. Select one sequence from: Bio 2AB; Chem 1AB; Physics 20AB with Labs.
Important Note: The courses listed above are required of all Computer Science majors at CSUN. Since CSUN offers 11 choices for concentration in Computer Science at the junior level, some of them with additional lower division requirements, a student who is planning this major should refer to the CSUN catalog for further information and, upon transfer, consult an advisor at CSUN about these concentrations.
University of California, Berkeley:
CS 10/10L, 20/20L, 30/30L; Engr 20; Math 25A, 25B, 31.
University of California, Davis:
CS 20/20L; Math 25A, 25B, 25C, 31, 35.

■ Computer Science
Associate in Science Degree

Moorpark College offers an Associate in Science Degree in Computer Science. The Computer Science major has a dual purpose: to prepare students for upper division course work in Computer Science and to provide technical training for a variety of careers in business, industry, and government.

Required Courses:		Units
CS 10/10L*	Intro to Computer Programming/Pascal/Lab	4
CS 20/20L	Data Structures and Program Design/Lab	4
CS 30/30L	Assembly Language Programming/Lab	4
CS 40	Computer Architecture	3
Math 25A	Calculus/w Analytic Geometry I	5
Math 25B	Calculus/w Analytic Geometry II	5

Math 31	Intro to Linear Algebra	3

Required Additional Courses:
From the two Options listed below: (1) Select two courses from the Course Option group or (2) select one course from the Course Option group and one course from the Language Option group.

Course Option:		
CS 50	Files and Data Bases	3
CS 60/60L	Concepts of Programming Languages/Lab	4
Math 25C	Calculus/w Analytic Geometry III	5
Math 35	Applied Differential Equations	3
Phil 9	Symbolic Logic	4
Language Option:		
CS 17/17L	Computer Programming - C/Lab	4
CS 18/18L	Computer Programming - FORTRAN/Lab	4
CS 19/19L	Computer Programming - Ada/Lab	4

Total minimum units required in major area — 34-37

*CS 16 (Computer Programming Pascal) has been combined with CS 10 and is no longer offered as a separate course.

Suggested Course Sequence:

First Semester		Third Semester	
CS 10/10L	4	CS 30/30L	4
	4	Math 25B	5
			9
Second Semester		**Fourth Semester**	
CS 20/20L	4	CS 40	3
Math 25A	5	Math 31	3
	9		6

The Suggested Course Sequence shown above does not include the two Required Additional Courses that students select for the Associate in Science Degree.
See Degree Requirements and Transfer Information section for General Education requirements.

Computer Science Courses

CS 10 — 3 Units
Introduction to Computer Programming/Pascal
Prerequisite: Math 6 or Math 7 or equivalent college course
Corequisite: Concurrent enrollment in CS 10L required
Class Hours: 3 lecture
This course is an introduction to programming and the organization of computers using the Pascal language. Basic programming concepts are studied including: algorithms, data and control structures, debugging, program design, documentation, and structured programming. *Transfer credit: CSU; UC. CAN: CSCI 2*

CS 10L — 1 Unit
Introduction to Computer Programming/Pascal Laboratory★
Corequisite: Concurrent enrollment in CS 10 required
Class Hours: 3 laboratory
This course provides laboratory experience to accompany CS 10. *Transfer credit: CSU; UC. CAN: CSCI 2*

CS 17 — 3 Units
Computer Programming - C
Prerequisite: CS 10/10L or equivalent college course or proficiency in Pascal
Corequisite: Concurrent enrollment in CS 17L required
Class Hours: 3 lecture
This course is an in depth study of the C programming language. Every facet of the C language is covered with emphasis on algorithms and data structures as implemented in C. The course will use C to demonstrate the application of software engineering methodologies. *Transfer credit: CSU; UC*

CS 17L — 1 Unit
Computer Programming Laboratory - C★
Prerequisite: CS 10/10L or equivalent college course or proficiency in Pascal
Corequisite: Concurrent enrollment in CS 17 required
Class Hours: 3 laboratory
This course provides laboratory experience to accompany CS 17. *Transfer credit: CSU; UC*

CS 18 — 3 Units
Computer Programming - FORTRAN
Prerequisites: Math 5 and Math 6 or Math 7 or equivalent college course, or satisfactory score on the Math Placement Exam
Corequisite: Concurrent enrollment in CS 18L required
Class Hours: 3 lecture
This course is an introduction to programming and the organization of computers using the FORTRAN language. Basic programming concepts are studied including: algorithms, data and control structures, debugging, program design, documentation, and structured programming. Depending on their primary area of student, students will use FORTRAN to solve problems in math, data processing, engineering, social sciences, physical science, life sciences, economics and business. *Transfer credit: CSU; UC. CAN: CSCI 4*

CS 18L — 1 Unit
Computer Programming Laboratory - FORTRAN★
Corequisite: Concurrent enrollment in CS 18 required
Class Hours: 3 laboratory
This course provides laboratory experience to accompany CS 18. *Transfer credit: CSU; UC. CAN: CSCI 4*

CS 19 — 3 Units
Computer Programming - Ada
Prerequisite: CS 10/10L or equivalent college course
Corequisite: Concurrent enrollment in CS 19L required
Class Hours: 3 lecture
This course is an introduction to computer programming in Ada, with emphasis on aspects of software engineering. Topics include data abstraction and Ada's types, generics, exception handling, packages, tasking and parallel programming. *Transfer credit: CSU*

CS 19L — 1 Unit
Computer Programming Laboratory - Ada★
Prerequisite: CS 10/10L or equivalent college course
Corequisite: Concurrent enrollment in CS 19 required
Class Hours: 3 laboratory
This course provides laboratory experience to accompany CS 19. *Transfer credit: CSU*

CS 20 — 3 Units
Data Structures and Program Design
Prerequisites: CS 10/10L or equivalent college course. Proficiency in Pascal is required.
Corequisite: Concurrent enrollment in CS 20L required
Class Hours: 3 lecture
Structured programming methods will be applied to abstract data types such as stacks, queues, trees, and graphs. The concepts of pointer variables, linked lists, list processing, recursion, simulation, algorithm analysis and verification will be presented. *Transfer credit: CSU; UC*

CS 20L — 1 Unit
Data Structures and Program Design Laboratory★
Corequisite: Concurrent enrollment in CS 20 required
Class Hours: 3 laboratory
This course provides laboratory experience to accompany CS 20. *Transfer credit: CSU; UC*

CS 22A/B — 1-3/1-3 Units
Independent Studies in Computer Science
Prerequisite: A previous course in Computer Science
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of computer science on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

CS 30 — 3 Units
Assembly Language Programming
Prerequisite: CS 20/20L or equivalent college course
Corequisite: Concurrent enrollment in CS 30L required
Class Hours: 3 lecture

This course covers computer structure and machine language, mnemonic operations and symbolic addressing, addressing techniques, data representation, input/output techniques, assembler construction and program linkage, and program development implementing high-level language constructs. *Transfer credit: CSU; UC*

CS 30L — 1 Unit
Assembly Language Programming Laboratory★
Prerequisite: CS 20/20L or equivalent college course
Corequisite: Concurrent enrollment in CS 30 required
Class Hours: 3 laboratory
This course provides laboratory experience to accompany CS 30. *Transfer credit: CSU; UC*

CS 40 — 3 Units
Computer Architecture
Prerequisite: CS 30/30L
Class Hours: 3 lecture
This course is an introduction to the structure and organization of computer systems. The topics covered include: digital logic, microprogramming, micro-architectures, machine languages and their interpretation, operating systems, virtual memory and cache memory. *Transfer credit: CSU; UC*

CS 49A-D — 1-4 Units
Cooperative Work Experience - Computer Science★
Prerequisite: Placement at a work station
Class Hours: 5-20 employment, 1 by arrangement
Students employed in a field related to Computer Science will design a learning contract in conjunction with their employer that will involve expanded responsibilities and/or the opportunity to learn new job experiences beyond those required in the existing job duties. Direct coordination with the employer in question will be a part of this learning experience.

CS 50 — 3 Units
Files and Data Bases
Prerequisite: CS 30/30L
Class Hours: 3 lecture
This course is an introduction to large files and data bases. Students will study file structure; sequential, indexed sequential, indexed, direct, inverted, tree, and ring; also multi-file data base, objectives of data base organization, and data base structures. *Transfer credit: CSU*

CS 60 — 3 Units
Concepts of Programming Languages
Prerequisite: CS 20/20L or equivalent college course
Corequisite: Concurrent enrollment in CS 60L required
Class Hours: 3 lecture
Basic concepts of programming languages including storage management, syntax, BNF, scope of names, semantics, and typechecking will be covered. Study and comparison of programming languages including Pascal, Ada, FORTRAN and Lisp. *Transfer credit: CSU; UC*

CS 60L — 1 Unit
Concepts of Programming Languages Laboratory★
Prerequisite: CS 20/20L or equivalent college course
Corequisite: Concurrent enrollment in CS 60 required
Class Hours: 3 laboratory
This course provides laboratory experience to accompany CS 60. *Transfer credit: CSU; UC*

Drafting Technology/CAD

The Drafting Technology program prepares the student for careers related to construction, architecture, and civil engineering. Students will be trained in the use of Computer-Aided Design (CAD) equipment as well as conventional drafting machines and instruments.

Career Opportunities

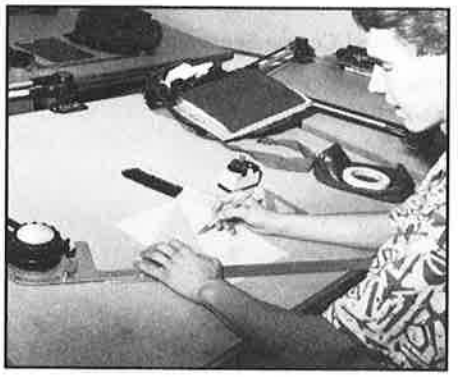
Drafter
Architectural Assistant
Construction Assistant
Construction Trades
Building Plan Reader
Civil Engineering Assistant

Faculty

Full-Time
Verle Harris

Part-Time
Tommie Craft
Charles T. Harris
Joyce Studebaker
Sylvia Sullivan

Counselors
John Heydenreich
Edna Ingram



■ Drafting Technology/CAD
Certificate of Completion

Required Courses:		Units
DT 1	Intro to Drafting	3
DT 2	Intro to Computer-Aided Drafting	3
DT 3	Architectural Drafting I	3
DT 4	Architectural Computer-Aided Drafting	3
DT 11	Building Codes	3
Math 1	Elementary Algebra	5

Required Additional Courses:
Select one of the following options:

Architectural Option
This option is for students who are interested in jobs related to the design of buildings and structures. Students are required to complete the core curriculum plus the following courses:

DT 5	Architectural Drafting II	3
DT 8	Energy Conservation Code	3
DT 9	Fundamentals of Structural Design	3

Civil Engineering Option
This option is for students interested in entry-level jobs in the field of civil engineering such as engineering assistant or drafter. Students are required to complete the core curriculum plus the following courses:

DT 6	Building Site Drafting	3
DT 9	Fundamentals of Structural Design	3
DT 13	Construction Materials	3

Construction Option
This option is for students that are interested in entry-level positions in the construction industry. Students are required to complete the core curriculum plus the following courses:

DT 5	Architectural Drafting II	3
DT 10	Construction Cost Estimating	3

DT 13	Construction Materials	3
DT 14	Construction Blueprint Reading	3

Total minimum units required — 29-32

Drafting Technology/CAD Courses

DT 1 — 3 Units
Introduction to Drafting
Class Hours: 2 lecture, 3 laboratory
This introduction to drafting and graphic practice includes use and care of drafting equipment and instruments, lettering, theory of orthographic projection, pictorial drawings, sketches, working drawings. Prerequisite to all drafting and design courses. (formerly ET 2) *Transfer credit: CSU*

DT 2 — 3 Units
Introduction to Computer-Aided Drafting
Prerequisite: DT 1
Class Hours: 2 lecture, 3 laboratory
This course is an introduction to Auto CAD computer-aided drafting. It includes dimensioning, layering, symbols, blocks, copies, and multiple images. Drawings will be transferred to hard copy on a printer and plotter. *Transfer credit: CSU*

DT 3 — 3 Units
Architectural Drafting I
Prerequisite: DT 1
Class Hours: 2 lecture, 3 laboratory
This is a course in the preparation and interpretation of architectural working drawings and specifications, with emphasis on light wood frame construction. Local planning ordinances, uniform building codes, architectural graphic standards and information published by Building Product Manufacturers will be utilized as reference materials. *Transfer credit: CSU*

DT 4 — 3 Units
Architectural Computer-Aided Drafting★
Prerequisite: DT 2
Class Hours: 2 lecture, 3 laboratory
This course will introduce the students to the development of architectural drawings with the use of computer-aided drafting. *Transfer credit: CSU*

DT 5 — 3 Units
Architectural Drafting II
Prerequisite: DT 3
Class Hours: 2 lecture, 3 laboratory
This is a course in the preparation and interpretation of architectural drawings with emphasis on heavy timber, concrete, masonry, and steel construction. *Transfer credit: CSU*

DT 6 — 3 Units
Building Site Drafting
Prerequisite: DT 3
Class Hours: 2 lecture, 3 laboratory
This course is an introduction to civil engineering drafting which includes survey notation, graphic translation of survey notes, grading, site planning and utilities. *Transfer credit: CSU*

DT 8 — 3 Units
Energy Conservation Code
Class Hours: 3 lecture
This course covers Title 24 of the State Energy Code. The course will cover requirements of the code and show the student how to complete the necessary forms.

DT 9 — 3 Units
Fundamentals of Structural Design
Prerequisite: Math 1 or one year high school algebra
Class Hours: 3 lecture
The structural members of small frame buildings will be analyzed and designed. The complete structural calculations for a residence, a commercial and an industrial building will be developed. (formerly ET 9)

DT 10 — 3 Units
Construction Cost Estimating
Prerequisite: Math 1
Class Hours: 3 lecture
The class covers principles and practices in making quantity surveys and labor estimates for construction projects. Three field trips. (formerly ET 11) *Transfer credit: CSU*

DT 11 — 3 Units
Building Codes
Class Hours: 3 lecture
This course covers various building codes that relate to structural, plumbing, heating and air conditioning, and electrical components of buildings that are constructed in Southern California. (formerly ET 15)

DT 13 — 3 Units
Construction Materials
Class Hours: 3 lecture
Students learn use and apply building materials to the structural composition of modern residences, commercial and industrial buildings. (formerly ET 21)

DT 14 — 3 Units
Construction Blueprint Reading
Class Hours: 3 lecture
The student will learn to read construction drawings for typical buildings. These include wood frame, masonry, concrete and steel construction used in residential, commercial and industrial projects. *Transfer credit: CSU*

DT 22A/B — 1-3/1-3 Units
Independent Studies in Drafting Technology/CAD
Prerequisite: A previous course in Drafting Technology
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of drafting technology on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU*

DT 30 — 3 Units
Mechanical Drawing
Prerequisite: DT 1 or equivalent
Class Hours: 2 lecture, 3 laboratory
This course in mechanical drawing is designed to expand and increase skills in mechanical drawing. It will cover complete working drawings, exploded view and assembly drawings, emphasizing section views, screws and fasteners, inking and increased skill in lettering. (formerly ET 3) *Transfer credit: CSU*

DT 31 — 3 Units
Interior Design Drafting
Class Hours: 3 lecture
This course covers floor plans, elevations, orthographic and isometric sketches and drawings, and building requirements that are used to prepare interior design drawings.

DT 32 — 3 Units
Mechanical Blueprint Reading
Class Hours: 3 lecture
Students learn to interpret mechanical drawings typical of those found in the mechanical field theory of common types of projections, dimensioning principles, and machine standards, application by creative sketching and by interpretation of blueprints. (formerly ET 16)

DT 89A-Z — ½-3 Units
Institutes in Drafting Technology/CAD★
Class Hours: Variable
This short-term lecture series is designed to develop the abilities and skills of the participants through appropriate activities. Emphasis is placed on the acquisition of specialized knowledge in a particular segment of drafting.

Economics

The major in economics leads to careers in business or government and offers valuable preparation for various professions including law and journalism. The study of economics provides the opportunity to build a solid foundation for graduate study in either economics or administration.

Career Opportunities

B.S. Level

(Most careers require advanced degrees)

Economist
Assessor
Financial Planner
Stock Broker
Securities Analyst
Management Trainee
Economic Development Coordinator

Faculty

Full-Time	Part-Time	Counselor
Peter Gucciardo	Rex Edwards	Bud Long
Robert Herman	Gary Gluck	
	Carol Jablonicky	
	Edward Sanford	

Transfer Information

Major requirements for upper division standing at:

California State University, Northridge:
Bus 1A, 1B; Econ 1, 2; Math 12 or 16A or 25A; Phil 9 or Math 31.

University of California, Davis:
Econ 1, 2; Math 15, 25A.

Economics Courses

ECON 1 — 3 Units
Principles of Micro-Economics
Class Hours: 3 lecture

The course is an introduction to economic institutions and to issues of economic policy, especially those issues relating to the efficient use of scarce resources. Students develop a method of thinking by investigating and applying the principles of economic inquiry. Students learn how exchange acts as a social system of making choices about the consumption, production, and distribution of those resources. *Transfer credit: CSU; UC. CAN: ECON 4*

ECON 2 — 3 Units
Principles of Macro-Economics
Prerequisite: Econ 1 or equivalent
Class Hours: 3 lecture

This course provides further development of a method of thinking by investigating and applying the principles of economic inquiry. It is an introduction to economic institutions and to issues of economic policy, especially as those issues relate to the levels of employment and prices and to the rate of economic growth. Exchange is studied as a social system of making choices that determine policies, that influence or determine aggregate economic activity. *Transfer credit: CSU; UC. CAN: ECON 2*

ECON 4 — 3 Units
Economic Development of the United States
Class Hours: 3 lecture

This course concerns the evolution of U.S. economic institutions as revealed by economic analysis and quantitative data, as well as the application of economics to other social sciences, to social change, and to economic problems. *Transfer credit: CSU; UC*

ECON 22A/B — 1-3/1-3 Units
Independent Studies in Economics
Prerequisite: A previous course in Economics
Class Hours: 1-3 tutorial

This course is for students who are interested in furthering their knowledge of economics on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

ECON 30 — 3 Units
Introduction to Business and Economics
Class Hours: 3 lecture

This course presents basic concepts and functions of business and economics and the application of economic thinking to the operation and evolution of business. It also explores business organization and finance, demand and supply, money and banking, business decision making, and inflation. Emphasis is placed on the practical use of business and economic understanding. (co-numbered Bus 30) *Transfer credit: CSU*

Electronics Technology

Technological developments in the electronic industry continue to create opportunities for persons who have been well-trained in that field. There is a wide choice of careers for the electronics technology student, including occupations in business, industry, education, and government.

Career Opportunities

(Most careers require a bachelors degree)

A.S. Level

Electronics Technician
Field Service Technician
Computer Repair
Electronics Assembly
Electronic Sales

B.S. Level

Computer Technician
Microwave Technician
Field Service Representative
Electronic Assembly Supervisor
Electronic Metrology Technician
Electronics Maintenance Technician
Customer Support Representative
Numerical Control Technician
Electronic Trouble Shooter
Field Engineer
Biomedical Technician
Equipment Technician
Quality Engineer
Bench Technician
Traveling Technician
Sales Engineer
Technical Trainer

Faculty

Full-Time
Sergio Monteiro
John Thomsen

Part-Time
Nagi Mekhiel
Leon Rouge
Fernando Vazquez

Counselors
John Heydenreich
Edna Ingram

Transfer Information

Major requirements for upper division standing at:
California Polytechnical State University, San Luis Obispo:
Chem 12; CS 18/18L; EL 10/10L, 16/16L, 17/17L; Engl 1A, 11; Math 4, 16A, 16B; Physics 10A/10AL, 10B/10BL; Speech 1.

■ Electronics Engineering Technology
Associate in Science Degree

The foundation of today's high technology is in electronics. Students desiring an intensive two-year program in all major areas of electronics should enroll in the Electronics Technology Associate in Science Degree course of study.

Those students interested in a more comprehensive four-year university transfer program should enroll in the Electronics Engineering Technology Associate in Science Degree program. The first year of both programs are nearly identical.

Preparation for the Major:

Mathematics — two years of high school algebra or Math 1 and Math 3 or equivalent.

Electronics — Students with no prior experience with Electronics are encouraged to take EL 1/1L prior to or concurrently with EL 10/10L.

All students are strongly encouraged to take advantage of summer school class offerings.

Required Courses:		**Units**
Chem 12*	Introductory Chemistry I	4
CS 18/18L	Computer Programming - FORTRAN/Lab	4
EL 10/10L	Passive Circuits/Lab	5
EL 16/16L	Analog Circuits/Lab	4
EL 17/17L	Digital Circuits/Lab	4
Engl 1A*	English Composition	3
Engl 11	Report and Technical Writing	3
Math 4*	Applied Mathematics with Calculus	5
Math 16A	Applied Calculus I	3
Math 16B	Applied Calculus II	3
Ph 10A/10AL*	General Physics I/Lab	4
Ph 10B/10BL	General Physics II/Lab	4
Spch 1*	Intro to Speech	3

Total required units in major — 49-19 (GE) = 30

*Denotes General Education course that EET majors are required to take for the A.S. Degree.

Suggested Course Sequence:

First Semester	
EL 10/10L	5
Engl 1A	3
Math 4 (alternate course: Math 16A or 25A)	5
Spch 1	3
	16

Second Semester	
EL 16/16L	4
EL 17/17L	4
Engl 11	3
	11

Third Semester	
Chem 12 (alternate course: Chem 1A)	4
Math 16A (alternate course: Math 25A)	3
Ph 10A/10AL (alternate course: Ph 20A/20AL)	4
	11

Fourth Semester	
CS 18/18L	4
Math 16B (alternate course: Math 25B)	3
Ph 10B/10BL (alternate course: Ph 20B/20BL)	4
	11

See Degree Requirements and Transfer Information section for General Education requirements.

■ Electronics Technology
Occupational
Associate in Science Degree

The foundation of today's high technology is in electronics. Students desiring an intensive two-year program in all major areas of electronics should enroll in the Electronics Technology Associate in Science Degree course of study.

Those students interested in a more comprehensive four-year university transfer program should enroll in the Electronics Engineering Technology Associate in Science Degree program. The first year of both programs are nearly identical.

Preparation for the Major:

Mathematics — two years of high school algebra or Math 1 and Math 3 or equivalent.

Electronics — Students with no prior experience with Electronics are encouraged to take EL 1/1L prior to or concurrently with EL 10/10L.

All students are strongly encouraged to take advantage of summer school class offerings.

Required Courses:		Units
EL 10/10L	Passive Circuits/Lab	5
EL 16/16L	Analog Circuits/Lab	4
EL 17/17L	Digital Circuits/Lab	4
EL 20/20L	Communication Electronics/Lab	4
EL 21/21L	Microprocessors/Lab	4
EL 24/24L	Diagnostics, Trouble Shooting and Repair/Lab	4
EL 27	Microcomputer Applications	2
EL 28/28L	Industrial Electronics/Lab	4
EL 29	Industrial Seminar	1
Engl 1A*	English Composition	3
Engl 11	Report and Technical Writing	3
Math 4*	Applied Mathematics with Calculus	5
Phy Sc 1/1L*	Principles of Physical Science/Lab	4

Total required units in major — 47-12 (GE) = 35

*Denotes General Education course required for A.S. Degree.

Suggested Course Sequence:

First Semester		Third Semester	
EL 10/10L	5	EL 20/20L	4
Math 4	5	EL 21/21L	4
(alternate course: Math 16A or 25A)		EL 24/24L	4
Phy Sc 1/1L	4		
(alternate courses: Ph 10A/10AL or 20A/20AL & Chem 1A or 12)			
	14		12
Second Semester		**Fourth Semester**	
EL 16/16L	4	EL 27	2
EL 17/17L	4	EL 28/28L	4
Engl 1A	3	EL 29	1
		Engl 11	3
	11		10

See Degree Requirements and Transfer Information section for General Education requirements.

■ Electronics Technology
Certificate of Achievement

A Certificate of Achievement in Electronics is offered to those students desiring only the intensive training in electronics, but not the general education courses required of all associate degree programs and transfer degree programs.

Preparation for the Major:

Mathematics — two years of high school algebra or Math 1 and Math 3 or equivalent.

Electronics — Students with no prior experience with Electronics are encouraged to take EL 1/1L prior to or concurrently with EL 10/10L.

All students are strongly encouraged to take advantage of summer school class offerings.

Required Courses:		Units
EL 10/10L	Passive Circuits/Lab	5
EL 16/16L	Analog Circuits/Lab	4
EL 17/17L	Digital Circuits/Lab	4
EL 20/20L	Communication Electronics/Lab	4
EL 21/21L	Microprocessors/Lab	4
EL 24/24L	Diagnostics, Trouble Shooting and Repair/Lab	4
EL 27	Microcomputer Applications	2
EL 28/28L	Industrial Electronics/Lab	4
EL 29	Industrial Seminar	1
Math 4*	Applied Mathematics with Calculus	5
Phy Sc 1/1L*	Principles of Physical Science/Lab	4

Total required units — 41-9 (GE) = 32

*Denotes General Education course required for Certificate.

Suggested Course Sequence:

First Semester		Third Semester	
EL 10/10L	5	EL 20/20L	4
Math 4	5	EL 21/21L	4
(alternate course: Math 16A or 25A)		EL 24/24L	4
Phy Sc 1/1L	4		
(alternate courses: Ph 10A/10AL or 20A/20AL & Chem 1A or 12)			
	14		12
Second Semester		**Fourth Semester**	
EL 16/16L	4	EL 27	2
EL 17/17L	4	EL 28/28L	4
		EL 29	1
	8		7

■ Computerized Composition Technical Representative

*See Graphic Communications for curriculum

Electronics Technology Courses

EL 1 — 3 Units
Introduction to Electronics
Prerequisite: Math 1 or equivalent college course, or a satisfactory score on the Math Placement Exam or one year high school algebra
Class Hours: 3 lecture

This is an introductory course in electronics intended for both technically and nontechnically-minded students. The presentation of basic concepts and theory is reinforced by laboratory experiments in concurrent or later EL 1L enrollment. The scope ranges from electron theory to microcomputers, with emphasis on passive and active devices, amplifiers, oscillators and digital circuits. The course includes practical applications of electronics to business, science, industry and entertainment.

EL 1L — 1 Unit
Introduction to Electronics Laboratory
Prerequisite: Concurrent or previous enrollment in EL 1
Class Hours: 3 laboratory

This course supplements lecture course EL 1 by providing laboratory experiments to illustrate and demonstrate application of lecture concepts. Practical use of electronic parts, circuit breadboarding and measurement equipment is emphasized.

EL 2 — 3 Units
Introduction to Microprocessors
Class Hours: 3 lecture

This general introduction to the operation and application of the microprocessor will include numbering systems and basic logic building blocks, partitioning and architecture, interfacing and interface devices, the TTY, CRT, keyboard, cassette loader; programming, microprocessor applications, the 8080 microprocessor will be stressed throughout the course.

EL 10 — 4 Units
Passive Circuits
Prerequisite: Math 3 or equivalent
Corequisite: Math 4 or Math 16A or Math 25A or equivalent college course
Class Hours: 4 lecture

This course covers passive DC and AC circuit theory and operation. Ohm's and Kirchhoff's laws are used in solving series-parallel circuit problems. Basic theorems, such as Thevenin's and Norton's are applied in solving more complex circuit problems. The characteristics of resistors, capacitors, and inductors and their response in DC and AC circuits will be studied. *Transfer credit: CSU*

EL 10L — 1 Unit
Passive Circuits Laboratory

Prerequisite: Previous completion or concurrent enrollment in EL 10
Class Hours: 3 laboratory
This laboratory course provides "hands-on" experience to reinforce the theory discussed in the lecture. Actual DC and AC circuits will be wired and measurement of resistance, voltage and current will be taken and compared to calculated values to show validity of the formulas. *Transfer credit: CSU*

EL 16 — 3 Units
Analog Circuits
Prerequisite: EL 10/10L or Physics 20B/20BL or Physics 10B/10BL
Class Hours: 3 lecture
This course describes active electronic devices and circuits, including operation and analysis of diodes, BJT's and FET's and OP amp devices. Topics covered include gain, frequency response, feedback principles, small signal amp and power amps. *Transfer credit: CSU*

EL 16L — 1 Unit
Analog Circuits Laboratory
Prerequisites: EL 10/10L or Physics 20B/20BL or Physics 10B/10BL; concurrent enrollment or previous completion of EL 16
Class Hours: 3 laboratory
This laboratory course provides "hands-on" experience to reinforce the theory discussed in the lecture. Typical solid state devices are tested and their operation in circuits is observed. *Transfer credit: CSU*

EL 17 — 3 Units
Digital Circuits
Prerequisite: EL 10/10L or Physics 20B/20BL or Physics 10B/10BL
Class Hours: 3 lecture
This course is an in-depth study of modern digital devices and systems. It covers binary number systems, combinational and sequential logic circuits, counters, memory devices, and a brief introduction to microprocessors. *Transfer credit: CSU*

EL 17L — 1 Unit
Digital Circuits Laboratory
Prerequisites: EL10/10L or Physics 20B/20BL or Physics 10B/10BL and concurrent enrollment in EL 17
Class Hours: 3 laboratory
This laboratory course is intended to reinforce the concepts learned in the lecture course. The students will build, analyze, and trouble shoot all basic circuits that are used in modern digital systems. *Transfer credit: CSU*

EL 20 — 3 Units
Communication Electronics
Prerequisite: EL 16/16L
Class Hours: 3 lecture
This is an up-to-date survey of modern communication devices and systems. Course covers analog and digital communications, antennas, transmission lines, fiber optics, microwaves, as well as various modulation and demodulation techniques.

EL 20L — 1 Unit
Communication Electronics Laboratory
Prerequisites: EL 16/16L and concurrent enrollment in EL 20
Class Hours: 3 laboratory
This laboratory course reinforces the principles discussed in the Communication Electronics lecture course. Basic communication circuits are constructed and tested. Trouble shooting is emphasized throughout the course.

EL 21 — 3 Units
Microprocessors
Prerequisite: EL 17/17L
Class Hours: 3 lecture
This is an advanced course covering use of the microprocessor in typical microcomputer and similar applications. Typical industrial components and programming will be emphasized.

EL 21L — 1 Unit
Microprocessors Laboratory
Prerequisites: EL 17/17L and concurrent enrollment in EL 21
Class Hours: 3 laboratory
This laboratory course provides "hands-on" experience to reinforce the theory discussed in the lecture. Actual programs will be made up and run through the Healthkit EL 3400 Trainer.

EL 22A/B — 1-3/1-3 Units
Independent Studies in Electronics
Prerequisite: A previous course in Electronics Technology
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of electronics technology on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units.

EL 24 — 3 Units
Diagnostics, Trouble Shooting and Repair
Prerequisites: EL 16/16L, 17/17L
Class Hours: 3 lecture
A basic course in the procedures and methods used in trouble shooting typical electronic equipment. The systematic approach is emphasized and applied to analog and digital circuits.

EL 24L — 1 Unit
Diagnostics, Trouble Shooting and Repair Laboratory
Prerequisite: Concurrent enrollment in EL 24
Class Hours: 3 laboratory
This course is the laboratory course to accompany the EL 24 lecture course. Trouble shooting principles presented in the lecture will be applied to actual circuits and systems.

EL 27 — 2 Units
Microcomputer Applications
Prerequisites: EL 16/16L, 21/21L or equivalent
Class Hours: 1 lecture, 3 laboratory
This course offers a study of modern applications of microcomputers in science, engineering, and industry. The study is primarily hardware oriented, but the necessary software is also considered. Topics covered include: I/O procedures for the serial and parallel ports, RS232C, IEEE-488, process control, measurement techniques, numeric control, and microprocessor development.

EL 28 — 3 Units
Industrial Electronics
Prerequisites: EL 17/17L, 21/21L
Class Hours: 3 lecture
A thorough overview of modern electronics in industry. The first part of the course deals with electrical power systems, transformers, motors, actuators, switches. The remainder of the course covers various electronic circuits that control/actuate electromechanical devices; for example, power supplies, transducers, optoelectronic devices, computer control, and robotics. *Transfer credit: CSU*

EL 28L — 1 Unit
Industrial Electronics Laboratory
Prerequisite: Concurrent enrollment in EL 28
Class Hours: 3 laboratory
This course provides "hands-on" experience with modern industrial electronics circuits. Frequently used circuits will be built, tested, and repaired. The basic principles of process control are studied through the actual constructing and operating of control electronics hardware. *Transfer credit: CSU*

EL 29 — 1 Unit
Industrial Seminar
Prerequisites: EL 16/16L, 17/17L
Class Hours: 1 lecture
This course is designed to acquaint the student with various aspects of the electronics industry by means of a series of guest lecturers. Typical topics of the seminars include: recent advancements in electronics, job placement, resume writing and job interviews, and working in the industrial environment.

EL 49A-D — 1-4 Units
Cooperative Work Experience — Electronics Technology★
Prerequisite: Placement at a work station
Class Hours: 5-20 employment, 1 by arrangement
Students employed in a field related to Electronics Technology will design a learning contract in conjunction with their employer that will involve expanded responsibilities and/or the opportunity to learn new job experiences beyond those required in the existing job duties. Direct coordination with the employer in question will be a part of this learning experience.

EL 89A-Z — ½-3 Units
Institutes in Electronics★
Class Hours: Variable

This short-term lecture series designed to develop the abilities and skills of the participants through appropriate activities places emphasis on the acquisition of specialized knowledge in a particular segment of electronics.

Engineering

The field of engineering is a particularly broad one which affords the student the choice of several areas in which to specialize. The lower division course work described below is designed to provide basic preparation for any of these choices.

Career Opportunities

B.S. Level

(Opportunities are bachelor or post-graduate level)

Mechanical Engineer
Chemical Engineer
Civil Engineer
Electrical Engineer
Water Quality Engineer
Nuclear Engineer
Environmental Engineer
Sanitary Engineer
Process Engineer
Hydraulic Engineer
Project Engineer
Geotechnical Engineer
Systems Engineer
Computer Engineer
Stationary Engineer
Aerospace Engineer
Biomedical Engineer
Industrial Engineer
Manufacturing Engineer
Metallurgical Engineer
Mining Engineer
Naval Engineer
Petroleum Engineer
Plastics Engineer
Astronautical Engineer
Structural Engineer
Traffic Engineer
Electronic Systems Engineer
Automotive Engineer
Robotics Engineer
Artificial Intelligence Engineer
Military Pilot

Faculty

Full-Time
Fred Meyer
John Thomsen

Part-Time
Michael Mitchell
Michael Morcos
Sylvia Sullivan

Counselors
John Heydenreich
Edna Ingram

Transfer Information

Major requirements for upper division standing at:

California State University, Los Angeles:
Chem 1A, 1B; CS 18/18L; Engr 4, 12, 16, 20/20L; Math 25A, 25B, 25C, 35; Physics 20A/20AL, 20B/20BL, 20C/20CL.

California State University, Northridge:
Chem 1A, 1B; CS 10/10L, 18/18L; Engr 4, 12, 16*, 20/20L; Math 25A, 25B, 25C, 35; Physics 20A/20AL, 20B/20BL, 20C/20CL.
*Engr 227L to be taken after transfer.

California State University, Sacramento:
Chem 1A; CS 18/18L; Engr 12, 16, 20; Math 25A, 25B, 35; Physics 20A/20AL, 20B/20BL, 20C/20CL.

University of California, Berkeley:
Chem 1A, 1B; CS 10/10L, 18/18L; Engr 12.

■ Engineering

Associate in Science Degree

This program is designed to award a designated associate degree to those students who have completed a course of specialization in Engineering. These requirements were chosen by faculty to optimize students' preparation for upper division course work for Bachelor of Science degrees in Engineering offered by four-year institutions. Since the course work in engineering is sequential, students may spend less time earning an Associate in Science Degree and/or Bachelor of Science Degree by deferring some of the university general education requirements until their Junior and Senior years and giving priority to the requirements for a major in engineering. In addition, the earning of this degree will be evidence of achievement of technical skills which may be helpful towards the seeking of immediate employment.

Preparation for the Major:

Mathematics — two years high school algebra plus trigonometry or Math 1, 3, and 7 or equivalent.

Chemistry — one year high school chemistry or Chem 12 or equivalent.

Physics — one year high school physics or Ph 12 or equivalent.

Engineering students are strongly encouraged to take advantage of summer school class offerings.

Required Courses:		**Units**
Chem 1A	General Chemistry	6
Engr 4	Intro to Engineering Design	3
Engr 12	Engineering Materials	3
Engr 16	Engineering Statics and Strength of Materials	4
	or	
Engr 20/20L	Electrical Engineering Fundamentals/Lab	4
Math 25A	Calculus/w Analytic Geometry I	5
Math 25B	Calculus/w Analytic Geometry II	5
Math 25C	Calculus/w Analytic Geometry III	5
Ph 20A/20AL	Mechanics of Solids and Fluids/Lab	4
Ph 20B/20BL	Electricity and Magnetism/Lab	4
Ph 20C/20CL	Wave Motion, Heat, Optics and Modern Physics/Lab	4

Total minimum units required in major area — 43

Recommended courses: Chem 1B; CS 18/18L; Math 35

Suggested Course Sequence:

First Semester	
Chem 1A	6
Engr 4	3
Math 25A	5
	14

Second Semester	
Math 25B	5
Ph 20A/20AL	4
	9

Third Semester	
Engr 12	3
Math 25C	5
Ph 20B/20BL	4
	12

Fourth Semester	
Engr 16 or Engr 20/20L	4
Ph 20C/20CL	4
	8

See Degree Requirements and Transfer Information section for General Education requirements.

Engineering Courses

ENGR 4 — 3 Units
Introduction to Engineering Design
Class Hours: 1 lecture, 6 laboratory

This course is designed to further the student's understanding of the engineering profession by means of lecture/discussions on systematic design techniques, written communication, and the anatomy of the engineering curriculum and profession. Course content includes basic ideas in engineering graphics such as views, projections, sections, inter-sections, developments, symbols used in mechanical and electrical drawings, materials and parts specifications, dimensioning, fits and tolerances. A laboratory in engineering and graphics is provided. Projects in engineering are assigned. *Transfer credit: CSU; UC*

ENGR 12 — 3 Units
Engineering Materials
Prerequisite: Chem 1A
Class Hours: 3 lecture

This introductory course on the engineering properties of materials applies the basic principles of the atomic and crystal structure of solids to the study of properties, and to the selection and use of engineering materials. *Transfer credit: CSU; UC*

ENGR 16 — 4 Units
Engineering Statics and Strength of Materials
Prerequisites: Engr 12 and Math 25B
Class Hours: 4 lecture

This course covers vector algebra, equivalent force systems, free body diagrams and equilibrium, structural mechanics, behavior of deformable solids, stress and strain tension, compression, flexure, torsion, beams, columns, statically indeterminate problems, multiaxial stresses, theories of strength. *Transfer credit: CSU; UC*

ENGR 20 — 3 Units
Electrical Engineering Fundamentals
Prerequisite: Physics 20B
Corequisite: Math 35
Class Hours: 3 lecture

This course is an introduction to the theory and analysis of electrical circuits, basic circuit elements including the operational amplifier, circuit theorems, dc circuits, forced and natural responses of simple circuits, sinusoidal steady state analysis and the use of a standard computer aided circuit analysis program. Consideration will be given to power, energy, impedance, phasors, and frequency response. *Transfer credit: CSU; UC*

ENGR 20L — 1 Unit
Electrical Engineering Fundamentals Laboratory
Prerequisite: Physics 20BL
Corequisite: Engr 20
Class Hours: 3 laboratory

Experiments in passive and active electrical circuits will be conducted to reinforce the concepts studied in Engr 20. *Transfer credit: CSU; UC*

ENGR 22A/B — 1-3/1-3 Units
Independent Studies in Engineering
Prerequisite: A previous course in Engineering
Class Hours: 1-3 tutorial

This course is for students who are interested in furthering their knowledge of engineering on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

ENGR 49A-D — 1-4 Units
Cooperative Work Experience — Engineering★
Prerequisite: Placement at a work station
Class Hours: 5-20 employment, 1 by arrangement

Students employed in a field related to Engineering will design a learning contract in conjunction with their employer that will involve expanded responsibilities and/or the opportunity to learn new job experiences beyond those required in the existing job duties. Direct coordination with the employer in question will be a part of this learning experience.

English

The study of English offers a basic understanding of writing skills and appreciation of literature. The exploration of the possibilities of language in the human experience is a vital foundation for all learning.

Career Opportunities

B.A. Level

(Most careers require a bachelors degree)

Editor
Editor, House Publications
Copywriter
Journalist
Library Reference Worker
Television Writer
Technical Writer
Publicist
Researcher
Copy Editor
Program Developer
Civil Service Positions
Executive Assistant
Manager Trainee
Scenario Writer
Legal Aide
Report Writer
Proofreader
Novelist
Playwright
Biographer
Story Writer
Magazine Writer
Poet
Public Relations Worker

Faculty

Full-Time

Judith Allen
Richard Black
Gillian Dale
John Davie
Richard Edwards
Hugo Ekback
Norman Garber
John Hanft
Diana Lopez
Barbara Outland
Pamela Sheridan
Howard Siegel
Sydney Sims
Michael Strumpf

Part-Time

Dale Alan Bailes
David Birchman
Thomas Bryan
Joseph Castorino
Elizabeth Clark
Derreatha Corcoran
Jimmy Crawford
Matthew Crow
Ralph Edsell
Margaret Freeman
Francine Hallcom
Ila Jean Kragthorpe
Thomas Neuburger
Sheryl Paylor
Marlene Pearson
Judie Rae
Judith Ramos
Sandra Rayl
Ilene Rubenstein
Karen Tepfer
Sheryl Thompson
Stuart Wilson
Richard Wimmer

Counselor

Don Henderson

Transfer Information

Career opportunities in English include teaching; journalism; advertising; copywriting; writing for stage, screen, television, and magazines. Studies in English provide preparation for the professions, government service, and politics.

Major requirements for upper division standing at:

California State University, Northridge:
Option I - Literature:
Select 6 units from Engl 14, 19, 20
(3 units) from: Engl 13A, 13B, 15A, 15B
Option II - Writing:
Engl 10A or 10B and 3 units from 14, 19, 20
(3 units) from: Engl 13A, 13B, 15A, 15B
Option III - Contract option:
Consult faculty advisor at CSUN.

California State University, Sacramento:
Engl 13A, 13B, 15A, 15B (Majors must complete one year of college-level foreign language, or the equivalent.)

University of California, Davis:
Engl 1A, 1B, 10A, 13A, 13B, 14, 15A, 15B

University of California, Santa Barbara:
Engl 1A, 1B, 15A, 15B, 30; Hist 1A, 1B; select one of the following languages: Fr 1, 2, 3, 4; Ger 1, 2, 3, 4; Spn 1, 2, 3, 4.

Special Note

A satisfactory score on the English Placement Test is required of all students desiring entrance into English 1A. Otherwise, enrollment in English 2 and completion of the class with a C or better grade is necessary.

English Courses

ENGL 1A — 3 Units
English Composition
Prerequisite: A satisfactory score on English placement test or satisfactory completion of Engl 2 or equivalent.
Class Hours: 3 lecture
This course in composition emphasizes expository writing which demonstrates principles of rhetorical organization, control of diction, clear sentence construction and command of the mechanics of writing. Course work will also include the study and analysis of literature as a model for composition. *Transfer credit: CSU; UC. CAN: ENGL 2*

ENGL 1B — 3 Units
Introduction to Literature
Prerequisite: Engl 1A or its equivalent
Class Hours: 3 lecture
A study of imaginative literature complementing the rhetorical emphasis of English 1A. Written work will focus on the meaning and style of fiction, drama, or verse, seeking to develop analytical and critical skills and to provide insight into human experience. *Transfer credit: CSU; UC*

ENGL 2 — 3 Units
Preparatory English
Prerequisite: A satisfactory score on the English placement test.
Class Hours: 3 lecture
This course is intended for students who need help in learning to write at the college level. The course will emphasize the coherent development of a controlling idea to a reasoned conclusion. Course work will increase the student's ability to use a variety of sentence structures and to achieve relative freedom from basic errors when writing college-level papers. May be taken two (2) times for credit.

ENGL 3 — 3 Units
Writing Skills
Class Hours: 3 lecture
This course is strongly recommended for students who need a review of basic writing skills. Emphasis will be placed on grammar, spelling, vocabulary building and sentence structure, and the student will be provided with intensive practice in developing ideas, organization, and clarity of statement. Student will be expected to write regularly. May be taken two (2) times for credit.

ENGL 4A/B/C — 3/3/3 Units
English as a Second Language
Prerequisite: Beginning skills in English (speaking, reading, writing) for 4A, 4A for 4B, 4B for 4C
Class Hours: 2 lecture, 3 laboratory
This course identifies needs in speech, writing, reading, vocabulary, spelling of students for whom English is not their principal language and strengthens these areas so the student will be capable of communicating

well in English. Some emphasis will also be placed on American customs. *Transfer credit: CSU; UC*

ENGL 5 — 3 Units
Radio-Television Writing
Prerequisite: Engl 1A or equivalent
Class Hours: 3 lecture
This course deals with the preparation and analysis of dramatic scripts, program formats, public service announcements, local news, commercials, continuity, discussion programs, special events, talks and interviews. Training is given in the fundamentals of script format, professional methods, and the ethics and restrictions involved in the broadcasting media. (co-numbered RT 5) *Transfer credit: CSU*

ENGL 10A — 3 Units
Creative Writing
Prerequisite: Engl 1A or equivalent
Class Hours: 3 lecture
This writing workshop designed to concentrate on the techniques of writing fiction and poetry provides practice in original writing, followed by discussion and analysis of student writing. *Transfer credit: CSU; UC*

ENGL 10B — 3 Units
Creative Writing
Prerequisite: Engl 10A
Class Hours: 3 lecture
This is an advanced study of literary forms with emphasis on prose and poetry; practice in original writing followed by discussion and analysis. *Transfer credit: CSU; UC*

ENGL 11 — 3 Units
Report and Technical Writing
Prerequisite: Engl 1A
Class Hours: 3 lecture
The course will provide extensive practice in writing proposals, memoranda, letters, technical reports, and technical manuals. Students will analyze writing situations and use appropriate structuring, developmental, and stylistic techniques. They will do careful research and documentation and incorporate data and graphics to produce complete, accurate and useful written communications. *Transfer credit: CSU*

ENGL 13A — 3 Units
Major American Writers I
Prerequisite: Engl 1A or equivalent
Class Hours: 3 lecture
This course is a survey of American writing from the colonial era to the end of the Civil War in fiction, non-fiction, and poetry. It includes major statements by 17th and 18th century writers such as Anne Bradstreet, Edward Taylor, Jonathan Edwards, and Benjamin Franklin, as well as 19th century masterpieces by Poe, Melville, the New England Transcendentalists and Walt Whitman. *Transfer credit: CSU; UC. CAN: ENGL 14*

ENGL 13B — 3 Units
Major American Writers II
Prerequisite: Engl 1A or equivalent
Class Hours: 3 lecture
This course is a survey of American writing from the post-Civil War era to the present in fiction, non-fiction, drama, and poetry. It includes the novels of modern masters like Mark Twain, Henry James, and Edith Wharton, as well as powerful stylists like Hemingway, Faulkner, Steinbeck, Robert Frost and Eugene O'Neill. Contemporary poetry and prose will also be studied. *Transfer credit: CSU; UC. CAN: ENGL 16*

ENGL 14 — 3 Units
Study of Poetry
Prerequisite: Engl 1A or equivalent
Class Hours: 3 lecture
The study of poetry will relate form to meaning through a study of imagery, figurative language, allegory, etc. in American and British poetry. The close reading and discussion of selected poems will provide a basis for the writing of critical essays. *Transfer credit: CSU; UC*

ENGL 15A/B — 3/3 Units
Survey of English Literature
Prerequisite: Engl 1A or equivalent
Class Hours: 3 lecture
Engl 15A: English literature is studied in its cultural framework, from its beginning to the rise of Romanticism. *Transfer credit: CSU; UC. CAN: ENGL 8*
Engl 15B: English literature is studied in its cultural framework, from the rise of Romanticism to the present. *Transfer credit: CSU; UC. CAN: ENGL 10*

ENGL 17 — 3 Units
Shakespeare
Prerequisite: Engl 1A or equivalent
Class Hours: 3 lecture
This is a survey of twelve plays, including romantic comedies, chronicles, tragedies, "dark" comedies, and romances. Class work will also include lectures, critical papers, and discussions. *Transfer credit: CSU; UC*

ENGL 18 — 3 Units
The Modern American Novel
Prerequisite: Engl 1A or equivalent
Class Hours: 3 lecture
Structure and meaning are analyzed in the works of Dreiser, Hemingway, Dos Passos, Faulkner, Lewis, Wolfe, Bellow, Ellison, Malamud and I. B. Singer. Written and oral presentations will supplement lecture and classroom discussions. *Transfer credit: CSU; UC*

ENGL 19 — 3 Units
Introduction to Short Story
Prerequisite: Engl 1A or equivalent
Class Hours: 3 lecture
The form and meaning of short stories are studied through intensive analysis of selected American, British and continental examples. *Transfer credit: CSU; UC*

ENGL 20 — 3 Units
Study of Drama
Prerequisite: Engl 1A or equivalent
Class Hours: 3 lecture
English 20 is an introduction to the study of drama in its historical, cultural, and biographical context. Plays studied will range from ancient Greek tragedy to the Theatre of the Absurd. Emphasis will be on analysis and developing sound critical judgment. Critical essay writing is required. *Transfer credit: CSU; UC*

ENGL 21 — 3 Units
Contemporary Novels
Prerequisite: Engl 1A or equivalent
Class Hours: 3 lecture
Students read and analyze post-World War II novels, American and foreign, selected because of their popularity as well as their innovative importance and literary quality. *Transfer credit: CSU; UC*

ENGL 22A/B — 1-3/1-3 Units
Independent Studies in English
Prerequisite: A previous course in English
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of English on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

ENGL 25 — 3 Units
Playwriting
Class Hours: 3 lecture
This course is designed for the student to develop his skills in writing for the theater with the possible opportunity of production. (co-numbered ThA 21) *Transfer credit: CSU*

ENGL 29A — 3 Units
Old Testament as Literature
Class Hours: 3 lecture
Students read and discuss the Books of the Old Testament, including the thirty-nine books from the Genesis to Malachi, and acquire an understanding of the history of the Old Testament Apocrypha. Form, theme, and style are studied. *Transfer credit: CSU; UC*

ENGL 29B — 3 Units
New Testament as Literature
Class Hours: 3 lecture

Students read and discuss Books of the New Testament, which includes nine of the twenty-seven books of the New Testament, from Matthew to Revelation. Form, theme, and style are also studied. *Transfer credit: CSU; UC*

ENGL 30 — 3 Units
Masterpieces of World Literature I
Prerequisite: Engl 1A or equivalent
Class Hours: 3 lecture
This is a survey of representative authors from the time of Homer to the Renaissance, with intensive study of selected Greek, Roman, Medieval and Renaissance masterpieces. *Transfer credit: CSU; UC*

ENGL 31 — 3 Units
Masterpieces of World Literature II
Prerequisite: Engl 1A or equivalent
Class Hours: 3 lecture
This is a survey of major literature from the Renaissance to the present, including such authors as Locke, Moliere, Rousseau, Goethe, Emerson, Tolstoy, Ibsen, and Mann. *Transfer credit: CSU; UC*

ENGL 33 — 3 Units
Modern European Fiction
Prerequisite: Engl 1A or equivalent
Class Hours: 3 lecture
This study of major modern European fiction includes the work of Dostoievsky, Tolstoy, Flaubert, Camus, Verga, Hesse, Gogol, Babal, and Mann. *Transfer credit: CSU; UC*

ENGL 47 — 3 Units
Magazine Editing
Prerequisites: Journ 1, Journ 2 or equivalent
Class Hours: 2 lecture, 3 laboratory
This is a course in the analysis, development, composition and layout of magazines or similar publications. Emphasis is given to coordinating feature stories and related articles with attractive pictorial displays. Instruction is also given in the graphic arts as related to magazine production. (co-numbered Journ 11A) *Transfer credit: CSU*

ENGL 60A-Z — 1-3 Units
Topics in English
Prerequisites: To be determined with each Topic
Class Hours: To be determined with each Topic
This is a special series of courses each of which deals with a specific topic in English not covered in detail in the general English course offerings. Topics courses are announced on a semester basis in the schedule of classes. *Transfer credit: CSU; UC maximum credit 3 units.*

Topics which have been developed include:

60A — 3 Units
The Poetry of Chaucer
Prerequisite: Engl 1A
Class Hours: 3 lecture
This course emphasizes "The Canterbury Tales" and "Troilus and Criseyde." It examines Chaucer's language and literary techniques, in close reading and discussion of his major work which will be the basis for critical essays.

60B — 3 Units
Shakespeare on Television
Class Hours: 3 lecture

60C — 3 Units
Literature of the Human Psyche
Prerequisite: Engl 1A or equivalent
Class Hours: 3 lecture

Environmental Science

Environmental Science is a multi-disciplinary field covering the physical, biological, economical, and legal aspects of the environment.

Career Opportunities

Bachelor degree level or advanced degree
Urban Planner/Assistant
Environmental Analyst (B.A.)
Resources Manager
Environmental Research Technician
Local, State, Federal Government (B.A.)
Teaching

Faculty

Full-Time
Richard Kurtik
Robert Miller
Muthena Naseri

Counselor
Diane Sukiennik

Transfer Information

The following courses transfer where students can major in Urban Planning, Natural Resource Conservation and Management, Teaching, and may work for Government, such as Forest Service, and/or private business.

Major requirements for upper division standing at:
University of California, Santa Barbara:
Econ 1; Env Sc 1, 2; Phil 7; select one course from Math 15 or 16A or 25A. Select one course from each group:
Group 1 - Physics 1/1L, 10A/10AL, 12
Group 2 - Bio 1, 2A; Bot 1
Group 3 - Chem 1A, 12

Environmental Science Courses

ENV SC 1 — 4 Units
Environmental Science
Class Hours: 3 lecture, 3 laboratory
This course presents the basic chemistry and physics of ecosystems. Emphasis is placed on the scientific method and natural laws in understanding energy, population, food, water, and pollution. Laboratory experiments and field rips are designed to correspond with lecture topics. Individual student projects are part of the laboratory. (Physical Science credit) *Transfer credit: CSU; UC*

ENV SC 2 — 4 Units
Environment and Human Interactions
Prerequisite: Only one of the following: HS Biology or HS Chemistry or HS Physics or EnvSc 1 or Chem 12 or equivalent.
Class Hours: 3 lecture, 3 laboratory
This course introduces the biological principles governing ecosystems. An analysis of environmental problems as they relate to world demography and human activities is also covered. Topics include: population dynamics; major world biotic communities; and the urban environment. Field study of California's major plant communities and study of the local environment will be part of the course. (Biological Science credit) *Transfer credit: CSU; UC*

ENV SC 3 — 3 Units
Energy Resources and Conservation
Prerequisite: Math 9 or equivalent
Class Hours: 3 lecture
This course is an overall quantitative survey of current energy resources, alternate methods of energy generation and various energy conservation methods. Emphasis is placed on practical application relevant to today's economy and technology. Basic physics of energy and environmental utilization relevant to energy use are stressed. *Transfer credit: CSU*

ENV SC 20 — 3 Units
Environmental Systems
Prerequisite: One year of high school science or one college-level science course.
Class Hours: 2 lecture, 3 activity/laboratory
The objective of this course is to develop an understanding of the physical environment of ecosystems including: geographic formations; soils (types, textures and structure); basic rock types; elements of weather and oceanic influences, including tides and currents. This course consists of a nine-day field trip to a selected environment (e.g. deserts of Death Valley or Baja, Mexico), plus 32 hours of pre- and post-trip lectures. The field study provides first-hand experience in collecting, interpreting and reporting field data while the lecture periods provide background in the scientific method, measurements, instrumentation use, the chemistry of sea water, geologic features, rock identification, and biological indicators and adaptations. *Transfer credit: CSU*

ENV SC 22A/B — 1-3/1-3 Units
Independent Studies in Environmental Science
Prerequisite: A previous course in Environmental Science
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of environmental science on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

Essential Skills

Essential Skills classes are offered to students who need specific information, abilities, and techniques to improve their chances of succeeding in all of their college classes, in the job market, and in the society. In completing the Skills Developmental Laboratory course(s), students will become prepared to undertake successfully further education and training at a college level.

Faculty

Full-Time
Patricia Dozen

Counselor
Donna Allyn

Essential Skills Courses

ES 1 — 1 Unit
Library Success Skills
Class Hours: 16 lecture total
This course is designed to teach basic library skills necessary for research, term paper development and classroom assignments. Skills taught will include use of the card catalog, periodical and newspaper indexes, basic reference sources, and how to compile a bibliography for term paper assignments.

The following courses are part of the supervised, self-paced, individualized Skills Development Laboratory program which uses teaching and tutorial techniques along with multi-media and computer-aided instruction. Following appropriate diagnostic testing and discussion with a laboratory staff member, enrollment in the appropriate course(s) for an appropriate number of units necessary to reach the student's goals will be recommended. Students may be enrolled in these classes at any time during a semester and, once having met the course and hourly requirements, they may receive college credit (not degree credit) based on an attendance formula.

For each of the following four courses, enrollment is preceded by diagnostic assessment.

ES 2 — ½-1½ Units
Skills Development Laboratory - Reading★
Class Hours: 24-72 laboratory total
This course provides the opportunity for intensive individualized developmental work in reading skills. Following diagnostic assessment each student will be provided with teaching and tutorial assistance in conjunction with the use of multi-media materials and computer-aided instruction in reaching his/her goals. Graded Credit/No Credit. May be taken four (4) times for credit.

ES 3 — ½-1½ Units
Skills Development Laboratory - Writing★
Class Hours: 24-72 laboratory total
This course provides the opportunity for intensive individualized developmental work in writing skills. Following diagnostic assessment each student will be provided with teaching and tutorial assistance in conjunction with the use of multi-media materials and computer-aided instruction

in reaching his/her goals. Graded Credit/No Credit. May be taken four (4) times for credit.

ES 4 — ½-1½ Units
Skills Development Laboratory - Mathematics★
Class Hours: 24-72 laboratory total

This course provides the opportunity for intensive individualized developmental work in mathematical skills. Following diagnostic assessment each student will be provided with teaching and tutorial assistance in conjunction with the use of multi-media materials and computer-aided instruction in reaching his/her goals. Graded Credit/No Credit. May be taken four (4) times for credit.

ES 5 — ½-1½ Units
Skills Development Laboratory - Study Skills★
Class Hours: 24-72 laboratory total

This course is designed to provide students with the basic skills and information required for a successful college academic experience. Time management and study strategies, effective listening, note taking, informal outlining, how to read texts, memory improvement principles and techniques, effective test-taking techniques, and how to reduce stress and anxiety before and during tests are but some of the study skills that will be available. Following diagnostic assessment each student will be provided with individual and group assistance in conjunction with the use of multi-media materials and computer-aided instruction in reaching his/her goals. Graded Credit/No Credit. May be taken four (4) times for credit.

Exotic Animal Training and Management

This program offers a program of training for students interested in entering the expanding world of animal training and related employment. The rapid development of recreational animal parks, ecologically oriented zoos and animal entertainment centers presents many career options to graduates of this curriculum.

Career Opportunities

Animal Handler
Zookeeper
Animal Trainer
Zoo Educator
Veterinary Assistant
Kennel Worker

Faculty

Full-Time
James Patterson
Gary Wilson

Part-Time
Susan Cox
Carole Doria
Nancy Hollenbeck
James Peddie
Cynthia Wilson

Counselor
Susan Izumo

Procedures for Applying to the EATM Program

The requirements, procedures, application dates and program offerings are subject to change. Consult the EATM staff or counselor for current information.

Applicants will be selected in the Spring semester for admission into the Fall classes subject to available openings.

March 1 — EATM application, school transcripts, and three letters of recommendation from employers or teachers, must be submitted to the EATM compound office by this date.

April 1 — Applicants accepted for personal interviews will be notified. Interviews will be scheduled for the end of April.

May 15 — Notification of accepted candidates for the EATM program.

Qualifying Requirements

1. One of the following must be completed before applying to the program:
   a) High school graduation and GPA of 2.5 or
   b) General Education Development (GED) with a score of 45 and a minimum of 12 units of college with a 2.25 GPA or
   c) High school graduate with less than a 2.5 GPA and a minimum of 12 units of college with a GPA of 2.25.

   Note: Applicant may be in the process of completing above requirements at time of filing application; admission to the program will be contingent on satisfaction of requirements.
2. The following documents must be on file at the EATM Program Office at Moorpark College by March 1:
   a) All official high school and college transcripts
   b) Completed EATM program application form
   c) Three letters of recommendation from counselors, instructors, or employers other than relatives
3. An application to Moorpark College must be filed for the appropriate semester.
4. All applicants must demonstrate freedom from physical handicaps which would affect their ability to safely and satisfactorily perform the responsibilities required of all EATM students. This

requires applicants to pass a physical examination administered by the College Health Center.

It is the applicant's responsibility to check with the EATM Program Office to see that all required documents are on file at Moorpark College.

■ Exotic Animal Training and Management

Occupational Associate in Science Degree

This program is designed to prepare students for a variety of career options in the animal industry. Entry-level positions exist in zoos, animal parks and the entertainment field. Completion of required courses in the major and general education courses will qualify the student for the degree.

Required Courses:		Units
EATM 2	Animal Health and Safety	1.5
EATM 3	Exotic Animal Nutrition	1.5
EATM 4	Animal Behavior	3
EATM 5	Zoo Horticulture	3
EATM 10	Projects in EATM	1
EATM 11A	Exotic Animal Care and Handling	5
EATM 11B	Exotic Animal Care and Handling	5
EATM 13A	Exotic Animal Management & Supervision	5
EATM 13B	Exotic Animal Management & Supervision	5
EATM 15	Education & Entertainment in Animal Parks	3
EATM 21A	Exotic Animal Training	1
EATM 21L	Exotic Animal Training Laboratory	2
EATM 23	Elementary Veterinary Procedures	4
EATM 35	Animal Park Planning & Administration	2
EATM 40A	Field Experience in EATM	3
EATM 40B	Field Experience in EATM	3
EATM 45	Advanced Education & Entertainment in Animal Parks	2-2
Zoo 1	General Zoology	5
Total minimum units required in major area — 57		

Elective Courses:		
EATM 15L	Education & Entertainment Lab	1
EATM 21B	Exotic Animal Training	1

Suggested Course Sequence:

First Semester	
EATM 2	1.5
EATM 11A	5
EATM 15	3
Zoo 1	5
	14.5

Second Semester	
EATM 3	1.5
EATM 4	3
EATM 5	3
EATM 11B	5
EATM 15L	1
	13.5

Summer Session	
EATM 40A	3
	3

Third Semester	
EATM 13A	5
EATM 21A	1
EATM 21L or EATM 40B	2-3
EATM 23	4
EATM 45	2
	14-15

Fourth Semester	
EATM 10	1
EATM 13B	5
EATM 21B	1
EATM 21L or EATM 40B	2-3
EATM 35	2
EATM 45	2
	13-14

See Degree Requirements and Transfer Information section for General Education requirements.

■ Exotic Animal Care and Handling

Certificate of Achievement

This program is designed to train exotic animal handlers and keepers for employment in recreational animal parks, zoos and animal entertainment centers.

Required Courses:		Units
EATM 2	Animal Health and Safety	1.5
EATM 3	Exotic Animal Nutrition	1.5
EATM 4	Animal Behavior	3
EATM 5	Zoo Horticulture	3
EATM 10	Projects in EATM	1
EATM 11A	Exotic Animal Care and Handling	5
EATM 11B	Exotic Animal Care and Handling	5
EATM 13A	Exotic Animal Management & Supervision	5
EATM 13B	Exotic Animal Management & Supervision	5
EATM 15	Education & Entertainment in Animal Parks	3
EATM 21A	Exotic Animal Training	1
EATM 21L	Exotic Animal Training Laboratory	2
EATM 23	Elementary Veterinary Procedures	4
EATM 35	Animal Park Planning & Administration	2
EATM 40A	Field Experience in EATM	3
EATM 40B	Field Experience in EATM	3
EATM 45	Advanced Education & Entertainment in Animal Parks	2-2
Zoo 1	General Zoology	5
Total minimum units required — 57		

Elective Courses:		
EATM 15L	Education & Entertainment Lab	1
EATM 21B	Exotic Animal Training	1

Suggested Course Sequence:

First Semester	
EATM 2	1.5
EATM 11A	5
EATM 15	3
Zoo 1	5
	14.5

Second Semester	
EATM 3	1.5
EATM 4	3
EATM 5	3
EATM 11B	5
EATM 15L	1
	13.5

Summer Session	
EATM 40A	3
	3

Third Semester	
EATM 13A	5
EATM 21A	1
EATM 21L or EATM 40B	2-3
EATM 23	4
EATM 45	2
	14-15

Fourth Semester	
EATM 10	1
EATM 13B	5
EATM 21B	1
EATM 21L or EATM 40B	2-3
EATM 35	2
EATM 45	2
	13-14

Exotic Animal Training and Management Courses

EATM 2 — 1½ Units
Animal Health and Safety
Prerequisite: Acceptance into the EATM major
Class Hours: 1½ lecture

This course covers the health and safety problems of keeping animals in captivity. Students are instructed in emergency procedures, how to recognize symptoms of disease, and preventative medicine practices. The techniques of capture and restraint of animals are discussed as well as methods of transporting non-domestic animals.

EATM 3 — 1½ Units
Exotic Animal Nutrition
Prerequisite: EATM 2
Class Hours: 1½ lecture
This course is designed to provide the student with a basic understanding of those factors relating to the feeding and nutritional needs of exotic animals in captivity as well as in the wild.

EATM 4 — 3 Units
Animal Behavior
Class Hours: 3 lecture
This course is an introduction to the study of animal behavior with an emphasis on learning theory, especially classical and operant conditioning. It is designed to provide the student with an understanding of how to apply the concepts of ethology and behavior modification to the maintenance and training of animals in captivity. Each student will be required to train a rat. (co-numbered Psych 12)

EATM 5 — 3 Units
Zoo Horticulture
Prerequisite: Enrollment in EATM program
Class Hours: 2 lecture, 3 laboratory
This course is designed to provide the student with an opportunity to learn and apply skills in soils; plant growth; weed, insect and disease control; irrigation and fertilization principles; identification and uses of plants; planting and care of lawns, ground covers, flowers, trees and shrubs including proper pruning and training. Also the relationship of plants and zoo animals as it relates to the EATM facility will be stressed.

EATM 10 — 1-3 Units
Projects in EATM
Prerequisite: EATM 13A
Class Hours: 3-9 laboratory
A number of projects will be offered, each with an emphasis in a different area of the animal industry. This will allow students to gain more experience in an area of particular interest. Work will consist of field experience with professionals. May be taken four (4) times for credit.

EATM 11A — 5 Units
Exotic Animal Care and Handling
Prerequisite: Acceptance into the EATM major
Class Hours: 1 lecture, 12 laboratory
This course provides students with instruction in the maintenance of domestic and non-domestic animals in captivity. The laboratory time gives the students the opportunity to apply this knowledge to the care of the college's animal collection. Essential zoo keeping skills are developed through this "hands-on" approach.

EATM 11B — 5 Units
Exotic Animal Care and Handling
Prerequisite: EATM 11A
Class Hours: 1 lecture, 12 laboratory
This course deals with the problems of catching and restraining animals as well as construction of animal enclosures. The student applies this knowledge while working in the college's animal facility.

EATM 13A — 5 Units
Exotic Animal Management and Supervision
Prerequisite: EATM 11B
Class Hours: 1 lecture, 12 laboratory
This course explores the problems of supervising and training workers. Techniques of supervision are discussed and the student is given the opportunity to apply this knowledge in the college's animal facility. Special topics pertaining to animal management are presented.

EATM 13B — 5 Units
Exotic Animal Management and Supervision
Prerequisite: EATM 13A
Class Hours: 1 lecture, 12 laboratory
This course deals with the problems of managing an animal facility. Techniques of management and creative problem solving are presented. Special topics pertaining to animal management are explored.

EATM 15 — 3 Units
Education and Entertainment in Animal Parks
Prerequisite: Acceptance into the EATM major
Class Hours: 2 lecture, 3 laboratory
This course instructs the student in the techniques of interpretation as they are utilized in zoos and live animal presentations. Some of the topics covered include public speaking, program design, and the handling of animals. Public relations methods and problems of animal parks are also presented with instruction in the production of press materials and publications. Students will make presentations utilizing live animals.

EATM 15L — 1 Unit
Education and Entertainment Laboratory
Prerequisite: EATM 15
Class Hours: 3 laboratory
The student will make use of the techniques learned in EATM 15 to perform educational and entertaining presentations using live animals.

EATM 21A — 1 Unit
Exotic Animal Training
Prerequisites: EATM 2 and EATM 4
Class Hours: 1 lecture
Students will learn techniques for training a variety of animals through lecture. The concepts developed in other EATM courses will provide a foundation on which to build an understanding of methods applicable to particular species.

EATM 21B — 1 Unit
Exotic Animal Training
Prerequisite: EATM 21A
Class Hours: 1 lecture
Students will learn advanced techniques for training exotic animals in a variety of specialized situations including working in front of the movie camera.

EATM 21L — 2 Units
Exotic Animal Training Laboratory
Prerequisites: EATM 2 and EATM 4
Corequisite: EATM 21
Class Hours: 6 laboratory
The student will apply the knowledge acquired in EATM 21AB to train three animals: a bird, an herbivore, and either a primate or a carnivore. With this "hands-on" approach, the student will learn the importance of proper timing and how to read the body language of animals. May be taken two (2) times for credit.

EATM 22A/B — 1-3/1-3 Units
Independent Studies in Exotic Animal Training and Management
Prerequisite: A previous course in Exotic Animal Training and Management
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of exotic animal training and management on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units.

EATM 23 — 4 Units
Elementary Veterinary Procedures
Prerequisite: Zoo 1 or equivalent
Corequisite: EATM 13A
Class Hours: 2 lecture, 6 laboratory
The course will deal with the techniques utilized by animal health technicians to assist veterinarians in caring for sick and/or injured animals. Special emphasis will be put upon the detection and treatment of common animal diseases.

EATM 35 — 2 Units
Animal Park Planning and Administration
Prerequisite: EATM 11B
Class Hours: 2 lecture
This course deals with the design and operation of animal parks with emphasis on economic and legal considerations. Topics covered include regulations (local, state, and federal), budgeting, contracts, insurance, visitor services, and esthetics and functionality of enclosure design. Students will make field trips to various animal facilities and design a hypothetical facility.

EATM 40A/B — 1-6/1-6 Units
Field Experience in EATM
Prerequisite: EATM 3
Class Hours: 48-288 laboratory total
Field experience is designed to give students an opportunity to discover

and explore the professional aspects of wild/exotic careers. 40A will meet in the compound during the summer for first-year students. 40B will meet at the Los Angeles Zoo and Santa Barbara Zoo during the fall or spring.

EATM 45 — 2 Units
Advanced Education and Entertainment in Animal Parks
Prerequisite: EATM 15
Class Hours: 6 laboratory
The emphasis of this course is placed on actually performing with animals before all types of audiences. Each student will be assigned an animal to train and work in public shows. Students will be instructed and evaluated on their performance. Techniques of solving training problems will be discussed. May be taken two (2) times for credit.

EATM 60A-Z — 1-3 Units
Topics in Exotic Animal Training and Management
Prerequisites: To be determined with each Topic
Class Hours: To be determined with each Topic
This is a special series of courses each of which deals with a specific topic in Exotic Animal Training and Management not covered in detail in the general Exotic Animal Training and Management course offerings. Topics courses are announced on a semester basis in the schedule of classes.

French

Study in the French language provides specialists to work in areas such as anthropology, economics, political science, literature, and sociology. While teaching is the principle area of employment, other careers may be found in interpreting, translating, research, diplomacy, libraries, and the publishing business.

Career Opportunities

B.A. Level

Translator
Diplomatic Office
Tutor
Editor
Foreign-Exchange Trader
Foreign Clerk
Foreign Service Officer

Faculty

Full-Time
Howard Siegel

Part-Time
Sarah Cordova
Sami Dagher
Sara Wheeler

Counselors
Don Henderson
Diane Sukiennik

Transfer Information

Major requirements for upper division standing at:
California State University, Northridge:
FRENCH: Engl 30 and 31; French 3, 4.
Additional lower division courses to be taken at CSUN
University of California, Santa Barbara:
French 1, 2, 3, 4; Hist 1A, 1B.

French Courses

FR 1 — 4 Units
Elementary French I
Class Hours: 4 lecture, 1 laboratory by arrangement
In this intensive study of the French language and culture, special emphasis will be given to the skills and knowledge necessary for speaking, understanding, reading and writing French and the unique nature of the people and their history. The language laboratory will be used extensively in the class and students will be expected to arrange an additional hour of language laboratory time each week. *Transfer credit: CSU; UC*

FR 2 — 4 Units
Elementary French II
Prerequisite: Fr 1 or 2 years of high school French with grades of C or better.
Class Hours: 4 lecture, 1 laboratory by arrangement
Training is given in the basic principles of grammar and pronunciation; development of the ability to understand and to express French in oral and written form; extensive use of the language laboratory. All study in the language laboratory. *Transfer credit: CSU; UC*

FR 3 — 4 Units
Intermediate French I
Prerequisite: Fr 2 or 3 years of high school French with grades of C or better.
Class Hours: 4 lecture, 1 laboratory by arrangement
This is a further study of basic grammar and composition and development of ability to read with greater ease, with a continued emphasis on oral

and written expression. All students will be expected to spend one additional hour per week in the language laboratory. *Transfer credit: CSU; UC*

FR 4 — 4 Units
Intermediate French II
Prerequisite: Fr 3 or 4 years of high school French with an equivalent fluency.
Class Hours: 4 lecture, 1 laboratory by arrangement
In this course, study and discussions of representative literary works are carried out in French. Emphasis on oral and written expression continues. Students are expected to spend an additional hour per week of study in the language laboratory. *Transfer credit: CSU; UC*

FR 22A/B — 1-3/1-3 Units
Independent Studies in French
Prerequisite: A previous course in French
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of French on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

FR 31A — 3 Units
Beginning Conversational French
Class Hours: 3 lecture
Designed for students who wish to understand and use French in practical situations, this introductory course for non-native speakers of French includes use of elementary grammar and principles of usage.

FR 31B — 3 Units
Intermediate Conversational French
Prerequisite: Fr 31A or equivalent
Class Hours: 3 lecture
This intermediate course for non-native speakers of French includes study of grammar and principles of usage. It is designed for students who have some basic conversational French, but who wish to continue work in this area.

FR 31C — 3 Units
Advanced Conversational French
Prerequisite: Fr 31B or equivalent
Class Hours: 3 lecture
This course emphasizes correct oral communication in French. It is especially geared for the student with a French-speaking background. The music, art, literature, and architecture of France will serve as the main topics of oral presentation and discussion.

Geography

Geography is the study of place and space; it is the description of land, sea, and air, and the distribution of plant and animal life including humans and their activities. The most rapidly increasing area of employment for people trained in geography is planning, planning at all levels - local, regional, and national. Education is a second major career area for geographers, while a background in geography is an asset in travel, recreation, industry, and international trade and commerce.

Career Opportunities

B.A. Level
(All careers require a bachelors or advanced degree)

Cartographer
Research Marketing Analyst
City or County Planner
Economic Geographer
Regional Analyst
Demographer
Aerial Photo Interpreter
Political Geographer
Resource Planning Analyst
Environmental Impact Analyst
Environmental Research Assistant

Faculty

Full-Time
Gary Rees

Part-Time
Fred Chambers
Joseph Glantz
Christiane Mainzer
Kathleen Rees

Counselor
Frank Bianchino

Transfer Information

Major requirements for upper division standing at:
California State University, Northridge:
Select one course from each of two categories:
1. Physical: Geog 1 or 5
2. Human: Geog 2 or 4, and 3 or 7
3. Techniques: Geog 6

University of California, Santa Barbara:
Geog 1, 4; select one course from: Bio 2A; Bot 1; Env Sc 2; or Geol 2, 2L. Math 15 recommended.

Geography Courses

GEOG 1 — 3 Units
Our Physical Environment
Class Hours: 3 lecture
This is a study of the physical elements of the landscape envelope of the earth: weather, climate, landforms, vegetation, soils, hydrography, and the effects of the earth's interior structure. Emphasis is placed on their interrelationships which exist between people and their physical environment. Field trips will be required. *Transfer credit: CSU; UC*

GEOG 1L — 1 Unit
Physical Environment Lab
Prerequisite: Geog 1 (may be concurrent) or equivalent
Class Hours: 3 laboratory
This laboratory to accompany Geog 1 is an introduction to earth-sun relations, elements of map and air photo reading and interpretation, practice in landscape description, measurement and analysis. Local field trips required. *Transfer credit: CSU; UC*

GEOG 2 — 3 Units
Cultural Environment
Class Hours: 3 lecture
This is an introduction to the broad field of geography — its objectives, principal divisions, basic principles, and applications to present-day world problems. Students also acquire an understanding of human society in relation to the earth environment, with emphasis on the cultural elements. Urban and rural field work involved. *Transfer credit: CSU; UC*

GEOG 3 — 3 Units
Geography of World Affairs
Class Hours: 3 lecture
A survey of world geography emphasizing the regions, people, and economic activities characteristic of the major political areas of the world, this course is designed for students who desire to improve their understanding of how world affairs are affected by the way we occupy the earth. *Transfer credit: CSU; UC*

GEOG 4 — 3 Units
Resource Utilization
Class Hours: 3 lecture
Covered in this course are physical and cultural factors influencing the location of economic activities; analysis of the principal economic production systems especially involved with agriculture, foodstuffs, resources and industrialization in the developed and developing world; contemporary problems of international economic power struggles. *Transfer credit: CSU; UC*

GEOG 5 — 3 Units
Introduction to Meteorology
Class Hours: 3 lecture
The course is an introduction to meteorological phenomena: atmospheric circulation and behavior, clouds, precipitation, wind systems, storms, and air pollution. Interrelationships between land, ocean, and atmosphere are also covered. In addition, there is an introduction to weather instruments and their roles in reporting those conditions contributing to general weather conditions and aviation weather. *Transfer credit: CSU; UC*

GEOG 5L — 1 Unit
Introduction to Meteorology Laboratory
Prerequisite: Geog 5 concurrent or equivalent
Class Hours: 3 laboratory
This laboratory to accompany Geog 5 is an introduction to meteorological observation, cloud identification, instrumentation, interpretation of weather charts and data, weather system identification and analysis. Field trips are required. *Transfer credit: CSU; UC*

GEOG 6 — 2 Units
Map Use and Interpretation
Class Hours: 36 lecture total
This course provides an introduction to map reading, analysis, and interpretation. It includes history and practical use of maps, map projections, and aerial photography. *Transfer credit: CSU; UC*

GEOG 7 — 3 Units
The Human Impact
Class Hours: 3 lecture
This course is a world survey through time of the role of humans in the modification of the natural environment, including vegetation, animal life, soils, landforms, water and atmosphere. *Transfer credit: CSU; UC*

GEOG 10 — 3 Units
Geography of California
Class Hours: 3 lecture
A study of human involvement with the varied California landscape, this course includes an examination of the historical settlement, resource utilization and physical environment of the Golden State. Field trips focusing on the local land use pattern will be required. *Transfer credit: CSU; UC*

GEOG 22A/B — 1-3/1-3 Units
Independent Studies in Geography
Prerequisite: A previous course in Geography
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of geography on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

GEOG 60A-M — 1-3 Units
Topics in Physical Geography
Prerequisite: Prior course in Geography
Class Hours: To be determined with each Topic
This is a special series of courses each of which deals with a specific topic in Geography not covered in detail in the general Geography course offerings. Topics courses are announced on a semester basis in the schedule of classes. *Transfer credit: CSU; UC maximum credit 3 units.*

Topics which have been developed include:

60A — 3 Units
Volcanism and Human Activity
Class Hours: 3 lecture

60B — 3 Units
Glacial Landscapes
Class Hours: 3 lecture

60C — 3 Units
Regional Geomorphology
Class Hours: 3 lecture

GEOG 60N-Z — 1-3 Units
Topics in Cultural Geography
Prerequisite: Prior course in Geography
Class Hours: To be determined with each Topic
This is a special series of courses each of which deals with a specific topic in Geography not covered in detail in the general Geography course offerings. Topics courses are announced on a semester basis in the schedule of classes. *Transfer credit: CSU; UC maximum credit 3 units.*

Topics which have been developed include:

60N — 3 Units
Landscape Analysis
Class Hours: 3 lecture
This course is the observation, mapping and analysis of landscapes affected by human activity. The procedures of field examination and data collection will be studied for such topics as settlement patterns, population changes and land use. Field trips required.

Geology

This program presents a study of the earth, its physical, chemical and biological forces at work.

Career Opportunities

B.S. Level

Field Geologist
Mining Geologist
Engineering Geologist
Researcher
Consultant
Librarian
Park Naturalist
Geological Technician
Technical Writer/Editor
Laboratory Research Worker
Aerogeologist
Map Editor

Faculty

Full-Time	Part-Time	Counselor
Gary Rees	Thomas Blake	John Heydenreich
	Terry Davis	
	Gerald Simila	

Transfer Information

Earth Science

This program involves the study of natural phenomena of the earth designed to contribute to the students' liberal education and to prepare them for professions which require familiarity with astronomy, meteorology, oceanography, physical geography, and geology.

Major requirements for upper division standing at:

California State University, Northridge:

Astron 1/1L; Chem 1A/1B; Geog 5; Geol 2; Math 15 or CS 18/18L; Math 25A; Physics 10A/10AL, 10B/10BL.

Geological Sciences

This major is concerned with study of the earth's rocks and minerals and of the physical, chemical, and biological processes, past and present, at work in the earth's interior and on its surface. Career opportunities in the geological sciences are numerous in educational, governmental, and industrial organizations. Careers may be concerned with environmental problems, production, research, and teaching.

Major requirements for upper division standing at:

California State University, Northridge:

(Geology option): Chem 1A, 1B; CS 10/10L; Geol 2; Math 25A; Physics 10A/10AL, 10B/10BL or 20A/20AL, 20B/20BL; and 2 courses from: Math 15, Math 25B, or Physics 20C/20CL.

(Geophysics option): Chem 1A, 1B; CS 10/10L, 18/18L; Geol 2; Math 25ABC, 35; Physics 20A/20AL, 20B/20BL, 20C/20CL.

■ Geology
Associate in Science Degree

This program is designed to award a designated associate degree to those students who have completed a course of specialization in Geology. These requirements were chosen by faculty to optimize students' preparation for upper division course work for Bachelor of Science degrees in Geology offered by four-year institutions. Since the course work in geology is sequential, students may spend less time earning an Associate in Science Degree and/or Bachelor of Science Degree by deferring some of the university general education requirements until their Junior and Senior years and giving priority to the requirements for a major in geology. In addition, the earning of this degree will be evidence of achievement of technical skills which may be helpful towards the seeking of immediate employment.

Preparation for the Major:

Mathematics — two years high school algebra plus trigonometry or Math 1, 3, and 7 or equivalent.

Chemistry — one year high school chemistry or Chem 12 or equivalent.

Physics — one year high school physics or Ph 12 or equivalent if student plans to take Ph 20A/20AL.

Geology students are strongly encouraged to take advantage of summer school class offerings.

Required Courses:		Units
Chem 1A	General Chemistry	6
Chem 1B	General Chemistry	6
Geol 2	Physical Geology	3
Geol 2L	Physical Geology Lab	1
Geol 3	Earth History	3
Geol 4	Mineralogy	4
Math 15	Introductory Statistics	4
	or	
Math 25C	Calculus/w Analytic Geometry III	5
Math 25A	Calculus/w Analytic Geometry I	5
Math 25B	Calculus/w Analytic Geometry II	5
Ph 10A/10AL	General Physics I/Lab	4
	or	
Ph 20A/20AL	Mechanics of Solids and Fluids/Lab	4
Ph 10B/10BL	General Physics II/Lab	4
	or	
Ph 20B/20BL	Electricity and Magnetism/Lab	4

Total minimum units required in major area — 45-46

Suggested Course Sequence:

First Semester		Third Semester	
Chem 1A	6	Geol 3	3
Geol 2	3	Math 25A	5
Geol 2L	1	Ph 10A/10AL or Ph 20A/20AL	4
	10		12
Second Semester		**Fourth Semester**	
Chem 1B	6	Geol 4	4
Math 15 or Math 25C	4-5	Math 25B	5
		Ph 10B/10BL or Ph 20B/20BL	4
	10-11		13

See Degree Requirements and Transfer Information section for General Education requirements.

Geology Courses

GEOL 1 — 3 Units
Introductory Geology
Class Hours: 2 lecture, 3 laboratory

This is an introductory study of the composition, structure, and modification of the earth and its physical systems. Students will learn to identify common rocks, minerals, physical processes and geologic structures working both in the lab and in the field. *Transfer credit: CSU; UC*

GEOL 2 — 3 Units
Physical Geology
Class Hours: 3 lecture

This course is a study of materials and structure of the earth, origin and development of land forms, principles and processes of geology including erosion and sedimentation, volcanic, glacial and earthquake activity. Global tectonics will be used as a focus. *Transfer credit: CSU; UC*

GEOL 2L — 1 Unit
Physical Geology Lab
Corequisite: Geol 2 or equivalent
Class Hours: 3 laboratory
A laboratory experience developing the skills of direct observation and scientific analysis of geologic data. Class emphasizes mineral and rock formation and identification; topographic and geologic map interpretation; and laboratory and field observation and identification of geologic structures. Field trips will be required. *Transfer credit: CSU; UC*

GEOL 3 — 3 Units
Earth History
Class Hours: 3 lecture
The geologic history of the earth and evolution of life as revealed in the fossil record is studied. Elementary problems in paleontology, stratigraphy, structure and geologic mapping are also included. *Transfer credit: CSU; UC*

GEOL 4 — 4 Units
Mineralogy
Prerequisite: Geol 2 and 2L and Chem 12
Class Hours: 2 lecture, 6 laboratory
This course is a study of the principal rock-forming minerals, plus those of economic value. Crystallography, mineral chemistry, physical properties, occurrence, origin, and associations of common minerals are emphasized. Field trips may be required. *Transfer credit: CSU; UC*

GEOL 5 — 3 Units
The World Ocean
Class Hours: 3 lecture
This course is an introduction to physical oceanography. The course will consider the geological, physical and chemical characteristics of the ocean. Topics to be covered include the formation of the ocean basins, ocean currents, waves, tides, beaches, chemistry and marine pollution. *Transfer credit: CSU; UC*

GEOL 21 — 3 Units
Geology of California
Class Hours: 3 lecture
This course focuses on the geologic provinces of California including topography, structure, geologic history, lithology and mineral resources. Field trips will be required. *Transfer credit: CSU; UC*

GEOL 22A/B — 1-3/1-3 Units
Independent Studies in Geology
Prerequisite: A previous course in Geology
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of geology on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

GEOL 41 — 3 Units
Geology of the National Parks and Monuments
Class Hours: 3 lecture
This survey of the physical and historical geology of the national parks and monuments emphasizes western America. Field trips. *Transfer credit: CSU*

GEOL 51 — 1-3 Units
Field Geology
Prerequisite: A previous course in Geology or Geog 1 or Geog 5
Class Hours: 3-9 laboratory
Course involves field studies and geologic processes as exemplified at various localities. May be taken two (2) times for credit. *Transfer credit: CSU*

GEOL 61 — 3 Units
Geologic Hazards
Class Hours: 3 lecture
This study of geologic hazards applies geology to environmental problems such as landslides, earthquakes, floods, etc. Local conditions are emphasized. Field trips may be required. *Transfer credit: CSU; UC*

German

Study in the German language provides specialists to work in areas such as anthropology, economics, political science, literature, and sociology. While teaching is the principle area of employment, other careers may be found in interpreting, translating, research, diplomacy, libraries, and the publishing business.

Career Opportunities

B.A. Level
Translator
Diplomatic Office
Tutor
Editor
Foreign-Exchange Trader
Foreign Clerk
Foreign Service Officer

Faculty

Part-Time
Gabrielle Anicker
Jane Chapman

Counselors
Don Henderson
Diane Sukiennik

Transfer Information

Major requirements for upper division standing at:
California State University, Northridge:
GERMAN: Engl 30 and 31; German 3, 4.
Additional lower division courses to be taken at CSUN
University of California, Davis:
German 1, 2, 3, 4.
University of California, Santa Barbara:
German 1, 2, 3, 4; Hist 1A, 1B.

German Courses

GER 1 — 4 Units
Elementary German I
Class Hours: 4 lecture, 1 laboratory by arrangement
In this intensive study of the German language and culture, special emphasis will be given to the skills and knowledge necessary for speaking and writing German and the unique nature of the people and their history. The language laboratory will be used extensively in the class and students will be expected to arrange an additional hour of language lab time each week. *Transfer credit: CSU; UC*

GER 2 — 4 Units
Elementary German II
Prerequisite: Ger 1 or 2 years high school German or an equivalent fluency.
Class Hours: 4 lecture, 1 laboratory by arrangement
A continued intensive study of the German language and culture; will place special emphasis on the skill and knowledge necessary for speaking and writing German and the unique nature of the people and their history.

The language laboratory will be used extensively in the class, and students will be expected to arrange an additional hour of language lab time each week. *Transfer credit: CSU; UC*

GER 3 — 4 Units
Intermediate German I
Prerequisite: Ger 2 or 3 years of high school German with grades of C or better or equivalent fluency.
Class Hours: 4 lecture, 1 laboratory by arrangement
This first intermediate course in German provides intensive review of basic grammar with some extension and refinement of fundamentals. Reading, writing, and oral skills are further developed through the study and discussion of selected stories of the 20th Century and other literature. Other cultural aspects of Germany are introduced through the study of contemporary German youth. *Transfer credit: CSU; UC*

GER 4 — 4 Units
Intermediate German II
Prerequisite: Ger 3 or 4 years high school German.
Class Hours: 4 lecture, 1 laboratory by arrangement
An advanced study of spoken and written German and of German culture, the course provides development of ability to read with greater ease by study and discussion in German of representative literary works. There will be continued emphasis on oral and written expression. All students will be expected to spend an additional hour per week in the language laboratory. *Transfer credit: CSU; UC*

GER 22A/B — 1-3/1-3 Units
Independent Studies in German
Prerequisite: A previous course in German
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of German on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

GER 31A — 3 Units
Beginning Conversational German
Class Hours: 3 lecture
This introductory course for non-native speakers of German includes study of elementary grammar and principles of usage and is designed for students who wish to understand and use German in practical situations such as travel in German-speaking nations. May be taken three (3) times for credit.

GER 31B — 3 Units
Intermediate Conversational German
Prerequisite: Ger 31A or equivalent
Class Hours: 3 lecture
This intermediate course for non-native speakers of German includes study of grammar and principles of usage and is designed for students who have some basic conversational German, but who wish to continue work in this area.

Graphic Communications

The growing graphics industry offers opportunities on a wide scale to the majors in Graphic Communications. Creative layout and design, advertising sales, graphics photography, lithography and bindery operations are some of the special areas in which employment is available. Management and operation of computer controlled equipment provide new opportunities for careers in graphics.

Career Opportunities

Typesetting
Graphic Designer
Paste-up Artist
Process Camera Operator
Stripper/Platemaker
Press Operator
Technician (Typesetters)
Sales Representative

Faculty

Full-Time
Sexton Stewart

Part-Time
Ruben Reyes
Leland Swindel

Counselor
Don Henderson

■ Computerized Composition Phototypesetter

Occupational
Associate in Science Degree

This program is designed for the student with background in both computer information systems and graphics who is interested in training for the new phototypesetter aspect of the graphics industry.

Required Courses:		**Units**
BIS 10A	Intro to the Personal Computer	.5
CIS 1	Intro to Information Systems	3
CIS 4A	Computer Programming I: COBOL	3
CIS 8	Operating Systems	3
GC 1	Intro to Graphic Communications	3
GC 3A	Phototypesetting	3
GC 3B	Advanced Phototypesetting	3
GC 4	Layout and Paste-up Techniques	3
Total minimum units required in major area — 21.5		

See Degree Requirements and Transfer Information section for General Education requirements.

■ Computerized Composition Sales

Occupational
Associate in Science Degree

This program is designed to prepare the students for a career in the area of sales. Various opportunities in sales and sales support are available in the expanding computer graphics industry.

Required Courses:		Units
BIS 10A	Intro to the Personal Computer	.5
Bus 30	Intro to Business and Economics	3
Bus 35	Sales Techniques	3
Bus 37	Marketing	3
Bus 39	Business Communications	3
CIS 1	Intro to Information Systems	3
GC 1	Intro to Graphic Communications	3
GC 3A	Phototypesetting	3
GC 4	Layout and Paste-up Techniques	3
GC 11A	Process Camera	3

Total minimum units required in major area — 27.5

See Degree Requirements and Transfer Information section for General Education requirements.

■ Computerized Composition Technical Representative

Occupational
Associate in Science Degree

This program is designed for the computer information systems student with an interest in the growing computer graphics industry. Opportunities exist for those who would specialize in the technical aspects of this emerging field.

Required Courses:		Units
CIS 1	Intro to Information Systems	3
CIS 4A	Computer Programming I: COBOL	3
CIS 5	Database Management Systems	3
EL 10/10L	Passive Circuits/Lab	5
EL 16/16L	Analog Circuits/Lab	4
EL 17/17L	Digital Circuits/Lab	4
GC 1	Intro to Graphic Communications	3
GC 3A	Phototypesetting	3

Total minimum units required in major area — 28

Recommended Courses: CIS 8; EL 21/21L; Math 4

See Degree Requirements and Transfer Information section for General Education requirements.

■ Graphic Design

Occupational
Associate in Science Degree

This program is designed for the student interested in the artistic aspects of Graphic Communications. Emphasis is upon production art for commercial advertising and design.

Required Courses:		Units
Art 12A	Drawing and Composition	3
BIS 10A	Intro to the Personal Computer	.5
Bus 38	Advertising	3
Cm Art 2	Commercial Design	3
Cm Art 4	Advertising Design	2
Cm Art 5	Marker Techniques	2
GC 1	Intro to Graphic Communications	3
GC 3A	Phototypesetting	3
GC 4	Layout and Paste-up Techniques	3
GC 5A	Screen Printing	2
GC 11A	Process Camera	3
GC 11B	Advanced Process Camera	3

Total minimum units required in major area — 30.5

Recommended Courses: Art 4A; Cm Art 3, 12A

See Degree Requirements and Transfer Information section for General Education requirements.

■ Graphic Production

Occupational
Associate in Science Degree

This program offers students training for employment in the field of graphic communications. Emphasis here is upon production skills in composing, camera, lithography and bindery operations.

Required Courses:		Units
BIS 10A	Intro to the Personal Computer	.5
GC 1	Intro to Graphic Communications	3
GC 3A	Phototypesetting	3
GC 3B	Advanced Phototypesetting	3
GC 4	Layout and Paste-up Techniques	3
GC 11A	Process Camera	3
GC 11B	Advanced Process Camera	3
GC 26A	Offset Presswork/Stripping/Platemaking	3
GC 26B	Advanced Offset Presswork	3
GC 32	Estimating and Scheduling	3

Total minimum units required in major area — 27.5

Recommended Courses: GC 5A, 11C

See Degree Requirements and Transfer Information section for General Education requirements.

■ Offset Lithography

Certificate of Achievement

This program prepares students for various occupations in the offset lithography industry. Emphasis upon basic and advanced skills for camera and presswork.

Required Courses:		Units
BIS 10A	Intro to the Personal Computer	.5
GC 1	Intro to Graphic Communications	3
GC 3A	Phototypesetting	3
GC 4	Layout and Paste-up Techniques	3
GC 11A	Process Camera	3
GC 11B	Advanced Process Camera	3
GC 26A	Offset Presswork/Stripping/Platemaking	3
GC 26B	Advanced Offset Presswork	3
GC 32	Estimating and Scheduling	3

Total minimum units required — 24.5

Graphic Communications Courses

GC 1 — 3 Units
Introduction to Graphic Communications
Class Hours: 3 lecture

This orientation to the concepts in Graphic Communications includes an overview of layout, design, composition, process camera, letterpress, offset and screen printing. A survey of the industry and employment opportunities is also made. *Transfer credit: CSU*

GC 3A — 3 Units
Phototypesetting
Prerequisite: BIS 1 or equivalent
Class Hours: 2 lecture, 3 laboratory

This introduction in computerized typesetting provides theory and practical application in the use of photocomposition equipment. A study is made in theory of keyboard function, programming terminology, proofing and markup techniques. *Transfer credit: CSU*

GC 3B — 3 Units
Advanced Phototypesetting
Prerequisite: GC 3A or equivalent
Class Hours: 2 lecture, 3 laboratory

This is a course in advanced theory and technique in computerized typesetting including computation and problem solving in copyfitting, type selection and machine programming. Practical application is given in justification, intermixing film fonts, setting run arounds, etc. for publications and book work. *Transfer credit: CSU*

GC 4 — 3 Units
Layout and Paste-up Techniques
Class Hours: 2 lecture, 3 laboratory
Students will learn practical applications of layout and paste-up techniques for graphic reproduction, including the principles of design. Students will also study the design of roughs, comprehensives and camera ready art, preparation of line and tone copy, use of technical pens and rubylith material; a study of the point system, type identification and copy mark-up systems. (co-numbered Journ 7) *Transfer credit: CSU*

GC 5A — 2 Units
Screen Printing
Class Hours: 1 lecture, 3 laboratory
This study of screen printing and its artistic and commercial application, includes instruction in preparation of various screen printing stencil methods, preparation and care of screens, and use of transparent and opaque inks. *Transfer credit: CSU*

GC 5B — 2 Units
Advanced Screen Printing
Prerequisite: GC 5A
Class Hours: 1 lecture, 3 laboratory
This course covers advanced extension of ideas and images utilizing photo screen printing singly or in combination with other stencil methods, introduction to the process camera and its application to screen printing, instruction and practice in basic line photography and contact printing, emphasis in single and multi-color printing and posterization techniques, and further study and use of color combination transparent and opaque inks. Exploration is made into special printing on various surfaces. *Transfer credit: CSU*

GC 11A — 3 Units
Process Camera *(F)*
Prerequisite: GC 1 or equivalent or concurrent enrollment.
Class Hours: 2 lecture, 3 laboratory
Students learn characteristics of photographic materials, instruction, and practices in the use of a gallery camera for the production of line negatives. Course content includes instruction and practice in darkroom techniques, use of filter, contact printing, color proofing, posterization techniques and the diffusion transfer process. *Transfer credit: CSU*

GC 11B — 3 Units
Advanced Process Camera *(S)*
Prerequisite: GC 11A or equivalent
Class Hours: 2 lecture, 3 laboratory
Advanced theory and practice on the gallery camera emphasizes halftone photography, including rescreening, duotones, dot manipulation techniques, and halftones for the PMT process. *Transfer credit: CSU*

GC 11C — 3 Units
Process Camera/Color Separation *(F)*
Prerequisite: GC 11B or equivalent trade experience
Class Hours: 2 lecture, 3 laboratory
Course provides orientation and practice in the use of equipment, materials and techniques for color separation photography. It includes three and four color direct and indirect separations with reflection and transmission copy. *Transfer credit: CSU*

GC 22A/B — 1-3/1-3 Units
Independent Studies in Graphic Communications
Prerequisite: A previous course in Graphic Communications
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of graphic communications on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU*

GC 26A — 3 Units
Offset Presswork/Stripping/Platemaking
Prerequisite: GC 1 or concurrent enrollment.
Class Hours: 2 lecture, 3 laboratory
Students will gain theory and practice in small lithographic press operation and stripping/platemaking procedures. Instruction and operational functions of the printing units, inking units, dampening and delivery units; preparation of support for stripping, impositioning and assembly; selection, care and making of presensitive lithographic plates. *Transfer credit: CSU*

GC 26B — 3 Units
Advanced Offset Presswork
Prerequisite: GC 26A or equivalent
Class Hours: 2 lecture, 3 laboratory
Students gain further theory and practice in lithographic press operation, including operational function of stream feeder, printing units, inking, dampening and delivery units. Emphasis is placed on close registration practice in four color process printing. *Transfer credit: CSU*

GC 32 — 3 Units
Estimating and Scheduling *(S)*
Prerequisite: 2 previous courses in Graphic Communications.
Class Hours: 3 lecture
Students learn how to establish unit costs and operational time requirements. They study catalogs and standard price lists, subcontracting overhead and profit, as well as production planning, including scheduling, routing coordination and quality control. *Transfer credit: CSU*

GC 49A-D — 1-4 Units
Cooperative Work Experience — Graphic Communications★
Prerequisite: Placement at a work station
Class Hours: 5-20 employment, 1 by arrangement
Students employed in a field related to Graphic Communications will design a learning contract in conjunction with their employer that will involve expanded responsibilities and/or the opportunity to learn new job experiences beyond those required in the existing job duties. Direct coordination with the employer in question will be a part of this learning experience.

Health Science

The objective of the Health Science major is the development and education of students in preparation for professional careers in a variety of health fields. The curricula, based upon a foundation in the liberal arts and the natural and behavioral sciences, are directed to special preparation for the various activities in the specific health fields.

Career Opportunities

(Career opportunities require bachelors or advanced degrees)

Athletic Trainer
Hospital Administrator
Health Officer
Fitness Instructor

Faculty

Full-Time

Judy Alexander
James Bittner
Ronald Halleran
Linda Moore
Delbert Parker

Part-Time

MacArthur Becker
Darleen Branigan
Thomas Lee
Vance Manakas

Counselors

Frank Bianchino
Diane Sukiennik

Transfer Information

Major requirements for upper division standing at:
California State University, Northridge:
The Bachelor of Science in Health Science is offered with six different options, all of which require these core courses: Psych 1A; Soc 1.
Additional requirements in the individual options:

1. Health Education: Bio 2A; Biol 16 or Env Sc 2; Chem 12; Health Sci 1; Math 12; Physio 1.
2. Environmental and Occupational Health: Bio 2A; Chem 1A, 1B or 12, 13* and 8, 9; Math 7; Micro 1; Physio 1; Physics 10A/10AL, 10B/10BL.
3. Health Administration: Bio 2A; Bus 1A, 1B; Chem 12; Math 12; Physio 1.
4. Physical Therapy: Anat 1; Bio 2A; Chem 1A, 1B or 12, 13*; Math 7; Physio 1; Physics 10A/10AL, 10B/10BL.
5. School Nursing/Nursing Services: Bio 1; Chem 12; HS 5; Math 15.
6. Radiologic Technology: Anat 1; Bio 2A; Chem 12; Math 7; Physio 1; Physics 10A/10AL, 10B/10BL.

*Chem 1A and 1B may be offered by the student in lieu of Chem 12 and 13 in the Physical Therapy and the Environmental and Occupational Health Options.

Health Science Courses

The UC system will allow credit for only one of the courses indicated below as acceptable for transfer credit in that system.

HS 1 — 2 Units
Health and Society
Class Hours: 2 lecture

Focus of the course is on the nature and function of health in our society. The course is an overview of major health concepts designed to contribute to the student's understanding of healthful living. Concepts included are: personal fitness; mental health and personal relationships; harmful substances; environmental health; communicable diseases; chronic and degenerative disease; reproduction and contraception; and consumer health. *Transfer credit: CSU; UC credit limitations. See counselor.*

HS 2 — 2 Units
Women's Health
Class Hours: 2 lecture

Focus of the course is on consideration of the nature and function of women's health in our society. An analysis is made of major female health problems designed to contribute to the student's understanding of the woman's role as an individual and contributing member of the community's efforts to implement the advances of medicine and the health sciences. *Transfer credit: CSU; UC credit limitations. See counselor.*

HS 4 — ½ Unit
Fitness Assessment
Class Hours: 9 lecture total

Students will use established procedures to assess their physical fitness at the beginning and end of the semester. Students will evaluate their body composition (percent body fat), strength, flexibility, cardiovascular endurance, vital capacity and nutrition. May be taken four (4) times for credit. THIS COURSE DOES NOT FULFILL THE PE/HEALTH REQUIREMENT FOR THE ASSOCIATE DEGREE.

HS 5 — 2 Units
Safety and First Aid
Class Hours: 2 lecture

Positive attitudes are developed toward safety and the application of the concepts of what constitutes safe living, the prevention and treatment of shock, unconsciousness, poisons, burns, obstructed airways, drug overdose, heat and cold injuries, infant emergencies and specific bodily injuries, fractures, dressing and bandages. Successful completion of this course qualifies for the standard or the advanced "American Red Cross First Aid and Personal Safety" certificate. *Transfer credit: CSU; UC*

HS 6 — 2 Units
The Trainer and Athletic Injuries
Class Hours: 1 lecture, 3 laboratory

This introductory course in the basic concepts and skills and practices of the athletic trainer provides training room practice, medical aspects of athletic training, athletic therapy, modalities, strength, conditioning, and rehabilitation and diagnostic techniques. Practical experience is provided in taping and for the prevention and care of the athletically injured: THIS COURSE DOES NOT FULFILL THE PE/HEALTH REQUIREMENT FOR THE ASSOCIATE DEGREE. *Transfer credit: CSU*

HS 7 — 3 Units
Personal Health
Class Hours: 3 lecture

This course is a study of the individual's role in developing a responsible life style for optimal health. Specific information concerning disease prevention and treatment will be covered as well as the interconnection of the mind and body as a determinant of personal health factors. *Transfer credit: CSU; UC*

HS 9 — ½ Unit
Cardiopulmonary Resuscitation★
Class Hours: 8 lecture total

A course designed to teach proficiency in basic cardiopulmonary resuscitation techniques of single-person, two-persons and infant resuscitation as well as witnessed and unwitnessed blocked airway managements. This emergency lifesaving procedure can be applied to individuals with cardiovascular disease, and to persons suffering sudden death due to drowning, electrocution, sensitivity reaction, asphyxia, drug overdose, heart attack and anesthesia idiosyncrasy. Early warning signs, risk factors and prevention of heart disease will also be discussed. May be taken four (4) times for credit. THIS COURSE DOES NOT FULFILL THE PE/HEALTH REQUIREMENT FOR THE ASSOCIATE DEGREE.

HS 22A/B — 1-3/1-3 Units
Independent Studies in Health Science

Prerequisite: A previous course in Health Science
Class Hours: 1-3 tutorial

This course is for students who are interested in furthering their knowledge of health science on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

HS 60A-Z — ½-3 Units
Topics in Health Science
Prerequisites: To be determined with each Topic
Class Hours: To be determined with each Topic

This is a special series of courses each of which deals with a specific topic in Health Science not covered in detail in the general Health Science course offerings. Topics courses are announced on a semester basis in the schedule of classes. *Transfer credit: CSU; UC*

Hebrew

Study in the Hebrew language provides specialists to work in areas such as anthropology, economics, political science, literature, and sociology. While teaching is the principle area of employment, other careers may be found in interpreting, translating, research, diplomacy, libraries, and the publishing business.

Career Opportunities

B.A. Level

Translator
Diplomatic Office
Tutor
Editor
Foreign-Exchange Trader
Foreign Clerk
Foreign Service Officer

Faculty

Part-Time

David Pardess

Counselors

Don Henderson
Diane Sukiennik

Hebrew Courses

HEB 1 — 4 Units
Elementary Hebrew I
Class Hours: 4 lecture, 1 laboratory by arrangement

This course introduces the essentials of grammar and vocabulary with an emphasis on reading, translating, and comprehension. Basic language forms will be reinforced through writing and conversation. *Transfer credit: CSU; UC*

HEB 31A — 3 Units
Beginning Conversational Hebrew
Class Hours: 3 lecture

This course is a basic practical course emphasizing vocabulary essentials, conversational patterns and pronunciation. It is a language-training course designed to produce proficiency in the practical aspects of using the language (Ulpan). Readings will touch on history and customs of modern Israel.

History

History is an evolving record of human emotion, human aspiration, human frustration, and human success. Historians deal with the goals, fears, interests, opinions, and prejudices of people in the past. What made people the way they were? What is the impact of their thought and action on people today and what is their impact on people tomorrow? As a study of people, history offers both a necessary understanding of one's place in the human experience, and the conceptual framework for a lifelong avocation.

Career Opportunities

B.A. Level

(Careers require bachelors or advanced degrees)

Lobbyist
Historian
Library Reference Worker
Politician
Law Clerk
Diplomat
Publicist
Program Development
Advertising
Journalist
Editor
Communication Specialist
Archivist
Management Trainee
Researcher
Museum Cataloger
Marketing Researcher
Pollster
Writer — Fiction and Non-Fiction

Faculty

Full-Time	Part-Time	Counselors
Daniel Brown	Scott Cameron	Frank Bianchino
Cecile Copsey	Eugene Cosby	Bud Long
Gerald Fecht	Gary Cunningham	
Frank Fierro	Bruce Loynd	
Joseph Gonzalez	James Morrison	
Knox Long		

Transfer Information

The study of history is a valuable basis for many careers both within and outside the social sciences. The majority of persons directly employed as historians today work in schools and colleges while others are employed by federal and state agencies, non-profit foundations, libraries, or corporations.

Major requirements for upper division standing at:

California State University, Northridge:
Hist 1A or 1B; 7A or 7B; 10 or 15 or 16; one other History course.

California State University, Sacramento:
Hist 1A, 1B, 7A, 7B.

University of California, Davis:
Hist 1A, 1B, 7A, 7B, 15, 16.

University of California, Santa Barbara:
Hist 1A, 1B, 7A, 7B; Hist 9 or 10 or 15 or 16 plus one additional history course.

History Courses

HIST 1A — 3 Units
An Introduction to Western Civilization
Class Hours: 3 lecture

The course surveys important events and developments in western civilization from prehistory through the sixteenth century, through readings and discussions of important ideas, institutions, and contributions. *Transfer credit: CSU; UC. CAN: HIST 2*

HIST 1B — 3 Units
An Introduction to Western Civilization
Class Hours: 3 lecture

This course surveys important events and developments in western civilization from the seventeenth century to modern times by means of continued readings and discussions of important ideas and institutions. Hist 1A is not a prerequisite for Hist 1B. *Transfer credit: CSU; UC. CAN: HIST 4*

HIST 3 — 3 Units
Afro-American History
Class Hours: 3 lecture

An analysis of the history of the Afro-American in the United States, this course places special emphasis on contemporary implications on historical events. It points out the major roles played and contributions made by the Afro-Americans both collectively as a people and as specific individuals in the development of the United States of America. *Transfer credit: CSU; UC*

HIST 4 — 3 Units
History of the Southwest
Class Hours: 3 lecture

This course surveys the history of the Chicano from pre-Columbian period to the present. Emphasis will be on the Mexican settlement of the American Southwest and the contributions of the Chicano to the development of the five Southwestern states (Arizona, California, Colorado, New Mexico, and Texas) in the context of American History. (co-numbered Ch St 4) *Transfer credit: CSU; UC*

HIST 5 — 3 Units
United States History
Class Hours: 3 lecture

In this thematic and problems approach to a survey of American History, consideration is focused on the historical development of institutions and values that shape present-day America. Topics include democratic government; the use of nature; work; political and social reform; experiences of discrimination based on sex, race, and nationality; contributions of individuals and groups. *Transfer credit: CSU; UC. UC transfer students planning to take more units of American History should consult with a counselor and/or the History Department.*

HIST 6 — 3 Units
History of the American Indian*
Class Hours: 3 lecture

A survey of the history of the indigenous peoples of the Western Hemisphere from pre-Columbian times to the present. This course places emphasis on the peoples and cultures of North America, especially as those peoples have inter-mixed and associated with mainstream Anglo-America. *Transfer credit: CSU; UC*

HIST 7A — 3 Units
Social and Political History of the United States
Class Hours: 3 lecture

In this survey of the creation and development of American Society to 1865, an analysis is made of the impact of both individuals and groups, evaluation of issues of religion, race, reform revolution, responsive government, sectionalism, and expansion. *Transfer credit: CSU; UC. UC transfer students planning to take more units of American History should consult with a counselor and/or the History Department. CAN: HIST 8*

HIST 7B — 3 Units
Social and Political History of the United States
Class Hours: 3 lecture

This is an evaluation of social and political adjustment from 1865 to the present. Significant historical events and issues that affect contemporary Americans are surveyed and analyzed by examining significant individuals and groups. Such issues and events as westward expansion, industrial development, ethnic confrontations and contributions, religious toleration, social and political reform movements, and international involvements are explored. *Transfer credit: CSU; UC. UC transfer students planning to take more units of American History should consult with a counselor and/or the History Department. CAN: HIST 10*

HIST 8 — 3 Units
History of California
Class Hours: 3 lecture

This is a survey of the Indian, Spanish, Mexican and American periods of California history. The political, social and cultural developments as well as the principal events in the state since 1849, are considered. *Transfer credit: CSU; UC*

HIST 9 — 3 Units
Latin American History
Class Hours: 3 lecture
This course is a comprehensive survey of Latin American History focusing on the development of cultural, economic, and political factors in the various Latin American nations. Special emphasis is placed on contemporary United States-Latin American relations. *Transfer credit: CSU; UC*

HIST 10 — 3 Units
African History*
Class Hours: 3 lecture
This is a survey of African history with attention given to social and economic as well as political aspects of the development of indigenous cultures and the colonial experience. *Transfer credit: CSU; UC*

HIST 12 — 3 Units
History of American Women
Class Hours: 3 lecture
Evaluation is made of the historical development of women's roles in American life, from early Indian cultures to 20th Century suburbia. Topics include: literary ideals, legal realities, pro and anti-feminist forces; the impact of women on national values and actions. *Transfer credit: CSU; UC*

HIST 15 — 3 Units
Asia: The Rise of Eastern Civilization*
Class Hours: 3 lecture
In this survey of early Eastern civilization from antiquity to the time of the coming of the west, consideration is given to geographical aspects, the rise of civilizations, and the development of the Chinese and Japanese Empires. *Transfer credit: CSU; UC*

HIST 16 — 3 Units
Asia in the Modern World*
Class Hours: 3 lecture
A survey of Eastern civilization covering cultural, social and political aspects from the time of the initial impact of Western travel and colonialism to the present, this course also includes a review of the wars in Viet Nam and Indochina. Particular attention is given developments in China, Japan, Korea, Indochina, and the Indian Subcontinent. *Transfer credit: CSU; UC*

HIST 22A/B — 1-3/1-3 Units
Independent Studies in History
Prerequisite: A previous course in History
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of history on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

HIST 60A-Z — 1-3 Units
Topics in History
Prerequisite: To be determined with each Topic
Class Hours: To be determined with each Topic
This is a special series of courses each of which deals with a specific topic in History not covered in detail in the general History course offerings. Topics courses are announced on a semester basis in the schedule of classes. *Transfer credit: CSU; UC maximum credit 3 units.*

Topics which have been developed include:

60C — 3 Units
World War II - The World at War
Prerequisite: A previous course in History
Class Hours: 3 lecture
An in-depth study of the most cataclysmic and important event in our time. World War II was truly a global conflict, affecting our society even today.

60D — 3 Units
World War I - The Great War
Prerequisite: A previous course in History
Class Hours: 3 lecture
World War I is still regarded as "The Great War" by Europeans. Given the experience of World War II, this historical judgment demands greater understanding so the course is designed to reflect the special status of The Great War as the catalyst for the rest of the twentieth century.

60E — 3 Units
Modern England
Prerequisite: A previous course in History
Class Hours: 3 lecture
The course examines England in its age of greatness, and most recently, in its time of decline. Particular attention will be paid to Victorian England, the industrial revolution, the world wars, the welfare state, and the Anglo-American partnership.

60F — 3 Units
The World Since 1945
Prerequisite: A previous course in History
Class Hours: 3 lecture
Traditional western civilization courses usually do not progress much past World War II. The purpose of this course is to fill in this substantial and important gap for modern students.

60G — 3 Units
Modern Germany
Prerequisite: A previous course in History
Class Hours: 3 lecture
This course is a political and cultural history of Germany during the last 100 years. Major topics include the creation and structure of the German Empire, World War I, the Weimar Republic, Hitler and National Socialism, World War II, and the division of Germany since 1945.

60H — 3 Units
History of the Jewish People
Class Hours: 3 lecture
This course traces the great ages and ideas of the Jewish people with a view to providing insight into the character and nature of the contemporary Jewish experience. A central focus will be such unique features of Jewish history as time, depth and geographical span, as well as the significance of the experience of a people moving through many cultures and many lands.

60R — 3 Units
Modern Russia
Class Hours: 3 lecture
This course is a political and cultural history of Russia in the 20th Century. Initial topics include the First World War, Lenin and the Communist Revolution of 1917, Stalin's domestic and foreign policies, and the Second World War; the latter part of the course will focus on the Cold War and East-West relations up to the present and on Soviet society today.

60T — 3 Units
Historic Site Evaluation
Prerequisite: A previous or concurrent course in History
Class Hours: 3 lecture
This course covers the methodology of historic site evaluation and interpretation. It includes on-site evaluation of Federal, State, and local historic sites, buildings, museums, parks, etc.

60V —3 Units
The American Legacy of Vietnam
Prerequisite: Previous course in American History
Class Hours: 3 lecture
This is a historical, political and cultural analysis of the American involvement in Vietnam. Topics will include events leading up to and including the actual intervention of U.S. forces in the war culminating with the fall of South Vietnam in 1975.

*These courses are offered periodically.

Humanities

This is an area of specially-designed courses that offer a broad-based understanding of literature, history, philosophy, art and contemporary issues and trends.

Faculty

Full-Time
John Davie
Hugo Ekback
Gerald Fecht
Carole Ginet
Linda Moore
Howard Siegel

Counselor
Don Henderson

Transfer Information

Major requirements for upper division standing at:
California State University, Northridge:
Art 1A or 1B or 2; Mus 8. Majors are required to demonstrate foreign language proficiency exam at the 1-2 level.

Humanities Courses

HUM 1 — 6 Units
The Individual and Society
Class Hours: 6 lecture
Designed to increase students' understanding of history, current social issues, and literature, the course will help students become more aware of the world in which they live and better able to master their freedom and responsibility in a democratic society. Special emphasis will be placed on improving writing skills. *Transfer credit: CSU; UC*

HUM 2 — 6 Units
The Individual and The Arts
Class Hours: 6 lecture
Designed to increase students' understanding of the arts and literature, this course will help students become more aware of the world in which they live through knowledge of the arts past and present. Special emphasis will be placed on improving writing skills. *Transfer credit: CSU; UC*

HUM 3 — 3 Units
History of the Motion Picture
Class Hours: 3 lecture
This is an historical and critical survey of world cinema from the beginnings to WW II. *Transfer credit: CSU; UC*

HUM 4 — 3 Units
Main Currents in Modern Film
Class Hours: 3 lecture
This is an historical and critical survey of world cinema from WW II to the present. *Transfer credit: CSU; UC*

HUM 5 — 3 Units
Contemporary Foreign Film
Class Hours: 3 lecture
This course will focus on contemporary foreign cinema. It will pay special attention to the work of important directors and the production systems within which they work. Students will study the genres, themes, and styles of various national cinemas. May be taken two (2) times for credit. *Transfer credit: CSU*

HUM 18 — 3 Units
Images of Women in Film
Class Hours: 3 lecture
This is a psycho-social survey of the stereotypes of women communicated through roles, myths and special personalities in motion pictures. The approach will consider such factors as visions of individual filmmakers, audience demands, censorship and cultural movements. The course will contrast the cinematic image with the actual status of women in an attempt to explore the relationship between reality and the impact of the media. *Transfer credit: CSU; UC*

HUM 19 — 3 Units
Women in Contemporary Society
Class Hours: 3 lecture
This course will examine the concerns, conflicts and rewards of women in today's society where their roles and opportunities are in the process of change. Increased awareness and fulfillment of individual potential will be emphasized through lecture, discussions, films and reading. *Transfer credit: CSU; UC*

HUM 22A/B — 1-3/1-3 Units
Independent Studies in Humanities
Prerequisite: A previous course in Humanities
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of humanities on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

HUM 60A-Z — 1-6 Units
Topics in the Humanities
Prerequisites: To be determined with each Topic
Class Hours: To be determined with each Topic
This is a special series of courses each of which deals with a specific topic in Humanities not covered in detail in the general Humanities course offerings. Topics courses are announced on a semester basis in the schedule of classes. *Transfer credit: See counselor.*

Interior Design

This program has been developed to prepare students for careers in various areas of home and business design. Students will receive training in specific skills commonly used by Interior Designers.

Career Opportunities

Display Designer
Interior Designer
Furniture Buyer
Color Consultant
Sales Representative

Faculty

Full-Time
Pauline Stringer-Eilers

Counselors
Donna Allyn
Rick Cardoni

Transfer Information

This program has been developed to provide students with practical skills and knowledge in areas of design, color, space planning and textiles for the purpose of entering the expanding field of interior design.

Major requirements for upper division standing at:
California State University, Northridge:
Home Economics:
Interior Design Option:
Art 4A, 4B, 12A; ID 31
See counselor for additional Options.

■ Interior Design

Occupational
Associate in Science Degree

The Interior Design program has been developed to prepare students for careers in various areas of home and business improvement. Students can prepare for careers as display designer, space planner, furniture buyer, and sales representatives for retail organizations.

Required Courses:		Units
Art 2	Art Appreciation	3
Art 4A	Color and Design	3
Bus 30	Intro to Business and Economics	3
Bus 32	Small Business Operation	3
DT 31	Interior Design Drafting	3
ID 5A	Beginning Interior Design	3
ID 5B	Advanced Interior Design	3
ID 7	Space Planning	3
ID 31	Textiles	3

Total minimum units required in major area — 27

Recommended Courses: Bus 35; CIS 1

See Degree Requirements and Transfer Information section for General Education requirements.

■ Interior Design

Certificate of Achievement

The Interior Design program has been developed to prepare students for careers in various areas of home and business improvement. Students can prepare for careers as display designer, space planner, furniture buyer, and sales representatives for retail organizations.

Required Courses:		Units
Art 2	Art Appreciation	3
Art 4A	Color and Design	3
Bus 30	Intro to Business and Economics	3
Bus 32	Small Business Operation	3
DT 31	Interior Design Drafting	3
ID 5A	Beginning Interior Design	3
ID 5B	Advanced Interior Design	3
ID 7	Space Planning	3
ID 31	Textiles	3

Total minimum units required — 27

Recommended Courses: Bus 35; CIS 1

Interior Design Courses

ID 5A — 3 Units
Beginning Interior Design
Prerequisite: None. Art 4A is recommended.
Class Hours: 3 lecture
Students learn principles and elements of design and color as applied to home interiors. They study materials, organization, and arrangement as related to living needs. The course offers basic preparation for students who plan to seek employment in the field of interior design. Field trips will be required. *Transfer credit: CSU*

ID 5B — 3 Units
Advanced Interior Design
Prerequisite: ID 5A
Class Hours: 3 lecture
This is an advanced study of interior design as related to family living. Application of color, materials, and historical styles to contemporary living will be developed. *Transfer credit: CSU*

ID 7 — 3 Units
Space Planning
Prerequisite: ID 5A
Class Hours: 2 lecture, 3 laboratory
Management of space as it relates to three-dimensional functional adequacy, task management, human behavior, social interaction, traffic and work flow. Technical considerations such as lighting and power, storage, noise control, computers and code requirements. Practical application through laboratory projects.

ID 22A/B — 1-3/1-3 Units
Independent Studies in Interior Design
Prerequisite: A previous course in Interior Design
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of interior design on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU*

ID 31 — 3 Units
Textiles *(F)*
Class Hours: 3 lecture
This is a study of the care of textile fibers, their construction, characteristics, finishes, uses and care. It is designed to give a basic knowledge of textiles

which will help the student in selecting and caring for textiles. *Transfer credit: CSU; UC*

ID 89A-Z — ½-3 Units
Institutes in Interior Design★
Class Hours: Variable

A special series of short courses focuses on particular aspects of home economics. Courses dealing in foods, clothing and household management will provide an opportunity for specialized study.

International and Intercultural Studies

The major in International Studies is based upon the idea that the past 20 years have been a series of significant changes in some of the fundamental ways in which nations have traditionally dealt with one another. There has been a shift away from the older politics of conflict and competition toward the recognition that economic and developmental strategies require international planning and management. Nations are beginning to realize that their destinies are mingled in a way, and to a degree, that is unprecedended. The major is designed to permit students to function in this new environment.

■ International Studies

Associate in Arts Degree

The program includes required classes as enumerated below. In addition, students must select a field of emphasis from those listed below.

Required Courses:		**Units**
Anth 2	Cultural Anthropology	3
Econ 1	Principles of Micro-Economics	3
Engl 31	Masterpieces of World Literature II	3
Geog 3	Geography of World Affairs	3
Hist 1B	An Intro to Western Civilization	3
	or	
Hist 60F	The World Since 1945	3
Pol Sc 2	Comparative Government	3
Pol Sc 3	American Government and Politics	3
Pol Sc 4	International Relations	3

Required Additional Courses:
Electives: Students may select any of the following areas of emphasis, choosing 2 courses from any single area. Participation in Moorpark College Study Abroad program may be substituted for 3 units.

Area A: Business - Economics

Bus 30/ Econ 30	Intro to Business and Economics	3
Bus 31	Business Organization and Management	3
Bus 37	Marketing	3
Econ 2	Principles of Macro-Economics	3

Area B: Culture and Politics

Hist 7B	Social and Political History of the United States	3
Hist 9	Latin American History	3
Hist 10	African History	3
Hist 16	Asia in the Modern World	3
Hist 60E	Modern England	3
Hist 60F	The World Since 1945	3
Hist 60G	Modern Germany	3
Hist 60R	Modern Russia	3
Phil 11	Survey of World Religions	3
Soc 1	Intro to Sociology	3

Area C: Foreign Languages
Two semesters of the same language: a parallel study of the appropriate culture, e.g., Spanish/Latin American History, is recommended.

Area D: Environmental Studies

Env Sc 2	Environment and Human Interactions	4
Env Sc 3	Energy Resources and Conservation	3
Geog 1	Our Physical Environment	3
Geog 7	The Human Impact	3

Total minimum units required in major area — 30

See Degree Requirements and Transfer Information section for General Education requirements.

Italian

Study in the Italian language provides specialists to work in areas such as anthropology, economics, political science, literature, and sociology. While teaching is the principle area of employment, other careers may be found in interpreting, translating, research, diplomacy, libraries, and the publishing business.

Career Opportunities

B.A. Level

Translator
Diplomatic Office
Tutor
Editor
Foreign-Exchange Trader
Foreign Clerk
Foreign Service Officer

Faculty

Part-Time

Damiano Marano
David Pardess

Counselors

Don Henderson
Diane Sukiennik

Italian Courses

ITAL 1 — 4 Units
Elementary Italian I
Class Hours: 4 lecture, 1 laboratory by arrangement
This is an intensive study of the Italian language and culture. Special emphasis will be given to the skills and knowledge necessary for speaking, understanding, reading and writing Italian and the unique nature of the people and their history. The language laboratory will be used extensively in the class, and students will be expected to arrange an additional hour of language lab time each week. *Transfer credit: CSU; UC*

ITAL 2 — 4 Units
Elementary Italian II
Prerequisite: Ital I or 2 years of high school Italian with grades of C or better or equivalent fluency.
Class Hours: 4 lecture, 1 laboratory by arrangement
This course concentrates on development of the ability to understand and to express Italian in oral and written form. Extensive use is made of the language laboratory. All students will be expected to spend an additional hour per week of study in the language laboratory. *Transfer credit: CSU; UC*

ITAL 22A/B — 1-3/1-3 Units
Independent Studies in Italian
Prerequisite: A previous course in Italian
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of Italian on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

ITAL 31A — 3 Units
Beginning Conversational Italian
Class Hours: 3 lecture
This introductory course for non-native speakers of Italian includes study of elementary grammar and principles of usage. It is designed for students who wish to understand and use Italian in practical situations.

ITAL 31B — 3 Units
Intermediate Conversational Italian
Prerequisite: Ital 31A or equivalent
Class Hours: 3 lecture
An intermediate course for non-native speakers of Italian, including study of grammar and principles of usage. Designed for students who have some basic conversational Italian, but who wish to continue work in this area.

ITAL 31C — 3 Units
Advanced Conversational Italian
Prerequisite: Ital 31B or equivalent
Class Hours: 3 lecture
This course emphasizes correct oral communication in Italian. It is especially geared for the student with an Italian-speaking background. The music, art, literature and architecture of Italy will serve as the main topics of oral presentation and discussion.

Journalism

The Journalism major program has a two-fold purpose: to provide preparation for careers in newspaper and magazine editorial work, television and radio news, or public relations, and, to provide a study of the media of mass communications for those students who feel it would contribute to their liberal education.

Career Opportunities

Reporter
Feature Writer
Copy Editor
Editorial Assistant
Make-up Editor
Photographer
Lay-out Worker
Advertising Assistant
Writer
Publicity Director
Technical Writer
Proofreader
Stringer
Production Assistant

Faculty

Part-Time
Natalie Holtzman
Gerald Olsen

Counselor
Don Henderson

Transfer Information

Major requirements for upper division standing at:
California State Universities, Northridge and San Jose:
Journ 2. (No more than 12 units in Journalism may be transferred from Moorpark.)

■ Journalism

Occupational
Associate in Science Degree

This program is designed to introduce students to the field of Journalism with possible preparation for entry-level positions as stringers, lay-out workers, advertising assistants, and other production related jobs. An internship program in connection with local print media is available.

Required Courses:		**Units**
Journ 1	Media and Society	3
Journ 2	News Reporting and Writing	3
Journ 3	Advanced News/Feature Writing	3
Journ 8	Basic Photo-Journalism	3
Journ 9	Copy Editing and Make-up	3
Journ 10A	Newspaper Production	3
Journ 12	Broadcast Journalism	3
Journ 14	Intro to Public Relations	3

Total minimum units required in major area — 24

Recommended Courses: Bus 38; GC 3A; Journ 7, 10B, 11A/B

See Degree Requirements and Transfer Information section for General Education requirements.

Journalism Courses

Students planning to take more than 6 units of the Journalism courses marked with * should consult a counselor. The UC system allows credit for the first 6 units only.

JOURN 1 — 3 Units
Media and Society
Class Hours: 3 lecture
This course surveys the history and nature of print and electronic media in America. It will examine the social, political and cultural implication of media. (co-numbered RT 1) *Transfer credit: CSU; UC*

JOURN 2* — 3 Units
News Reporting and Writing
Prerequisite: Eligibility for Engl 1A or equivalent
Class Hours: 3 lecture
This is an introduction to journalism with an emphasis on developing news writing skills through interviewing, reporting, evaluating news significance, collecting accurate facts, and writing of news copy. Practical experience is gained through writing for the school newspaper. *Transfer credit: CSU; UC credit limitations. See counselor. CAN: JOURN 2*

JOURN 3* — 3 Units
Advanced News/Feature Writing
Prerequisite: Eligibility for Engl 1A or equivalent
Class Hours: 3 lecture
Students learn to write the kind of feature articles used in magazine and newspapers, as well as the techniques used in gathering material. Practical experience is given through writing for the school newspaper and magazine. *Transfer credit: CSU; UC credit limitations. See counselor.*

JOURN 4 — 3 Units
Magazine Article Writing
Prerequisite: Engl 1A or Journ 2 or equivalent
Class Hours: 3 lecture
This course offers instruction in writing for magazines, including feature articles, reviews, and editorials suitable for publication. It includes practice in editing and the use of illustrative materials. *Transfer credit: CSU*

JOURN 7 — 3 Units
Layout and Paste-up Techniques
Class Hours: 2 lecture, 3 laboratory
Students will learn practical applications of layout and paste-up techniques for graphic reproduction, including the principles of design. Students will also study the design of roughs, comprehensives and camera ready art, preparation of line and tone copy, use of technical pens and rubylith material; a study of the point system, type identification and copy mark-up systems. (co-numbered GC 4) *Transfer credit: CSU*

JOURN 8* — 3 Units
Basic Photo-Journalism
Prerequisite: Photo 1A, or suitable portfolio.
Class Hours: 2 lecture, 3 laboratory
This course concentrates on the aspects of photography as applied to mass communication, broadcast and print journalism. Students concentrate on the translation of ideas to images for reproduction in magazines, newspapers and book illustrations. Other topics include special effects, the utilization of camera and light as creative tools and basic motion picture techniques. May be taken two (2) times for credit. (co-numbered Photo 8) *Transfer credit: CSU*

JOURN 9 — 3 Units
Copy Editing and Make-up
Prerequisites: Journ 2 with a grade of "C" or better. Ability to type. Recommend concurrent enrollment in Journ 10A or B for journalism majors.
Class Hours: 2 lecture, 3 laboratory
This course offers study and practice in analysis of structure and effectiveness of written materials, rewriting, correction of errors, proofreading, headline writing, news and picture evaluation, and page design. Opportunity is provided to work on the campus newspaper. *Transfer credit: CSU*

JOURN 10A/B* — 3/3 Units
Newspaper Production
Prerequisites: Journ 1, Journ 2 or equivalent
Class Hours: 1 lecture, 6 laboratory
This is a course in the conception, development, editing, layout and composition of newspapers. Particular emphasis will be given to finding attractive and effective ways of presenting written and pictorial matter. Instruction will be given in the graphic arts; use of composing and headlining equipment. *Transfer credit: CSU*

JOURN 11A* — 3 Units
Magazine Editing
Prerequisites: Journ 1, Journ 2 or equivalent
Class Hours: 2 lecture, 3 laboratory
This is a course in the analysis, development, composition and layout of magazines or similar publications. Emphasis is given to coordinating feature stories and related articles with attractive pictorial displays. Instruction is also given in the graphic arts as related to magazine production. (co-numbered Engl 47) *Transfer credit: CSU*

JOURN 11B* — 3 Units
Magazine Editing
Prerequisite: Journ 11A
Class Hours: 2 lecture, 3 laboratory
This is an advanced study in the analysis, development, composition and layout of magazines and similar publications. Emphasis is given to coordinating feature stories and related articles with attractive pictorial displays. *Transfer credit: CSU*

JOURN 12 — 3 Units
Broadcast Journalism
Class Hours: 3 lecture
In this advanced practical course in the preparation of radio and television newscasts, students develop interviewing skills, write original news copy and edit and rewrite wire service copy for on-air purposes. Actual field work is performed using remote recording equipment. (co-numbered RT 12) *Transfer credit: CSU*

JOURN 14 — 3 Units
Introduction to Public Relations
Class Hours: 3 lecture
This is a basic survey course for lay persons and practitioners in the art and science of image building and public/community relations. This course surveys the history and development of PR and enables students to develop skills in Public Relations for profit and non-profit institutions. *Transfer credit: CSU*

JOURN 22A/B — 1-3/1-3 Units
Independent Studies in Journalism
Prerequisite: A previous course in Journalism
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of journalism on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU*

Laser/Electro-Optics Technology

This high technology program reflects an important trend in the varied electronics industry. The fields of aerospace, computer technology and military applications are only a few of the areas where a growing laser industry is of great importance.

Career Opportunities

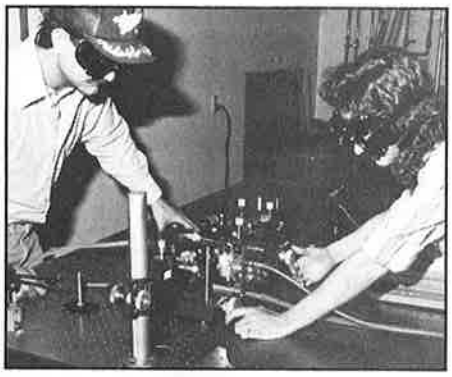
Laser Technician
Laser Sales Specialist
Electro-Optics Technician
Project Technician
Research Technician
Physics Technician
Electro-Optical Sales Specialist

Faculty

Full-Time
Balazs Becht
Clinton Harper
Sergio Monteiro

Part-Time
Eric Goldner
James Sliney

Counselors
John Heydenreich
Diane Sukiennik



■ Laser/Electro-Optics Technology
Occupational
Associate in Science Degree

This program trains students for employment in industries that construct, service and utilize lasers and related electro-optical equipment. Graduates of the program will be employed in a broad spectrum of jobs, including: laser sales and service, research and development, material processing applications, medical applications, information storage, non-destructive testing and applications in the fine arts to name a few. Entry into the program occurs only in the Fall semester and is open to all students who meet the entrance requirements for Moorpark College. Students interested in a degree in the laser/electro-optics field that can eventually lead to a 4-year institution should consider Physics Option III (Electro-optics) rather than the LET major.

Preparation for the Major:
Mathematics — two years of high school algebra or Math 1 and Math 3 or equivalent.
Electronics — Students with no prior experience with Electronics are encouraged to take EL 1/1L prior to or concurrently with EL 10/10L.

All students are strongly encouraged to take advantage of summer school class offerings.

Required Courses:		**Units**
EL 10/10L	Passive Circuits/Lab	5
EL 16/16L	Analog Circuits/Lab	4
EL 17/17L	Digital Circuits/Lab	4
Engl 1A*	English Composition	3
Engl 11	Report and Technical Writing	3
HS 9	Cardiopulmonary Resuscitation	.5
LET 1/1L	Intro to Lasers/Lab	4
LET 3A/3AL	Intro to Optics/Lab	4
LET 3B/3BL	Modern Optics/Lab	4

LET 4	Machine Shop Techniques	2
LET 6/6L	Laser Components, Devices & Metrology/Lab	4
LET 8	Laser Power Systems	2
LET 9/9L	Laser Systems and Applications/Lab	5
LET 10	Projects in LET	2
Math 4*	Applied Mathematics with Calculus	5
Phy Sc 1/1L*	Principles of Physical Science/Lab	4

Total required units in major — 55.5-12 (GE) = 43.5

*Denotes General Education course required for A.S. Degree.

Note: HS 9 (CPR, 0.5 unit) will be waived if, at time of graduation, student holds a current, valid certificate from a Red Cross approved CPR course.

Recommended Courses: CIS 14; EL 21/21L

Suggested Course Sequence:

First Semester	
EL 10/10L	5
LET 1/1L	4
LET 4	2
Math 4 (alternate course: Math 16A or 25A)	5
	16

Second Semester	
EL 16/16L	4
EL 17/17L	4
HS 9	.5
LET 3A/3AL	4
Phy Sc 1/1L (alternate courses: Ph 10A/10AL or 20A/20AL & Chem 1A or 12)	4
	16.5

Third Semester	
Engl 1A	3
LET 3B/3BL	4
LET 6/6L	4
LET 8	2
	13

Fourth Semester	
Engl 11	3
LET 9/9L	5
LET 10	2
(alternate course: LET 22A)	
	10

See Degree Requirements and Transfer Information section for General Education requirements.

■ Laser/Electro-Optics Technology

Certificate of Achievement

This program trains students for employment in industries that construct, service and utilize lasers and related electro-optical equipment. Those who earn certificates can expect employment in a broad spectrum of jobs including those listed under Laser/Electro-Optics Technology Associate in Science Degree.

Preparation for the Major:

Mathematics — two years of high school algebra or Math 1 and Math 3 or equivalent.

Electronics — Students with no prior experience with Electronics are encouraged to take EL 1/1L prior to or concurrently with EL 10/10L.

All students are strongly encouraged to take advantage of summer school class offerings.

Required Courses:		**Units**
EL 10/10L	Passive Circuits/Lab	5
EL 16/16L	Analog Circuits/Lab	4
EL 17/17L	Digital Circuits/Lab	4
LET 1/1L	Intro to Lasers/Lab	4
LET 3A/3AL	Intro to Optics/Lab	4
LET 3B/3BL	Modern Optics/Lab	4
LET 4	Machine Shop Techniques	2
LET 6/6L	Laser Components, Devices & Metrology/Lab	4
LET 8	Laser Power Systems	2
LET 9/9L	Laser Systems and Applications/Lab	5
LET 10	Projects in LET	2

Total minimum units required — 40

Recommended Courses: CIS 14; EL 21/21L

Laser/Electro-Optics Technology Courses

LET 1 — 3 Units
Introduction to Lasers
Prerequisite: Math 3 or equivalent
Corequisite: Math 4 or Math 16A or Math 25A
Class Hours: 3 lecture

This course introduces the student to the elements and operation of a laser, the properties of light and the fundamentals of atomic and molecular structure as applied to laser systems. The helium-neon laser is studied in detail and other laser systems are surveyed. Safety procedures regarding the use of laser systems are stressed. *Transfer credit: CSU*

LET 1L — 1 Unit
Introduction to Lasers Laboratory
Prerequisite: Prior completion of or concurrent enrollment in LET 1
Class Hours: 3 laboratory

This laboratory course introduces students to the measurement of laser output parameters such as beam diameter, divergence and irradiance. Cleaning of optical surfaces and alignment of a laser resonator are also covered. Techniques of proper data taking, recording and analysis are introduced, and laboratory safety procedures are stressed. *Transfer credit: CSU*

LET 3A — 3 Units
Introduction to Optics
Prerequisites: LET 1/1L and Math 4 or Math 16A or Math 25A or equivalent
Class Hours: 3 lecture

This is a comprehensive course in geometrical and wave optics. Topics include: reflection and refraction, matrix optics, thin and thick lenses, interference diffraction and polarization. *Transfer credit: CSU*

LET 3AL — 1 Unit
Introduction to Optics Laboratory
Prerequisite: Prior completion of or concurrent enrollment in LET 3A
Class Hours: 3 laboratory

This is an introductory laboratory course in geometrical and wave optics. Techniques of data taking, recording and analysis are stressed. *Transfer credit: CSU*

LET 3B — 3 Units
Modern Optics
Prerequisite: LET 3A or Physics 20C
Class Hours: 3 lecture

This is a course with selected topics in modern optics including: matrix treatment of polarization, multilayer films, Fourier optics, Gaussian beam propagation, holography, electro and magneto-optic effects, fiber optics. *Transfer credit: CSU*

LET 3BL — 1 Unit
Modern Optics Laboratory
Prerequisite: Prior completion of or concurrent enrollment in LET 3B
Class Hours: 3 laboratory

This is a laboratory course in which students perform experiments in selected areas of modern optics. Experiments will include polarization, multilayer coatings, Gaussian beam propagation, holography, E-O modulators, A-O modulators, Faraday rotation, and fiber optics. *Transfer credit: CSU*

LET 4 — 2 Units
Machine Shop Techniques
Class Hours: 1 lecture, 3 laboratory

This is an introductory course in machine shop techniques. Topics covered include: use of common hand tools, band saws, drill press, lathe and mill. Basic drafting techniques including blue print reading, dimensioning, fits and tolerances will be introduced. Shop safety procedures will be stressed. *Transfer credit: CSU*

LET 6 — 3 Units
Laser Components, Devices & Metrology
Prerequisites: LET 3A/3AL, Phy Sc 1/1L, EL 16/16L or equivalent (or Physics 20B/20BL for Physics Option III majors)
Class Hours: 3 lecture

This course is designed to acquaint the student with many of the components, devices and measurement techniques used in the laser/electro-optics industry. Components discussed include: optical tables and benches, mounts, mirrors, lenses, gratings, filters and polarizers. Devices discussed include: switches and mode lockers, modulators, fiber optics, beam expanders and

optical isolators. Measurement techniques using monochromators, spectrophotometers, wave meters and interferometers are introduced. Equipment control and data acquisition using computers is demonstrated.

LET 6L — 1 Unit
Laser Components, Devices & Metrology Laboratory
Prerequisite: Prior completion of or concurrent enrollment in LET 6
Class Hours: 3 laboratory

This laboratory course is designed to give the students practical experience with the use and operation of a variety of devices and instruments common to the electro-optics industry. The principles of high vacuum technology are also introduced. A semester project including oral and written progress reports is required.

LET 8 — 2 Units
Laser Power Systems
Prerequisites: LET 1L, EL 16L
Class Hours: 1 lecture, 3 laboratory

This is a course that covers the operation and maintenance of both CW and pulsed laser power supplies. Techniques of circuit board repair and electronic troubleshooting are introduced. Emphasis is placed on the safety aspects of working with high voltage and high current circuits.

LET 9 — 3 Units
Laser Systems and Applications
Prerequisites: EL 16/16L, LET 6/6L (Physics Option III majors may take EL 16/16L concurrently)
Class Hours: 3 lecture

This course introduces the students to laser systems, typical of those currently used in industry. Laser systems discussed include: Ar and Kr ion, He-ne, organic dye, CO_2, nitrogen, ruby, Nd:YAG, Nd: Glass, alexandrite excimer, and free-electron. Applications in areas such as material processing, medicine, consumer products, and defense will be discussed. Students will be taught the basic skills of laser system maintenance, and the appropriate safety procedures regarding laser radiation, high voltage and toxic materials.

LET 9L — 2 Units
Laser Systems and Applications Laboratory
Prerequisite: Prior completion of or concurrent enrollment in LET 9
Class Hours: 6 laboratory

This laboratory course gives the student extensive hands-on experience in the operation, maintenance and applications of a wide variety of laser systems. Lasers operated during this lab include: Ar and Kr ion, organic dye, CO_2, N_2, ruby, He-Ne, and Nd:YAG. Students will be taught the basic skills of laser system maintenance, and the appropriate safety procedures regarding laser radiation, high voltage and toxic materials.

LET 10 — 2 Units
Projects in LET
Prerequisites: EL 16/16L, EL 17/17L, LET 6/6L, concurrent enrollment in LET 9/9L
Class Hours: 6 laboratory

This course is designed to instruct the student by actual practice in the formulation, design and implementation of a project in laser/electro-optics. Projects may include the construction of a laser or related electro-optical device and/or utilization of a laser in an experiment. *Transfer credit: CSU*

LET 22A/B — 1-3/1-3 Units
Independent Studies in LET
Prerequisite: A previous course in Laser/Electro-Optics Technology
Class Hours: 1-3 tutorial

This course is for students who are interested in furthering their knowledge of laser/electro-optics technology on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU*

LET 49A-D — 1-4 Units
Cooperative Work Experience — Laser/Electro-Optics Technology★
Prerequisite: Placement at a work station
Class Hours: 5-20 employment, 1 by arrangement

Students employed in a field related to Laser/Electro-Optics Technology will design a learning contract in conjunction with their employer that will involve expanded responsibilities and/or the opportunity to learn new job experiences beyond those required in the existing job duties. Direct coordination with the employer in question will be a part of this learning experience.

LEADERSHIP

All Leadership courses are listed with the Personal Growth courses. Refer to that section alphabetically for full course information.

LEARNING SKILLS

All Learning Skills courses are listed with the Special Education courses. Refer to that section alphabetically for full course information.

Liberal Studies

Faculty

Counselors
Donna Allyn
Rick Cardoni

Transfer Information

The major in Liberal Studies is designed primarily for students seeking the multiple subjects (elementary) credential, but is open to all students. This major is *not* appropriate for most students intending to teach in a public junior or senior high school. The completion of the Liberal Studies major automatically satisfies the General Education requirements of the University.

While the four components are common to this major at any Cal State campus, the specific courses required in each component will vary between campuses. Plan to see your counselor for more details about this major — do this early to avoid errors in course selection.

Major requirements for advanced standing at:

California Lutheran University:

I. English/Speech
   A. 3 units from: English 1A
   B. 3 units from: Speech 1, 2, 5, or 7
   C. 3 units from: English 1B, 13A, 13B, 15A, 15B, 17, 18, 19, 21, 30, 31, or 33
   D. 9-12 units upper division electives after transfer.

II. Math/Science
   A. 4 units from: Biol 1 or 2A
   B. 3-4 units from: Biol 2B (see Education Counselor)
   C. 3 units from: Math 10
   D. 8-11 units upper division electives after transfer.

III. Social Science
   A. 3 units from: Psych 1A
   B. 3 units from: Any transferable History course
   C. 3 units toward California History Requirement from: History 7A or 7B or Pol Sc 3
   D. 3-4 units from a transferable course in: AJ, or Geog, or Hist, or Pol Sc, or Psych
   E. 6-9 units upper division electives after transfer.

IV. Humanities/Fine Arts
   A. 4 units from: Fr 1, 2; Ger 1, 2; Spn 1, 2
   B. 3 units from: Phil 1
   C. 3 units from: Art 1A, 1B, 2, 12A, 12B, 16A, 16B; or Mus 1, 8, 9A, 9B; or ThA 1, 2A, 2B, 4A, 4B, 9
   D. 8-11 units upper division electives after transfer.

California State University, Northridge:

I. Basic Skills component
   A. 3 units from: English 1A
   B. 3 units from: Philosophy 7

II. English component
   A. 3 units from: English 1B, 30, or 31

III. Math-Science component
   A. Credential candidates: Math 10
      Non-credential students: 6 units from CIS 1; Math 13, 15, 16A; Philosophy 7 (3 units must be a Math course)
   B. Biology 1
   C. 1 course from: Chemistry 12; or Physical Science 1/1L; or Physics 1/1L or 10A/10AL
   D. 1 course from: Astronomy 1/1L; Geography 1 or 5; or Geology 2 or 5 or 61
   E. At least one course taken from above should be a lab course.
   F. 2-3 units of elective credit from transferable Math or Science courses.

IV. Social Science component
   A. 6 units from: History 1A, 1B
   B. Credential candidates must take Geograhy 2 (3 units)
      Non-credential students: 3 units from Anthropology 2; and either Psychology 1A or Sociology 1
   C. Credential candidates must take 3 units from: Anthropology 2; Pol Sc 4; Psychology 1A; Sociology 1.
      Non-credential students: 3 units from Chicano Studies 2; History 9, 10, 16; and 3 units from any foreign language or applied fine arts.

V. Humanities component
   3 units from: Art 1A, 1B, 2; Music 8; Theatre Arts 1
   3 units from: Philosophy 1 or 2

   NOTE: GE transfer courses refer to courses which are included in the CSU GE transfer courses.
   Students should be encouraged to complete Title V requirements in U.S. History Constitution, and government (e.g., History 7A, 7B; Political Science 3)

Mathematics

The Mathematics degree program offers training in both pure and applied mathematics, leading to careers in research, education, business, industry, and government. Many areas, such as the physical, biological, and social sciences, engineering, economics, and business, are dependent upon the use of applied mathematics in developing solutions to practical problems.

Career Opportunities

B.S. Level

(Most careers require bachelors or advanced degrees)

Banker
Systems Analyst
Programmer
Statistical Methods Analyst
Statistician
Mathematician
Demographer
Operations Research Analyst
Applied Science Programmer

Faculty

Full-Time

Christine Aguilera
Beverly Barker
Alberto Beron
Jane Broadbooks
Kathryn Fink
Mary LaBarge
Fred Meyer
Charles Molnar
Mahyad Rahnamaie
Deborah Ritchie
Benjamin Rode
Fred Schaak
Kokki Shindo
Robert Stephens
Arthur Szylewicz
Roger Walters
Grethe Wygant

Part-Time

Keith Barker
Kenneth Billau
Jan Britz
Janice Christensen
Christine Cole
John Collins
Francis Davidson
Robert Davis
Eugene Foxman
James Garon
Nella Hartnell
Robert Holden
Robert Jones
Larry Lace
Dean Meyers
Stephen Mussack
John Mutolo
David Ogawa
Charles Pearson
James Riley
Mark Schuberg
Virginia Seaton
David Smith
Manuel Tessier
James Wilkes
Leo Wingle
Maria Zimmer

Counselors

John Heydenreich
Edna Ingram

Transfer Information

Major requirements for upper division standing at:

California State University, Northridge:
CIS 3A, 4A; Math 25A, 25B, 25C, 31; Phil 9; Physics 20A/20AL, 20B/20BL.
Note: For a BS in Applied Mathematics add Math 35.

California State University, Sacramento:
CS 18, 18L; Math 25A, 25B, 25C, 31, 35.

University of California, Berkeley:
Math 25A, 25B, 25C, 31, 35.

University of California, Davis:
Math 7, 25A, 25B, 25C, 31, 35.

■ Mathematics

Associate in Arts Degree

This program is designed to award a designated associate degree to those students who have completed a course of specialization in Mathematics. These requirements were chosen by faculty to optimize students' preparation for upper division course work for Bachelor of Arts degrees in Mathematics offered by four-year institutions. Since the course work in mathematics is sequential, students may spend less time earning an Associate in Arts Degree and/or Bachelor of Arts Degree by deferring some of the university general education requirements until their Junior and Senior years and giving priority to the requirements for a major in mathematics. In addition, the earning of this degree will be evidence of achievement of technical skills which may be helpful towards the seeking of immediate employment.

Preparation for the Major:

Mathematics — two years high school algebra plus trigonometry or Math 1, 3, and 7 or equivalent.

Physics — one year high school physics or Ph 12 or equivalent.

Mathematics students are strongly encouraged to take advantage of summer school class offerings.

Required Courses:		**Units**
CS 18/18L	Computer Programming - FORTRAN/Lab	4
Math 25A	Calculus/w Analytic Geometry I	5
Math 25B	Calculus/w Analytic Geometry II	5
Math 25C	Calculus/w Analytic Geometry III	5
Math 31	Intro to Linear Algebra	3
Math 35	Applied Differential Equations	3
Ph 20A/20AL	Mechanics of Solids and Fluids/Lab	4
Ph 20B/20BL	Electricity and Magnetism/Lab	4

Total minimum units required in major area — 33

Recommended Courses: Chem 1A; CS 10/10L; Math 15, 30; Ph 20C/20CL

Suggested Course Sequence:

First Semester	
CS 18/18L	4
Math 25A	5
	9

Second Semester	
Math 25B	5
Ph 20A/20AL	4
	9

Third Semester	
Math 25C	5
Math 31	3
Ph 20B/20BL	4
	12

Fourth Semester	
Math 35	3
	3

See Degree Requirements and Transfer Information section for General Education requirements.

Mathematics Courses

IMPORTANT NOTES

a) A satisfactory grade (A, B, C, or CR) is required for all prerequisite college course work. A student receiving an unsatisfactory grade (D, F, or NC) in a prerequisite college course is to repeat the class and receive a satisfactory grade before enrolling in a sequel college mathematics class.

b) The Mathematics Placement Exam places students who haven't completed a mathematics class in a college mathematics program. Information on the Math Placement Exam is available at the Counseling Center in the Administration Building and also in the fall, spring, and summer class schedules.

c) A student who has earned a satisfactory grade in a college mathematics class may petition to repeat the class after a lapse of two or more years. If the petition is approved and the course is repeated, the previous grade will be lined through on the record and will not be used in the student's GPA computation.

MATH 1 — 5 Units
Elementary Algebra
Prerequisite: Math 9 or equivalent college course, or a satisfactory score on the Math Placement Exam.
Class Hours: 5 lecture
This course briefly reviews arithmetic with integers, fractions and decimals. It covers linear equations and inequalities, including graphing, systems of linear equations, polynomials, rational expressions, integer exponents, square roots and radical expressions, and quadratic equations and the quadratic formula.

MATH 2 — 3 Units
Fundamentals of Geometry *(F)*
Prerequisite: Math 1 or equivalent college course, or a satisfactory score on the Math Placement Exam. Math 3 may be taken concurrently.
Class Hours: 3 lecture
This course concentrates on definitions and properties of lines, segments, planes, rays, angles, triangles, circles and polygons, congruence and similarity of triangles, coordinate systems, areas, volumes, space geometry, triangle trigonometry and methods of proof.

MATH 3 — 5 Units
Intermediate Algebra
Prerequisite: Math 1 or equivalent college course, or a satisfactory score on the Math Placement Exam.
Class Hours: 5 lecture
This course reviews elementary algebra, including factoring, rational expressions, linear equations and inequalities, determinants and Cramer's Rule, exponents and radicals, complex numbers, functions and graphs, quadratic equations, exponential and logarithmic functions.

MATH 4 — 5 Units
Applied Mathematics with Calculus
Prerequisite: Math 3 or equivalent college course, or a satisfactory score on the Math Placement Exam.
Class Hours: 5 lecture
Topics covered in this course include a review of functions and graphs, systems, trigonometric functions, vectors, determinants and matrices, analytical trigonometry, topics in analytic geometry, introduction to probability and statistics, and a brief introduction to manipulative calculus. *Transfer credit: CSU*

MATH 5 — 3 Units
College Algebra
Prerequisite: Math 3 or equivalent college course, or a satisfactory score on the Math Placement Exam. Math 6 may be taken concurrently.
Class Hours: 3 lecture
This course covers polynomial functions, rational function, theory of equations, logarithmic and exponential functions, complex numbers, mathematical induction, probability, sequences and series, binomial theorem, matrices and determinents. Completion of both Math 5 and Math 6 is equivalent to completing Math 7. *Transfer credit: CSU; UC credit limitations. See counselor.*

MATH 6 — 3 Units
Trigonometry
Prerequisite: Math 5 or equivalent college course, or a satisfactory score on the Math Placement Exam. Math 5 may be taken concurrently.
Class Hours: 3 lecture
This course covers functions, trigonometric functions, solutions of triangles, radian measure, analytic trigonometry, trigonometric identities and equations, composite angle identities, inverse trigonometric functions, complex numbers and polar equations, and logarithms. Completion of both Math 5 and Math 6 is equivalent to completing Math 7. *Transfer credit: CSU*

MATH 7 — 5 Units
College Algebra and Trigonometry
Prerequisite: Math 3 or equivalent college course, or a satisfactory score on the Math Placement Exam.
Class Hours: 5 lecture
This integrated course in college algebra and trigonometry is strongly recommended for all students planning to enter the Math 25ABC sequence. Topics include basic algebraic concepts, equations and inequalities of the first and second degree, functions and graphs, linear and quadratic functions, polynomial functions of higher degree, exponential and logarithmic functions, trigonometric functions, analytical trigonometry, systems of equations and inequalities, and sequences and series. Students taking Math 5, 6, 7 will receive a maximum of 6 units credit. Completion of Math 7 is equivalent to completing both Math 5 and Math 6. *Transfer credit: CSU; UC credit limitations — maximum credit, 4 units. CAN: MATH 16*

MATH 9 — 3 Units
Practical Arithmetic
Class Hours: 3 lecture
This course is the study of addition, subtraction, multiplication and division of fractions and decimals. Their application in practical problems is also studied. Applications of percent, commission, interest, discount, etc. are also studied, as well as measurement of lengths, areas and volumes, etc. Students are introduced to operation with integers, basic algebra and use of the hand-held calculator.

MATH 10 — 3 Units
Mathematics for Elementary Teachers
Prerequisites: Math 3 or equivalent college course, or a satisfactory score on the Math Placement Exam. In addition, one year high school geometry, or Math 2, or equivalent college course.
Class Hours: 3 lecture
This course covers the language of sets; systems of numeration; the nature of numbers and the fundamentals of operations; the domain of integers; the fields of rational, real and complex numbers. It will satisfy credential requirements for elementary and junior high teachers and/or general education option under basic studies. Not open to students majoring in the physical sciences or mathematics. *Transfer credit: CSU*

MATH 12 — 3 Units
College Algebra with Business Applications
Prerequisite: Math 3 or equivalent college course, or a satisfactory score on the Math Placement Exam.
Class Hours: 3 lecture
Topics from college algebra and calculus are applied to problems in business and economics. Algebra topics covered include linear, quadratic, exponential and logarithmic functions; linear systems and matrices; and systems of linear inequalities. Calculus topics covered include the derivative and its applications, and an introduction to integral calculus. *Transfer credit: CSU; UC*

MATH 13 — 3 Units
Mathematics Appreciation
Prerequisite: Math 3 or equivalent college course, or a satisfactory score on the Math Placement Exam.
Class Hours: 3 lecture
This course is intended to give general students a better understanding of the nature of mathematics, the character and origin of different subject fields in mathematics and the application of mathematics to several disciplines. Topics to be covered include logic, numeration systems, number theory, mathematical systems, probability, statistics, and application of these topics to the arts, architecture, powers, puzzles, computers, geometry, and everyday needs of the consumer. *Transfer credit: CSU*

MATH 14 — 3 Units
Finite Mathematics
Prerequisite: Math 3 or equivalent
Class Hours: 3 lecture
This course is for students of business, managerial, social or behavioral science. Topics include: matrices, linear inequalities and linear programming, mathematics of finance, probability and probability distributions and applications to linear programs. *Transfer credit: CSU; UC*

MATH 15 — 4 Units
Introductory Statistics
Prerequisite: Math 3 or equivalent college course, or a satisfactory score on the Math Placement Exam.
Class Hours: 4 lecture
This course explores the nature of statistical methods, including the description of sample data, probability, theoretical frequency distributions, sampling, estimation, testing hypothesis, special topics. Students are given problems and problem-solving techniques. *Transfer credit: CSU; UC. CAN: STAT 2*

MATH 16A — 3 Units
Applied Calculus I
Prerequisite: Math 5 or Math 7 or Math 12 or equivalent college course, or a satisfactory score on the Math Placement Exam. Students need a scientific calculator.
Class Hours: 3 lecture
This course gives a brief review of college algebra, and then gives a

thorough study of limits, continuity and differentiation. Emphasis is placed on applying differential calculus to problems in business, economics, social and biological sciences. This course ends with an introduction to antidifferentiation. *Transfer credit: CSU; UC*

MATH 16B — 3 Units
Applied Calculus II *(S)*
Prerequisite: Math 16A or Math 25A or equivalent
Class Hours: 3 lecture
This course is a continuation of Math 16A. The topics covered include integration, elementary and separable differential equations, functions of several variables, partial derivatives, relative maxima and minima, Lagrange multipliers, method of least squares, double integrals, infinite series, Taylor Approximation, and Newton's method. Emphasis is placed on applying calculus to problems in business, economics, social and biological sciences. *Transfer credit: CSU; UC*

MATH 20 — 3 Units
Introduction to Numerical Methods
Prerequisites: CS 18/18L and (Math 16A or Math 25A).
Class Hours: 3 lecture
Topics covered in this course include: error analysis, power series calculation of functions, roots of equations, non-linear simultaneous equations, matrices, determinants, and linear simultaneous equations; numerical integration; interpolation and curve fitting. These numerical methods will be practically applied using a computer. *Transfer credit: CSU; UC credit limitations. See counselor.*

MATH 22A/B — 1-3/1-3 Units
Independent Studies in Mathematics
Prerequisite: A previous course in Mathematics
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of mathematics on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

MATH 25A — 5 Units
Calculus with Analytic Geometry I
Prerequisites: Math 5 and Math 6 or Math 7 or equivalent college course, or a satisfactory score on the Math Placement Exam.
Class Hours: 5 lecture
Topics covered in this course include: a brief review of college algebra, the real number system, elements of analytic geometry and functions; limits, continuity, differentiation and integration of algebraic functions with applications, differentiation and integration of elementary transcendental functions with applications, and solutions of 1st order, separable differential equations with applications. *Transfer credit: CSU; UC. CAN: MATH 18*

MATH 25B — 5 Units
Calculus with Analytic Geometry II
Prerequisite: Math 25A or Math 16B or equivalent
Class Hours: 5 lecture
Topics covered in this course include: differentiation and integration of the logarithmic and exponential functions, inverse trigonometric and the hyperbolic functions, techniques of integration, improper integrals and L'Hospital's Rule, sequences, series, and Taylor's Theorem, analytical geometry including conic selections, translations, rotations, and applications of integration and differentiation. *Transfer credit: CSU; UC. CAN: MATH 20*

MATH 25C — 5 Units
Calculus with Analytic Geometry III
Prerequisite: Math 25B or equivalent
Class Hours: 5 lecture
Study is made of Power series L'Hospital's Rule, improper integrals, vector space theory, vector calculus, function of several variables, multiple integrals. *Transfer credit: CSU; UC. CAN: MATH 22*

MATH 30 — 3 Units
Introduction to Modern Algebra
Prerequisite: Math 25B or equivalent
Class Hours: 3 lecture
This course is an introduction to logic and proofs, set theory, relations and mappings, properties of integers, and algebraic structures. *Transfer credit: CSU; UC*

MATH 31 — 3 Units
Introduction to Linear Algebra *(F)*
Prerequisite: Math 25B or equivalent
Class Hours: 3 lecture
Studies include vectors, vector spaces, matrices, systems of linear equations, dimension, determinants, eigenvalues. Linear transformations. *Transfer credit: CSU; UC*

MATH 33 — 3 Units
Introduction to Analysis
Prerequisite: Math 25C or equivalent
Class Hours: 3 lecture
Elements of real analysis and set theory are studied with emphasis on attaining a thorough understanding of the basic concepts of set theory, algebra and topology of the real numbers, limits, continuity. *Transfer credit: CSU; UC*

MATH 35 — 3 Units
Applied Differential Equations *(S)*
Prerequisite: Math 25B or equivalent
Class Hours: 3 lecture
This course includes study of linear differential equations, equations with constant coefficients, variation of parameters, Laplace transform, systems of linear equations, series solutions, first order differential equations, existence and uniqueness of solutions with emphasis on applications to physics and engineering, introduction to Fourier series and partial differential equations. *Transfer credit: CSU; UC. CAN: MATH 24*

Music

The Moorpark College Music Department offers a wide variety of classes designed for both the aspiring professional musician who wishes to continue studies at the university level, and the knowledgable amateur eager to understand and appreciate the important role music occupies in this society.

Career Opportunities

Instrument Concert Musician
Concert Singer
Entertainer
Accompanist
Vocalist
Professional Church Musician
Organist.
Choir Director
Soloist
Composer
Music Tutor
Conductor
Music Writer
Music Editor
Copyist
Orchestrator
Librettist/Lyricist
Disc Jockey
Announcer
Arranger

Faculty

Full-Time

Alan Hyams
Orbie Ingersoll
Sheldon Mehr
James Stemen
Joan Thompson

Part-Time

Marilyn Anderson
Sandra Bostrom
Scott Garrison
Suzanne Julian
Dolly Kessner
Lou-Jean Osborne

Counselor

Don Henderson

Transfer Information

Major requirements for upper division standing at:
California State University, Northridge:
Mus 2A, 2B, 2C, 2D, 9A, 9B. Students should select at least one ensemble course in each of four semesters from: Mus 10, 12, 15. Note: Ensemble courses similar to CSUN courses will be accepted.

■ Music

Associate in Arts Degree

This program is designed for the students interested in specializing in music education leading to transfer to most universities and/or a professional career in music.*

Required Courses for all specialization areas:		**Units**
Mus 2A	Music Theory	3
Mus 2B	Music Theory	3
Mus 9A	Music History and Literature	3
Mus 9B	Music History and Literature	3

Area Specializations

Vocal Music Specialization

Required Courses:		
Mus 13A/B	Fundamentals of Vocal Technique I-II	2-2
Mus 13C/D	Advanced Vocal Development I-II	2-2
Required Additional Courses:		
Select one (1) vocal performance class each semester from the following:		
Mus 10	Concert Choir	2
Mus 12	Voice Ensemble	2
Mus 16	Voice in Opera Workshop	2
Mus 60D	Masterworks Chorale	2

Total minimum units required in major area — 28

Recommended Courses: Mus 2C, 3A, 25A, 25B, 25C, 25D

Instrumental Music Specialization

Required Additional Courses:		
Select one (1) instrumental ensemble performance class each semester from the following:		
Mus 18	Jazz/Rock Ensemble	2
Mus 19	Instrumental Music Workshop	1
Mus 28	Instrumental Conducting	2

Total minimum units required in major area — 17

Recommended Courses: Mus 2C, 2D, 25A, 25B

Music Theory & Composition Specialization

Required Courses:		
Mus 2C/D	Music Theory	3-3
Mus 25A/B/C/D	Class Piano	6

Total minimum units required in major area — 24

Recommended Courses: Any Music Performance classes from Instrumental, Vocal, or Piano Ensemble.

Keyboard Music Specialization

Required Courses:		
Mus 20	Piano Ensemble	2
Mus 25A/B/C/D	Class Piano	6
Required Additional Courses:		
Select one (1) performance class each semester from the following:		
Mus 10	Concert Choir	2
Mus 12	Vocal Ensemble	2
Mus 20	Piano Ensemble	2
Mus 60D	Masterworks Chorale	2

Total minimum units required in major area — 28

Recommended Courses: Mus 2C, 3A

**All students are encouraged to enroll in at least one performance class each semester.*
See Degree Requirements and Transfer Information section for General Education requirements.

■ Music

Certificate of Achievement

This program is designed to provide the student with the basic training, knowledge and conducting skills necessary for accepting a position as a church or community choral director.

Required Courses for all options:		**Units**
Mus 2A	Music Theory	3
Mus 2B	Music Theory	3
Mus 3A	Music Reading and Musicianship I	2
Mus 9A	Music History and Literature	3

Select one of the following options:

Choral Conducting

Required Courses:		
Mus 10	Concert Choir	2-2
Mus 13A/B	Fundamentals of Vocal Technique I-II	2-2

Mus 25A/B	Class Piano	3
Mus 27	Choral Conducting	2
Mus 60D	Masterworks Chorale	2
Mus 60E	Choral Conducting Seminar	3

Total minimum units required — 29

Instrumental Conducting

Required Courses:

Mus 3B	Music Reading and Musicianship II	2
Mus 9B	Music History and Literature	3
Mus 19	Instrumental Music Workshop	1-1
Mus 21	Band	2
Mus 22A/B	Independent Studies in Music	1-1
Mus 25A/B	Class Piano	3
Mus 28	Instrumental Conducting	2-2

Total minimum units required — 29

Vocal Performance

Required Courses:

Mus 3B	Music Reading and Musicianship II	2
Mus 10	Concert Choir	2-2
Mus 13A/B	Fundamentals of Vocal Technique I-II	
Mus 13C/D	Advanced Vocal Development I-II	2-2
Mus 16	Voice in Opera Workshop	2-2
Mus 25A/B	Class Piano	3

Total minimum units required — 28

Music Courses

Students planning to take more than 12 units of Music courses marked with * should consult a counselor; the UC system allows credit for the first 12 units only.

MUS 1 — 3 Units
Fundamentals of Music
Class Hours: 3 lecture
This course is designed for the student with little or no prior understanding in music who wishes to learn to read music. Course objective is to gain a basic understanding of scales, intervals, chords, key signatures, time signatures, musical symbols, an introduction to the piano keyboard, and all necessary preparations for Music 2A. *Transfer credit: CSU; UC*

MUS 2A — 3 Units
Music Theory
Prerequisite: Music 1 or equivalent
Class Hours: 3 lecture
This course is concerned with major and minor scales (structure) all keys, figured primary chords and their inversions in all keys, secondary chords and inversions, chord progressions, modulation by pivot chord to the keys of the dominant and the relative minor, and other closely related keys. *Transfer credit: CSU; UC*

MUS 2B — 3 Units
Music Theory
Prerequisite: Music 2A or equivalent
Class Hours: 3 lecture
Modulation by pivot chord to closely related keys. The dominant seventh chord and its inversions, secondary dominants and dominant ninths, and more remote modulation are studied. *Transfer credit: CSU; UC*

MUS 2C — 3 Units
Music Theory
Prerequisite: Music 2B or equivalent
Class Hours: 3 lecture
Study is made of chromatic harmony, augmented sixth chords, the Neapolitan 6th chord, eleventh and thirteenth chords and basic use of binary and ternary forms, accompanimental figures, and basic orchestration. *Transfer credit: CSU; UC*

MUS 2D — 3 Units
Music Theory (Counterpoint)
Prerequisite: Music 2A or equivalent
Class Hours: 3 lecture
Counterpoint is the study of horizontal or linear music rather than the vertical form of harmonization. This class deals with the composition of linear melodies to a given melody, cantus firmus, and explores the various styles or species, from 1st through 5th. The culmination of this course is the composition of a two-part invention. *Transfer credit: CSU; UC*

Students are recommended to enroll in Music 3A when taking Music 2A and Music 3B when taking either Music 2B, C, or D.

MUS 3A — 2 Units
Music Reading and Musicianship I
Prerequisite: Music 1 or equivalent
Class Hours: 1 lecture, 3 laboratory
This course is designed to teach the techniques of reading music and fundamental musicianship. Work includes rhythmic and pitch notations, singing of graded song and choral literature, melodic, rhythmic and harmonic dictation, and ear training exercises. It is recommended that this class be taken simultaneously with Music 2A. May be taken two (2) times for credit. *Transfer credit: CSU; UC*

MUS 3B — 2 Units
Music Reading and Musicianship II
Prerequisite: Music 3A or equivalent
Class Hours: 1 lecture, 3 laboratory
This is a course in advanced music reading and ear training; melodic, rhythmic and harmonic dictation, dictation in more than one part, chromatic and multi-rhythmic dictation. It is recommended that this class be taken simultaneously with Music 2B, C or D. May be taken two (2) times for credit. *Transfer credit: CSU; UC*

MUS 7 — 3 Units
Survey of 20th Century American Music
Class Hours: 3 lecture
Survey of 20th Century American Music is a music appreciation class which focuses on the study of American music from early jazz to the present. It traces the roots of American music, examines the musical contributions of such talents as Gershwin, Copland, Bernstein, and others, and explores Folk, Big Band Rock as well as the Age of New Electronics in music. *Transfer credit: CSU; UC*

MUS 8 — 3 Units
Music Appreciation
Class Hours: 3 lecture
This course presents a survey of musical history with special emphasis on the understanding and enjoyment of music. It will investigate, through directed listening, the basic elements of music, the structure of musical compositions, and the instruments of the orchestra which transport the composers ideas. This course will also focus on the various styles and characteristics of the musical historic periods and the composers most representative of these elements. Not recommended for Music majors. *Transfer credit: CSU; UC*

MUS 9A — 3 Units
Music History and Literature
Class Hours: 3 lecture
This course begins with a study of the musical activity, influences, and contributions of the Greek and Roman civilizations. It then traces the development of music of the Western world beginning with the Romanesque periods, and ending with the Baroque period. It includes a study of the major instrumental and vocal forms and the composers of each period. Considerable emphasis is placed upon listening, identifying, and analyzing representative works of each stylistic period. *Transfer credit: CSU; UC*

MUS 9B — 3 Units
Music History and Literature
Class Hours: 3 lecture
This is a study of the changing styles, techniques, and forms of music from the middle of the 18th Century to the present. Special emphasis is placed upon the artistic philosophy of each style period. Intensive consideration is given to the analysis of style and form in representative musical works. Required for music majors. Listening and analysis outside of the classroom is required. *Transfer credit: CSU; UC*

MUS 10* — 2 Units
Concert Choir
Class Hours: 1 lecture, 3 laboratory
This is a singing organization for both music majors and non-music majors, which learns and performs choral music selected from the Renaissance, Baroque, Classical, Romantic, and Modern Periods. Performancs include

on-campus concerts, high school assembly programs, community college choral festivals, and other community events. May be taken four (4) times for credit. *Transfer credit: CSU; UC credit limitations. See counselor.*

MUS 12* — 2 Units
Vocal Ensemble
Prerequisite: Audition
Class Hours: 1 lecture, 3 laboratory
A select group of singers who study and perform suitable choral music from all periods. In the spring semester the ensemble specializes in the performance of Renaissance music including English and Italian madrigals, French chansons, German Liede, and sacred motets. The ensemble, known as the Renaissance Singers, appears in English Tudor costumes, makes numerous appearances at Concerts, festivals, assembly programs, Renaissance Pleasure Faires, and other community events. May be taken four (4) times for credit. *Transfer credit: CSU; UC credit limitations. See counselor.*

MUS 13A* — 2 Units
Fundamentals of Vocal Technique I
Class Hours: 1 lecture, 3 laboratory
Designed to begin development of the vocal potential, to lay a foundation for proper vocal production, and to correct faulty singing. Material will consist of song literature sung in Italian and English in addition to vocal exercises. Course is designed for both majors and non majors desiring beginning vocal training. *Transfer credit: CSU; UC credit limitations. See counselor.*

MUS 13B* — 2 Units
Fundamentals of Vocal Technique II
Prerequisite: Music 13A or adequate prior study
Class Hours: 1 lecture, 3 laboratory
Designed to follow Music 13A, the course will further vocal development through advanced vocal exercises and the introduction of advanced song literature, simple opera and oratorio literature. *Transfer credit: CSU; UC credit limitations. See counselor.*

MUS 13C* — 2 Units
Advanced Vocal Development I
Prerequisite: Music 13B or equivalent
Class Hours: 1 lecture, 3 laboratory
This course is a continuation in development of a proper vocal production. Material to be studied will consist of English, Italian, German, French art songs, and more demanding opera and oratorio literature. *Transfer credit: CSU; UC credit limitations. See counselor.*

MUS 13D* — 2 Units
Advanced Vocal Development II
Prerequisite: Music 13C or equivalent
Class Hours: 1 lecture, 3 laboratory
This is a continuation of vocal development through the study and performance of more challenging literature with emphasis on the operatic and oratorio literature in addition to more difficult art song literature. *Transfer credit: CSU; UC credit limitations. See counselor.*

MUS 15* — 2 Units
Orchestra
Class Hours: 4 lecture/laboratory
Students acquire preparation and performance of orchestral repertoire. May be taken four (4) times for credit. *Transfer credit: CSU; UC credit limitations. See counselor.*

MUS 16* — 2 Units
Voice in Opera Workshop
Prerequisite: Music 13C or equivalent
Class Hours: 1 lecture, 3 laboratory
The study of song literature taken from the musical theatre. This course will enable students to study and perform opera and musical plays in excerpt or as a complete production. Class is designed for singers with proven ability with interest in drama. May be taken four (4) times for credit. *Transfer credit: CSU; UC credit limitations. See counselor.*

MUS 17* — 3 Units
Summer Music Theatre
Prerequisite: Audition
Class Hours: 144 laboratory total
A complete musical theatre work will be rehearsed and performed by members of this class for presentation to the community. May be taken four (4) times for credit. *Transfer credit: CSU; UC credit limitations. See counselor.*

MUS 18* — 2 Units
Jazz/Rock Ensemble
Prerequisite: Ability to play a musical instrument appropriate to the Jazz Rock Ensemble (piano, percussion, sax, trumpet, guitar, bass guitar, electronic instruments).
Class Hours: 6 laboratory
Students will read, prepare and perform music arranged for jazz and jazz rock ensemble and big band. Rehearsal for and performance at scheduled concerts is required. May be taken four (4) times for credit. *Transfer credit: CSU; UC credit limitations. See counselor.*

MUS 19* — 1 Unit
Instrumental Music Workshop
Prerequisite: Ability to play a musical instrument
Class Hours: 3 laboratory
This course offers instruction in music for instrumental performance. Graded literature for various instrumental combinations for rehearsal and performance is studied. May be taken four (4) times for credit. *Transfer credit: CSU; UC credit limitations. See counselor.*

MUS 20* — 2 Units
Piano Ensemble
Prerequisite: Music 25B or equivalent training
Class Hours: 1 lecture, 3 laboratory
Piano literature for one piano - 4 hands, two pianos - 4 hands, will be covered in this course. May be taken four (4) times for credit. *Transfer credit: CSU; UC credit limitations. See counselor.*

MUS 21* — 2 Units
Band
Prerequisite: Ability to perform on a standard band instrument
Class Hours: 1 lecture, 3 laboratory
This course will focus on the preparation and performance of suitable musical literature for the band in support of the various campus events and activities. May be taken four (4) times for credit. *Transfer credit: CSU; UC credit limitations. See counselor.*

MUS 22A/B— 1-3/1-3 Units
Independent Studies in Music
Prerequisite: A previous course in Music
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of music on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

MUS 25A* — 1½ Units
Class Piano
Class Hours: 3 lecture/laboratory
This course is designed for the student with little or no prior piano experience. It includes the fundamentals of piano playing, music reading, technique, improvisation, scales, chords, and simple piano literature. *Transfer credit: CSU; UC credit limitations. See counselor.*

MUS 25B* — 1½ Units
Class Piano
Prerequisite: Music 25A
Class Hours: 3 lecture/laboratory
This course is designed to teach greater independence of hands, continues music reading and technique skills, further exploration of chords and scales. *Transfer credit: CSU; UC credit limitations. See counselor.*

MUS 25C* — 1½ Units
Class Piano
Prerequisite: Music 25B
Class Hours: 3 lecture/laboratory
This course is designed to teach greater independence of hands, and continues music reading and technique skills. Overview and study of the 'teaching' pieces of the major important composers. *Transfer credit: CSU; UC credit limitations. See counselor.*

MUS 25D* — 1½ Units
Class Piano

Prerequisite: Music 25C
Class Hours: 3 lecture/laboratory
This course is designed to teach greater independence of hands, and continues music reading and technique skills. Overview and study of intermediate-advanced pieces of the major composers. *Transfer credit: CSU; UC credit limitations. See counselor.*

MUS 27* — 2 Units
Choral Conducting
Class Hours: 2 lecture, 1 laboratory
This course is the study of basic conducting techniques including the 2/4, ¾, 4/4, 6/8, 3/8, 2/8 and subdivided beat patterns. Video recording and perusal by students will assist the learning process. Class members and prepared cassette recordings will provide the music for conducting practice. *Transfer credit: CSU; UC credit limitations. See counselor.*

MUS 28* — 2 Units
Instrumental Conducting
Prerequisites: Equivalent of Music 1
Class Hours: 1 lecture, 3 laboratory
A study is made of basic conducting techniques of various instrumental organizations; students also explore instrumental literature, including style, performance and interpretation. May be taken two (2) times for credit. *Transfer credit: CSU; UC credit limitations. See counselor.*

MUS 60A-Z — 1-3 Units
Topics in Music
Prerequisites: To be determined with each Topic
Class Hours: To be determined with each Topic
This is a special series of courses each of which deals with a specific topic in Music not covered in detail in the general Music course offerings. Topics courses are announced on a semester basis in the schedule of classes. *Transfer credit: CSU; UC maximum credit 3 units.*

Topics which have been developed include:

60D — 2 Units
Masterworks Chorale
Prerequisite: Audition
Class Hours: 1 lecture, 3 laboratory
The Masterworks Chorale is designed for the experienced singer wishing to perform the choral works of master composers. Music suitable for the large ensemble is selected from the Renaissance, Baroque, Classic, Romantic, and Modern Periods. May be taken four (4) times for credit.

60E — 3 Units
Choral Conducting Seminar
Prerequisite: Music 27 or equivalent experience
Class Hours: 3 lecture
The Choral Conducting Seminar addresses the problems facing the choral director. The course focuses on understanding the historical background of choral conducting, the director's role as interpreter, the selection of appropriate choral materials, the understanding of the stylistic differences of choral music and the periods in which they were composed, the efficient use of rehearsal techniques, and the conducting of the performance.

60P — 2 Units
Advanced Choral Performance
Prerequisite: Audition
Class Hours: 1 lecture, 3 laboratory
This is an advanced course in the performance of choral literature requiring strong note-reading abilities and voice skills. May be taken four (4) times for credit.

60T — 2 Units
Masterworks Abroad
Prerequisite: Audition
Class Hours: 6 laboratory
Designed for experienced singers, this course combines preparatory rehearsals on campus with concert performances, seminars, lectures, and related cultural activities on tour abroad. May be taken four (4) times for credit.

60V — 2 Units
Advanced Concert Choir
Prerequisites: Satisfactory completion of Music 10, Music 60P or equivalent work. Audition required.
Class Hours: 1 lecture, 3 laboratory
Advanced Concert Choir is a choral organization which is concerned with the refinement of choral singing. Detailed attention is given to intonation, tonal quality, tonal blend and balance, textual articulation, interpretation, and stage presence. May be taken four (4) times for credit.

Nursing Science

The requirements, procedures, application dates, and program offerings for the Nursing Science program are subject to change. Consult the Nursing Counselor for current information.

Career Opportunities

ASA Registered Nurse
Pediatric Nurse
Geriatric Nurse
Operating Room Nurse
Home Health Nurse
Armed Forces Nurse
Mental Health Nurse
Critical Care Nurse
Trauma Care Nurse

Faculty

Full-Time
Denise Byrne
Frances Hughes
Nancy La Sota
Linda Loiselle
Brenda Shubert

Part-Time
Gary Metelak

Counselor
Diane Sukiennik

Procedures for Applying to the Nursing Program: Academic Year 1990-91

Applicants will be selected each semester for the subsequent semester class, subject to available openings. The deadline for receipt of all application information, including transcripts is:

May 1 — (*Spring Semester Applicants) for the following Fall Semester.

November 1 — (Fall Semester Applicants) for the following Spring Semester.

*A 1991 Spring Semester class will be started if there are enough applicants. If not, these applicants will be accepted into the 1991 Fall Semester class.

December 1 and June 1 — Notification of accepted candidates and group planning with counselor.

Qualifying Requirements

1. One of the following must be completed before applying to the program:
   a) High school graduation and GPA of 2.5 or
   b) General Education Development (GED) with a score of 45 and a minimum of 12 units of college with a 2.25 GPA or
   c) High school graduate with less than a 2.5 GPA and a minimum of 12 units of college with a GPA of 2.25.
2. a) All official high school and college transcripts must be on file at Moorpark College by March 1 to be considered.
   b) Application to the Nursing Program must be on file with the Counseling Office at Moorpark College by March 1 to be considered.
   c) An application to the college must also be filed for the appropriate semester.
   d) It is the applicant's responsibility to check with the transcript clerk in the Admissions Office to see that his or her official transcripts are on file at Moorpark College.
   e) Pre-Nursing students are asked to complete a Pre-Nursing Application available in the Counseling Office.
   f) Transfer/Advance Placement students are asked to complete an appropriate application specific to advance standing by May 1 for Fall Semester, November 1 for Spring Semester. Applications available in Counseling Office.
3. All of the following must be completed before applying to the program:
   a) Chemistry: **Chem 12**. Completion of college chemistry course with a minimum grade of C or score 17 or better on Chemistry Placement Exam. (Chem 20 and 20L or Chem 10 and 10L at Ventura; Chem 20 and 20L, Oxnard).
   b) Anatomy-Physiology: **An 1 and Phys 1**. Completion of college anatomy and physiology 5-unit course with laboratory, with a minimum grade of C (Either AnPh 1 or both Anat 1 and Physio 1 at Ventura — HS 5 not acceptable; Biol 107, Oxnard).
   c) Microbiology: **Micro 1**. Completion of college bacteriology/microbiology 4 or 5-unit course with laboratory with a minimum grade of C (Bac 1 at Ventura; Biol 110, Oxnard).
   d) Math: Completion of **Math 1** or equivalent college course with a minimum grade of C or eligibility for Math 3.

Students must be in good academic standing (not on probation) to be eligible for application to the Nursing program at Moorpark College. All interested applicants should contact the Nursing Counselor for further information regarding the Associate Degree Nursing program.

Admission Process

Each qualified applicant will be assigned a number by the use of random tables. The class will be selected on the basis of available openings in the order determined by random numbers. Each qualified applicant, if selected, must decide either to enter the class or remove his or her name from the eligibility list. Those qualified applicants who are not selected due to limited openings may retain their name (in the order assigned by random tables) on a waiting list. These applicants then have priority for admission to the next class selected.

After students have been selected by the above procedure, a physical exam, to be completed by the student's physician, must be passed prior to entry into the program. The exam will consider freedom from communicable diseases and ability to function in a hospital clinical area. Students must present **proof of immunity to Rubella**. All students are to have completed a Nursing Department approved course in Cardiopulmonary Resuscitation prior to entry into the clinical portion of the program. NS 18 will satisfy this requirement. Also, all students must purchase and maintain **malpractice insurance**.

All students admitted to the Nursing program are expected to maintain the highest personal standards of conduct consistent with the professional standards as perceived by the faculty and professional personnel in the agencies used as extended campus sites. Any information indicating that such standards are not maintained is subject to review by members of the faculty which might recommend to the college dismissal from the program.

Evidence of physical and emotional fitness upon admission and throughout the program is expected and is subject to medical opinion of the college physician and to medical opinion or policy of hospitals or agencies which are used as extended campus sites for assigned educational experience.

Associate Degree Curriculum in Nursing

The Associate Degree Program in Nursing is intended to develop the necessary knowledge and skill basic to the functions of registered nurses in the direct care of patients. Many of the courses assigned to this curriculum are transfer courses and articulation is possible with the baccalaureate programs in nursing at the California State University and Colleges. The courses may be applied as a foundation for advanced work at the discretion of the accepting institution. Courses, taken on campus concurrently with supervised clinical experience in selected hospitals and agencies, constitute a Nursing Science clinical laboratory experience. Each course merits a letter grade and it is necessary to pass both the classroom course and the concurrent clinical laboratory course in order to proceed in nursing. For successful completion of the program, a minimum grade of C is mandatory in all courses required for the nursing major. The student must maintain an overall GPA of 2.0 to continue in the program.

Each student is responsible for his or her own transportation to the extended campuses for laboratory experience, some of which are a distance from the college.

The nursing program is accredited by the California State Board of Registered Nursing. To be eligible to take the California State Board Examination leading to licensure as a registered nurse, the student must have fulfilled all the requirements defined by the California State Board of Registered Nursing. Graduate nurses lacking California licensure requirements may be admitted into the open spaces to complete any needed courses as specified by the California State Board of Registered Nursing. Transfer students will have equal access to the open spaces and credit for nursing courses taken at another institution will be evaluated on an individual basis.

Career Ladders

Opportunities are available for Licensed Vocational Nurses and others in the Health Care field to advance on the career ladder leading to eligibility for registered nurse licensure. To be eligible for this program a candidate must be an LVN who graduated from an accredited school of vocational nursing and is currently registered in California, or has related Health Care credentials.

There are several options available depending on the qualifications and needs of the applicant. Contact the Nursing Department for individual evaluation of eligibility. All career ladder programs are on a space available basis.

Continuing Education

Students who hold a California Registered Nurse license and who are presently enrolled and in good standing at Moorpark College may petition, after completion of 12 units in residence at Moorpark College, through the Nursing Counselor for 37 units of nursing science credit applicable toward an AA/AS degree.

Moorpark College has been approved by the Board of Registered Nursing as a Continuing Education Provider (number 02811). There are several courses identified in the curriculum as acceptable for Continuing Education credit. Continuing education classes are frequently offered in the NS 89 Institutes in Nursing Science series. Please refer to the schedule of classes for more information.

■ Nursing Science

Associate in Science Degree

The full compliment of course work required for the Associate in Science Degree in Nursing is as follows:

Preparation for the Nursing Major

In the Ventura County Community College District any of the following may be chosen to meet this requirement. All courses are transferable to Moorpark College.

Moorpark College		**Units**
An 1	General Human Anatomy: 2 hrs Lec., 6 hrs Lab. (prerequisite: Biol 1 or Biol 2A or equiv.)	4
Phys 1	Human Physiology: 4 hrs Lec., 3 hrs Lab. (prerequisites: Chem 12 or equiv. and Biol 2A)	5
Micro 1	Principles of Microbiology: 3 hrs Lec., 6 hrs Lab. (prerequisites: Chem 12 and Biol 2A)	5
Ventura College		
AnPh 1	Introduction to Anatomy/Physiology: 3 hrs Lec., 6 hrs Lab. (prerequisite: Chem 10-10L or Chem 20-20L or HS or College Chem with Lab or concurrent enrollment)	5
Bac 1	General Bacteriology and Microbiology: 3 hrs Lec., 6 hrs Lab. (prerequisite: Chem 10-10L or Chem 20-20L)	5
Oxnard College		
Bio 107	Anatomy and Physiology: 3 hrs Lec., 6 hrs Lab. (prerequisite: none, HS Bio and Chem recommended)	5
Bio 110	Principles of Microbiology: 3 hrs Lec., 6 hrs Lab. (prerequisites: Chem 20, Bio 103 or equiv.)	5

Required General Education Courses

(It is recommended that the remaining required courses be taken prior to the ADN program)

Engl 1A	English Composition	3
Psych 1A	Intro to Psychology	3
Spch 1	Intro to Speech	3
Select one (1) of the following courses:		
Anth 2	Cultural Anthropology	3
Soc 1	Intro to Sociology	3

Required Additional General Education Courses: Choose one course from each category.

American History/Institutions	3
Fine/Performing Arts	3
Communication or Analytical Thinking (Phil 7 or 9, or Spch 7 recommended)	3
Physical Education	.5-3
Physical Science (for students who score 17 or better on Chemistry Placement Exam this requirement must be met)	3

Consult with Nursing Counselor to assist with course selections. If you are considering transferring to a Bachelor of Science in Nursing Program, please consult the Nursing Counselor.

See Degree Requirements and Transfer Information section for General Education requirements.

Required Nursing Courses

NS 1	Beginning Nursing Science	4
NS 1L	Beginning Clinical Nursing Lab	4
NS 2	Intermediate Nursing Science	5
NS 2L	Intermediate Clinical Nursing Lab	5
NS 3A	Psychiatric/Mental Health Nursing	2.5
NS 3AL	Psychiatric/Mental Health Clinical Nursing Lab	2.5
NS 3B	Maternal Child and Gynecological Nursing	2.5
NS 3BL	Maternal Child and Gynecological Clinical Nursing Lab	2.5
NS 4A	Advanced Nursing Science	2.5
NS 4AL	Advanced Clinical Nursing Lab	2.5
NS 4B	Preparation for Professional Practice - Preceptorship	4
		37

Required Nursing Science Course Sequence:

Level I - First Year		**Units**
First Semester		
NS 1	Beginning Nursing Science	4

NS 1L	Beginning Clinical Nursing Lab	4
NS 11	Nursing Skills Laboratory	1
NS 15	Pharmacology for Nurses	3
NS 18	CPR for Nurses or Red Cross Certificate (All students must have CPR-C certificate prior to clinical experience)	.5
		12.5

Second Semester

NS 2	Intermediate Nursing Science	5
NS 2L	Intermediate Clinical Nursing Lab	5
NS 12	Nursing Skills Laboratory	1
NS 22A	Independent Studies in Nursing	1-3
		12

Level II - Second Year
Third Semester

NS 3A	Psychiatric/Mental Health Nursing	2.5
NS 3AL	Psychiatric/Mental Health Clinical Nursing Lab	2.5
NS 3B	Maternal Child and Gynecological Nursing	2.5
NS 3BL	Maternal Child and Gynecological Clinical Nursing Lab	2.5
NS 13	Nursing Skills Laboratory	1
NS 18	CPR for Nurses Renewal or Red Cross Certificate (All students must renew CPR-C certificate each year)	.5
NS 22A	Independent Studies in Nursing	1-3
		12.5

Fourth Semester

NS 4A	Advanced Nursing Science	2.5
NS 4AL	Advanced Clinical Nursing Lab	2.5
NS 4B	Preparation for Professional Practice - Preceptorship	4
NS 14	Nursing Skills Laboratory	1
NS 17	Intravenous Therapy/Blood Withdrawal	2
		12

Summer Semester

NS 16	Registered Nursing Board Review	1
NS 78	Operating Room Nursing	4
		5

Nursing Science Courses

NS 1 — 4 Units
Beginning Nursing Science
Prerequisite: Admission to Moorpark College ADN Program
Corequisite: NS 1L
Class Hours: 4 lecture

This course is an introduction to the application of the nursing process as a basis for nursing practice. The focus will be on identifying universal self-care requisites: air, water, food, elimination, activity, social, safety, and normalcy throughout the life span. Emphasis is placed on assessing client's self-care demands or deficits, determining nursing diagnoses, and providing interventions based on beginning nursing skills through the modes of acting, teaching, guiding and supporting (with follow-up evaluation). Nutrition, pharmacology, legal/ethical aspects, bio-psycho-sociocultural and spiritual aspects, preventive, supportive and rehabilitative nursing is integrated throughout this course and the following courses in nursing science. Clinical experience is concurrent. May be taken two (2) times for credit. *Transfer credit: CSU*

NS 1L — 4 Units
Beginning Clinical Nursing Laboratory
Prerequisite: Admission to Moorpark College ADN Program
Corequisite: NS 1
Class Hours: 12 laboratory

This is an introductory clinical nursing laboratory experience which allows the student to apply the nursing process, concepts and skills identified in Nursing Science 1. The clinical experience is two clinical days per week. The first four weeks will be in a simulated skills laboratory learning basic nursing skills. The second four weeks will be in a skilled nursing facility with the remainder of the semester in an acute care facility. May be taken two (2) times for credit. *Transfer credit: CSU*

NS 2 — 5 Units
Intermediate Nursing Science
Prerequisites: NS 1, NS 1L
Corequisite: NS 2L
Class Hours: 5 lecture

Continued utilization of the nursing process and the self-care concept of nursing are the basis of this course. The focus will be on the interaction of the self-care agency and the nurse agency to meet the client's self-care demands. Selected adult/pediatric self-care deficits requiring intermediate nursing interventions and appropriate pathophysiology will be included. Diagnostic measures, medical therapeutic modalities, pharmacology and medication administration, nutrition, cultural, spiritual and mental health concepts are studied. Also, legal and ethical considerations, growth and development as related to the client's therapeutic self-care demand is addressed. Concurrent clinical experience is provided in the hospital, outpatient, and home health setting. May be taken two (2) times for credit. *Transfer credit: CSU*

NS 2L — 5 Units
Intermediate Clinical Nursing Laboratory
Prerequisites: NS 1, NS 1L
Corequisite: NS 2
Class Hours: 15 laboratory

This is an intermediate clinical laboratory experience which allows the student to apply the nursing process, concepts and skills identified in Nursing Science 2. The clinical experience is two 7.5 hour rotations, and may be a day or evening combination in an acute care facility with experiences in Home Health Nursing and other specialty areas. May be taken two (2) times for credit. *Transfer credit: CSU*

NS 3A — 2½ Units
Psychiatric/Mental Health Nursing
Prerequisites: NS 2, NS 2L
Corequisite: NS 3AL
Class Hours: 2½ lecture

This course focuses on the application of the nursing process to the client, family and groups with psycho-social self-care deficits across the life span. Emphasis is placed on psychopathology, theoretical basis and processes for psychiatric nursing. Human responses to distress and disorder and intervention modes: Wholly compensatory, partially compensatory and educative/supportive are discussed. Nutrition, pharmacology, legal/ethical aspects, bio-psycho-sociocultural and spiritual aspects, preventive, remedial, supportive and rehabilitative nursing is integrated. Clinical experience is concurrent. May be taken two (2) times for credit. *Transfer credit: CSU*

NS 3AL — 2½ Units
Psychiatric/Mental Health Clinical Nursing Laboratory
Prerequisites: NS 2, NS 2L
Corequisite: NS 3A
Class Hours: 7½ laboratory

This clinical experience allows the student to apply the nursing process, psychiatric nursing concepts and skills to psychiatric and crisis clients. The clinical may be a day or evening or combination of both. The clinical rotation will be in the psychiatric/mental health setting to include chronic, acute, adult, geriatric, and children. May be taken two (2) times for credit. *Transfer credit: CSU*

NS 3B — 2½ Units
Maternal Child and Gynecological Nursing
Prerequisites: NS 2, NS 2L
Corequisite: NS 3BL
Class Hours: 2½ lecture

This course includes the study of the childbearing family with emphasis on pregnancy, fetal development, labor and delivery, post partum and newborn periods, pediatrics, gynecology and complications of pregnancy. Using Orem's model and the nursing process the student will identify requisite and self-care deficits including diseases related to women and children, and plan, implement, and evaluate nursing interventions. Nutrition, pharmacology, legal/ethical aspects, bio-psycho-sociocultural and spiritual aspects, preventive, remedial, supportive and rehabilitative nursing is integrated. Clinical experience is concurrent. May be taken two (2) times for credit. *Transfer credit: CSU*

NS 3BL — 2½ Units
Maternal Child and Gynecological Clinical Nursing Laboratory
Prerequisites: NS 2, NS 2L
Corequisite: NS 3B
Class Hours: 7½ laboratory
This clinical experience provides an opportunity for the student to apply the nursing process, maternal child and gynecological concepts and skills to the obstetrical, pediatric and gynecological client in the acute care and outpatient setting. The clinical lab may be a day or evening or combination of both. May be taken two (2) times for credit. *Transfer credit: CSU*

NS 4A — 2½ Units
Advanced Nursing Science
Prerequisites: NS 3A, NS 3AL, NS 3B, NS 3BL
Corequisite: NS 4AL
Class Hours: 5 lecture for 9 weeks
This advanced course of nursing practice focuses on the application of nursing process to the client and family with complex health deviations. Advanced pathophysiological concepts will be applied to specific universal self-care deficits: air, water, food, elimination, hazards, and normalcy throughout the life span. Emphasis is placed on nursing judgment reflecting critical thinking, decision-making, intervention modes, and teaching based on application of theory. Nutrition, pharmacology, legal aspects, bio-psycho-sociocultural, spiritual aspects, preventive, supportive and rehabilitative nursing is integrated. Clinical experience is concurrent. May be taken two (2) times for credit. *Transfer credit: CSU*

NS 4AL — 2½ Units
Advanced Clinical Nursing Laboratory
Prerequisites: NS 3A, NS 3AL, NS 3B, NS 3BL
Corequisite: NS 4A
Class Hours: 15 laboratory for 9 weeks
This clinical experience provides an opportunity for the student to apply the nursing process and advanced nursing concepts and skills to the client and family with complex health deviation in the acute care setting. The clinical rotation may include days, evenings, or combination of both. May be taken two (2) times for credit. *Transfer credit: CSU*

NS 4B — 4 Units
Preparation for Professional Practice - Preceptorship
Prerequisites: NS 4A, NS 4AL
Class Hours: 24 lecture, 120 laboratory total
To ease the transition from student to staff nurse, principles of total patient care, leadership and professionalism relevant to current nursing practice will be presented. The focus is on health care systems and the practice of nursing including: legal and ethical issues, professional organizations, reality shock and current issues that confront nurses today. Opportunities are provided to participate as a nursing team leader and/or primary nurse in an acute care facility. The student provides care to a group of patients utilizing a Registered Nurse as a preceptor to improve clinical practice and professional skills. THIS COURSE FULFILLS THE HEALTH GENERAL EDUCATION REQUIREMENT FOR THE AS DEGREE IN NURSING. *Transfer credit: CSU*

NS 11 — 1 Unit
Nursing Skills Laboratory★
Corequisite: NS 1
Class Hours: 3 laboratory
This practicum will provide an opportunity for practical application of theory content from the Nursing Science 1 course work, through simulated clinical experiences in a nursing skills laboratory. *Transfer credit: CSU*

NS 12 — 1 Unit
Nursing Skills Laboratory★
Corequisite: NS 2
Class Hours: 3 laboratory
This practicum will provide an opportunity for practical application of theory content from the Nursing Science 2 course work, through simulated clinical experiences in a nursing skills laboratory. *Transfer credit: CSU*

NS 13 — 1 Unit
Nursing Skills Laboratory★
Corequisite: NS 3A or NS 3B
Class Hours: 3 laboratory
This practicum will provide an opportunity for practical application of theory content from the Nursing Science 3 course work, through simulated clinical experiences in a nursing skills laboratory. *Transfer credit: CSU*

NS 14 — 1 Unit
Nursing Skills Laboratory★
Corequisite: NS 4A or NS 4B
Class Hours: 3 laboratory
This practicum will provide an opportunity for practical application of theory content from the Nursing Science 4 course work, through simulated clinical experiences in a nursing skills laboratory. *Transfer credit: CSU*

NS 15 — 3 Units
Pharmacology for Nurses
Prerequisite: Admission to ADN Program and/or registered nurse, licensed vocational nurse, psychiatric technician or respiratory therapist.
Class Hours: 3 lecture
This course will provide an understanding of the mechanisms and uses of currently available drugs. It will provide a foundation of knowledge that will allow the student to understand future developments in drug therapy and allow for administering drugs more efficiently and safely. Drug information and mathematical calculations will be oriented to the needs of the practicing nurse. The course may be repeated because yearly revisions are required to reflect the constantly changing pharmaceutical approaches and resultant nursing implications and patient care. May be taken four (4) times for credit. *Transfer credit: CSU*

NS 16 — 1 Unit
Registered Nursing Board Review★
Prerequisite: Completion of an accredited nursing program
Class Hours: 16 lecture total
This course is designed to aid the student in a systematic and effective way to synthesize the essential content that is covered in the NCLEX. The focus of this course is nursing content as it relates to the nursing process and its application to the following areas of nursing practice: Medical-surgical, Maternal/Child Health and Psychiatric Nursing. May be taken four (4) times for credit.

NS 17 — 2 Units
Intravenous Therapy/Blood Withdrawal
Prerequisite: A Registered Nurse student currently enrolled in the Associate Degree Nursing Program, Licensed Registered Nurses and Licensed Vocational Nurses.
Class Hours: 30 lecture, 6 laboratory total
This course provides the student with current information on Intravenous Therapy Administration. Fluid and electrolyte balance, circulatory system, IV Therapy objectives and goals, IV infusion equipment, venipuncture techniques, blood administration, TPN, arterial lines, mathematical calculations and medication administration, safety and legal factors are among the topics covered. This course is approved by the LVN Board for the LVN certificates for IV Therapy/Blood Withdrawal.

NS 18 — ½ Unit
CPR for Nurses★
Prerequisite: Admission to ADN Program and/or registered nurse, vocational nurse, psychiatric technician or respiratory therapist.
Class Hours: 8 lecture total
Basic Cardiopulmonary Resuscitation techniques of single person, two person, child and infant resuscitation. Basic techniques to relieve obstructed airway in adult, child and infant. Standards required by hospitals for personnel related to emergency resuscitation procedures relative to specific disease processes and the hospital setting. Orientation to crash cart medications, protocol and the nurse's role. May be taken four (4) times for credit. THIS COURSE FULFILLS THE HEALTH GENERAL EDUCATION REQUIREMENT FOR THE AS DEGREE IN NURSING.

NS 22A/B — 1-3/1-3 Units
Independent Studies in Nursing
Prerequisite: A previous course in Nursing Science
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of nursing science on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU*

NS 49A-D — 1-4 Units
Cooperative Work Experience — Nursing Science★
Prerequisite: Placement at a work station
Class Hours: 5-20 employment, 1 by arrangement
Students employed in a field related to Nursing Science will design a learning contract in conjunction with their employer that will involve expanded

responsibilities and/or the opportunity to learn new job experiences beyond those required in the existing job duties. Direct coordination with the employer in question will be a part of this learning experience.

NS 78 — 4 Units
Operating Room Nursing
Prerequisites: RN License; Completion of NS 2; CPR Certification; Malpractice Insurance; Physical Exam
Class Hours: 48 lecture, 48 laboratory total
This course focus will be on application of the nursing process to the perioperative paient. A combination of lecture and laboratory classes and a preceptor experience will introduce the student to the scrub and circulating role of the OR nurse.

NS 89A-Z — ½-3 Units
Institutes in Nursing Science
Prerequisites: Admission to ADN Program, registered nurse, Licensed Vocational Nurse, Psychiatric Technician
Class Hours: Variable
This is a series of special lectures and discussions on selected topics in nursing science which are not included in the Nursing Science offerings.

Nutritional Science

The nutritional science program is designed to meet the needs of all health conscious persons. The program particularly addresses itself to those aspiring to careers in health and fitness related professions and teaching and to those interested in promoting personal wellness. For some, this program may lead to entry into the dietetics/nutrition program at a four-year college or university.

Career Opportunities

(Most careers will need a bachelors degree of advanced studies)
Diet Aide
Diet Program Lecturer

Faculty

Full-Time	Part-Time	Counselor
Judy Alexander	Anna Cotton	Don Henderson
	Bridget Harvey-Elliott	

Transfer Information

Major requirements for upper division standing at:
California State University, Northridge:
Dietetics: Biol 2A; Chem 8, 9, 12, 13; Engl 1A; ID 31; Micro 1; Physio 1; Psych 1A; Math 3 (for ADA requirement).

Nutritional Science Courses

NtS 1 — 3 Units
Nutrition
Class Hours: 3 lecture
This is a study of the nutrients, their sources, assimilation, functions and requirements. Topics include current national and international problems and evaluation of nutritional information in mass media. Good for majors and non-majors. *Transfer credit: CSU; UC*

NtS 3 — 3 Units
Current Issues in Nutrition
Prerequisite: NtS 1 or equivalent course
Class Hours: 3 lecture
This course is a focus on contemporary concerns in nutrition. It will cover areas such as nutrition and stress, body image, wellness, nutrient supplements, energy balance and eating disorders. Emphasis on health concerns and career needs of students in health care fields will also be included. *Transfer credit: CSU; UC*

NtS 4 — 3 Units
Nutrition, Fitness and Stress Management
Class Hours: 3 lecture
This is an integrated approach to good health and physical fitness through the study of basic principles of exercise, nutrition and human behavior. Concepts will be applied to specific topics of current concern such as weight control, heart disease and stress management. Skills for incorporating habits and techniques into one's daily life will be stressed. *Transfer credit: CSU; UC pending*

NtS 5 — 3 Units
Nutrition for the Health Professions
Class Hours: 3 lecture
This course is an evaluation of nutritional status; promotion of optimal nutrition; and application of nutrition principles to common medical disorders. *Transfer credit: CSU; UC pending*

NtS 22A/B — 1-3/1-3 Units
Independent Studies in Nutritional Science

Prerequisite: A previous course in Nutritional Science
Class Hours: 1-3 tutorial

This course is for students who are interested in furthering their knowledge of nutritional science on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

NtS 89A-Z — ½-3 Units
Institutes in Nutritional Science★
Class Hours: Variable

This is a special series of short courses focusing on particular aspects of Nutritional Science. Courses dealing with foods and nutrition will provide an opportunity for specialized study.

Personal Growth/Leadership

Student Personnel Services provides two types of classroom instruction: personal growth classes emphasizing career development and personal self-help course work and leadership classes aimed at encouraging involvement in student government.

Faculty

Full-Time

Donna Allyn
Francis Bianchino
Richard Cardoni
Donald Henderson
Edna Ingram
Susan Izumo
Knox Long
Lisa Raufman
Diane Sukiennik

Part-Time

Annette Burrows
Gail Goodman
Mary Martin

Leadership Courses

LDR 1 — 1 Unit
Principles of Leadership
Class Hours: 1 lecture, 1 practicum

Effective group leadership is developed through an understanding of the basic tenets of parliamentary procedure. Practical application of parliamentary procedure in the group situation will be emphasized. May be taken four (4) times for credit. *Transfer credit: CSU*

LDR 2 — 2 Units
Student Leadership★
Class Hours: 1 lecture, 3 practicum

This course is designed to provide theory and application for students interested or involved in student government, particularly A.S.B. officers, club officers, and persons wishing to serve on campus Governance committees. Development of effective leadership qualities will be stressed through an ongoing study of parliamentary procedure, student governance documents, and district, state, and federal regulations pertaining to student organizations. Practical application in the execution of student activities and programs will also be stressed. *Transfer credit: CSU*

LDR 89A — 1 Unit
Student Government Leadership★
Class Hours: 16 lecture total

This special performance class open to all students is designed to develop skills and effective leadership ability in preparation to serve as an Associated Student Body officer, as a student club officer, as a student representative on campus governance committees, or as a student involved with the student activities program. *Transfer credit: CSU*

Personal Growth Courses

PG 2 — 3 Units
Career Development
Class Hours: 3 lecture

This class assists the student in systematically examining the components of career choice. The focus is on career awareness, personal awareness, and educational awareness as they relate to the process of career choice. Planning skills and self-assessment instruments will help identify tentative career options. Decision-making strategies, interviewing skills, resume writing, application completion and job search techniques will be reviewed. *Transfer credit: CSU*

PG 3 — 1 Unit
Orientation★
Class Hours: 17 lecture total

An introduction to college; information necessary for successful adaptation for survival at Moorpark College; an opportunity for self-assessment through testing and evaluation; training in study skills and efficient use of time. A class designed to relieve anxiety, and make one feel comfortable.

PG 60A-Z — 1-3 Units
Topics in Personal Growth★
Prerequisites: To be determined with each Topic
Class Hours: To be determined with each Topic
This is a special series of courses each of which deals with a specific topic in Personal Growth not covered in detail in the general Personal Growth course offerings. Topics courses are announced on a semester basis in the schedule of classes.

Topics which have been developed include:

60A — 1 Unit
Confident Test Taking
Class Hours: 16 lecture total
Course will assist students to feel more confident about taking instructor-prepared tests and standardized examinations. Assignments and discussion will focus on positive and negative self images while taking tests, problem-solving approaches, and relaxation techniques. May be taken four (4) times for credit.

Philosophy

The study of philosophy provides students with the unique opportunity to carefully analyze and thoughtfully respond to the fundamental ideas and basic concerns present in the human experience. It requires the constructive re-experiencing of these problems and doubts in one's own life. The goal is to examine ourselves, our culture, and our world with the aims of criticizing and contributing toward a reformation of self and world. The program also develops analytical, critical and writing skills that are an excellent preparation for professional and other careers.

Career Opportunities

(Careers require a bachelors degree or advanced degree)

Social Worker
Lawyer
Public Administrator
Urban Planner
Management Trainer
Project Director

Faculty

Full-Time
Kil Coster
Paul Fink
Elane O'Rourke
Fred Schaak

Part-Time
Diana Axelsen
Mark Cox-Pursley
Christopher Horrock
James Martin
Selton Peters
Ronald Remsburg
Michael Rosenthal
Carol Swift

Counselor
Don Henderson

Transfer Information

Philosophy

The Philosophy major is intended to provide undergraduate preparation for graduate study in philosophy and to contribute to a broad general education and to preprofessional training in areas (e.g. law, theology) where early specialization is normally not encouraged.

Major requirements for upper division standing at:
California State University, Northridge:
Phil 9; additional lower division courses to be taken after transfer.
University of California, Santa Barbara:
Phil 7.
Analytical Reasoning Option: Select one course from: CS 18; CIS 4A or 4B; Econ 1, 2; Math 15; Psych 1A.
Humanities Option: Engl 30 or Hist 1A and 1B.

Religious Studies

The Religious Studies major is designed to provide a background for understanding the forms and traditions of religion that have appeared in human culture. Professional careers in research and/or teaching are open in education at all levels, and graduates can also pursue careers in related areas — various forms of ministry, counseling, or social work.

Major requirements for upper division standing at:
California State University, Northridge:
Phil 11; other lower division courses to be taken after transfer.

Philosophy Courses

PHIL 1 — 3 Units

Introduction to Philosophy
Class Hours: 3 lecture

Philosophy 1 has as its purpose the systematic exploration of the concepts of human knowledge, reality and thought. Both theoretical and practical concepts will be examined, including free will, scepticism, dogmatism, materialism, epistemology, metaphyics and aesthetics. As an introduction to the subject, it requires no previous course work. *Transfer credit: CSU; UC*

PHIL 2 — 3 Units
Values and Society
Class Hours: 3 lecture

This course is an introduction to the philosophy of ethics through a study of some of the basic questions of life; what is good? what is right? how should I live? what are my obligations to others? are morals relative? do we have free will? An attempt is made to review the ideas and arguments of philosophers concerning these, and related issues, and to encourage individual application of the ideas presented. *Transfer credit: CSU; UC*

PHIL 3 — 3 Units
Social and Political Philosophy
Class Hours: 3 lecture

This course is a study of the philosophical foundations of social and political thought. Theories about collective human organization can view people as acting naturally according to individual rules; as group members behaving within social roles; and as participants in legal relationships within political institutions. This course is designed to show the importance of philosophical assumptions about collective human nature, by clarifying the differences and connections between these perspectives. *Transfer credit: CSU; UC*

PHIL 7 — 3 Units
Introduction to Logic
Class Hours: 3 lecture

This course will explore elementary thought processes, both deductive and inductive with emphasis on definition, verification, validity, forms of argument and of fallacious reasoning and application of various areas of inquiry. *Transfer credit: CSU; UC. CAN: PHIL 6*

PHIL 9 — 4 Units
Symbolic Logic
Class Hours: 4 lecture

This course is an introduction to symbolic logic, including the logic of connectives and the logic of quantifiers. Topics to be included will be truth functional composition, consistency trees, derivations, and quantifications. *Transfer credit: CSU; UC*

PHIL 11 — 3 Units
Survey of World Religions
Class Hours: 3 lecture

Philosophy 11 consists of a systematic study of the major religions of the world. Hinduism, Buddhism, Jainism, Taoism, Confucianism, Zen, Zoroastrianism, Judaism, Christianity, and Islam are among the positions reviewed. In each instance an attempt is made to learn to view the religion from the standpoint of its proponents. The purpose is to promote a broader understanding of the main similarities and differences which these outlooks exhibit, and to acquire an appreciation of their historical connections. *Transfer credit: CSU; UC*

PHIL 22A/B — 1-3/1-3 Units
Independent Studies in Philosophy
Prerequisite: A previous course in Philosophy
Class Hours: 1-3 tutorial

This course is for students who are interested in furthering their knowledge of philosophy on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

Photography

A comprehensive program designed to provide professional job skills for future photographers is the goal of this program.

Career Opportunities

(Professional school or college degree preferable)

Portrait Photographer
Aerial Photographer
Still Photographer
Photograph Restorer
Photograph Printer
Photojournalist
Audio-Visual Designer
Corporation Photographer
Photofinishing Specialist
Slide Program Producer/Director
Fine Art Photographer
Editorial Photographer

Faculty

Full-Time
John Grzywacz-Gray

Part-Time
Stephen Callis
Amani Fliers
Virginia Lawler
James Parker

Counselor
Don Henderson

■ Photography
Occupational
Associate in Science Degree

This program is designed for students to acquire the skills necessary to enter the very competitive profession of photography. Instruction in both black and white and color photography along with the latest equipment mastery is provided.

Required Courses:		**Units**
Art 4A	Color and Design	3
Photo 1A	Beginning Photography	3
Photo 1B	Intermediate Photography	3
Photo 2	The History of Photography	3
Photo 3	Basic Color	3
Photo 4	Advanced Photography	3
Photo 5	Color Printing	3
Photo 8	Basic Photo-Journalism	3

Total minimum units required in major area — 24

Recommended Courses: Art 1A, 1B, 4B, 12A, 12B; Hum 3

See Degree Requirements and Transfer Information section for General Education requirements.

■ Photojournalism
Occupational
Associate in Science Degree

This program is designed for the student seeking a professional career in newspaper or magazine photography. Students completing this program will be prepared for entry-level photography positions on newspapers, magazines or as free-lance photographers.

Required Courses:		**Units**
Journ 1	Media and Society	3
Journ 2	News Reporting and Writing	3

Photo 1A	Beginning Photography	3
Photo 1B	Intermediate Photography	3
Photo 2	The History of Photography	3
Photo 3	Basic Color	3
Photo 4	Advanced Photography	3
Photo 8	Basic Photo-Journalism	3
Photo 9	'Reporter' Staff Photography	4

Total minimum units required in major area — 28

See Degree Requirements and Transfer Information section for General Education requirements.

Photography Courses

Students planning to take more than 12 units of course work from all the Photography courses marked * should consult a counselor; the UC system allows credit for the first 12 units only.

PHOTO 1A* — 3 Units
Beginning Photography
Class Hours: 2 lecture, 3 laboratory

This is a beginning course in photographic theory. Emphasis is placed on photography as a means of creative expression. The course includes a study of the basic principles of camera operation, exposure, developing and printing. *Transfer credit: CSU; UC credit limitations. See counselor.*

PHOTO 1B* — 3 Units
Intermediate Photography
Prerequisite: Photo 1A or suitable portfolio
Class Hours: 2 lecture, 3 laboratory

This course is an extension of techniques featured in Photo 1A. Emphasis is placed on creativity and exploration of a variety of traditional techniques in black and white, including high contrast images, solarization, posterization, gum bichromate printing and cyanotypes. The following areas will be studied: film sensitivity testing, developer density parameters, paper and paper developer characteristics, archival processing, the use of medium format cameras, and introduction to the view camera. *Transfer credit: CSU; UC credit limitations. See counselor.*

PHOTO 2 — 3 Units
The History of Photography
Class Hours: 3 lecture

This course is a survey of the history of photography from Daguerre to the personal images of many well known contemporaries. Studies will include genres and theories that began in the past and which intensify and clarify the direction of work in the present. *Transfer credit: CSU; UC*

PHOTO 3* — 3 Units
Basic Color
Prerequisite: Photo 1B or suitable portfolio
Class Hours: 2 lecture, 3 laboratory

Students will study the principles of color photography, the use of correction filters; processing of transparency materials with emphasis on creative use of special effects achieved by unique lighting, films and camera techniques directed towards a more expressive visual statement. Experimental approach will be encouraged. May be taken two (2) times for credit. *Transfer credit: CSU*

PHOTO 4* — 3 Units
Advanced Photography
Prerequisite: Photo 3 or suitable portfolio
Class Hours: 2 lecture, 3 laboratory

In this class major emphasis is placed on individual projects. The student will generate ideas and, with instructor guidance, work on the problem of intensifying personal statement through the medium of photography. Students will select their own projects and work with their own ideas, refining technical and aesthetic understanding in black and white and/or color. Areas covered include: zone system, basic densitometry, expansion and compaction development, the view camera, artificial light technique, and portfolio development. *Transfer credit: CSU*

PHOTO 5* — 3 Units
Color Printing
Prerequisite: Photo 3 or suitable portfolio
Class Hours: 2 lecture, 3 laboratory

Students will print from color negatives. "Type C" printing techniques will be learned. In addition the following special techniques will be explored: multiple printing, diffusion, distortion control and exaggeration, combination printing, high contrast, solarization and posterization. May be taken two (2) times for credit. *Transfer credit: CSU*

PHOTO 8* — 3 Units
Basic Photo-Journalism
Prerequisite: Photo 1A or suitable portfolio
Class Hours: 2 lecture, 3 laboratory

This course concentrates on the aspects of photography as applied to mass communications, broadcast and print journalism. Students concentrate on the translation of ideas to images for reproduction in magazines, newspapers and book illustrations. Other topics include special effects, the utilization of camera and light as creative tools and basic motion picture techniques. May be taken two (2) times for credit. (co-numbered Journ 8) *Transfer credit: CSU*

PHOTO 9* — 4 Units
'Reporter' Staff Photography
Prerequisite: Photo 8 or suitable portfolio
Class Hours: 1 lecture, 9 laboratory

This is a course for 'Reporter' staff photographers who will work in all phases of press photography, including news, feature, illustration, portraiture, sports, and advertising. Students will learn to communicate visually with aesthetic and technical skill. May be taken two (2) times for credit. *Transfer credit: CSU*

PHOTO 22A/B — 1-3/1-3 Units
Independent Studies in Photography
Prerequisite: A previous course in Photography
Class Hours: 1-3 tutorial

This course is for students who are interested in furthering their knowledge of photography on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU*

PHOTO 49A-D — 1-4 Units
Cooperative Work Experience — Photography★
Prerequisite: Placement at a work station
Class Hours: 5-20 employment, 1 by arrangement

Students employed in a field related to Photography will design a learning contract in conjunction with their employer that will involve expanded responsibilities and/or the opportunity to learn new job experiences beyond those required in the existing job duties. Direct coordination with the employer in question will be a part of this learning experience.

PHOTO 60A-Z — 1-3 Units
Topics in Photography
Prerequisite: A previous college-level course in the discipline.
Class Hours: To be determined with each Topic

This is a special series of courses each of which deals with a specific topic in Photography not covered in detail in the general Photography course offerings. Topics courses are announced on a semester basis in the schedule of classes. *Transfer credit: See counselor.*

Topics which have been developed include:

60A — 1 Unit
Field Studies in Photography
Class Hours: ½ lecture, 1½ laboratory

Photo field work concentrates on solving the specific photographic problems of a chosen location. Students may work in black and white or color. May be taken four (4) times for credit.

60B — 2 Units
Field Studies in Photography
Class Hours: 1 lecture, 3 laboratory

Photo field work concentrates on solving the specific photographic problems of a chosen location. Students may work in black and white or color. May be taken four (4) times for credit.

60C — 3 Units
Field Studies in Photography
Class Hours: 1 lecture, 6 laboratory

Photo field work concentrates on solving the specific photographic

problems of a chosen location. Students may work in black and white or color. May be taken four (4) times for credit.

60D — 1 Unit
Laboratory Practice
Class Hours: ½ lecture, 1½ laboratory
This is instructor supervised laboratory work for beginning, intermediate and advanced students. May be taken four (4) times for credit.

60E — 2 Units
Laboratory Practice
Class Hours: ½ lecture, 4½ laboratory
This is instructor supervised laboratory work for beginning, intermediate and advanced students. May be taken four (4) times for credit.

60F — 3 Units
Laboratory Practice
Class Hours: 1 lecture, 6 laboratory
This is instructor supervised laboratory work for beginning, intermediate and advanced students. May be taken four (4) times for credit.

Physical Education

Physical Education offers students an opportunity to round out their education with emphasis on improving individual physical well-being. It also introduces students to opportunities in physical education and dance professional careers.

Career Opportunities

Associate Degree Level

Athlete
Recreation Specialist
Dance Teacher
Camp Counselor
Dancer
Community Center Leader
Playground Director
Recreation Leader
Referee
Industrial Recreation Leader
Racquet Club Manager
Fitness Specialist

Bachelors Degree Level

Athletic Trainer
Teacher
Pre-Physical Therapist
Corrective Therapist
Exercise Test Technologist
Sportscaster
Coach
Choreographer
Resort Sports Coordinator
Health and Safety Director
YM/YWCA Instructor
Sports Editor
Therapist
Dance Therapist
Recruiter

Faculty

Full-Time

James Bittner
Paul Dunham
Ronald Halleran
John Keever
Stella Matsuda
MoDean McCullough
Gilbert Mendoza
Linda Moore
Alvyn Nordquist
Delbert Parker
Nancy Stewart
Manuel Trevino

Part-Time

Gary Abraham
Karl Akkerman
Grant Andreasen
Rene Baum
Stephen Breda
Nanci Cavanaugh
Pauletta Crook
Edwin Davis
Michael Flanagan
Avalon Garrett
Donald Hyatt
John Loranzano
Allyn Olson
Joseph Ortiz
Patrick Pakele
Sandra Patterson
Denise Rinaldi
Carole Romanowitz
Michael Stewart
Ronald Stillwell
Willard Thurston
Charles Williams
Leo Wingle

Counselors

Don Henderson
Edna Ingram

Transfer Information

The major in Physical Education is designed to permit flexibility

in preparing students for various professional goals. Graduates may find careers in such fields as teaching, therapeutics, coaching, recreation work, dance, and work with scientific foundations.

Major requirements for upper division standing at:

California State University, Northridge:

Core courses: Anat 1; Bio 2A; Physio 1; five units of professional activities.

Selected activities courses may substitute for these courses. Contact CSUN Physical Education Department for details.

Physical Education Courses

Students planning to take more than 4 units of Physical Education courses marked with * and/or more than 8 units of those marked with † should consult a counselor. The UC system accepts only that limited number of units in the respective cases. All P.E. courses are accepted for equal semester credit by schools in the California State University system.

Any combination of P.E. activity courses of a particular kind (e.g., body conditioning, golf, tennis, etc.) may be taken for a total of four (4) times.

Individual Sports Activities

PE 1A* — 1½ Units
Walking for Fitness
Class Hours: 1 lecture, 2 activity
Walking for Fitness is designed to provide exercise and fitness training with emphasis on cardiovascular conditioning and to restore muscle tone to prepare individuals for more strenuous physical activity classes. Designed to meet needs of individuals recovering from respiratory and cardiovascular disorders as well as surgery and minor injuries related to lower extremities.

PE 2A* — 1½ Units
Body Conditioning/Fitness Lab
Class Hours: 1 lecture, 2 activity
This is a course designed to increase the understanding of the principles of fitness and the development and maintenance of a high level of efficiency of the total body.

PE 2B* — 1½ Units
Body Conditioning/Free Weights
Class Hours: 1 lecture, 2 activity
This is a body conditioning course designed to improve the cardiovascular system, enhance flexibility and increase muscular strength. The class will include jogging, stretching exercises and specific free weight exercises designed to strengthen the entire body.

PE 3* — 1½ Units
Running for Fitness and Conditioning
Class Hours: 1 lecture, 2 activity
This course is designed to help the individual improve his physical health and general well being. The course is open to all students. Emphasis will be placed on endurance training with a gradual increase in distance. Special attention will be given to cardiovascular fitness through running.

PE 4* — 1½ Units
Body Conditioning through Rhythmics/Aerobics
Class Hours: 1 lecture, 2 activity
This course covers instruction and supervised practice in aerobic dancing. It is a series of simple but vigorous dances which improve circulation, respiration, digestion, agility, flexibility, coordination and rhythm, as well as endurance and strength.

PE 5* — 1½ Units
Bowling
Class Hours: 1 lecture, 2 activity
This course is designed to help the student develop skills, including rules, etiquette, safety and techniques of the game of bowling. Class is conducted off campus.

PE 6A* — 1½ Units
Beginning Golf I
Class Hours: 1 lecture, 2 activity
This course covers development of skill in learning to play golf which would include rules, etiquette, background and analysis of techniques.

PE 6C* — 1½ Units
Intermediate Golf
Prerequisite: PE 6A or equivalent
Class Hours: 1 lecture, 2 activity
This course covers advanced techniques and skill development on links play.

PE 6D* — 1½ Units
Advanced Golf
Prerequisite: PE 6C or equivalent
Class Hours: 1 lecture, 2 activity
The course studies bio-mechanical principles of all elements of golf. Special attention will be given to preparation for all aspects of golf competition.

PE 7* — 1½ Units
Floor Exercise - Tumbling
Class Hours: 1 lecture, 2 activity
Development of proficiency in elementary skills of tumbling and gymnastics with principles of fitness and the development and maintenance of high level of efficiency.

PE 8* — 1½ Units
Power Lifting/Free Weights
Class Hours: 1 lecture, 2 activity
This course in weight training and conditioning is designed to build strength, power, and bulk necessary for athletic sports. Exercise will center on the development of upper body strength, rehabilitation and strengthening of knee joints, and power lifting for the lower body. Emphasis will be placed on power lifting. The conditioning phase will emphasize the development of agility, quickness, coordination, balance and speed through the implementation of competitive drills and routines.

PE 9* — 1½ Units
Racquetball
Class Hours: 1 lecture, 2 activity
This course covers the basic fundamentals of racquetball, game rules, proper use and purchase of equipment, court etiquette and safety.

PE 10* — 1½ Units
Skiing
Class Hours: 1 lecture, 2 activity
This course will cover the G.L.M. dry land ski instruction. The course will also cover the purchasing, care and repair of ski equipment and clothing.

PE 11A* — 1½ Units
Beginning Tennis I
Class Hours: 1 lecture, 2 activity
Designed for the student with no tennis experience, this course covers beginning skills including etiquette, rules, techniques and strategies of the baseline game.

PE 11C* — 1½ Units
Intermediate Tennis
Prerequisite: PE 11A or equivalent
Class Hours: 1 lecture, 2 activity
This course is designed for the student with beginning playing experiences. The course further develops the player in singles and doubles rules, strategies and techniques.

PE 11D* — 1½ Units
Advanced Tennis
Prerequisite: PE 11C or equivalent
Class Hours: 1 lecture, 2 activity
Designed for the student with intermediate playing experience, this course further develops the player in singles and doubles rules, strategies and techniques. Tournament play is emphasized.

PE 12* — 1½ Units
Badminton
Class Hours: 1 lecture, 2 activity
This is a course in the development of badminton skills, including rules, etiquette, and techniques of playing badminton.

PE 13† — 2 Units
Hiking and Backpacking
Class Hours: 1 lecture, 3 activity
This course is a lecture, field study and experience course in the sport of hiking and backpacking. Conditioning, skills, information and resources for the sport will be covered. Safety procedures are emphasized. Field trips are required.

PE 20A* — 1½ Units
Adaptive Physical Education
Prerequisite: Classification for enrollment by Director of School Health Services and College Physician.
Class Hours: 1 lecture, 2 activity
This is a special course designed to meet the needs of students who are unable to participate in regular physical education activity classes. Students will be classified by the college physician as to the type of physical activity in which they may participate. Each student is given individual attention in terms of adapted and recreational activities suited to his/her work.

PE 21* — 1½ Units
Field Hockey
Class Hours: 1 lecture, 2 activity
This course is designed to teach the fundamentals of field hockey. The course includes the individual skills of passing, receiving, and dribbling the ball, and the offensive and defensive tactics and strategy of the team.

Independent Studies

PE 22A/B — 1-3/1-3 Units
Independent Studies in Physical Education
Prerequisite: A previous course in Physical Education
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of physical education on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units.

Team Sports

PE 23C* — 1½ Units
Intermediate Baseball
Class Hours: 1 lecture, 2 activity
This is a class in which advanced techniques and strategies of baseball are developed. A high degree of skill is emphasized during actual games.

PE 23D* — 1½ Units
Advanced Baseball
Prerequisite: Must demonstrate advanced baseball skills
Class Hours: 1 lecture, 2 activity
This class provides program development of advanced skills in baseball including methods and styles of play. Class members will participate in fall baseball program with lab assignments.

PE 24C* — 1½ Units
Intermediate Basketball
Prerequisites: Basketball experience, understanding of the rules.
Class Hours: 1 lecture, 2 activity
This class covers advanced techniques and strategies in basketball. A continuing development of a high degree of skill is emphasized.

PE 24D* — 1½ Units
Advanced Basketball
Prerequisite: PE 24C or varsity high school experience
Class Hours: 1 lecture, 2 activity
This class teaches advanced techniques and strategies in basketball. This course incorporates game experience and different styles and formats of play.

PE 25C* — 1½ Units
Intermediate Football
Prerequisite: Advanced football ability
Class Hours: 1 lecture, 2 activity
This course covers development of advanced skills in football and the theory behind the different styles of play.

PE 25D* — 1½ Units
Advanced Football
Prerequisite: PE 25C or varsity high school experience
Class Hours: 1 lecture, 2 activity
This class includes advanced techniques of football with the emphasis placed on the offensive and defensive passing game. It includes condition and speed improvement for the football player.

PE 26* — 1½ Units
Team Sports
Class Hours: 1 lecture, 2 activity
This course teaches the basic rules, techniques and strategy of various seasonal team sports, which include soccer, softball, football and basketball. Provides for actual participation in each sport.

PE 27* — 1½ Units
Soccer
Class Hours: 1 lecture, 2 activity
This is a course in development of soccer skills, including the rules, techniques and strategy of playing the game.

PE 28* — 1½ Units
Softball
Class Hours: 1 lecture, 2 activity
This course offers co-educational instruction and participation in the basic skills and strategy of slow pitch softball.

PE 29C* — 1½ Units
Intermediate Track
Prerequisite: Basic track ability
Class Hours: 1 lecture, 2 activity
Students study advanced techniques and strategies in track and field. A continuing development of a high degree of skill is emphasized in the preparation for a competitive season. Special attention will be given to the research of the skills needed for the proficiency in the sport. This is a requirement for varsity track candidates.

PE 29D* — 1½ Units
Advanced Track
Prerequisite: PE 29C
Class Hours: 1 lecture, 2 activity
Students continue to develop advanced skills and strategies of track and field. Particular attention will be given for the preparation of the student for the competitive season. This is a requirement of all track GA candidates.

PE 30A* — 1½ Units
Beginning Volleyball I
Class Hours: 1 lecture, 2 activity
Basic skills in playing volleyball are developed. Students learn rules and techniques of playing power volleyball.

PE 30C* — 1½ Units
Intermediate Volleyball
Prerequisite: PE 30A or playing ability in volleyball
Class Hours: 1 lecture, 2 activity
The player with beginning experience is further developed in the fundamental skills and strategies of the 6-player game. More exposure to skills allows the player to participate in two and three-player volleyball as well.

PE 30D* — 1½ Units
Advanced Volleyball
Prerequisite: PE 30C or equivalent playing experience
Class Hours: 1 lecture, 2 activity
This course continues development of the fundamental techniques of the 2-, 3- and 6-player power volleyball game. Students are introduced to advanced strategies and encouraged to participate in amateur volleyball tournaments in the community.

Combatives/Self-Defense

PE 36A† — 2 Units
Analysis of Sexual Assault and Self-Defense
Class Hours: 2 lecture, 1 activity
This course covers the issues of personal assault and rape, with practical experience in learning self-defense techniques. Students will study the academic literature as well as the physical responses in assault and rape.

PE 36B* — 1 Unit
Self-Defense and Assault Prevention

Prerequisite: PE 36A
Class Hours: 2 lecture/activity
This course covers lecture and demonstration of practical self-defense, community safety, and assault prevention. The course emphasizes methods and techniques of defense against weapon assault.

PE 36C* — ½ Unit
Basic Self-Defense Refresher
Prerequisite: PE 36A
Class Hours: 4 lecture, 8 activity total
This course includes practical experience in reviewing self-defense techniques acquired in PE 36A.

PE 38* — 1½ Units
Wrestling
Class Hours: 1 lecture, 2 activity
This is an introduction to wrestling as an educational medium, which gives the student opportunity for self-expression. The student is taught takedowns, rides, escapes, and falls.

Dance/Creative Movement

PE 46A* — 1½ Units
Ballet I
Class Hours: 1 lecture, 2 activity
This is an introduction to basic ballet technique and terminology, general principles of alignment, centering and posture as it relates to ballet. Class will include exercises at the barre to develop flexibility, strength, control, coordination and resilience and center practice of Port des Bras, simple adage and allegro movements.

PE 46B* — 1½ Units
Ballet II
Prerequisite: PE 46A
Class Hours: 1 lecture, 2 activity
This course continues to introduce new movements and terminology that are part of the basic ballet technique, both at the barre and in center. Basic movements will now be combined into adage and allegro patterns. Stress on increased technical skills is also included.

PE 46C* — 1½ Units
Ballet III
Prerequisite: PE 46A-B or equivalent
Class Hours: 1 lecture, 2 activity
This course covers the knowledge and development of intermediate technique both at the barre and in center. More concentration on the disciplines of ballet form and the physical abilities necessary to execute movements.

PE 46D† — 2 Units
Ballet IV
Prerequisite: PE 46C or equivalent
Class Hours: 1 lecture, 3 activity
A continuation of intermediate ballet. This course involves the analysis and application of kinesthetic principles as they apply to ballet to further develop one's skills, techniques, and physical capabilities.

PE 47A* — 1½ Units
Folk, Square, Ethnic Dance I
Class Hours: 1 lecture, 2 activity
Students will study the development of Ethnic dance skills, understanding and appreciation including experiences in Folk, Square, and Round dancing.

PE 47C* — 1½ Units
Folk, Square, Ethnic Dance II
Prerequisite: PE 47A or equivalent
Class Hours: 1 lecture, 2 activity
This course is a continuation of study in Folk, Square, and Ethnic dance skills.

PE 48A* — 1½ Units
Modern Dance I
Class Hours: 1 lecture, 2 activity
This course covers the fundamentals of modern dance techniques to develop flexibility, strength, control, coordination, endurance and form, basic principles, evaluation and application of dance composition, and the understanding of modern dance as an art form.

PE 48B* — 1½ Units
Modern Dance II
Prerequisite: PE 48A or equivalent
Class Hours: 1 lecture, 2 activity
This continues to develop the basic skills in modern dance technique, simple improvisation and composition, the understanding of the principles of alignment and motion, and to experience movement in more complex rhythmic forms.

PE 48C† — 2 Units
Modern Dance III
Prerequisite: PE 48B or equivalent
Class Hours: 1 lecture, 3 activity
A continuing study of modern dance technique with emphasis upon increased flexibility, strength, and coordination. Study of the dance phrase combinations with integration of the elements of rhythm, design, dynamics and motivation. Understand and appreciate dance as a creative art form.

PE 48D† — 2 Units
Modern Dance IV
Prerequisite: PE 48C or equivalent
Class Hours: 1 lecture, 3 activity
A continuation of intermediate modern dance technique with emphasis on skills of performance, development in techniques of dance composition and choreography.

PE 49A* — 1½ Units
Modern Jazz I
Class Hours: 1 lecture, 2 activity
This course is an introduction of basic movement skills in modern jazz technique emphasizing an understanding and appreciation of jazz as an artistic dance form.

PE 49B* — 1½ Units
Modern Jazz II
Prerequisite: PE 49A or equivalent
Class Hours: 1 lecture, 2 activity
This beginning course is a continued development of basic movement skills in modern jazz technique. Compositional forms and rhythm are practiced leading to an understanding and appreciation of jazz as an artistic dance form.

PE 49C* — 1½ Units
Modern Jazz III
Prerequisite: PE 49A-B or equivalent
Class Hours: 1 lecture, 2 activity
A continuation of Modern Jazz I and II with emphasis on style and form as well as increased technical and choreographic skills.

PE 49D† — 2 Units
Modern Jazz IV
Prerequisite: PE 49C
Class Hours: 1 lecture, 3 activity
A continuation of Modern Jazz III with an emphasis on performance style and form as well as increased technical and choreographic skills.

PE 50A* — 1½ Units
Improvisation I
Prerequisite: None. Concurrent enrollment in modern dance is recommended
Class Hours: 1 lecture, 2 activity
This course is designed to primarily stimulate one to discover the joy of movement and to enter into an environment that will encourage the individual to find unique and creative expressions in dance.

PE 50B* — 1½ Units
Improvisation II
Prerequisite: PE 50A or equivalent
Class Hours: 1 lecture, 2 activity
This course is designed to assist the individual to explore in a creative, free environment, various stimuli that will heighten the expressive act of dance movements to communicate to others and to enjoy for one's own pleasure or for performance.

PE 50C* — 1½ Units
Improvisation III
Prerequisite: One beginning dance class or equivalent

Class Hours: 1 lecture, 2 activity
This course is an experience in creating appropriate movement responses to express ideas and feelings. Students will explore various stimulus situations with the ultimate aim at recreating and developing their initial spontaneous responses in the organic form of the dance.

PE 51A* — 1½ Units
Dance Performance/Production I
Prerequisite: Beginning dance class; recommend concurrent enrollment in dance
Class Hours: 1 lecture, 2 activity
This course will aid in understanding the basic elements of production (i.e. staging, lighting, publicity, make-up, costumes, set design and construction, etc.) and experience these by participation in a production (dance) event.

PE 51B* — 1½ Units
Dance Performance/Production II
Prerequisite: PE 51A; recommend concurrent enrollment in dance
Class Hours: 1 lecture, 2 activity
This course is a practical involvement in the elements of dance production 'behind the scenes' as well as on stage.

PE 51C* — 1½ Units
Dance Performance/Production III
Prerequisite: Beginning dance class or equivalent. Concurrent enrollment in another dance class recommended
Class Hours: 1 lecture, 2 activity
This course emphasizes practical experience in the many phases of dance productions, concerts and demonstrations, with particular emphasis on dance as a performing art. This class is also concerned with choreography, staging and the production elements of dance.

PE 51D† — 2 Units
Dance Performance/Production IV
Prerequisite: Intermediate dance class; concurrent enrollment in dance class recommended
Class Hours: 1 lecture, 3 activity
This course will offer practical experience in the many phases of dance productions, concerts and demonstrations. It will also be primarily concerned with the performing aspect of dance as well as some choreography and staging.

PE 52A* — 1½ Units
Ballroom Dance I
Class Hours: 1 lecture, 2 activity
This course is designed to introduce students to ballroom dancing through developing an understanding of its history, music and fundamental practices of performance. Basic steps, variations and styling techniques for the foxtrot, swing, waltz, chacha, tango, rumba, samba, mambo, polka and selected novelty dances will be included.

PE 52B* — 1½ Units
Ballroom Dance II
Prerequisite: PE 52A
Class Hours: 1 lecture, 2 activity
This course is designed to further students' knowledge of and expertise in ballroom dancing. Students will review basic steps and increase their repertoire of variations and styling techniques for the foxtrot, swing, waltz, chacha, tango, rumba, samba, mambo, polka and selected novelty dances. Students will be expected to attend at least one out of class dance.

PE 53A† — 2 Units
Dance Composition and Choreography I
Prerequisite: PE 48B
Class Hours: 1 lecture, 3 activity
This course explores the basic principles of dance composition as an art form and applies these guides through practical applications. It develops the concept of space, time and energy into creating dances. It integrates dance movement technique as a form of expression to communicate literal and non-literal themes. Solo and small group choreography will be emphasized as well as improvisations.

PE 53B† — 2 Units
Dance Composition and Choreography II
Prerequisite: Intermediate modern dance or equivalent
Class Hours: 1 lecture, 3 activity
This course continues to explore dance as a creative art form by integrating dance movement technique as a form of expression to communicate literal and non-literal themes. Solo and small group choreography will be emphasized as well as improvisations.

PE 53C† — 2 Units
Dance Composition and Choreography III
Prerequisite: Intermediate modern dance or equivalent
Class Hours: 1 lecture, 3 activity
This course continues to explore more in depth dance as a creative art form combining movement with the use of music and sound. Emphasis will be to develop a substantial solo work that is ready to be performed in a concert setting.

PE 53D† — 2 Units
Dance Composition and Choreography IV
Prerequisite: Advanced dance class or equivalent
Class Hours: 1 lecture, 3 activity
This course uses all the elements of space, time and energy as they apply to developing dance as an art form. Working with literal and non-literal themes, the student choreographer will have an opportunity to set a group dance for a concert piece.

Aquatics

PE 60* — 1 Unit
Life Saving
Prerequisite: Intermediate swimming or equivalent
Class Hours: 9 lecture, 21 activity total
This course covers instruction and practice in American Red Cross (Advanced) Senior Life Saving and Water Safety. Emphasis is placed on personal safety, safety and self rescue in the use of small craft, elementary forms of rescue, the swimming rescue, basic first aid, artificial respiration, and American Red Cross Certification in Senior Life Saving.

PE 61* — 1 Unit
Water Safety Instructor
Prerequisite: Current Red Cross Advanced Life Saving Certificate
Class Hours: 9 lecture, 21 activity total
This class covers the theory and practical techniques needed in teaching water safety techniques and procedures. Course includes certification as an American Red Cross Water Safety Instructor with authorization to teach and certify swimming and life-saving classes.

Intercollegiate Athletics

PE 64A/B† — 3/3 Units
Soccer-Men - Year I/II
Prerequisite: Meet requirements for athletic eligibility in the Western State Conference.
Class Hours: 1 lecture, 9 activity
Varsity sports are highly competitive and require an advanced degree of skill. Students engaged in varsity sports should expect to compete against other institutions, travel, and put in additional hours beyond the normal activity load. PE 64B may be taken two (2) times for credit.

PE 65A/B† — 3/3 Units
Soccer-Women - Year I/II
Prerequisite: Meet requirements for eligibility as established by the WSC.
Class Hours: 1 lecture, 9 activity
Varsity sports are highly competitive and require an advanced degree of skill. Students engaged in varsity sports should expect to compete against other institutions, travel, and put in additional hours beyond the normal activity load. PE 65B may be taken two (2) times for credit.

PE 66A/B† — 3/3 Units
Baseball-Men - Year I/II
Prerequisite: Meet requirements for athletic eligibility in the Western State Conference.
Class Hours: 1 lecture, 9 activity
Varsity sports are highly competitive and require an advanced degree of skill. Students engaged in varsity sports should expect to compete against other institutions, travel, and put in additional hours beyond the normal activity load. PE 66B may be taken two (2) times for credit.

PE 67A/B† — 3/3 Units
Basketball-Men - Year I/II
Prerequisite: Meet requirements for athletic eligibility in the Western State

Conference.
Class Hours: 1 lecture, 9 activity
Varsity sports are highly competitive and require an advanced degree of skill. Students engaged in varsity sports should expect to compete against other institutions, travel, and put in additional hours beyond the normal activity load. PE 67B may be taken two (2) times for credit.

PE 68A/B† — 3/3 Units
Basketball-Women - Year I/II
Prerequisite: Meet requirements for eligibility as established by the WSC.
Class Hours: 1 lecture, 9 activity
Varsity sports are highly competitive and require an advanced degree of skill. Students engaged in varsity sports should expect to compete against other institutions, travel, and put in additional hours beyond the normal activity load. PE 68B may be taken two (2) times for credit.

PE 69A/B† — 3/3 Units
Cross Country-Men - Year I/II
Prerequisite: Meet requirements for athletic eligibility in the Western State Conference.
Class Hours: 1 lecture, 9 activity
Varsity sports are highly competitive and require an advanced degree of skill. Students engaged in varsity sports should expect to compete against other institutions, travel, and put in additional hours beyond the normal activity load. PE 69B may be taken two (2) times for credit.

PE 70A/B† — 3/3 Units
Cross Country-Women - Year I/II
Prerequisite: Meet requirements for eligibility as established by the WSC.
Class Hours: 1 lecture, 9 activity
Varsity sports are highly competitive and require an advanced degree of skill. Students engaged in varsity sports should expect to compete against other institutions, travel, and put in additional hours beyond the normal activity load. PE 70B may be taken two (2) times for credit.

PE 71A/B† — 3/3 Units
Football-Men - Year I/II
Prerequisite: Meet requirements for athletic eligibility in the Western State Conference.
Class Hours: 1 lecture, 9 activity
Varsity sports are highly competitive and require an advanced degree of skill. Students engaged in varsity sports should expect to compete against other institutions, travel, and put in additional hours beyond the normal activity load. PE 71B may be taken two (2) times for credit.

PE 72A/B† — 3/3 Units
Golf - Year I/II
Prerequisite: Meet requirements for athletic eligibility in the Western State Conference.
Class Hours: 1 lecture, 9 activity
Varsity sports are highly competitive and require an advanced degree of skill. Students engaged in varsity sports should expect to compete against other institutions, travel, and put in additional hours beyond the normal activity load. PE 72B may be taken two (2) times for credit.

PE 73A/B† — 3/3 Units
Softball-Women - Year I/II
Prerequisite: Meet requirements for eligibility as established by the WSC.
Class Hours: 1 lecture, 9 activity
Varsity sports are highly competitive and require an advanced degree of skill. Students engaged in varsity sports should expect to compete against other institutions, travel, and put in additional hours beyond the normal activity load. PE 73B may be taken two (2) times for credit.

PE 74A/B† — 3/3 Units
Tennis-Men - Year I/II
Prerequisite: Meet requirements for athletic eligibility in the Western State Conference.
Class Hours: 1 lecture, 9 activity
Varsity sports are highly competitive and require an advanced degree of skill. Students engaged in varsity sports should expect to compete against other institutions, travel, and put in additional hours beyond the normal activity load. PE 74B may be taken two (2) times for credit.

PE 75A/B† — 3/3 Units
Tennis-Women - Year I/II
Prerequisite: Meet requirements for eligibility as established by the WSC.
Class Hours: 1 lecture, 9 activity
Varsity sports are highly competitive and require an advanced degree of skill. Students engaged in varsity sports should expect to compete against other institutions, travel, and put in additional hours beyond the normal activity load. PE 75B may be taken two (2) times for credit.

PE 76A/B† — 3/3 Units
Track-Men - Year I/II
Prerequisite: Meet requirements for athletic eligibility in the Western State Conference.
Class Hours: 1 lecture, 9 activity
Varsity sports are highly competitive and require an advanced degree of skill.Students engaged in varsity sports should expect to compete against other institutions, travel, and put in additional hours beyond the normal activity load. PE 76B may be taken two (2) times for credit.

PE 77A/B† — 3/3 Units
Track-Women - Year I/II
Prerequisite: Meet requirements for eligibility as established by the WSC.
Class Hours: 1 lecture, 9 activity
Varsity sports are highly competitive and require an advanced degree of skill. Students engaged in varsity sports should expect to compete against other institutions, travel, and put in additional hours beyond the normal activity load. PE 77B may be taken two (2) times for credit.

PE 78A/B† — 3/3 Units
Volleyball-Women - Year I/II
Prerequisite: Meet requirements for eligibility as established by the WSC.
Class Hours: 1 lecture, 9 activity
Varsity sports are highly competitive and require an advanced degree of skill. Students engaged in varsity sports should expect to compete against other institutions, travel, and put in additional hours beyond the normal activity load. PE 78B may be taken two (2) times for credit.

PE 79A/B† — 3/3 Units
Wrestling-Men - Year I/II
Prerequisite: Meet requirements for athletic eligibility in the Western State Conference.
Class Hours: 1 lecture, 9 activity
Varsity sports are highly competitive and require an advanced degree of skill. Students engaged in varsity sports should expect to compete against other institutions, travel, and put in additional hours beyond the normal activity load. PE 79B may be taken two (2) times for credit.

PE 80† — 2 Units
Pep Squad
Class Hours: 7 activity
This course is for students interested in the Pep Squad. The course is designed to develop cheer leading skills through instruction in gymnastics and dance. May be taken four (4) times for credit.

Professional Activities

PE 90† — 2 Units
Introduction to Physical Education
Class Hours: 2 lecture
This course is a general survey of the field of Physical Education, and exploration of the aims, objectives, scope and contemporary values of Physical Education. Projects and field work are required.

Physical Science

The major in Physical Science is designed to prepare students for a diversity of professions requiring an understanding of the fundamentals of the physical sciences. Such professions include teaching science at the secondary level, technical administration in government and industry, legal work with patents, scientific librarianship, and scientific journalism.

Career Opportunities

(Bachelors degree necessary)

Astronomer
Teacher
Patent Lawyer
Oceanographer

Faculty

Full-Time
Clinton Harper
Richard Kurtik

Part-Time
Kenneth Robinson
Ronald Wallingford

Counselor
Diane Sukiennik

Transfer Information

Major requirements for upper division standing at:
California State University, Northridge:
Chem 1A, 1B; Math 16A, 16B or Math 25A, B, C; Physics 10A/10AL, 10B/10BL or Physics 20A/20AL, 20B/20BL, 20C/20CL.

Note: Students seeking a teaching credential must take additional lower division courses as outlined in the CSUN catalog.

Physical Science Courses

PHYS SC 1 — 3 Units
Principles of Physical Science
Prerequisite: Math 3 or equivalent
Class Hours: 3 lecture

This course introduces selected significant facts, principles and laws from physics and chemistry. Topics will include: motion, force, energy, wave motion, electricity and magnetism, light, atomic structure, chemical bonding and chemical reaction rates and equilibrium. *Transfer credit: CSU; UC credit limitations. See counselor.*

PHYS SC 1L — 1 Unit
Principles of Physical Science Laboratory
Prerequisite: Prior or concurrent enrollment in Phys Sc 1
Class Hours: 3 laboratory

This is a laboratory course designed to be taken concurrently with, or after completion of Phys Sc 1. Laboratory experiments will emphasize selected topics from both introductory physics and chemistry. *Transfer credit: CSU; UC*

PHYS SC 22A/B — 1-3/1-3 Units
Independent Studies in Physical Science
Prerequisite: A previous course in Physical Science
Class Hours: 1-3 tutorial

This course is for students who are interested in furthering their knowledge of physical science on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

Physics

The strong emphasis in physics on fundamental concepts and problem solving makes it one of the most versatile majors available. The Physics major provides the basis for careers in applied physics and in interdisciplinary areas such as astronomy, biophysics, environmental science, oceanography, and scientific instrumentation.

Career Opportunities

(Post-bachelors degree necessary)

Laser Specialist
Seismologist
Researcher
Oceanographer
Geochemist
Weather Forecaster
Astronomer
Medical Technologist
Biomedical Engineer
Plasma Physicist
Fusion Engineer
Nuclear Physicist
Physical Chemist
Statistician
Chemical Physicist

Faculty

Full-Time
Balazs Becht
Clinton Harper
Fred Meyer
Sergio Monteiro

Part-Time
Ahmad Amjadi
Youssef Kohanzadeh
Russell Patera

Counselors
John Heydenreich
Diane Sukiennik

Transfer Information

Major requirements for upper division standing at:
California State University, Northridge:
Core courses: Chem 1A; CS 10/10L, 18/18L; Math 25A, 25B, 25C; Physics 20A/20AL, 20B/20BL, 20C/20CL.
Physics option: Chem 1B; Math 35.
Applied Physics: CS 10/10L or CS 18/18L; Engr 20/20L; Math 35.
Mathematical Physics: Math 35.
California State University, Sacramento:
Physics - Physical Science major:
Chem 1A, 1B; Math 25A, 25B, 25C, 35; Physics 20A/20AL, 20B/20BL, 20C/20CL.
University of California, Berkeley:
Math 25A, 25B, 25C, 31, 35; Physics 20A/20AL, 20B/20BL, 20C/20CL.
University of California, Davis:
Math 25A, 25B, 25C, 31; Physics 20A/20AL, 20B/20BL, 20C/20CL.

■ Physics

Associate in Science Degree

This program is designed to award a designated associate degree to those students who have completed a course of specialization in Physics. These requirements were chosen by faculty to optimize students' preparation for upper division course work for Bachelor

of Science degrees in Physics offered by four-year institutions. Since the course work in physics is sequential, students may spend less time earning an Associate of Science Degree and/or Bachelor of Science Degree by deferring some of the university general education requirements until their Junior and Senior years and giving priority to the requirements for a major in physics. In addition, the earning of this degree will be evidence of achievement of technical skills which may be helpful towards the seeking of immediate employment.

Preparation for the Major:

Mathematics — two years high school algebra plus trigonometry or Math 1, 3, and 7 or equivalent.

Chemistry — one year high school chemistry or Chem 12 or equivalent.

Physics — one year high school physics or Ph 12 or equivalent.

Physics students are strongly encouraged to take advantage of summer school class offerings.

Required Courses:		**Units**
Chem 1A	General Chemistry	6
Math 25A	Calculus/w Analytic Geometry I	5
Math 25B	Calculus/w Analytic Geometry II	5
Math 25C	Calculus/w Analytic Geometry III	5
Ph 20A/20AL	Mechanics of Solids and Fluids/Lab	4
Ph 20B/20BL	Electricity and Magnetism/Lab	4
Ph 20C/20CL	Wave Motion, Heat, Optics and Modern Physics/Lab	4

Select one of the following options:

Physics Option
Core plus the following:

Chem 1B	General Chemistry	6
Math 35	Applied Differential Equations	3

Recommended Courses: CS 18/18L; Math 31

Applied Physics Option
Core plus the following:

CS 10/10L	Intro to Computer Programming/Pascal/Lab	4
CS 18/18L	Computer Programming - FORTRAN/Lab	4
Engr 12	Engineering Materials	3
Math 35	Applied Differential Equations	3

Recommended Courses: Chem 1B; Math 31

Note: Students desiring to enter a vocational program in laser/electro-optics should refer to the LET curriculum which is designed to culminate after two years with either a Certificate or an A.S. degree. Unlike Physics Option III, the LET program does not require calculus and is not intended to transfer to a four-year institution. Prospective students are advised to make the decision regarding their long-term degree goals (stop at the technician level or go on to a four-year program) prior to entering either the Physics Option III or the LET programs.

Electro-Optics Option
Core plus the following:

EL 16/16L	Analog Circuits/Lab	4
LET 6/6L	Laser Components, Devices & Metrology/Lab	4
LET 9/9L	Laser Systems and Applications/Lab	5

Recommended Courses: Chem 1B; LET 1/1L; Math 35

Total minimum units required in major area — 42 - 47

PHYSICS OPTION

Suggested Course Sequence:

First Semester

Chem 1A	6
Math 25A	5
	11

Second Semester

Chem 1B	6
Math 25B	5
Ph 20A/20AL	4
	15

Third Semester

Math 25C	5
Ph 20B/20BL	4
	9

Fourth Semester

Math 35	3
Ph 20C/20CL	4
	7

APPLIED PHYSICS OPTION

Suggested Course Sequence:

First Semester

Chem 1A	6
Math 25A	5
	11

Second Semester

CS 10/10L	4
Math 25B	5
Ph 20A/20AL	4
	13

Third Semester

Engr 12	3
Math 25C	5
Ph 20B/20BL	4
	12

Fourth Semester

CS 18/18L	4
Math 35	3
Ph 20C/20CL	4
	11

ELECTRO-OPTICS OPTION

Suggested Course Sequence:

First Semester

Chem 1A	6
Math 25A	5
	11

Second Semester

Math 25B	5
Ph 20A/20AL	4
	9

Third Semester

LET 6/6L	4
Math 25C	5
Ph 20B/20BL	4
	13

Fourth Semester

EL 16/16L	4
LET 9/9L	5
Ph 20C/20CL	4
	13

See Degree Requirements and Transfer Information section for General Education requirements.

Physics Courses

PH 1 — 3 Units
Descriptive Physics
Class Hours: 3 lecture

This is an introductory course in the concepts of physics, taught with a minimum of mathematics. Lecture material is reinforced by the use of everyday examples and lecture demontrations. Topics include: classical mechanics, the properties of matter, heat, sound, electricity and magnetism, light, atomic and nuclear physics, relativity and astrophysics. Ph 1 is particularly designed for the non-science major. *Transfer credit: CSU; UC*

PH 1L — 1 Unit
Descriptive Physics Laboratory
Prerequisite: Prior or concurrent enrollment in Physics 1.
Class Hours: 3 laboratory

This is an introductory laboratory course in the elements of classical and modern physics for non-science majors. The topics to be covered are mechanics, electricity, wave motion, heat, light, and atomic and nuclear physics. *Transfer credit: CSU; UC*

PH 10A — 3 Units
General Physics I
Prerequisite: Math 4 or Math 6 or Math 7 or equivalent college course, or a satisfactory score on the Math Placement Exam.
Class Hours: 3 lecture

This course is an introduction to mechanics of solids and fluids, heat and wave motion, which is designed for students majoring in the life sciences or any other major requiring a non-calculus based laboratory physics course. *Transfer credit: CSU; UC credit limitations. See counselor. CAN: PHYS 2*

PH 10AL — 1 Unit
General Physics I Laboratory
Prerequisite: Concurrent enrollment in Physics 10A.
Class Hours: 3 laboratory

This is a laboratory course during which the student performs experiments in classical mechanics, heat and wave motion. It is designed for students majoring in the life sciences or any other major requiring a non-calculus based laboratory physics course. *Transfer credit: CSU; UC credit limitations. See counselor. CAN: PHYS 2*

PH 10B — 3 Units
General Physics II
Prerequisite: Physics 10A/10AL or equivalent college course.

Class Hours: 3 lecture

This course is an introduction to electricity and magnetism, optics and modern physics, which is designed for students majoring in the life sciences or any other major requiring a non-calculus based laboratory physics course. *Transfer credit: CSU; UC credit limitations. See counselor. CAN: PHYS 4*

PH 10BL — 1 Unit
General Physics II Laboratory

Prerequisite: Physics 10A/10AL or equivalent college course.
Corequisite: Physics 10B.
Class Hours: 3 laboratory

This is a laboratory course during which the students perform experiments in electricity and magnetism, optics and modern physics. It is designed for students majoring in the life sciences or any other major requiring a non-calculus based laboratory physics course. *Transfer credit: CSU; UC credit limitations. See counselor. CAN: PHYS 4*

PH 12 — 3 Units
Introduction to Physics

Prerequisite: Math 6 or Math 7 or equivalent college course, or a satisfactory score on the Math Placement Exam.
Class Hours: 3 lecture

This is an introductory course covering the basic principles of physics with emphasis on mechanics and electricity. Physics 12 is particularly designed for those students who did not take high school Physics, but intend to enroll in the Physics 20ABC series. *Transfer credit: CSU; UC credit limitations.* **No credit** *at UC if taken after Physics 1, 10A/10AL, or 20A/20AL. See counselor.*

PH 20A — 3 Units
Mechanics of Solids and Fluids

Prerequisites: Math 25A and Physics 12 or Physics 10A/10AL or equivalent college course.
Corequisite: Math 25B.
Class Hours: 3 lecture

This course is an introductory study of statics and dynamics of particles and rigid bodies and an introduction to hydrostatics and hydrodynamics. Physics 20A uses calculus and is designed for students majoring in physics, engineering, mathematics, chemistry, computer science and the biology A.S. degree program. *Transfer credit: CSU; UC credit limitations. See counselor. CAN: PHYS 8*

PH 20AL — 1 Unit
Mechanics of Solids and Fluids Laboratory

Prerequisites: Math 25A and Physics 12 or Physics 10A/10AL or equivalent.
Corequisites: Math 25B, Physics 20A.
Class Hours: 3 laboratory

This is a laboratory course in which the students perform experiments in dynamics of particles and rigid bodies, hydrostatics, and hydrodynamics. *Transfer credit: CSU; UC credit limitations. See counselor. CAN: PHYS 8*

PH 20B — 3 Units
Electricity and Magnetism

Prerequisites: Physics 20A/20AL and Math 25B.
Corequisite: Math 25C.
Class Hours: 3 lecture

This course is an introduction to electricity and magnetism. Emphasis is placed on the understanding of field theory and applications of calculus. Topics include: electric and magnetic fields; Coulomb's Law; Gauss' Law; Faraday's Law; Amperes Law; Biot-Savart Law; Ohm's Law; A.C. and D.C. circuits; and an introduction to electronic devices. *Transfer credit: CSU; UC. CAN: PHYS 12*

PH 20BL — 1 Unit
Electricity and Magnetism Laboratory

Prerequisites: Physics 20A/20AL and Math 25B.
Corequisites: Math 25C, Physics 20B.
Class Hours: 3 laboratory

This is a laboratory course designed to be taken concurrently with the Physics 20B lecture. Emphasis is placed on understanding of field theory and introducing the student to electronic measurements, A.C. and D.C. circuits, basic active analog circuits and devices. *Transfer credit: CSU; UC. CAN: PHYS 12*

PH 20C — 3 Units
Wave Motion, Heat, Optics and Modern Physics

Corequisites: Physics 20B/20BL and Math 25C.
Class Hours: 3 lecture

This course is an introduction to wave motion (sound and light), physical and isometrical optics, thermodynamics, selected topics in quantum mechanics, and special relativity. The solution of problems utilizing calculus and differential equations is demonstrated. *Transfer credit: CSU; UC. CAN: PHYS 10*

PH 20CL — 1 Unit
Wave Motion, Heat, Optics and Modern Physics Laboratory

Corequisites: Physics 20B/20BL, Physics 20C and Math 25C.
Class Hours: 3 laboratory

This is a laboratory course designed to introduce the student to wave motion, heat, optics and modern physics. Fundamental principles as well as the use of modern laboratory instrumentation will be stressed. *Transfer credit: CSU; UC. CAN: PHYS 10*

PH 22A/B — 1-3/1-3 Units
Independent Studies in Physics

Prerequisite: A previous course in Physics
Class Hours: 1-3 tutorial

This course is for students who are interested in furthering their knowledge of physics on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

Political Science

Political Science, the study of government and politics, leads to an understanding of the institutions of government and the role of citizens and leaders at every level of government.

Career Opportunities

(Post-bachelors degree necessary)

Government Official
Journalist
Foreign Diplomat
Teacher
Attorney
Politician

Faculty

Full-Time	Part-Time	Counselors
Gerald Bridgeman	Dean Birch	Frank Bianchino
Robert Herman	Luis Gomez	Bud Long
Jerry Straughan	Rodrigo Hernandez	
	Jack Miller	

Transfer Information

The major in political science povides training for those who plan a career in government service, intend to pursue the study of law or related disciplines, wish to prepare for work in journalism or writing, or wish to prepare for teaching or to work for advanced degrees.

Major requirements for upper division standing at:

California State University, Northridge:
Pol Sci 2, 3, 4.

University of California, Davis:
Pol Sci 2, 3, 4, 11. Additional lower division courses to be taken after transfer.

University of California, Santa Barbara:
Econ 1, 2; Hist 1A, 1B (or 7A, 7B for Public Service emphasis only); Pol Sc 2 or 4, and Pol Sc 3.
International Relations must add Foreign Language 1, 2, 3, 4; Geog 5; Soc 5.
Public Service emphasis must add Bus 1A or 1B; CIS 4A or 4B.

Political Science Courses

POL SC 1 — 3 Units
Introduction to Government
Class Hours: 3 lecture

This class covers basic principles and major areas of study within political science particularly as they apply to American, federal, state, and local government and politics. The student will do research and writing on special topics, and selected political problems will be used to supplement the lectures and discussions. The course is designed for social science majors, behavioral science majors, and others with strong interest in this area. *Transfer credit: CSU; UC*

POL SC 2 — 3 Units
Comparative Government
Class Hours: 3 lecture

This course is a comparative study of political and cultural factors that are important in determining political institutions. Industrialized areas are compared with those having less industrialization. Countries studied include the United States, the Soviet Union, China, Japan, and representative European, Latin American, or African nations. *Transfer credit: CSU; UC*

POL SC 3 — 3 Units
American Government and Politics
Class Hours: 3 lecture

This is an introductory course on the principles and problems of American Government and the political process, with particular emphasis on national government. This course satisfies the Title V United States Constitution requirement and the California state and local government requirement. *Transfer credit: CSU; UC. CAN: GOVT 2*

POL SC 4 — 3 Units
International Relations
Class Hours: 3 lecture

This course is a study of relations between sovereign units. It will concentrate on international organization, theoretical proposals toward and possibilities for world peace, the mechanics of politics among nations, and will consider the formation of American foreign policy. Attention will be paid to the relationship between domestic and foreign politics, and to the cultural origins of policy. *Transfer credit: CSU; UC*

POL SC 7 — 3 Units
Minority Groups*
Class Hours: 3 lecture

This course is a study of political problems which are faced by racial and ethnic minorities in the United States. The focus of the course is to examine the impact and consequences of formal and informal racism, discrimination and sexism which have precluded the full participation of many racial and ethic groups in the mainstream of American Life. The major emphasis shall be placed on the political process which is often seen as a vehicle for compromising and negotiating majority-minority relations in an attempt to maintain social equilibrium. *Transfer credit: CSU; UC*

POL SC 8 — 3 Units
Political Patterns in the U.S.*
Class Hours: 3 lecture

Fundamental principles of U.S. Government: federal, state and local are studied in theory and practice. Emphasis is on state and local government of the Southwest, with particular attention given to the legislative process, political parties, pressure groups, and implementation of policy at county and municipal levels. Special emphasis is placed on the participation of the Mexican-American in our political institutions. (co-numbered Ch St 8) *Transfer credit: CSU; UC*

POL SC 10 — 3 Units
Public Administration and Policy Development*
Prerequisite: Prior course in Social Science.
Class Hours: 3 lecture

This course is designed to help the student develop an understanding of what public administration is, how decisions are made in the public bureaucracy, what its tasks are, and how it goes about accomplishing these tasks. In addition to the politics of administrative organization, personnel management, budget administration, public relations and Government service as a career are also discussed. *Transfer credit: CSU; UC*

POL SC 11 — 3 Units
Law, Government, and Individual Rights
Class Hours: 3 lecture

This course analyzes the origins, workings, procedures, and policies of our federal and state governments from the perspective of Constitutional law. Particular emphasis is placed in the Judicial system and in the privileges, rights, and obligations of individuals guaranteed by the Constitution. Leading judicial decisions of the Supreme Court will be explored. *Transfer credit: CSU*

POL SC 22A/B — 1-3/1-3 Units
Independent Studies in Political Science
Prerequisite: A previous course in Political Science
Class Hours: 1-3 tutorial

This course is for students who are interested in furthering their knowledge of political science on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

POL SC 60A-Z — 1-3 Units
Topics in Political Science
Prerequisites: To be determined with each Topic
Class Hours: To be determined with each Topic

This is a special series of courses each of which deals with a specific topic in Political Science not covered in detail in the general Political Science course offerings. Topics courses are announced on a semester basis in the

schedule of classes. *Transfer credit: CSU; UC maximum credit 3 units.*

Topics which have been developed include:

60C — 3 Units
Politics in the Middle East
Class Hours: 3 lecture
This is a survey of political developments and changes in the Middle East with emphasis on the Arab states, Israel, Iran and Turkey. The students will explore the rich historical background of this region touching on its principal cultural contributions, political conflicts before the 20th century, current political processes, economic developments, and main problems confronting the nations of the Middle East.

*These courses are offered periodically.

Psychology

The major in psychology provides a study of the behavior of individuals and groups in contemporary society. The graduate in this major is prepared for positions in research and teaching, counseling, and working with individuals in clinical settings. The major also provides the student with the background for graduate study in the field of psychology and related specialties.

Career Opportunities

(Bachelors degree and post-graduate work required)

Psychologist
Administrative Assistant
Urban Renewal Specialist
Personnel Assistant
Program Analyst
Social Insurance Representative
Veterans Claims Examiner
Social Service Analyst
Employee Relations Specialist
Employee Development Specialist
Recreation Specialist
Social Worker
Family Counselor
Mental Health Officer
Rehabilitation Counselor
Sales Personnel
Advertising Executive
School Psychologist
Probation Officer

Faculty

Full-Time
Francis Bianchino
Judith Farrell
Frank Fierro
Carole Ginet
Linda McDill
Steven Pollock
Carol Woodward

Part-Time
Charles Allen
Barry Barmann
Christine Caruso
Susan Kapitanoff
Jeffrey Lee
Carolyn Powell
Anthony Raptis

Counselors
Frank Bianchino
Bud Long

Transfer Information

Major requirements for upper division standing at:
California State University, Northridge:
Math 15; Psych 1A, 1B.
California State University, Sacramento:
Psych 1A, 1B.
University of California, Davis:
Math 15; Psych 1A.

Psychology Courses

PSYCH 1A — 3 Units
Introduction to Psychology
Class Hours: 3 lecture
This course is an introduction to the subject matter of psychology with emphasis on heredity and environment, growth and development, sensa-

tion and perception, motivation and emotion, learning and cognition, personality, social psychology, mental illness and mental health. *Transfer credit: CSU; UC*

PSYCH 1B — 4 Units
Introduction to Psychobiology and Experimental Psychology
Prerequisite: Psych 1A
Class Hours: 4 lecture
This course is an introduction to psychobiological and experimental methodology in psychology with an emphasis on the scientific method, basic statistics, and the physiological bases of behavior. Individual experimental study is included. Recommended as a second course in the major sequence. *Transfer credit: CSU; UC*

PSYCH 3 — 3 Units
Psychology of Interpersonal Relationships
Class Hours: 3 lecture
This course is an orientation in the use of psychological principles applied in understanding human relationships and developing greater self-awareness. Emphasis will be on the nature of humans, human needs, and feelings, the processes of personal and social dynamics, mental health, and socialization. A combination of experimental and theoretical approaches is used to increase awareness, understanding, choices, and decision-making. *Transfer credit: CSU; UC*

PSYCH 4 — 3 Units
Child Psychology
Class Hours: 3 lecture
The focus of this course is on the psychology of children as well as on basic principles of developmental psychology. While the major emphasis will be on the child as a person, exploration of the personal, societal, and cultural forces important from birth to puberty will occur. *Transfer credit: CSU; UC*

PSYCH 5 — 3 Units
Social Psychology
Class Hours: 3 lecture
This course is a study of social relationships. Topics of study include interpersonal attraction, structure and leadership, role and status, prosocial behavior, attitude formation and change, communication and propaganda, nature of prejudice and social change, and conformity. (co-numbered Soc 5) *Transfer credit: CSU; UC*

PSYCH 7 — 3 Units
Developmental Psychology (Life Span)*
Class Hours: 3 lecture
This course is an introduction to the physical, emotional, cognitive, social and cultural aspects of development from conception to death. Emphasis will be placed on acquiring an understanding of the processes of development throughout the life span. Normative behaviors for specific ages and developmental stages are examined. Selected theories of development and contemporary issues in development are included. *Transfer credit: CSU*

PSYCH 8 — 3 Units
Abnormal Psychology*
Class Hours: 3 lecture
This course surveys the field of abnormal psychology. Topics for analysis, study, and discussion include: patterns, causes, and the history of maladaptive behavior; clinical assessment using DSM IIIR; therapies; and prevention of behavioral disorders. *Transfer credit: CSU; UC*

PSYCH 9 — 3 Units
Introduction to Gerontology
Class Hours: 3 lecture
An introduction to the study of Gerontology. The course includes a consideration of the physical, psychological, sociological, and economic aspects of aging, as well as, application of basic theory to the current issues and problems involving the older population. *Transfer credit: CSU; UC*

PSYCH 10 — 3 Units
Dying and Death
Class Hours: 3 lecture
A survey of the areas, issues, and decisions concerned with dying and death. Topics include: historical and cross-cultural perspectives toward death, death socialization, medical ethics and the health-care system, death over the lifespan, the law and death, and beyond death/after-life concerns. *Transfer credit: CSU; UC*

PSYCH 11 — 3 Units
Psychology of Assertion
Class Hours: 3 lecture
This course focuses on openness, honesty, and directness in communication and behavior. Through a study of self concept, perception, emotions, language, non verbal communication, defense mechanisms, and conflict resolution, students learn to identify problem areas and examine alternate behaviors. Students examine options in specific areas, such as expressing anger and other emotions, methods of changing behavior, making requests and saying no, coping with criticism, defining and resolving conflict. *Transfer credit: CSU*

PSYCH 12 — 3 Units
Animal Behavior
Class Hours: 3 lecture
This course is an introduction to the study of animal behavior with an emphasis on learning theory, especially classical and operant conditioning. It is designed to provide the student with an understanding of how to apply the concepts of ethology and behavior modification to the maintenance and training of animals in captivity. Each student will be required to train a rat. (co-numbered EATM 4)

PSYCH 22A/B — 1-3/1-3 Units
Independent Studies in Psychology
Prerequisite: A previous course in Psychology
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of psychology on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

PSYCH 30 — 3 Units
Psychological Aspects of Aging*
Class Hours: 3 lecture
This course explores psychodynamic behaviors over the life span with the focus being on the development of the adult. The psychological needs of the aging adult and the responses to these needs by others will be explored. *Transfer credit: CSU*

PSYCH 60A-Z — 1-3 Units
Topics in Psychology*
Prerequisites: To be determined with each Topic
Class Hours: To be determined with each Topic
This is a special series of courses each of which deals with a specific topic in Psychology not covered in detail in the general Psychology course offerings. Topics courses are announced on a semester basis in the schedule of classes. *Transfer credit: CSU; UC maximum credit 3 units.*

Topics which have been developed include:

60V — 1½ Units
Research Seminar
Class Hours: 24 lecture total
An introduction to the principles and practices of experimental research within Psychology. Topics for analysis and discussion focus both on the philosophy of science and research and on a hands-on exploration of various psychological phenomena.

*These courses are offered periodically.

Radio/Television

This major is designed for students who plan professional or academic careers in educational or commercial radio or television. The major provides training which leads to positions in management or creative capacities or in related scholarly areas. Study is directed toward developing competence in specific areas of the mass media professions and providing a general knowledge of mass communication theory.

Career Opportunities

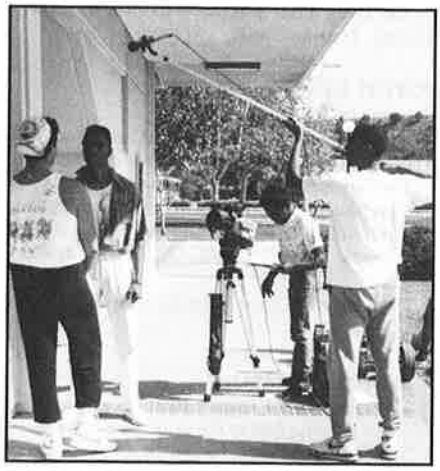
Account Executive
Actor
Anchor (News)
Announcer
Advertising Copy Writer
Assistant Director
Art Director
Audio/Video Engineer
Camera Operator
Executive Producer
Floor Manager
Lighting Director
Lighting Assistant
Make-Up Specialist/Artist
News Director
News Writer
Media Librarian
ITV Specialist
Program Manager/Director
Publicity/Promotion Assistant
Public Relations Assistant
Property Master/Grip
Radio-Television Director
Reporter
Operations Manager
Technical Director
Traffic Director
Research Specialist
Teleplay Writer
Videotape Editor
Station Manager/General Manager
Advertising Sales Director/Manager

Faculty

Full-Time
Alfred Miller
Leslie Wieder

Part-Time
Frank Roach
Richard Studebaker
Charles Whitten

Counselor
Don Henderson



Transfer Information

Radio — Television — Film

Major requirements for upper division standing at:
California State University, Northridge:
Hum 3; RT 1, 3A, 5 (or Engl 5), 7A
University of California, Los Angeles:
Motion Picture/Television
Portfolio required. All UCLA College of Fine Arts Breadth Requirements to be completed prior to entry. Overall 3.0 or better. No more than 16 additional units of Theatre and Radio/Television courses.

■ Radio/Television

Occupational
Associate in Science Degree

This program offers a varied curriculum that provides students with introductory knowledge of broadcasting. Emphasis is possible through introductory specialization in such fields as broadcast journalism, production techniques, advertising/sales management.

Required Courses:		**Units**
Hum 3	History of the Motion Picture	3
	or	
Hum 4	Main Currents in Modern Film	3
RT 1	Media and Society	3
RT 2	Broadcast Studio Operation	3
RT 3A	Television Production Workshop	3
RT 5	Radio-Television Writing	3
RT 7A	Radio Production Workshop	3
Required Additional Courses:		
Select nine (9) units from the following courses:		
Photo 1A	Beginning Photography	3
RT 3B	Television Directing and Editing	3
RT 7B	Advanced Radio Production	3
RT 8	Voice and Diction	3
RT 9	Acting for Film and TV	3
RT 12	Broadcast Journalism	3
RT 17	Advanced Television Production	3
RT 18A	Music and Sound Recording	3
Total minimum units required in major area — 27		

See Degree Requirements and Transfer Information section for General Education requirements.

Radio/Television Courses

RT 1 — 3 Units
Media and Society
Class Hours: 3 lecture
This course surveys the history and nature of print and electronic media in America. It will examine the social, political and cultural implication of media. (co-numbered Journ 1) *Transfer credit: CSU*

RT 2 — 3 Units
Broadcast Studio Operation
Class Hours: 2 lecture, 3 laboratory
This class covers instruction in basic studio and control room equipment and operation. Students gain practical experience in the various aspects of production, explanation of program patterns, studio procedures, use of equipment and production of programs. *Transfer credit: CSU*

RT 3A — 3 Units
Television Production Workshop
Prerequisite: RT 2
Class Hours: 2 lecture, 3 laboratory
This course involves intermediate work in production, camera work, technical direction, lighting, etc. The creation of new program concepts and types is stressed. Each student is responsible for producing an experimental TV program. *Transfer credit: CSU*

RT 3B — 3 Units
Television Directing and Editing
Prerequisite: RT 3A
Class Hours: 2 lecture, 3 laboratory
This course covers advanced directing and editing of special projects and experimental television programs. Each student is responsible for producing a variety of television programs. *Transfer credit: CSU*

RT 5 — 3 Units
Radio-Television Writing
Prerequisite: Engl 1A or equivalent
Class Hours: 3 lecture
This course deals with the preparation and analysis of dramatic scripts, program formats, public service announcements, local news, commercials, continuity, discussion programs, special events, talks and interviews. Training is given in the fundamentals of script format, professional methods, and the ethics and restrictions involved in the broadcasting media. (co-numbered Engl 5) *Transfer credit: CSU*

RT 7A — 3 Units
Radio Production Workshop
Prerequisite: RT 1 or concurrent enrollment
Class Hours: 2 lecture, 3 laboratory

This class offers integrated work in various radio broadcasting functions. Including announcing, acting, disc jockeying, basic writing, program direction, program production, advertising, radio interviewing, and station operations. *Transfer credit: CSU*

RT 7B — 3 Units
Advanced Radio Production
Prerequisite: RT 7A or equivalent
Class Hours: 2 lecture, 3 laboratory
This is an advanced practical course designed to prepare students for entry-level positions as a radio announcer and/or newscaster at a radio station outside the top 20 major radio markets. Students are given basic background needed in: developing a radio personality; working with and developing music formats; editing, re-writing, and gathering news to function as a broadcast journalist; and preparing an audition tape and resume for use in the job market. *Transfer credit: CSU*

RT 8 — 3 Units
Voice and Diction
Class Hours: 3 lecture
Designed for Theatre, Forensics and Broadcasting students but open to all others, this course provides instruction in correct pronunciation, breathing, and control techniques. It includes the theory and practice of voice control as well as the study of regional and foreign dialects. May be taken two (2) times for credit. (co-numbered Spch 3, ThA 3) *Transfer credit: CSU; UC credit limitations. See counselor.*

RT 9 — 3 Units
Acting for Film and TV
Class Hours: 2 lecture, 3 laboratory
Students will learn the techniques required in acting before the camera, blocking, movement, rapid line learning, etc., as it pertains to film and TV, and as it varies from stagework. Studied also will be microphone techniques and opportunities to perform in student-directed films and television shows. May be taken four (4) times for credit. (co-numbered ThA 9) *Transfer credit: CSU; UC credit limitations. See counselor.*

RT 12 — 3 Units
Broadcast Journalism
Class Hours: 3 lecture
In this advanced practical course in the preparation of radio and television newscasts, students develop interviewing skills, write original news copy and edit and rewrite wire service copy for on-air purposes. Actual field work is performed using remote recording equipment. (co-numbered Journ 12) *Transfer credit: CSU*

RT 17 — 1-5 Units
Advanced Television Production
Prerequisite: RT 3A
Class Hours: 48-240 laboratory total
This is an advanced course in the production of a variety of television program categories. Some programs will be utilized by community media such as CATV public access systems. Includes remote assignments and special projects. May be taken four (4) times for credit. *Transfer credit: CSU*

RT 18A — 3 Units
Music and Sound Recording
Class Hours: 2 lecture, 3 laboratory
This course is an intensive introduction to the theory and practice of audio recording of music and sound. This course includes sections on the recording chain, microphones, tape, signal-processing and noise-reduction theory and equipment, consoles, studio session procedures, disc cutting and pressing and quadraphonic sound. It is designed for the serious recording engineer. *Transfer credit: CSU*

RT 18B — 3 Units
Advanced Music and Sound Recording
Prerequisite: RT 18A
Class Hours: 2 lecture, 3 laboratory
This is an advanced, practical course in the latest recording industry techniques. Students record, dub, mix-down, etc., a variety of concerts and special events. Special projects are developed at major recording studios in Hollywood. *Transfer credit: CSU*

RT 22A/B — 1-3/1-3 Units
Independent Studies in Radio/Television
Prerequisite: A previous course in Radio/Television
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of radio/television on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU*

RT 49A-D — 1-4 Units
Cooperative Work Experience — Radio/Television★
Prerequisite: Placement at a work station
Class Hours: 5-20 employment, 1 by arrangement
Students employed in a field related to Radio/Television will design a learning contract in conjunction with their employer that will involve expanded responsibilities and/or the opportunity to learn new job experiences beyond those required in the existing job duties. Direct coordination with the employer in question will be a part of this learning experience.

RT 60A-Z — 1-3 Units
Topics in Radio/Television
Prerequisites: To be determined with each Topic
Class Hours: To be determined with each Topic
This is a special series of courses each of which deals with a specific topic in Radio/Television not covered in detail in the general Radio/Television course offerings. Topics courses are announced on a semester basis in the schedule of classes. *Transfer credit: CSU*

Reading

Reading courses are provided to assist students to improve their basic abilities to function effectively in all classes.

Faculty

Full-Time
Barbara Outland
Michael Strumpf

Counselors
Rick Cardoni
Don Henderson

Reading Courses

READ 1 — 3 Units
Basic Reading Skills
Prerequisite: Appropriate score on standardized reading test.
Class Hours: 3 lecture

This course is designed for students with substantial reading problems as measured by both standardized and individualized tests. Through varied instructional approaches and the use of appropriate materials, students are helped to improve their comprehension and speed. Instructional activities and supporting materials will focus on study skills, vocabulary development, reading comprehension and speed, and the philosophy, psychology, and physiology of the reading process. Pre- and post-testing will measure progress and achievement.

READ 2 — 3 Units
Intermediate Reading Skills
Prerequisite: Satisfactory grade in Read 1, or appropriate score on standardized reading test.
Class Hours: 3 lecture

This course is designed for students with moderate reading problems as measured by standardized and individualized tests. Instructional activities and materials are designed to enhance both comprehension and speed. In addition to reinforcing the basic reading skills, this course will focus on such areas as reading rate variation, critical reading techniques, vocabulary enrichment, study skills, and reducing test anxieties. Pre- and post-testing will measure progress and achievement.

READ 3 — 3 Units
Speed and Power Reading
Prerequisite: Satisfactory grade in Read 1, or appropriate score on standardized reading test.
Class Hours: 3 lecture

This course teaches a wide variety of study skills, with the goal of enabling students to develop their total learning ability. Students will be taught strategies to improve reading comprehension and retention, to read at speeds appropriate to the material they are reading, to develop vocabulary awareness, to improve attitudes toward study (ranging from conquering procrastination to capitalizing on test-taking), to think critically, and to learn by visual, auditory, and kinesthetic means.

READ 10 — 3 Units
Word Power
Class Hours: 3 lecture

This comprehensive course is designed for students who wish to develop their listening, speaking, reading, and writing vocabularies. Instruction will include the development of word analysis skills through a study of Greek and Latin roots, prefixes, and suffixes. Vocabulary is expanded through a study of synonyms, antonyms, diction, word origins, contextual clues, and college level and professional vocabularies. Continuous evaluation will measure progress.

Real Estate

A career in Real Estate requires careful attention to state requirements and selection of courses that are designed to meet specific job goals in this field.

Career Opportunities

Real Estate Broker
Salesperson
Property Appraiser
Banker
Assessor
Escrow Officer

Faculty

Part-Time
David Calhoun
Marilyn Dion
Thomas Hester
Tom Hoover

Counselors
John Heydenreich
Bud Long

Applicants for the Real Estate Salesperson Examination

1. To qualify to take an examination for a real estate SALESPERSON license on and after January 1, 1986, an applicant must have completed the college-level course Real Estate Principles.
2. Those who must satisfy this new requirement must also, *either* prior to issuance of the original license *or* within eighteen months after issuance, complete two additional basic real estate courses selected from among the following:

Real Estate Practice	Legal Aspects of Real Estate
Real Estate Appraisal	Real Estate Financing
Accounting	Real Estate Economics
Business Law	Escrows
Property Management	Real Estate Office Administration

■ Real Estate
Occupational
Associate in Science Degree

This program is planned to fill the local demand for skilled real estate brokers. The courses are designed for students to meet the state requirements for licensing of and advancement to broker status.

Required Courses:		**Units**
Bus 1A	Accounting Principles I	3
RE 1	Real Estate Principles	3
RE 3	Real Estate Economics	3
RE 5	Real Estate Practices	3
RE 7	Real Estate Finance	3
RE 9	Legal Aspects of Real Estate	3
RE 11	Real Estate Appraisal	3
Total minimum units required in major area — 21		

See Degree Requirements and Transfer Information section for General Education requirements.

■ Real Estate
Certificate of Achievement

This program is designed for students desiring immediate employment in the real estate business. It offers a full curriculum for train-

ing of brokers.

Required Courses:		Units
Bus 1A	Accounting Principles I	3
CIS 1	Intro to Information Systems	3
CIS 1L	CIS Introduction Lab	1
Esc 1	Course to be re-established	3
RE 1	Real Estate Principles	3
RE 3	Real Estate Economics	3
RE 5	Real Estate Practices	3
RE 7	Real Estate Finance	3
RE 9	Legal Aspects of Real Estate	3
RE 11	Real Estate Appraisal	3

Total minimum units required — 28

Real Estate Courses

RE 1 — 3 Units
Real Estate Principles
Class Hours: 3 lecture

This course is a practical study of the California real estate industry designed to give the general public an overview of the Real Estate industry. It is also designed to supplement License Prep classes regarding the knowledge required of candidates for the California Real Estate Salespersons' and Brokers' examinations. Additionally, it is a prerequisite for most other Real Estate courses. The California Department of Real Estate requires proof of successful completion of RE 1 prior to taking the Real Estate Salespersons' license examinations. *Transfer credit: CSU*

RE 3 — 3 Units
Real Estate Economics
Prerequisite: RE 1 or California Real Estate license or equivalent
Class Hours: 3 lecture

Students will study economic trends in real estate and land use, dynamic factors which create values in real estate and background for more specialized courses in real estate operation and techniques. *Transfer credit: CSU*

RE 5 — 3 Units
Real Estate Practices
Prerequisite: RE 1 or California Real Estate license or equivalent
Class Hours: 3 lecture

This course covers techniques of operating a real estate business with emphasis on the daily activities of brokers and salespersons. Emphasis is placed on agency and disclosure requirements, on securing and qualifying prospects, obtaining listing, completing purchase contracts, and followup through close of escrow. *Transfer credit: CSU*

RE 7 — 3 Units
Real Estate Finance
Prerequisite: RE 1 or California Real Estate license or equivalent
Class Hours: 3 lecture

In this practical study and analysis of money markets, interest rates, and real estate financing, actual case illustrations demonstrating lending policies, problems and rules involved in financing real property are studied, including residential, multi-family, commercial, and special purpose properties. *Transfer credit: CSU*

RE 9 — 3 Units
Legal Aspects of Real Estate
Prerequisite: RE 1 or California Real Estate license or equivalent
Class Hours: 3 lecture

This course is a practical study of California real estate law designed to assist real estate sales licensees and the public in avoiding the legal problems which arise in conjunction with real estate transactions; case study methods are utilized. *Transfer credit: CSU*

RE 11 — 3 Units
Real Estate Appraisal
Prerequisite: RE 1 or California Real Estate license or equivalent
Class Hours: 3 lecture

This is a first course in real estate appraisal confined largely to residential property, with an introduction to investment property valuation. Also covered in this course are methods and techniques for determining value for loan and insurance purposes; case study situations and actual field work. *Transfer credit: CSU*

RE 14 — 1½ Units
Real Estate Salesperson License Preparation
Class Hours: 24 lecture total

This course is designed to prepare students for the California State Real Estate Salespersons examination. Emphasis is placed on the specific areas to be covered in the examination and students are provided with lesson summaries at each class session and a study book of sample questions for further review. Students should be aware that they must have successfully completed RE 1 (Real Estate Principles) prior to taking the Real Estate Salespersons License examination.

RE 22A/B — 1-3/1-3 Units
Independent Studies in Real Estate
Prerequisite: A previous course in Real Estate
Class Hours: 1-3 tutorial

This course is for students who are interested in furthering their knowledge of real estate on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units.

RE 89A-Z — ½-3 Units
Institutes in Real Estate★
Class Hours: Variable

This course considers specialized topics in Real Estate which are not covered in detail in the general Real Estate course offerings. Examples of topics to be offered from time to time include: Current Changes in Real Estate Practices; Current Changes in Real Estate Law; Current Changes in Real Estate Finance and Taxation; Current Changes in Real Estate Appraisal; Current Changes in Land Use Planning; and Current Real Estate Sales and Promotion.

Social Sciences

The major in Social Sciences permits undergraduates to explore a broad spectrum of the social sciences in order to obtain an acquaintance with their socio-cultural, economic, and political aspects and to develop a greater concentration in one of these areas of study. This major will satisfy much of the required liberal studies background for students who are planning to teach in elementary schools.

■ Social Science

Associate in Arts Degree
Areas of Emphasis: Geography, History, Philosophy, Political Science

This program is designed to award an A.A. degree in Social Science with an emphasis in either Geography, History, Philosophy, or Political Science. The basic requirements for the degree include completion of 21 units from the following:

Required Courses:	**Units**
AREA A: One three-unit course from each of the four discipline offerings:	
Geography: 2, 3, 4, 7.	3
History: Any course offered, except 22 or the 60 series.	3
Philosophy: 1, 2, 3.	3
Political Science: 1, 2, Urban 1A.	3

AREA B: Two additional three-unit courses from any one discipline below. These additional units determine the student's degree emphasis.

Geography: Any six (6) units, except those fulfilling Physical Science requirements.
History: Any six (6) units.
Philosophy: Any six (6) units.
Political Science: Any six (6) units including Urban 1A, 1B.

AREA C: One additional three-unit course from no. 1 or no. 2, below:

1. One (1) additional three-unit course from Area B outside the student's degree emphasis, or
2. One (1) additional three-unit course from the following:
   Anthropology: 2, 4.
   Psychology: 1A, 5, 7.
   Sociology: 1, 2, 3, 5, 6, 8.

Total minimum units required in major area — 21

See Degree Requirements and Transfer Information section for General Education requirements.

Sociology

Sociology offers much to the student who is anxious to understand the web and rhythm of human behavior. From intimate, personal, and family relationships to international corporation activities; from marginality, deviance and crime to recreation, religion and medicine; few disciplines have such broad scope and relevance.

Career Opportunities

(Bachelors or advanced degree necessary)

Metropolitan Development Representative
Model Cities Representative
Public Relations Consultant
Employment Counselor
Interviewer/Researcher
Urban Renewal Representative
Correctional Counselor
Industrial Sociologist
Disability Insurance Trainee
Personnel Management Specialist
Youth Counselor
Statistician
Criminologist
Social Worker
Case Worker
Counselor
Population Analyst
Probation Officer
Recreation Specialist
Claims Examiner

Faculty

Full-Time	**Part-Time**	**Counselors**
Kenneth Buckner	Karen Donahue	Frank Bianchino
Carole Ginet	Diane Heiken	Bud Long
Linda McDill		

Transfer Information

Sociologists study the groups, institutions, and societies which are formed by humans; the structure and behavior of such groups are analyzed to understand the influence of group activities on individual members and members influence on other members and other groups. The Sociology major is intended to provide undergraduate preparation leading to careers in law, social work, urban and environmental planning, public service, counseling, mental health, and many similar service professions.

Major requirements for upper division standing at:

California State University, Northridge:
Math 15; Soc 1, 3
University of California, Davis:
Soc 1, 2, 3
University of California, Santa Barbara:
Math 15; Soc 1, 5. Select one of the following sequences:
Anthro 2 and 4 or 9
Econ 1, 2 and 4
Hist 1A, 1B
Pol Sc 3 and 7 or 8
Psych 1A and one course after transfer

Sociology Courses

SOC 1 — 3 Units
Introduction to Sociology
Class Hours: 3 lecture

This course is an analysis of human interactions through a study of cultural origins, community organization, collective behavior, social change, institutional growth and social movements as interpreted by the major theoretical constructs in Sociology. *Transfer credit: CSU; UC. CAN: SOC 2*

SOC 2 — 3 Units
Social Problems
Class Hours: 3 lecture

This course covers sociological analysis of the causes and consequences of social problems confronting contemporary U.S. society such as intergroup conflict, sexism, racism, agism, sexual deviance, poverty, crime delinquency, substance abuse, cults (religious, political, psychological), terrorism, health and environmental degradation. Students examine the methodology and use of human skills and resources applied to the study and solution of social problems. *Transfer credit: CSU; UC. CAN: SOC 4*

SOC 3 — 3 Units
Sociological Analysis *(S)*
Prerequisite: Soc 1
Class Hours: 3 lecture

Students will examine the nature and logic of the scientific analysis of society and social institutions. Conceptualization, operationalization and hypothesis construction will be studied as well as the logic of sampling and types of sampling designs. Students will be required to analyze specific data collected in the field. *Transfer credit: CSU; UC*

SOC 4 — 3 Units
Marriage and the Family
Class Hours: 3 lecture

This course explores the meaning and function of committed relationships and examines various aspects of marriage and the family. Sex role socialization, sexuality, the single life, the choice to marry, parenting, dual-career families, conflict in relationships, separation, divorce and remarriage are studied from a historical, cross cultural, sociological and individual perspective. *Transfer credit: CSU*

SOC 5 — 3 Units
Social Psychology
Class Hours: 3 lecture

This course is a study of social relationships. Topics of study include interpersonal attraction, structure and leadership, role and status, prosocial behavior, attitude formation and change, communication and propaganda, nature of prejudice and social change, and conformity. (co-numbered Psych 5) *Transfer credit: CSU; UC*

SOC 6 — 3 Units
The Chicano in Contemporary Society*
Class Hours: 3 lecture

This course is an analysis of the socio-economic and political problems confronting the Chicano with emphasis on proposed solutions. Similarities to other ethnic groups will be incorporated in this analysis. Particular focus is placed on the effects that social institutions have had on the ethnic communities of the Southwest. (co-numbered Ch St 1) *Transfer credit: CSU; UC*

SOC 8 — 3 Units
Minority Group Relations*
Class Hours: 3 lecture

This course is an application of sociological theory to the social processes which affect racial, ethnic, and sexual minorities in the United States. An analysis of the relationship between the functions of the institutions of the society and the problems of the minorities will be studied. *Transfer credit: CSU; UC*

SOC 22A/B — 1-3/1-3 Units
Independent Studies in Sociology
Prerequisite: A previous course in Sociology
Class Hours: 1-3 tutorial

This course is for students who are interested in furthering their knowledge of sociology on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

SOC 60A-Z — 1-3 Units
Topics in Sociology*
Prerequisites: To be determined with each Topic
Class Hours: To be determined with each Topic

This is a special series of courses each of which deals with a specific topic in Sociology not covered in detail in the general Sociology course offerings. Topics courses are announced on a semester basis in the schedule of classes. *Transfer credit: CSU; UC maximum credit 3 units.*

Topics which have been developed include:

60A — 3 Units
Sociological Field Methods
Prerequisite: Soc 1 or Soc 2, or concurrent enrollment in either course
Class Hours: 1 lecture, 6 laboratory

This course is for students who desire to expand their knowledge of sociological theory through both classroom and on-site involvement within governmental and/or social agencies within the community.

*These courses are offered periodically.

Spanish

Study in the Spanish language provides specialists to work in areas such as anthropology, economics, political science, literature, and sociology. While teaching is the principle area of employment, other careers may be found in interpreting, translating, research, diplomacy, libraries, and the publishing business.

Career Opportunities

B.A. Level

Translator
Diplomatic Office
Tutor
Editor
Foreign-Exchange Trader
Foreign Clerk
Foreign Service Officer

Faculty

Full-Time
Alejandro Paredes
Beverly Pearson

Part-Time
Victoria Albright
Grace Bodhaine
Jose Garcia
Susana Goytia-Miller
Ildiko Lewis
Renee Rosenberg
Eduard Thron

Counselors
Don Henderson
Diane Sukiennik

Transfer Information

Major requirements for upper division standing at:
California State University, Northridge:
SPANISH: Engl 30 and 31; Spanish 3, 4.
Additional lower division courses to be taken at CSUN
University of California, Davis:
Spanish 1, 2, 3, 4.
University of California, Santa Barbara:
Spanish 1, 2, 3, 4.

Spanish Courses

SPN 1 — 4 Units
Elementary Spanish I
Class Hours: 4 lecture, 1 laboratory by arrangement
This course is an intensive study of the Spanish language and culture; special emphasis will be given to the skills and knowledge necessary for speaking and writing Spanish and to the unique nature of the people and their history. The language laboratory will be used extensively and students will be expected to arrange an additional hour of language lab each week. *Transfer credit: CSU; UC*

SPN 1A/B — 2/2 Units
Elementary Spanish
Prerequisite: None for 1A. Spn 1A or 1 year of high school Spanish for Spn 1B
Class Hours: 2 lecture, 1 laboratory by arrangement
Spanish 1A/1B offers students an opportunity to take Spanish 1 in two semesters rather than one. The skills and content covered are the same, but offered at half the pace of Spanish 1. Students receiving credit in the Spanish 1A/1B sequence may not receive credit in Spanish 1. *Transfer credit: CSU*

SPN 2 — 4 Units
Elementary Spanish II
Prerequisite: Spn 1 or two years of high school Spanish with grades of C or better.
Class Hours: 4 lecture, 1 laboratory by arrangement
This course covers continued intensive study of the Spanish language and culture; special emphasis will be given to the skills and knowledge necessary for speaking and writing Spanish. Study will cover the unique nature of the people and their history. The language laboratory will be used extensively and students will be expected to arrange an additional hour of language lab each week. *Transfer credit: CSU; UC*

SPN 3 — 4 Units
Intermediate Spanish I
Prerequisite: Spn 2 or three years of high school Spanish with grades of C or better.
Class Hours: 4 lecture, 1 laboratory by arrangement
Students will continue additional study of spoken and written Spanish and Spanish culture. They will develop the ability to read with greater ease by study and discussion in Spanish of representative literary works. Continued emphasis will be placed on oral and written expression. All students will be expected to spend an additional hour per week of study in the language laboratory. *Transfer credit: CSU; UC*

SPN 4 — 4 Units
Intermediate Spanish II
Prerequisite: Spn 3 or four years of high school Spanish.
Class Hours: 4 lecture, 1 laboratory by arrangement
This course covers advanced study of spoken and written Spanish and Spanish culture. Students develop the ability to read with greater ease by study and discussion in Spanish of representative literary works. Continued emphasis will be placed on oral and written expression. All students will be expected to spend an additional hour per week of study in the language laboratory. *Transfer credit: CSU; UC*

SPN 22A/B — 1-3/1-3 Units
Independent Studies in Spanish
Prerequisite: A previous course in Spanish
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of Spanish on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

SPN 31A — 3 Units
Beginning Conversational Spanish
Class Hours: 3 lecture
This is an introductory course for non-native speakers of Spanish, including study of elementary grammar and principles of usage. Designed for students who wish to understand and use Spanish in practical situations.

SPN 31B — 3 Units
Intermediate Conversational Spanish
Prerequisite: Spn 31A or equivalent
Class Hours: 3 lecture
This is an intermediate course for non-native speakers of Spanish. It includes study of grammar and principles of usage, and is designed for students who have some basic conversational Spanish, but who wish to continue work in this area.

SPN 31C — 3 Units
Advanced Conversational Spanish
Prerequisite: Spn 31B or equivalent
Class Hours: 3 lecture
This course emphasizes correct oral communication in Spanish. It is especially geared for the student with a Spanish-speaking background. The music, art, literature, and architecture of Mexico and Spanish America will serve as the main topics of oral presentation and discussion.

SPN 32 — 3 Units
Spanish for Public Employees
Class Hours: 3 lecture
This course covers a study of communication skills for public employees who function in a bilingual situation. Emphasis is on practical and instructional vocabulary. The course is designed to be adapted to the needs of each employee group.

Special Education/ Learning Skills

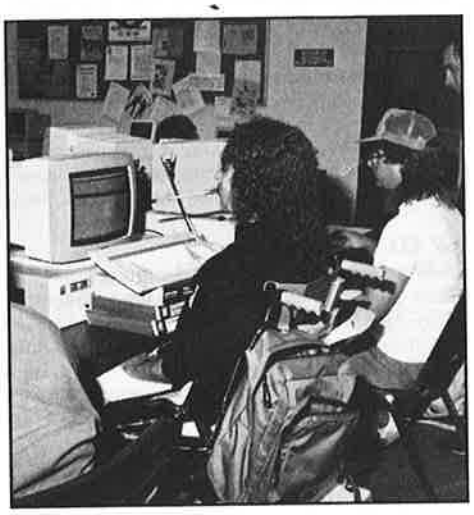
A wide-range of both special education and learning skills courses are provided for students with specially identified needs.

Faculty

Full-Time
Joanna Dillon
Janet Zaboski

Part-Time
Jean Bass
Stanton Lutton
Corinne Lynn
Vera Thau
Denise Vale
Gary Vale

Counselors
Rick Cardoni
Don Henderson



Adapted Computer Technology Courses

ACT 1 — 2 Units
Computer Access Evaluation★
Prerequisite: Eligibility for Disabled Student Programs
Class Hours: 1 lecture, 3 laboratory
This is a self-paced course which evaluates the students needs for special adaptations required to achieve access to the personal computer. Adaptations will be developed based on the students identified needs and using a variety of specialized hardware and software programs.

ACT 2 — 2 Units
Adapted Keyboarding★
Prerequisite: ACT 1 or equivalent
Class Hours: 1 lecture, 3 laboratory
This course is designed to teach keyboarding basics to disabled students who must use adaptive technologies for successful access to the keyboard or screen and/or who are unable to compete successfully in mainstream typing classes. May be taken two (2) times for credit.

ACT 3A — 2 Units
Computer Access I - Beginning★
Prerequisite: ACT 2 or equivalent
Class Hours: 1 lecture, 3 laboratory
This course provides training in the use of computer access technologies which enhance a disabled student's ability to access and use microcomputers.
The course will familiarize students with basic concepts of word processing used by the majority of industry-standard word processors; e.g., WordStar, WordPerfect. May be taken two (2) times for credit.

ACT 3B — 2 Units
Computer Access II - Intermediate★
Prerequisite: ACT 3A or equivalent
Class Hours: 1 lecture, 3 laboratory
Students will enhance their computer access skills through the completion of assignments of projects. May be taken two (2) times for credit.

Learning Skills Courses

In order to be admitted to the Learning Disabilities Program, students must meet the California Community College Learning Disability Guidelines criteria. Program staff provide assessments to determine student eligibility.

LS 1 — 3 Units
Assessment of Learning Skills
Class Hours: 3 lecture
This is a semester course designed for assessment and tutoring of learning disabled students by a specially trained staff. Specialized techniques, materials, texts, and audio-visual equipment are utilized to teach or assess fundamental skills and to support academic instruction for students with special learning styles.

LS 2 — 3 Units
Basic Writing Skills
Prerequisite: Acceptance to the Learning Disabilities Program or concurrent enrollment in LS 1 or LS 20
Class Hours: 3 lecture
This foundation writing course is designed to improve basic writing skills, improve creative thinking, and develop and improve language and intellectual capabilities. It covers basic grammar and usage necessary for writing simple and complex sentences, developing short paragraphs and simple essays. May be taken two (2) times for credit.

LS 3 — 3 Units
Study Skills
Class Hours: 3 lecture
This course focuses upon the fundamental principles of study skills. It is designed for those students who need a specialized approach to study skills. May be taken four (4) times for credit.

LS 4 — 3 Units
Basic Learning Skills
Prerequisite: Acceptance to the Learning Disabilities Program or concurrent enrollment in LS 1 or LS 20
Class Hours: 3 lecture
This highly-structured developmental approach to reading, consists of three mutually reinforcing elements - composition, phonics (the central area of instruction), and reading activities. A multisensory approach in all learning processes is used. May be taken two (2) times for credit.

LS 6 — 3 Units
Techniques of Problem Solving/Language
Prerequisite: Acceptance to the Learning Disabilities Program or concurrent enrollment in LS 1 or LS 20
Class Hours: 3 lecture
This foundation course is designed to improve creative thinking, problem solving, language, and intellectual capabilities. Utilizes AV materials in the language lab as well as individual instruction in the development of critical thinking. May be taken four (4) times for credit.

LS 7 — 3 Units
Techniques of Problem Solving/Math
Prerequisite: Acceptance to the Learning Disabilities Program or concurrent enrollment in LS 1 or LS 20
Class Hours: 3 lecture
This foundation math course is designed to improve creative thinking, problem solving, language, and intellectual capabilities. Utilizes AV materials in the math lab as well as individual instruction in the development of critical thinking. May be taken four (4) times for credit.

LS 8 — 3 Units
Spelling Improvement
Class Hours: 3 lecture
In this foundation course designed to improve spelling efficiency, special emphasis will be placed on developing spelling competence, with everyday words used in oral conversation and written themes.

LS 9 — 3 Units
Personal Development
Class hours: 3 lecture
This course provides an opportunity for people to meet in small groups in order to share thoughts and feelings and personal concerns, with variations for the special learning styles of learning disabled students. It emphasizes development of self concept, realistic appraisal of strengths, interpersonal relations and assertiveness. May be taken four (4) times for credit.

LS 10 — 3 Units
Vocabulary Building
Prerequisite: Acceptance to the Learning Disabilities Program or concurrent enrollment in LS 1 or LS 20
Class Hours: 3 lecture
In this foundation course designed to improve skills, special focus will be placed upon understanding the meaning and origin of "common" basic language words.

LS 12 — 1-3 Units
Tutoring Methods
Class Hours: 1-3 lecture
This basic tutoring foundation course is designed to give tutors the techniques to deal with special learning problems. May be taken four (4) times for credit.

LS 14 — ½-1½ Units
Computer Aided Instruction/Learning Skills
Prerequisite: Acceptance to the Learning Disabilities Program or concurrent enrollment in LS 1 or LS 20
Class Hours: 1½-4½ laboratory
This course provides the student with the opportunity to participate in an individualized computer-based program based on the student's identified learning needs. Programs are available in the areas of problem solving, reading skills, written language skills, basic math skills, spelling, advanced math skills, and computer literacy. May be taken four (4) times for credit.

LS 20 — ½-1½ Units
Assessment of Learning Skills/Lab★
Class Hours: 1½-4½ laboratory
This is open lab for the assessment and tutoring of learning disabled students by specially trained staff. Specialized techniques, materials, texts, and audio-visual equipment are utilized to teach or assess fundamental skills and to support academic instruction for students with special learning style. May be taken four (4) times for credit.

Special Education Courses

SP ED 1 — 3 Units
Survey of Disabilities
Class Hours: 3 lecture
This course is an overview of historical, social, medical, recreational, and educational implications of various physical and learning disabilities. Practical experience in simulated situations is gained to provide insights in the area of disabilities. The course is designed for the disabled student or anyone interested in working with the disabled. *Transfer credit: CSU; UC credit limitations. See counselor.*

SP ED 2 — 3 Units
Independent Living Skills
Class Hours: 3 lecture
This course is designed to provide the disabled student with a variety of practical skills and knowledge about living independently. It includes such things as consumer education, how to work within a budget, adapted homemaking skills and other essential information designed to help the disabled student who wants to be self-sufficient.

SP ED 4 — 1-3 Units
Speech Therapy
Prerequisite: Evaluation by speech pathologist
Class Hours: 1-3 lecture
This course is designed to provide speech therapy for students who are experiencing difficulty with their speech including lisping, stuttering and other related speech problems. May be taken four (4) times for credit.

SP ED 5A — 2 Units
Introduction to Visually Impaired/Braille
Class Hours: 1 lecture, 3 laboratory
This course is designed for those interested in a basic knowledge of the visually impaired and of Braille. An overview of materials, services, and daily living skills needed by the blind and visually impaired will be included.

SP ED 5B — 2 Units
Intermediate Braille
Prerequisite: Sp Ed 5A
Class Hours: 1 lecture, 3 laboratory
This is an advanced course in Braille designed for those students interested in improving their basic Braille skills for their own use or for working with the visually impaired.

SP ED 10A — 3 Units
Beginning American Sign Language
Class Hours: 3 lecture
This is an introductory course to the American Sign Language which is the native language of deaf people. This course includes instruction of basic language structure, manual signs, finger spelling and grammar required for simple manual communication with deaf people. *Transfer credit: CSU*

SP ED 10B — 3 Units
Intermediate American Sign Language
Prerequisite: Sp Ed 10A or equivalent fluency demonstrated to class instructor.
Class Hours: 3 lecture
This is an intermediate course of instruction in the American Sign Language with emphasis in the area of vocabulary, practice in receptive and expressive skills, and study of ASL idioms and syntax. *Transfer credit: CSU*

SP ED 10C — 3 Units
Advanced American Sign Language
Prerequisite: Sp Ed 10B or equivalent demonstrated fluency
Class Hours: 3 lecture
This is an advanced course of study of the American Sign Language for students interested in improving their fluency, vocabulary and communication skills. It is recommended for instructors of the deaf, interpreters, and those interested in working with deaf people. *Transfer credit: CSU*

SP ED 20 — 1½ Units
Adapted Physical Education
Class Hours: 1 lecture, 2 activity
This is a special course designed to meet the needs of students who are unable to participate in regular physical education activity classes. Students will be classified by a physician as to the type of physical activity in which they may participate. Each student works on an individual program in terms of adapted exercise and recreational activities. May be taken four (4) times for credit. *Transfer credit: CSU*

SP ED 22A/B — 1-3/1-3 Units
Independent Studies in Special Education
Prerequisite: A previous course in Special Education
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of special education on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU*

SP ED 24 — 1½ Units
Self-Defense for the Disabled
Class Hours: 1 lecture, 2 activity
This course is designed to provide disabled students with techniques of self-defense based on their individual physical capabilities and resources. May be taken four (4) times for credit. *Transfer credit: CSU*

SP ED 30 — 1 Unit
Career Evaluation★
Prerequisite: Disabled student or referral from Department of Rehabilitation.
Class Hours: ½ lecture, 1½ laboratory
This course is designed to help students explore their present vocational interests and abilities. Each student will have an individual evaluation of his/her aptitude for occupations based upon exploration of various job related tasks regardless of work history or past work skills. Class is designed to enable the student to plan and prepare for realistic vocational goals.

SP ED 31 — 2 Units
Pre-Vocational Skills
Class Hours: 2 lecture
This class is for functionally limited students who have none or very limited work experience. It is an introduction to the world of work, basics of job seeking, employment and vocabulary, employer/employee rights and attitudes, etc.

SP ED 32 — 2 Units
Job Seeking Skills
Class Hours: 2 lecture

This course is for disabled students who wish to improve their job seeking skills and become better acquainted with their rights and obligations as employees. Topics will include decision making, interview techniques, strategies for filling out an application, and employee-employer responsibilities.

SP ED 33 — 1½ Units
Career Exploration
Class Hours: 1 lecture, 1½ laboratory
This class is designed to provide disabled persons opportunities to explore and observe occupational areas in which they have expressed career interest. *Transfer credit: CSU*

Speech

Instruction in speech is both a fundamental skill for all students to possess in following a successful education path and a professional talent that is vital to many careers.

Career Opportunities

(Post-bachelors degree necessary)

Lawyer
Politician
Management Trainee
Speech Therapist
Linguist
Lecturer
Sales

Faculty

Full-Time
Charlene Arnold
Roland Glover
Richard Strong
James Wyman

Part-Time
Marjorie Berg
William Freeman
Drew Lobenstein
Patti Mills
Mary Moore
James Studer

Counselors
Frank Bianchino
Don Henderson

Transfer Information

For the lower division requirements in the Speech major, students are advised to consult a counselor and the catalog of the four-year school to which they intend to transfer.
Major requirements for upper division standing at:
California State University, Northridge:
Communication Studies option: Hum 3.
General Major option: Speech 5, additional lower division courses to be taken after transfer.
California State University, Sacramento:
Communication Studies Major: Speech 1 or 2, 7.
General option: Speech 7, 10A.
Media Communication option: RT 3A, 7A, 8.
University of California, Davis:
Rhetoric Major: Speech 2, 7.

Speech Courses

SPCH 1 — 3 Units
Introduction to Speech
Class Hours: 3 lecture
This course is designed to prepare students to be effective oral communicators in a public speaking context through instruction in basic communication theory, appropriate delivery skills, thorough research, and common organizational patterns. Course also offers practical training in feedback and listening skills. *Transfer credit: CSU; UC*

SPCH 2 — 3 Units

Elements of Public Speaking
Prerequisite: Speech 1 or equivalent
Class Hours: 3 lecture
Students in this class prepare and make formal delivery of various types of speeches, particularly those types requiring persuasive rhetoric; special attention is given to content and organization, audience motivation, and evaluation. Required of speech majors. *Transfer credit: CSU; UC*

SPCH 3 — 3 Units
Voice and Diction
Class Hours: 3 lecture
Designed for Theatre, Forensics and Broadcasting students but open to all others, this course provides instruction in correct pronunciation, breathing, and control techniques. It includes the theory and practice of voice control as well as the study of regional and foreign dialects. May be taken two (2) times for credit. (co-numbered RT 8, ThA 3) *Transfer credit: CSU; UC credit limitations. See counselor.*

SPCH 4 — 3 Units
Introduction to Interpersonal Communications
Class Hours: 3 lecture
This course is concerned with the dynamics of interpersonal communication. Symbolic interaction, nonverbal communication, self-perception, listening skills, conflict resolution, and problem solving will be the main topics studies. *Transfer credit: CSU; UC*

SPCH 5 — 3 Units
Elementary Oral Interpretation
Prerequisite: Speech 1 or equivalent
Class Hours: 3 lecture
This course covers principles and techniques of interpretive reading of prose with understanding and appreciation and evaluation of the literature selected for reading. This is a performance class. *Transfer credit: CSU; UC*

SPCH 7 — 3 Units
Argumentation and Debate
Class Hours: 3 lecture
This class is a course in the theory, methodology, and practice of critical listening, critical thinking and oral argument. The course includes training in propositions, methods of analysis, stock issue policy analysis, evidence and proof, cross-examination considerations in oral argument. The course includes an examination of the types of debatable propositions, listening, note-taking, research methodology, and delivery skills essential to effective oral advocacy. The course includes exposure to team and Lincoln-Douglas debate formats on class selected topics and issues. A final examination is required. *Transfer credit: CSU; UC credit limitations. See counselor.*

SPCH 10A/B/C/D — 2/2/2/2 Units
Forensics
Class Hours: 1 lecture, 3 laboratory
This course provides training, rehearsal, performance and practicum necessary to a competitive speech team. It provides training in argumentation and debate, informative and persuasive speaking, impromptu and extemporaneous speaking. Students research current political economic, legal and social problems. This course provides one-to-one training between student and instructor. Students are expected to participate in either interscholastic competition and/or speakers bureaus for various requesting community groups. *Transfer credit: CSU; UC*

SPCH 16 — 3 Units
Readers Theatre
Prerequisite: Eligibility for Speech 1
Class Hours: 3 lecture
The concepts and practices of oral interpretation of literature are studied.Students are involved in supervised activities in performing readers' theatre before community and college audiences. (co-numbered ThA 16) *Transfer credit: CSU; UC*

SPCH 22A/B — 1-3/1-3 Units
Independent Studies in Speech
Prerequisite: A previous course in Speech
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of speech on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

SPCH 56 — 3 Units
Business and Professional Speech
Class Hours: 3 lecture
Designed to hone the speech skills of business and industrial personnel in leadership positions, this course covers topics as presentation techniques, group and meeting dynamics, argumentation and persuasion, and structure content and organizations. Individual attention will be given to the needs and interests of the student. (co-numbered Bus 56) *Transfer credit: CSU*

Theatre Arts

People who major in the various specialties of the dramatic arts tend toward a professional career in theatre, television, or films. A large number go into teaching or into community theatre activities. Many have used training in theatre arts toward attaining confidence and self-assurance in professions such as law, the ministry, or business.

Career Opportunities

Actor/Actress
Assistant Director
Assistant Stage Manager
Stage Technician
Lighting Technician
Sound Technician
Production Assistant
Stagehand
Playwright

Faculty

Full-Time
Katherine Lewis
Leslie Wieder

Part-Time
Roy Howell

Counselor
Don Henderson

Transfer Information

Major requirements for upper division standing at:
California State University, Northridge:
ThA 2A, 2B, 4A, 4B, 20, 23.
Th 300 to be taken after transfer.

■ Theatre Arts — Acting

Associate in Arts Degree

This program is designed to emphasize skills required for acting in those desiring to transfer to a university or college or to seek to enter the acting profession.

Required Courses:		**Units**
ThA 1	Intro to the Theatre	3
ThA 2A	Beginning Acting	3.5
ThA 2B	Intermediate Acting	3.5
ThA 2C	Advanced Acting I	3.5
ThA 3	Voice and Diction	3
ThA 10	Production and Performance	3-3
ThA 20	Stagecrafts	3
ThA 24	Theatrical Costume and Makeup	3

Total minimum units required in major area — 28.5

Recommended Courses: Engl 15AB, 17; Mus 13A; PE 48A; ThA 2D, 9

See Degree Requirements and Transfer Information section for General Education requirements.

■ Theatre Arts — Directing

Associate in Arts Degree

This program is designed to emphasize skills required for directing in those desiring to transfer to a university or college or to seek to enter the directing profession.

Required Courses:		**Units**
ThA 1	Intro to the Theatre	3
ThA 2A	Beginning Acting	3.5
ThA 2B	Intermediate Acting	3.5
ThA 10	Production and Performance	3-3
ThA 15A	Beginning Stage Direction	3
ThA 15B	Intermediate Stage Direction	3
ThA 20	Stagecrafts	3

Total minimum units required in major area — 25

Recommended Courses: Engl 15AB, 17; ThA 21, 24

See Degree Requirements and Transfer Information section for General Education requirements.

Theatre Arts Courses

Students planning to take more than 12 units of theatre courses marked * and/or more than 12 units of those marked with † should consult a counselor. The UC system accepts only that number of units in the respective courses.

ThA 1 — 3 Units
Introduction to the Theatre
Class Hours: 3 lecture
This course is an introduction to the theatre as an art form, and an appreciation of the theatre, past and present. The course will pay particular attention to the significance of dramatic art in human culture and to the development of critical thinking and writing skills pertinent to the analysis of dramatic performance. *Transfer credit: CSU; UC*

ThA 2A* — 3½ Units
Beginning Acting
Class Hours: 2 lecture, 4½ laboratory
This is a beginning course in the art of acting, which emphasizes exercises designed to develop individual insight, technique, and concentration. The course focuses on improvisation and includes some scene work. *Transfer credit: CSU; UC credit limitations. See counselor.*

ThA 2B* — 3½ Units
Intermediate Acting
Prerequisite: ThA 2A or equivalent level of skill
Class Hours: 2 lecture, 4½ laboratory
This course covers further instruction in acting techniques and characterization which includes exercises in pantomime and improvisation. The course will include practical experience with scenes from plays and additional work with stage movement. *Transfer credit: CSU; UC credit limitations. See counselor.*

ThA 2C* — 3½ Units
Advanced Acting I
Prerequisite: ThA 2B or equivalent level of skill
This course covers advanced instruction in acting techniques and characterization with emphasis on refinement of skills including timing, sense memory, and vocal styles. Students will perform in a variety of scenes from plays and continue work with stage movement. *Transfer credit: CSU; UC credit limitations. See counselor.*

ThA 2D* — 3½ Units
Advanced Acting II

Prerequisite: ThA 2C or equivalent level of skill
Class Hours: 2 lecture, 4½ laboratory
This class covers further advanced instruction in characterization with emphasis on timing, vocal styles and sense memory. Students will perform in a variety of scenes from plays. *Transfer credit: CSU; UC credit limitations. See counselor.*

ThA 3 — 3 Units
Voice and Diction
Class Hours: 3 lecture
Designed for Theatre, Forensics and Broadcasting students but open to all others, this course provides instruction in correct pronunciation, breathing, and control techniques. It includes the theory and practice of voice control as well as the study of regional and foreign dialects. May be taken two (2) times for credit. (co-numbered RT 8, Spch 3) *Transfer credit: CSU; UC credit limitations. See counselor.*

ThA 4A — 3 Units
History of the Theatre
Class Hours: 3 lecture
This course is a history of theatrical development from primitive through present. The first semester covers the periods from early Greek through the Italian Renaissance. This course is required of Theatre Arts majors. *Transfer credit: CSU; UC*

ThA 4B — 3 Units
History of the Theatre
Class Hours: 3 lecture
This class is a history of theatrical development from English Renaissance to the present. It is required of Theatre Arts majors. *Transfer credit: CSU; UC*

ThA 9* — 3 Units
Acting for Film and TV
Class Hours: 2 lecture, 3 laboratory
Students will learn the techniques required in acting before the camera, blocking, movement, rapid line learning, etc., as it pertains to film and TV, and as it varies from stagework. Studied also will be microphone techniques and opportunities to perform in student-directed films and television shows. May be taken four (4) times for credit. (co-numbered RT 9) *Transfer credit: CSU; UC credit limitations. See counselor.*

ThA 10† — 3 Units
Production and Performance
Class Hours: 144 rehearsal total
This course offers credit for a range of supervised activities relative to college-sponsored drama production. May be taken four (4) times for credit. *Transfer credit: CSU; UC credit limitations. See counselor.*

ThA 15A — 3 Units
Beginning Stage Direction
Prerequisite: ThA 1 or (ThA 2A or ThA 20)
Class Hours: 2 lecture, 3 laboratory
This is an introductory study of the art and craft of stage direction, past and present. Course will include practical experience in directing scenes by major playwrights. Activities will be coordinated with ThA 2A/B/C. *Transfer credit: CSU; UC credit limitations.*

ThA 15B — 3 Units
Intermediate Stage Direction
Prerequisite: ThA 15A
Class Hours: 2 lecture, 3 laboratory
This course is a continuation of the study of the art and craft of stage direction with emphasis on practical experience with student productions. Activities will be coordinated with ThA 2A/B/C. *Transfer credit: CSU; UC*

ThA 16* — 3 Units
Readers Theatre
Prerequisite: Eligibilty for Speech 1
Class Hours: 3 lecture
The concepts and practices of oral interpretation of literature are studied. Students are involved in supervised activities in performing readers' theatre before community and college audiences. (co-numbered Spch 16) *Transfer credit: CSU; UC credit limitations. See counselor.*

ThA 20† — 3 Units
Stagecrafts
Class Hours: 2 lecture, 3 laboratory
This course emphasizes the theory and practice of set construction, lighting operations, audio operations, painting, costuming, makeup, and special effects. It is a hands-on class which teaches the basic skills in all areas of performing arts production. *Transfer credit: CSU; UC*

ThA 21* — 3 Units
Playwriting
Class Hours: 3 lecture
This course is designed for the student to develop his skills in writing for the theater with the possible opportunity of production. (co-numbered Engl 25) *Transfer credit: CSU*

ThA 22A/B — 1-3/1-3 Units
Independent Studies in Theatre
Prerequisite: A previous course in Theatre Arts
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of theatre arts on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU; UC credit limitations. See counselor.*

ThA 23† — 3 Units
Lighting and Scene Design
Class Hours: 2 lecture, 3 laboratory
This course deals with the study of basic lighting and sound theories, equipment procedures, and theatrical effects for stage productions. The fundamentals of theatrical scene design and construction will also be studied. *Transfer credit: CSU; UC*

ThA 24† — 3 Units
Theatrical Costume and Makeup
Class Hours: 2 lecture, 3 laboratory
This course deals with the study of the fundamentals of theatrical costume design and construction and design and application of theatrical makeup. *Transfer credit: CSU; UC*

Urban Studies

This is an interdisciplinary program focusing on major problems which stem from the complexities and pressures of the urban environment in a highly industrialized society. The degree may lead to employment in governmental and voluntary agencies concerned with planning and providing human services. Some students may wish to enter graduate study in such professional schools as city planning, public administration, social welfare, or law.

Career Opportunities

(Bachelors or advanced degree required)

City Planner
Public Administration
City Manager
Urban Economist
Recreation Specialist
Urban Historian
Elected Official
Law Enforcement
Urban Design and Redevelopment
Substance Abuse Specialist
Traffic Analyst
Community Relations

Faculty

Full-Time
Jerry Straughan

Counselors
Frank Bianchino
Bud Long

Transfer Information

Major requirements for upper division standing at:
California State University, Northridge:
Econ 1, 2; Urban 1A.
See also AS degree programs in Administration of Justice.

Urban Studies Courses

URBAN 1A — 3 Units
Contemporary Urban Issues
Class Hours: 3 lecture
This is an introductory course for students who are considering a career in public services. The course focuses on the variety of current issues related to the urban setting such as the ecological effect of urban growth, governmental structure and financing necessary to meet the public demand for government services, cooperation and conflict between federal, state and local governmental bodies, housing, education, law enforcement, racial conflict, land use and urban renewal. This course fulfills the state requirement for study of American Institutions. *Transfer credit: CSU; UC*

URBAN 1B — 3 Units
Contemporary Urban Issues
Class Hours: 3 lecture
This is an introductory course with emphasis placed on field research in addition to lectures and library study in the areas of: ecological effects of urban growth; governmental structure and financing; cooperation and conflict between federal, state and local governmental bodies; housing; law enforcement; education; racial conflict; land use and urban renewal. *Transfer credit: CSU; UC*

URBAN 22A/B — 1-3/1-3 Units
Independent Studies in Selected Urban Issues
Prerequisite: A previous course in Urban Studies
Class Hours: 1-3 tutorial
This course is for students who are interested in furthering their knowledge of urban studies on an independent study basis. The project selected must be approved by an instructor in the discipline and the Division Director. The project will involve library work or laboratory work or field trips. May be taken for a maximum of 6 units. *Transfer credit: CSU*

URBAN 60A-Z — 1-3 Units
Topics in Urban Studies
Prerequisites: To be determined with each Topic
Class Hours: To be determined with each Topic
This is a special series of courses each of which deals with a specific topic in Urban Studies not covered in detail in the general Urban Studies course offerings. Topics courses are announced on a semester basis in the schedule of classes. *Transfer credit: CSU*

URBAN 89A-Z — ½-3 Units
Institutes in Urban Studies★
Prerequisite: Urban Service Personnel
Class Hours: Variable
A short term lecture-seminar series on specialized urban issues designed for Urban Studies Personnel. *Transfer credit: CSU*

COLLEGE FACULTY AND ADMINISTRATION

Governing Board

Dr. James T. Ely — President
Ruth Oren — Vice President
Timothy D. Hirschberg
Gregory Kampf
Julian A. Tarleton, Sr.

District Administration

Chancellor . . . . . Barbara A. Derryberry
Executive Vice Chancellor . . . . . Dr. W. Ray Hearon
Vice Chancellor, Administrative Services . . . Tom E. Kimberling
Vice Chancellor, Instructional Services . . . . . John D. Tallman

Administration of the College

President . . . . . Stanley L. Bowers

Office of Administrative Services:

Vice President, Administrative Services . . . . . Lawrence G. Lloyd (acting)
Director, Maintenance and Operations . . . . . Ben Brown

Office of Instructional Services:

Vice President, Instructional Services . . . . . A. Darlene Pacheco
Dean, General/Transfer Education . . . . . Alicia A. Long (acting)
Dean, Vocational Education . . . . . Position Vacant
Director, Continuing Education . . . . . Jack Fleming
Director, Humanities Division . . . . . Sidney Adler
Director, Physical Education/Health Science Division . . . . . F. Paul Dunham
Director, Science/Mathematics/Engineering Division . . . . . Floyd Martin
Director, Social Science Division . . . . . Arthur J. Bettini
Director, Business/Technology Division . . Donald O. Matthews
Director, Learning Resources . . . . . Edward F. Tennen

Office of Student Services:

Vice President, Student and Educational Services, Admissions and Records . . . . . Floyd D. Thionnet
Dean, Student Services . . . . . Jose de la Pena
Dean, Counseling . . . . . William I. Bendat
Director, Athletics . . . . . F. Paul Dunham

Organization of Departments and Programs

Coordinators

Child Care/Child Development . . . . . Linda A. Cravens
Equine - Rancho Sierra Vista . . . . . Donald Anderson
Extended Opportunity Program Services . . . . . Paul K. Pagson
Exotic Animal Training/Management . . . . . Gary L. Wilson
Institutional Research . . . . . Position Vacant
Learning Assistance Center . . . . . Patricia E. Dozen
Nursing Science . . . . . Brenda Shubert
Special Education . . . . . Janet M. Zaboski
Student Health Services . . . . . Evelyn G. Moore

Department Heads

Behavioral Sciences . . . . . Carol Woodward
Business . . . . . Shay Collier
Fine Arts . . . . . Frank V. Sardisco
History and Institutions . . . . . Robert Herman
Language and Literature . . . . . Richard Edwards
Life Sciences . . . . . David Bishop
Mathematics . . . . . J. Fred Schaak
Performing Arts . . . . . Richard Strong
Physical Education . . . . . MoDean McCullough
Physical Sciences . . . . . Richard Kurtik

Facilitators

Assessment . . . . . Annette Burrows
Business Information Systems . . . . . Marjorie L. Corbell
Communications . . . . . John M. Grzywacz-Gray
Electronics/Engineering . . . . . Balazs Becht
Fitness Lab . . . . . Delbert M. Parker
Foreign Language Projects . . . . . Beverly J. Pearson
Humanities/Forum . . . . . John Davie
International Education . . . . . Gerald Bridgeman
LET/Physics . . . . . Clint D. Harper
Matriculation Development/Advise . . . . . Francis S. Bianchino
Trades and Industry . . . . . Mitchell L. Smith
Transfer/Transition . . . . . Susan Izumo
VEA Gender Equity . . . . . Donna P. Allyn
Women's Program . . . . . Carole Ginet

Title IX Representative

Dr. Darlene Pacheco
Vice President, Instruction
Administration Building, Office Number A-159
Telephone Number: (805) 378-1403
On Campus Extension: 1403

504 Facilitator (Handicapped)

Ms. Jan Zaboski
Student Services Building, Office Number SS-111
Telephone Number: (805) 378-1461
On Campus Extension: 1461

Title V Facilitator (Affirmative Action)

Mr. Roland Glover
Creative Arts Building, Office Number CA-118
Telephone Number: (805) 378-1493
On Campus Extension: 1493

Full-Time Certificated Staff

(Date) indicates year of employment at Moorpark College. Faculty rank determined by Moorpark College Academic Senate.

Adler, Sidney (1968)
Director, Humanities Division
B.A., M.A., City College of New York;
Ph.D., University of Southern California.

Aguilera, Christine S. Ruiz (1972)
Professor, Computer Science/Mathematics
B.A., University of California, Irvine;
M.A., University of California, San Diego;
M.S., University of California, Los Angeles.

Aiken, Kirk (1969)
Professor, Art
B.A., University of Southern California;
M.A., California State University, Los Angeles.

Alexander, Judy (1968)
Professor, Nutritional Science/Health Science
B.S., University of California, Los Angeles;
M.S., California State University, Northridge.

Allen, Judith (1968)
Professor, English
A.B., Pennsylvania State University;
M.A., California State University, Sacramento;
M.L.S., Immaculate Heart College.

Allyn, Donna P. (1988)
Instructor, Counseling
B.S., M.A., University of Hawaii.

Anderson, Donald (1968)
Coordinator, Equine - Rancho Sierra Vista
Professor, Agriculture
B.S., California State University, Fresno;
M.A., California Polytechnic State University, San Luis Obispo; Ph.D., Colorado State University, Fort Collins, Colorado.

Arnold, Charlene (1986)
Assistant Professor, Speech
B.A., M.A., California State University, Northridge.

Barker, Beverly J. (1989)
Instructor, Mathematics
B.A., Pomona College;
M.S., California State University, Northridge.

Becht, Balazs (1983)
Professor, Astronomy/Laser/Physics
B.S., M.S., California State University, Northridge.

Bendat, William I. (1970)
Dean, Counseling
B.A., University of California, Los Angeles;
M.A., San Diego State University;
Ph.D., Nova University.

Berg, Eugene (1970)
Professor, Chemistry
A.B., University of California, Los Angeles;
M.S., California State University, Long Beach;
Ph.D., University of California, Los Angeles.

Beron, Alberto (1971)
Professor, Mathematics
B.S., M.A., California State University, Los Angeles.

Bettini, Arthur J. (1967)
Director, Social Science Division
B.A., M.A., University of California, Los Angeles.

Bianchino, Francis S. (1977)
Professor, Counseling/Psychology
B.A., St. Francis College, Brooklyn, New York;
M.S., St. John's University, Jamaica, New York;
Ph.D., U.S. International University, San Diego.

Bishop, David (1968)
Department Head, Life Sciences,
Professor, Biology/Microbiology
B.S., Washington State University;
M.A., University of California, Santa Barbara.

Bittner, James L. (1979)
Professor, Physical Education/Health Science
B.A., Mt. Union College, Ohio;
M.A., Western State College, Colorado;
M.A., California Lutheran College.

Black, Richard (1968)
Professor, English
B.A., M.A., University of California, Santa Barbara.

Bowen, Donald C. (1967)
Professor, Accounting
B.S., San Diego State University;
M.B.A., University of California, Los Angeles;
M.S., California State University, Northridge.

Bowers, Stanley, L. (1977)
President
A.A., Pasadena City College;
B.A., California State University, Los Angeles;
M.A.T., The Johns Hopkins University;
Ed.D., University of Southern California.

Bridgeman, Gerald (1969)
Professor, Political Science
A.B., M.A., University of California, Berkeley.

Broadbooks, Jane M. (1986)
Associate Professor, Mathematics
B.S., University of Michigan;
M.A., Washington University.

Brown, Daniel P. (1986)
Associate Professor, History
B.A., Ball State University, Muncie, Indiana; M.A., Colorado State University, Fort Collins, Colorado.

Buckner, Kenneth (1968)
Professor, Sociology
B.S., M.A., University of Southern California.

Byrne, Denise J. (1981)
Professor, Nursing
B.S.N., M.S.N., California State University, Los Angeles.

Cardoni, Richard F. (1980)
Professor, Counseling
B.S., M.S., University of Arizona.

Cochee, Thomas W. (1976)
Professor, Administration of Justice
B.S., California State University, Los Angeles;
M.A., University of California, Berkeley.

Collier, Shay (1972)
Department Head, Business
Professor, Business Information Systems
B.A., Cornell College, Iowa;
M.A.E., California Lutheran College.

Copsey, Cecile M. (1968)
Professor, History
B.A., University of California, Berkeley;
M.A., University of California, Los Angeles.

Corbell, Marjorie L. (1970)
Professor, Business Information Systems
A.A., Kansas City Junior College;
B.S., Central Missouri State College;
M.A., California State University, Long Beach.

Coster, Jan Kilian (1972)
Professor, Philosophy
B.A., Harvard University;
M.A., University of California, Santa Barbara.

Cravens, Linda A. (1988)
Coordinator, Child Care/Child Development
Instructor, Child Development
B.A., University of California, Santa Barbara; M.A., California State University, Northridge.

Dale, Gillian M. (1988)
Instructor, English
B.A., Mount Holyoke College, Maryland;
M.A., University of Southern California.

Davie, John (1971)
Professor, English/Humanities
B.A., M.A., University of California, Santa Barbara.

de la Peña, Jose F. (1988)
Dean, Student Services
A.A., Laredo Junior College, Laredo, Texas;
B.A., Texas A&I University, Kingsville, Texas;
M.A., San Jose State University.

Dillon, Joanna P. (1980)
Professor, Learning Disabilities
B.S., University of Illinois;
M.S., California Lutheran College.

Dodgen, William W. (1971)
Professor, Art
B.A., Drury College, Springfield, Missouri;
M.F.A., Wichita State University, Kansas.

Dozen, Patricia E. (1988)
Instructor/Coordinator, Learning Assistance Center
B.A., M.A., California State University, Long Beach.

Dunham, F. Paul (1967)
Director, Physical Education/Health Science Division; Director, Athletics
B.A., University of California, Santa Barbara; M.A., California State University, Northridge.

Edwards, Richard (1970)
Department Head, Language and Literature;
Professor, English
A.B., University of California, Santa Barbara;
M.A., Yale University.

Ekback, Hugo (1971)
Professor, English/Humanities
B.A., University of California, Riverside;
M.A., California State University, Chico.

Farrell, Judith (1974)
Professor, Psychology
A.A., Ventura College; B.A., M.A., California State University, Northridge.

Fecht, Gerald R. (1969)
Professor, History/Humanities/Marketing
A.A., Los Angeles Valley College; A.B., M.S., Ph.D., University of Southern California.

Feingold, Janice C. (1989)
Instructor, Business
B.A., University of California, Davis;
M.S., California State University, Northridge.

Fierro, Frank (1970)
Professor, Chicano Studies/History/Psychology
A.A., Los Angeles Valley College; B.A., M.A., California State University, Northridge.

Fink, Kathryn E. (1981)
Associate Professor, Mathematics
B.A., University of California, Santa Cruz;
M.A., University of Oregon.

Fink, Paul (1970)
Professor, Philosophy
B.A., Pennsylvania State University;
M.A., University of Rochester.

Fleming, Jack (1968)
Director, Continuing Education
B.A., California State University, Sacramento;
M.A., California Lutheran College.

Garber, Norman (1986)
Instructor, English
B.A., University of Connecticut; M.A., Ph.D., University of California, Santa Barbara.

Ginet, Carole (1968)
Professor, Sociology/Humanities/Psychology
A.B., University of California, Berkeley;
M.S., University of Southern California.

Glover, Roland (1968)
Professor, Speech
B.A., California State University, Los Angeles;
M.A., Mount St. Mary's College.

Gonzalez, Joseph (1971)
Professor, History
A.A., Santa Barbara City College; B.A., M.A., Ph.D., University of California, Santa Barbara.

Grzywacz-Gray, John M. (1971)
Professor, Photography/Commercial Art
Institute of Design, Chicago.

Gucciardo, Peter (1971)
Professor, Economics
A.B., California Lutheran College;
M.A., University of Southern California.

Halleran, Ronald (1975)
Professor, Health Science/Physical Education
B.S., California State University, Hayward;
M.S., Utah State University;
M.A., California Lutheran College.

Hanft, John (1967)
Professor, English
B.A., University of California, Riverside;
M.A., California State University, Chico.

Harper, Clint D. (1978)
Professor, Laser/Physical Science/Physics
B.S., M.S., California State University, Northridge;
A.M., Ph.D., University of Southern California.

Harris, Verle D. (1968)
Professor, Drafting Technology
B.S.E., California State University, Long Beach.

Henderson, Donald (1974)
Professor, Counseling
B.A., Austin College;
M.S., California State University, Los Angeles.

Herman, Robert (1968)
Department Head, History, and Institutions; Professor, Political Science/Economics
B.A., M.A., University of California, Santa Barbara.

Heydenreich, John (1971)
Professor, Counseling
B.S., University of Southern California; M.S., California State University, Los Angeles.

Hughes, Frances E. (1985)
Professor, Nursing
R.N., Fresno General Hopital; B.A., California State University, Fresno; M.S. in Nursing, University of California, Los Angeles; M.Ed., University of British Columbia.

Hyams, Alan (1971)
Professor, Music
B.A., M.A., California State University, Los Angeles.

Ingersoll, Orbie (1967)
Professor, Music
B.A., California State University, Northridge; M.A., University of California, Santa Barbara.

Ingram, Edna M. (1986)
Associate Professor, Counseling
B.A., Roosevelt University, Chicago, Illinois; M.A., California State University, Northridge.

Izumo, Susan (1981)
Professor, Counseling
A.B., M.A.T., Whittier College; M.S., California Lutheran College.

Kay, David (1984)
Professor, Computer Information Systems
B.A., M.S., California State University, Northridge.

Keever, John (1969)
Professor, Physical Education
B.A., University of California, Santa Barbara; M.A., California State University, Chico.

Keyser, Marshall R. (1974)
Professor, Business
B.S., Shippenburg State College, Pennsylvania; M.S., Ph.D., University of Pittsburgh, Pennsylvania.

Kurtik, Richard (1971)
Department Head,, Physical Sciences; Professor, Chemistry/Environmental Science/-Physical Science
B.S., California State College; M.A., University of California, Santa Barbara.

La Sota, Nancy E. (1986)
Assistant Professor, Nursing
B.S., Villanova University College of Nursing, Villanova, Pennsylvania; M.N., U.C.L.A. School of Nursing, Los Angeles, California.

LaBarge, Mary L. (1983)
Associate Librarian, Professor, Mathematics
B.A., University of California, Santa Barbara; M.L.S., University of Southern California.

Lewis, Katherine (1975)
Professor, Theatre Arts
B.A., M.A., University of California, Los Angeles; Ph.D., University of California, Santa Barbara.

Lloyd, Lawrence G. (1967)
Vice President, Administrative Services (acting)
A.B., M.A., University of Southern California.

Loiselle, Linda S. (1981)
Professor, Nursing
B.S.N., University of Illinois Medical Center, Chicago; M.S.N., California State University, Los Angeles.

Long, Alicia A. (1979)
Dean, General/Transfer Education (acting)
B.A., University of Minnesota; M.A., California State University, Northridge.

Long, Knox T. (1968)
Professor, Counseling/History
B.A., University of California, Santa Barbara; M.A., California State University, Los Angeles.

Lopez, Diana (1970)
Professor, English
A.A., Ventura College; B.A., M.A., San Francisco State University; Ed.D., Nova University, Florida.

Lopez, Robert (1971)
Professor, Archaeology/Anthropology
B.A., M.A., California State University, Northridge.

MacTague, Ray (1974)
Professor, Buiness
A.A., Orange Coast College; B.S., California State University, Long Beach; M.B.A., California State University, Northridge; M.A., California Lutheran College.

Martin, Floyd (1967)
Director, Science/Mathematics/Engineering Division
B.S., M.A., Arizona State University.

Matsuda, Stella S. (1980)
Professor, Dance
B.S., University of California, Los Angeles; M.A., California Lutheran College.

Matthews, Donald O. (1988)
Director, Business and Technology Division
A.A., Ventura College.

McAdam, Thomas M. (1980)
Professor, Biology/Agriculture
B.A., California State University, Northridge; M.S., California Polytechnic State University, San Luis Obispo.

McCullough, MoDean (1969)
Department Head/, Professor, Physical Education
B.S., Jamestown College, North Dakota; M.S., University of North Dakota.

McDill, Linda (1986)
Associate Professor, Sociology/Psychology
B.A., M.A., Pepperdine University.

Mehr, Sheldon (1970)
Professor, Music
B.A., University of California, Los Angeles; M.A., California State University, Los Angeles. (Sabbatical, Fall 1989)

Mendoza, Gilbert R. (1973)
Professor, Physical Education
B.A., California State University, Fresno; M.A., California Polytechnic State University, San Luis Obispo.

Meyer, Harold F. (1969)
Professor, Physics/Mathematics/Engineering
B.S., M.A., California State University, Long Beach.

Miller, Alfred J. (1972)
Professor, Radio/Television
A.B., University of North Carolina; M.S., University of Illinois.

Miller, Larry O. (1971)
Professor, Biology/Physiology
B.A., M.A., Ph.D., University of California, Santa Barbara.

Miller, Robert W. (1967)
Professor, Chemistry/Environmental Science
A.B., Temple University; M.S., University of Arizona.

Molnar, Charles D. (1968)
Professor, Mathematics
B.S., Harvey Mudd College; M.A., University of California, Riverside.

Monteiro, Sergio Lara P. (1986)
Associate Professor, Electronics/Laser/Physics
B.S., Federal University, Rio de Janeiro; M.S., University of Wyoming; M.S., Ph.D., Washington State University.

Moore, Evelyn G. (1974)
Professor/College Nurse, Coordinator, Student Health Services
R.N., Jefferson Medical College Hospital, Pennsylvania; B.S., P.H.N., Catholic University of America, Washington, D.C.; M.A.E., California Lutheran College.

Moore, Linda (1968)
Professor, Physical Education/Health Science/Humanities
B.A., Purdue University; M.A., California Lutheran College. (Sabbatical, 1989-90)

Murphy, David K. (1969)
Professor, Chemistry/Computer Science
B.S., University of California, Berkeley; M.A., Ph.D., University of California, Santa Barbara.

Murphy, Susan (1972)
Professor, Computer Science
B.S., University of Illinois; M.S., Ph.C., University of California, Los Angeles; M.S., University of California, Santa Barbara.

Naseri, Muthena (1974)
Professor, Environmental Science
B.S., Arkansas State University; M.S., Kansas State University.

Nordquist, Alvyn (1967)
Professor, Physical Education
B.A., San Diego State University; M.A., California State University, Long Beach.

Noyes, Jack (1970)
Professor, Art/Commercial Art
B.S., M.A., University of Michigan.

O'Rourke, Elane (1989)
Instructor, Philosophy
B.A., Scripps College, Claremont, California; M.A., California State University, Los Angeles.

Ogden, Gary (1976)
Professor, Biology/Botany
A.B., M.A., California State University, Fresno; Ph.D., University of California, Santa Barbara.

Outland, Barbara (1976)
Professor, English/Reading
B.A., San Diego State University; M.A., California State University, Los Angeles.

Pacheco, A. Darlene (1969)
Vice President, Instructional Services
B.A., M.A., Ed.D., Colorado State University.

Pagson, Paul K. (1971)
Professor/Coordinator, Extended Opportunity Program Services
B.A., Loyola University, Los Angeles; M.S., Mount St. Mary's College.

Paredes, Alejandro (1989)
Instructor, Spanish
B.A., California State University, Long Beach; M.A., Ph.D., University of Southern California.

Parker, Delbert M. (1969)
Professor, Physical Education/Health Science
B.S., M.S., University of California, Los Angeles.

Patterson, James (1974)
Professor, Exotic Animal Training and Management
B.S., California StatePolytechnic University, Pomona; M.A., California Polytechnic State University, San Luis Obispo.

Pearson, Beverly J. (1967)
Professor, Spanish
B.A., University of Michigan; M.A., University of California, Berkeley.

Pollock, Steven J. (1968)
Professor, Psychology
B.A., Whitman College, Washington; M.A., Ph.D., Claremont Graduate School, California.

Rahnamaie, Mahyad Z. (1988)
Instructor, Mathematics
B.S., Pahlavi University, Iran; M.S., Ph.D., University of Southern California; M.S., California State University, Northridge.

Raufman, Cecilia (Lisa) (1976)
Professor, Counseling
B.A., University of California, Los Angeles; M.S., California State University, Los Angeles. (Sabbatical, 1989-90)

Rees, Gary W. (1975)
Professor, Geology/Geography
B.A., University of California, Los Angeles; M.A., California State University, Northridge.

Reynolds, Jack G. (1969)
Professor, Anatomy/Anthropology/Zoology
B.A., M.A., University of California, Berkeley.

Ritchie, Deborah J. (1986)
Assistant Professor, Mathematics
A.A., College of Sequoias; B.S., M.A., California Polytechnic State University, San Luis Obispo.

Rode, Benjamin L. (1989)
Instructor, Mathematics
B.A., M.A., University of California, San Diego.

Sardisco, Frank V. (1968)
Department Head, Fine Arts; Professor, Art
B.A., University of California, Los Angeles; M.F.A., Otis Art Institute.

Schaak, J. Fred (1981)
Department Head, Mathematics;
Associate Professor, Mathematics/Philosophy
B.S., University of California, Davis;
M.S., California State University, Northridge.

Schechter, Arthur J. (1980)
Professor, Biology/Chemistry
A.B., M.S., Ed.D., University of Southern California.

Sheridan, Pamela (1969)
Professor, English
B.A., M.A., University of California, Santa Barbara.

Shindo, Kokki (1969)
Professor, Mathematics
A.B., Ripon College, Wisconsin;
A.B., M.A., University of California, Los Angeles;
M.S., Western Washington State.

Shubert, Brenda (1982)
Professor/Coordinator, Nursing Science
B.S.N., Medical College of Georgia;
M.N., University of California, Los Angeles.

Siegel, A. Howard (1967)
Professor, Humanities/French/English
B.A., Queens College;
M.A., Kansas State University;
Ph.D., University of Southern California.

Sims, Sydney (1989)
Instructor, English
B.A., University of California, Los Angeles;
M.A., University of Pennsylvania;
Ph.D., University of California, Berkeley.

Smith, Mitchell L. (1972)
Professor, Administration of Justice
B.A., M.A., San Diego State University.

Spraggins, M. Thomas (1974)
Professor, Accounting/Business
B.S., California State University, Northridge;
M.S., Colorado State University;
M.A., California Lutheran College;
Certified Public Accountant.

Stemen, James A. (1969)
Professor, Music
B.A., Goshen College;
M.A., M.S.M., Southern Methodist University.

Stephens, Robert T. (1968)
Professor, Mathematics
B.S., Brigham Young University;
M.S., University of California, Riverside.

Stewart, Nancy L. (1980)
Professor, Physical Education
B.A., California State University, Long Beach;
M.S., Wisconsin State University, LaCrosse.

Stewart, Sexton (1974)
Professor, Graphic Communications
B.S., Southern University, Louisiana;
M.A., San Francisco State University.

Straughan, Jerry E. (1975)
Professor, Political Science/Urban Studies
B.A., University of California, Los Angeles;
M.A., California Lutheran College.

Stringer-Eilers, Pauline (1970)
Professor, Interior Design
B.S., Oklahoma State University;
M.S., California State University, Northridge;
Ed.D., Nova University, Florida.

Strong, Richard (1971)
Department Head, Performing Arts;
Professor, Speech/Forensics
B.A., M.A., University of Redlands.

Strumpf, Michael (1967)
Professor, English/Reading
B.S., M.S., University of Southern California.

Sukiennik, Diane (1974)
Professor, Counseling
B.A., State University of New York, Albany;
M.A., Columbia University, New York;
Ed.D., Nova University, Florida.

Szylewicz, Arthur (1986)
Professor, Mathematics
B.A., M.A., University of California, Los Angeles.

Tennen, Edward F. (1980)
Director, Learning Resources
B.A., California State University, Long Beach;
M.A., M.S.L.S., University of Southern California;
Ed.D., Nova University, Florida.

Thionnet, Floyd D. (1972)
Vice President, Student, and Educational Services, Admissions and Records
B.S., University of Arizona;
M.S., California Polytechnic State University, San Luis Obispo.

Thompson, Joan (1974)
Professor, Music
B.A., M.A., California State University, Northridge.

Thomsen, John E. (1969)
Professor, Electronics/Engineering
B.S., M.S., University of California, Los Angeles.

Trevino, Manuel O. (1971)
Professor, Physical Education
A.B., M.A., California State University, Chico.

Trevino, Sandra Kay (1988)
Associate Librarian
A.A., Ventura College; B.A., California State University, Chico; M.L.S., USC

Walters, J. Roger (1971)
Professor, Mathematics
B.A., University of California, Los Angeles;
M.A., University of Oregon.

Wieder, Les (1977)
Professor, Theatre Arts/Radio/Television
B.A., M.A., California State University, Northridge.

Wilson, Gary L. (1985)
Assistant Professor/Coordinator, Exotic Animal Training/Management
A.S., Moorpark College;
B.A., M.A., University of California, Santa Barbara.

Wolff, Louis A. (1982)
Professor, Computer Information Systems/ Business Information Systems
B.S., M.S., University of La Verne, Point Mugu.

Woodward, Carol (1981)
Department Head, Behavioral Sciences;
Professor, Psychology
B.A., M.A., California State University, Northridge;
Ph.D., University of Southern California.

Wygant, Grethe M. (1988)
Instructor, Mathematics
A.A., Santa Barbara City College;
B.A., M.A., University of California, Santa Barbara.

Wyman, James L. (1974)
Professor, Business/Speech/Forensics
B.A., University of Redlands;
J.D., Loyola Law School, Los Angeles.

Young, Kathleen (1974)
Professor, Business/Business Information Systems
B.S., California State University, Long Beach;
M.A., California Lutheran College.

Zaboski, Janet M. (1974)
Professor/Coordinator, Special Education
B.S., University of California, Los Angeles;
Physical Therapy Degree, Children's Hospital School of Physical Therapy, Los Angeles;
M.A., California State University, Northridge.
(Sabbatical, Spring 1990)

Faculty Emeritus

Ainge, Kenneth E. (1967)
Director, Business and Technology Division
A.B., University of California, Santa Barbara; M.A., University of California, Los Angeles; Ed.D., Brigham Young University. Retired June, 1987.

Bassett, Estella M. (1967)
College Nurse, Health Education
R.N., Saint Mary's Hospital School of Nursing, Rochester, New York; M.S., State University College, Brockport, New York; M.P.H., University of California, Los Angeles. Retired June, 1974.

Brisby, William L. (1969)
Exotic Animal, Training and Management
B.S., Colorado State University; M.S., University of Southern California. Retired June, 1985.

Coward, Richard E. (1976)
Director, Financial Services
B.A., M.Ed., Western Washington State College. Retired June, 1988.

Deutsch, Dolores (1970)
Professor, Child Development
B.A., University of California; M.A., California State University, Northridge. Retired June, 1988.

Gayle, James R. (1967)
Vice President, Instructional Services
B.S., United States Naval Academy; M.S., Purdue University. Retired June, 1988.

Gilman, Richard E. (1967)
Biological Sciences
B.S., M.S., St. Mary's College, Winona, Minnesota; M.S., University of Southern California. Retired February, 1978.

Griffith, W. Randolph (1967)
History
B.A., University of California, Riverside; M.A., University of California, Los Angeles. Retired June, 1986.

Hurley, John (1967)
Associate Librarian
B.A., M.A., San Diego State University; M.L.S., University of California, Los Angeles; Ed.D., Nova University, Florida. Retired June, 1983.

Imbach, Marjorie (1971)
Director, Community Services and Publications
B.A., University of California, Santa Barbara; M.A., University of California, Los Angeles. Retired June, 1979.

Lane, James W. (1969)
Law Enforcement
A.A., Valley College, Van Nuys, California. Retired June, 1974.

Lossner, Walter M. (1969)
Sociology
B.A., B.D., Concordia Seminary; M.S., Los Angeles State College; Ph.D., University of Southern California. Retired June, 1977.

Sarnecky, Dorothy (1967)
Geology
B.A., Notre Dame; M.S., Stanford University. Retired June, 1979.

Scott, Delmore E. (1969)
Professor, Art
B.F.A., M.F.A., University of Southern California. Retired June, 1988.

Slama, Michael M. (1966)
Director of, Library Services
J.D., Charles University, Prague, Czechoslovakia; M.A., University of Denver. Retired February, 1980.

Sturgeon, James H. (1967)
Art
B.A., M.F.A., University of California, Santa Barbara. Retired June, 1986.

Tallman, Maxine R. (1967)
Associate Dean of Students/Admission and Records
A.A., Ventura College; B.A., M.A., University of California, Santa Barbara. Retired June, 1979.

APPENDIX

Appendix I
Privacy Rights Governing Student Records

The colleges in this District establish and maintain information on students relevant to admission, registration, academic history, career, student benefits or services, extra-curricular activities, counseling and guidance, discipline or matters related to student conduct, and shall establish and maintain such information required by law.

RIGHT OF ACCESS

Any currently enrolled or former student has a right of access to any or all student records relating to the student maintained by this District. The editing or withholding of such records is prohibited except as provided by law.

Requests for access shall be in writing, addressed to the Vice President, Student and Educational Services at the college of attendance. Requests by students to inspect and review records shall be granted no later than 15 days following the date of request. The inspections and review shall occur during regular school hours. The Vice President, Student and Educational Services shall notify the student of the location of all official records which have been requested and provide personnel to interpret records where appropriate.

Student records are maintained in a manner to insure privacy of all such records and the colleges in this district shall not, except as authorized, permit any access to or release of any information therein.

Access to student records may be permitted to any person for whom the student has executed written consent specifying the records to be released and identifying the party to whom the records may be released. Information concerning a student shall be furnished in compliance with a court order. The College shall make a reasonable effort to notify the student in advance of such compliance if lawfully possible within the requirements of the judicial order.

Students may request copies of records for review. A fee of $3 will be charged.

DIRECTORY INFORMATION

The colleges in this District maintain directory information which may be released: student's name, address, telephone number, and place of birth, major field of study, class schedule, participation of officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, the most recent previous public and private school attended by the student.

Students may indicate that directory information which **shall not be released** providing written notification is given the Vice President, Student and Educational Services at the college of attendance at the time of enrollment or earlier if the activity occurs prior to the opening of school.

CHALLENGE

Any student may file a written request with the President of the college or the designee to remove student records which the student alleges to be: (1) inaccurate, (2) an unsubstantiated conclusion of inference, (3) a conclusion or inference outside of the observer's areas of competence, (4) not based on personal observations of the named person with the time and place of the observation noted.

Students filing a written request shall be provided a hearing and receive, in writing, a decision either sustaining or denying the allegations. Allegations which have been denied by the college may be further appealed to the Chancellor of the Ventura County Community College District or his designee. Allegations which have been denied by the Chancellor may be further appealed to the Governing Board of the Ventura County Community College District who shall meet with the student, within 30 days of receipt of such appeal, to determine whether to sustain or deny the allegations. All decisions of the Governing Board shall be final.

Appendix II
Affirmative Action

The Ventura County Community College District and its three colleges — Moorpark College, Oxnard College, and Ventura College — are committed to providing an equal opportunity for admissions, student financing, student support facilities and activities, and employment regardless of race, color, religion, sex, national origin, handicap, age, marital status or Vietnam veteran status, in accordance with the requirements of Title IX of the Education Amendments of 1972, Title VII of the Civil Rights Act of 1964 (as amended by the Equal Employment Opportunity Act of 1972), sections 503 and 504 of the Rehabilitation Act of 1973 and the Rehabilitation Act Amendments of 1974, Executive Order 11246 (as amended by Executive Order 11375), and the Federal Age Discrimination Employment Act of 1967 and the Age Discrimination Employment Act Amendments of 1978.

Equal Opportunity Act

The Ventura County Community College District subscribes to and promotes the principles and implementation of Equal Opportunity and Affirmative Action.

Pursuant to the provisions of Assembly Bill 803, the Governing Board has adopted a policy and procedure to ensure that its programs and activities are available to all persons without regard to ethnic group identification, religion, age, sex, color, or physical or mental disability. Both the policy and the procedure apply to students, employees, and applicants.

Inquiries regarding these laws and regulations, and the corresponding Board policies, may be directed to the District Affirmative Action Officer, c/o District Office, 71 Day Road, Ventura, CA 93003, telephone 642-0161 or 647-7387, Ext. 51.

Appendix III
Policy on Sexual Harassment

The Ventura County Community College District is committed to all provisions of Title VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972 and other human rights and equal opportunity laws. The laws include prohibitions of discrimination in employment and educational programs and services on the basis of sex.

Recent guidelines for Title VII of the Civil Rights Act focus upon sexual harassment as an unlawful practice. 'Sexual harassment on the basis of color, race, religion or national origin has long been recognized by the Equal Employment Opportunity Commission as a violation of Section 703 of Title VII of the Civil Rights Act as amended' (Federal Register, April 11, 1980). Recent interpretations of Title IX of the Education Amendments similarly delineate sexual harassment as discriminatory and unlawful.

Sexual harassment is unacceptable conduct, is unlawful, and will not be tolerated by the Ventura County Community College District. Disciplinary action shall be initiated against any individual found guilty of sexual harassment. The following criteria shall determine whether actions constitute sexual harassment.

1. Employment/Educational Condition.
   Submission to the conduct is either an explicit or implicit term or condition of employment and/or pursuit of educational objectives.
2. Employment/Educational Consequence.
   Submission to or rejection of the conduct is used as a basis for employment, educational, and/or service decisions affecting the persons who did the submitting or rejecting.
3. Offensive Job/Educational Interference.
   The conduct has the purpose or effect of substantially interfering with an individual's work, academic, or other educational performance or creating an intimidating, hostile or offensive environment.

IMPLEMENTATION AND GRIEVANCE PROCEDURES: STUDENTS

This procedural statement is a special application of the College District's Student Grievance Policy. It is presented in direct reference to the sexual harassment of the students of the colleges of the Ventura County Community College District and to the related policy of the District adopted by the District's Governing Board. The Board policy is based on Federal and State statutes on this subject.

While sexual harassment of students by other students or by District employees represents a wrong as described in the District's "Student Grievance Procedures," the nature of this particular offense renders it exceptional. Thus, a separate procedure has been established to recognize this distinction.

Sexual harassment is a matter requiring unusually prompt attention by authority since failure to act may represent various kinds of academic and personal damages to the alleged victim. Further, the issues involved are typically very personal and sensitive, and many victims will not risk the delays, publicity and complications attendant to regular grievance procedures. Since this District recognizes the delicate nature of such situations, each step in the grievance procedure will be conducted with discretion in order to maintain a high degree of confidentiality. It is the intent of these procedures to result in prompt recourse and to ensure fairness and equity to both the person alleging the wrong and to the person accused of the wrong.

The District recognizes its responsibilty to make every effort to maintain a neutral work and educational environment free of sexual harassment and/or intimidation.

For purposes of this policy, examples of conduct which may constitute sexual harassment, and are outside the standards of professional conduct, include:

1. Deliberate or unsolicited verbal comments, gestures, physical contacts of a sexual nature or demeaning to one's gender which are unwelcome and/or interfere with work productivity.
2. Implicit or explicit sexual behavior by a teacher, supervisor, fellow student, or co-worker to control, influence or otherwise affect the job, salary, course grade, performance evaluation, opportunity for employment, or career of an employee, nondistrict affiliated applicant for employment, or student.

Step 1. Students who believe that they have been subjected to any form of sexual harassment should carefully review both the District's policy on this subject and this procedure. They are encouraged to seek counsel from any member of the college community in whom they have confidence; however, it is recommended that the student contact the Counseling Office to discuss any possible complaint. In order to provide the best professional support to students, the Dean of Counseling or his/her designee shall designate two counselors, one male, one female, who will have special responsibility for advising students in matters of sexual harassment. The purpose of such counsel is personal support in a time of crisis. If the complaint involves sexual harassment by a college district employee, the student should proceed to Step 2 of this procedure (see below). The student shall have the right to be accompanied through the complaint process by an advisor of his/her choice. If the problem involves sexual harassment by another student, the Counseling Office shall refer the complainant to the Vice President, Student and Educational Services who will take action as prescribed in the Student Conduct Code.

Step 2. Complaints should be brought to the College. The Vice President will hear the complaint, counsel the complainant and be available to act as the complainant's advisor during the resolution process. If, for any reason, the Vice President is unavailable or if the complainant rejects this party in the role described, the college officer hearing the charges shall be the Vice President, Instructional Services.

Step 3. If the problem cannot be resolved at the second step within five working days, the Vice President will transmit it, in writing and signed by the complainant, to the college President and to the District Affirmative Action Officer for information purposes.

The President will act as described in the circumstances that follows:

1. The President will ask the campus certificated management representative to the District Advisory Committee on Affirmative Action to consult with the person mentioned in the complaint and such other persons as may be necessary to resolve the complaint. The supervising manager of the person accused must be consulted in this process, and the accused will be given a copy of the written accusation.
2. If the problem cannot be resolved to the satisfaction of all parties at Step 1 within five working days, the campus management Affirmative Action representative will transmit the written and signed complaint to the President. At this point, the President may either dismiss the matter for cause stated in writing to all parties or remand the case to a formal hearing. The President must act withing five working days.

Step 4. If a formal hearing is held, the following procedures will be employed by the college Grievance Committee.[1]

1. Both parties will be asked to attend the hearing and will be given sufficient notice in writing as to the time and place. Notice shall be given by certified mail at least five working days prior to the hearing date.
2. At the time of the hearing, the chairperson shall state the charge. The committee shall hear testimony, examine witnesses and receive all evidence pertaining to the charge.
3. Both parties shall have the right to present statements, testimony, evidence and witnesses. Each party shall have the right to be represented by a single advisor. If the person who is the subject of the complaint elects to have legal counsel present at the hearing, he/she must notify the College/District in sufficient time so that the District might arrange to have its own legal counsel available.
4. The accused person and/or representative may be present, as well as the aggrieved person and/or her/his representative. No other persons except scheduled single witnesses and the Grievance Committee members shall be present.
5. The person making the charge shall assume the burden of proof. The rule of confidentiality shall prevail at all stages of the hearing.
6. The committee shall judge the relevancy and weight of testimony and evidence. It shall make its findings on

fact and limit investigation to the formal charge. It shall also make a recommendation for disposition of the charge to the college President. Actions in this procedure shall be completed within five working days.

7. The committee shall submit its findings of fact and recommend action to both parties and to the President of the college. Upon receipt of the findngs and recommendations, the President of the college shall:
   a. Concur with the committee's recommendation.
   b. Not concur with the committee's recommendation.
   c. Take alternative action.
   d. The college President shall state in writing the reasons for the action taken on the committee's recommendation. The President shall act within ten working days.
8. If either party does not agree with the decision of the college President at this time, an appeal may be made to the Chancellor of the Ventura County Community College District through the District's Affirmative Action Officer; if he/she is still dissatisfied with the decision, an appeal may be made to the Governing Board who shall render the final decision.
9. Records of all proceedings will be maintained by the college President in accordance with rules of confidentiality and board/state/federal laws, rules, regulations and contracts. Insertion of information regarding a case in employee's personnel record will be made in compliance with board/state/federal laws, rules, regulations and contracts.

[1]The nature of the College Grievance Committee is described fully under the main Student Grievance Policy.

Appendix IV
Student Rights & Responsibilities

I. ASSOCIATED STUDENTS

The Governing Board of the Ventura County Community College District recognizes the need for and authorizes the operations of the Associated Students in accordance with Education Code sections 10701 to 10705, inclusive.

II. PRIVILEGES OF STUDENT ORGANIZATIONS

A. To use the name of one of the colleges or to use college facilities for regular meetings or special events, student organizations must be chartered by the Associated Students.

B. Recognized student organizations shall not use District facilities for the purpose of planning or implementing off-campus political or social events, nor use the name of the colleges in conducting such off-campus events, unless authorized by the Associated Students.

C. A chartered student organization shall have a faculty advisor who shall be chosen by the members of that organization and approved by the Vice President, Student and Educational Services. Institutional recognition shall not be withheld or withdrawn solely because of the inability of a student organization to secure an advisor.

D. Chartered student organizations shall be open to all students without respect to race, creed or national origin.

III. OFF-CAMPUS AFFILIATIONS

Any organization (whether official or unofficial) of students on the college campuses which, in its constitution or method of operation, vests control of its policies in an off-campus organization, shall not be recognized as an official college organization and shall not be allowed to use the facilities of the District.

IV. ADVOCACY AND FREE EXPRESSION

A. *Purpose.* The primary purpose of a college is the advancement and dissemination of knowledge. Free inquiry and expression are indispensable to the attainment of this purpose. The colleges of the Ventura County Community College District have the responsibility to establish and maintain general conditions conducive to an orderly and open examination of ideas and issues relevant to the primary purpose referred to above.

B. *Registered Students.* Students of the Ventura County Community College District have the right of free expression and advocacy and may exercise this right within the framework outlined below:
   1. That the cause or issue being advocated is legal.
   2. That the District's outside speaker policy is observed.
   3. That college rules regulating time, place, and manner, developed by a student/faculty/administrator committee at each college and approved by the college President or his designated representative are respected.
   4. That if, in the judgment of the President of the college or his designated representative, an activity or event is disruptive or incompatible with the educational objective of the college, he may order individual students or chartered student organizations, to discontinue the activity or event pending due process by either college and/or civil agencies. Due process is defined by a student/faculty/administrator committee at each college and approved by the college President.

C. *Non-Students.* The colleges of the Ventura County Community College District are provided for the purposes commonly ascribed to higher education. Non-students who wish to pursue these purposes at one of the colleges of the District are encouraged to enroll as registered students. However, in regard to any event or activity that takes place on one of the college campuses of the Ventura County Community College District, non-students are governed by the same rules that apply to registered students.

D. *Maintenance of Order.* It shall be the policy of the Governing Board of the Ventura County Community College District to cooperate with all established governmental agencies in the maintenance of order on and about its properties. This cooperation shall in no way infringe upon or limit the use of these properties for the purposes historically and legally reserved for them. The President of the Board, as appropriate, shall convene a special meeting for the purpose of taking proper action to support the District and college administrations in carrying out the policy referred to in this section.

V. DRESS CODE

The dress of persons appearing on the campuses of the Ventura County Community College District shall comply with generally accepted standards of hygiene and good taste. Clothing that is worn shall be such as to avoid interference with the educational responsibilities of the District, or with any other approved activities taking place within the District's jurisdiction.

VI. SOLICITATION

The solicitation, selling, exposing for sale, offering to sell, or endorsing any goods, articles, wares, services or merchandise of any nature whatsoever for the purpose of influencing lease, rental or sale at a college is prohibited except by written permission of the District Chancellor, President of the college or the President's designee. This policy applies to all students, staff and citizens.

Nothing in this policy shall be construed to revoke the rights and privileges of students and staff as specifically granted by Education Code sections and board policy with regard to fund raising activities (EC 76062), examination of instruction materials (EC 78904, 78905), or other activities sanctioned by federal, state and local regulations.

VII. NOTICES & POSTERS

Student and other college developed posters and flyers may be distributed or displayed as follows:

Any posters, flyers or other materials which advertise instructional programs, student activities or any other events that can be CLEARLY IDENTIFIED as having Moorpark College sponsorship may be circulated and posted without bearing the "approved for posting" stamp.

VIII. USE OF COLLEGE FACILITIES

A. The purpose of these policies is to assure the full effective use and enjoyment of the facilities of the college campus as an educational institution. Orderly procedures are necessary to promote the use of facilities by students and college personnel, to conserve and protect facilities for educational use and to prevent interference with college functions.

B. Available college facilities may be used and shall be reserved in advance for meetings and other events related to their purpose by:
   a. chartered student organizations
   b. certificated personnel
   c. organizations of college employees
   d. the associated students
   e. groups of ten or more students
   f. community organizations and groups under the Civic Center Act. (Education Code, 16551-16556).

C. Reservation of college facilities shall be made in the Office of the Dean, General and Transfer Education a reasonable time in advance of the event to permit schedule to be arranged. Reservations will be granted in the order of application, unless considerations of format, room size or equitable distribution of special facilities will require adjustments. Student groups should also seek approval from the Advisor to Student Activities.

D. The college may make reasonable charges for the use of college facilities by community groups in accordance with the civic center charges as published by the Ventura County Community College District.

E. Outdoor Meetings and Events
   1. Students and college personnel may gather at reasonable places and times on the campus consistent with the orderly conduct of college affairs and the free flow of traffic. Interference with entrances to buildings and college functions or activities, disturbance of offices, classes and study facilities and harm to property are prohibited.
   2. The campus center patio is available as a discussion area. The Vice President, Student and Educational Services may approve other areas if unusual circumstances require.
   3. Voice amplification will be permitted in the above areas between 11:30 a.m. and 12:30 p.m. on Fridays. Voice amplification equipment will be provided by the college upon request and without charge. No other voice amplification equipment may be used. The Vice President, Student and Educational Services may arrange for voice amplification at other times or places on the campus if unusual circumstances require it to implement the purposes of these regulations. The volume and direction of voice amplification will be adjusted to reach no farther than the audience present.

F. Tables
   1. Student organization and groups cited may maintain a table in the following areas:
      a. foyer of the campus center
      b. patios of the campus center
      c. mall
   2. Tables shall be staffed at all times. The name of the sponsoring organization shall be displayed at each table.
   3. Tables shall be furnished by the Associated Students. Posters shall be attached to the tables.
   4. Tables may be used to distribute and exhibit, free of charge, non-commercial announcements, statements and materials and for fund raising. Distributing or soliciting by means of accosting individuals or by shouting is prohibited.

Appendix V
Student Grievance

I. PURPOSE

Students are encouraged to pursue academic studies and other college-sponsored activities in order to promote intellectual growth and personal development. In seeking these ends, students should be free from improper interference by other members of the college community.

A grievance may be initiated by a student whenever the student believes that she or he has been subject to unjust actions or denied normal rights as stipulated in college regulations and in the State Education and Administrative Codes. A grievance may be initiated by a student against any other student or employee of the college.

II. DEFINITION

A grievance is an allegation of unjust action or denial of student rights. A grievance exists only when a specific educational wrong has occurred to a single student. This wrong must involve an unjust action or denial of student rights as defined in a specified college, college district or superior legal covenant or judgment. A grievance exists only when such an error or offense has some demonstrably correctable result. The outcome of a grievance must produce a tangible benefit to the student complaining or an actual redress of the wrong rather than a punishment for the person or persons found in error.

III. PROCEDURES

A. Informal Processes

When a student believes that a personal injustice has been sustained, an attempt should first be made to resolve the concern by informal means. Consultation should be made with the student, faculty member, administrator or classified person involved in order to seek direct resolution. If this process fails or, for some reason, cannot be accomplished, the aggrieved student should confer with the direct supervisor of the person allegedly causing the problem. If both of these steps are unsuccessful, the aggrieved student should discuss the problem with the Vice President, Instructional Services (for all programs and services controlled by this person) or the Vice President, Student and Educational Services (for all other college programs and services).

B. Formal Processes

If the aggrieved student believes that the informal consultation processes mentioned in III A. have failed, the procedures and rules described below must be followed by both the student and the college. This process represents the formal grievance procedure of the college. However, the entire formal grievance process shall be discontinued at any time the parties can informally agree on a mutually satisfactory result. All formal records will be destroyed in this instance.

Resolution of grievances may not abrogate state or federal laws and applicable Governing Board rules and policies.

1. A college Grievance Committee shall be established by the college President at the opening of each academic year. This committee shall be composed of one faculty member, one enrolled student and one ad-

ministrator. The chairperson will be designated by the President. Committee members are appointed by and serve at the pleasure of the President. If, in the judgment of either participant in a formal grievance or the President, a conflict of interest or bias exists with any committee member, that member will be excused and a substitute appointed for the case in question only.

A formal grievance must be filed with the Vice President, Student and Educational Services within 90 calendar days of the final event in a sequence of events if any. The 90-day period shall commence on the day of the event or on the day of first knowledge of the event by the complaining party. Proof of the latter delayed date is the responsibility of the complaining party.

2. A formal grievance exists when the Vice President, Student and Educational Services receives a signed written charge specifying the time, place and nature of the injury from the aggrieved student. This written charge should be dated and must be on behalf of an individual student only. Group or class action grievances are not permitted. This charge must also clearly specify the informal consultation attempts made and described in Section A.
3. The Vice President, Student and Educational Services will verify the completeness of the written charge and present the charge to the Grievance Committee within ten working days of receipt.
4. The Grievance Committee will review the charges made (Section B.2.) within five working days and request a response in writing from the person accused. This person must reply within ten working days. Upon receipt of this response, the committee shall meet and recommend to the President that (a) the case be dismissed or (b) the reasonable cause for a hearing exists. This action must take place within five working days.
5. The President will then either dismiss the case with the reasons set out in writing to both parties or request that the Grievance Committee hold a formal hearing. The President must take this action within five working days of receipt from the committee (Section B.4.).
6. Formal hearing procedures:
   a. A hearing will be called by the chairperson within fifteen working days of receipt of the President's request (Section B.5.).
   b. Both parties will be asked to attend the hearing and will be given sufficient notice in writing as to the time and place. Notice shall be given by certified mail at least five working days prior to the hearing date.
   c. At the time of the hearing, the chairperson shall state the charge. The committee shall hear testimony, examine witnesses and receive all evidence pertaining to the charge.
   d. Both parties shall have the right to present statements, testimony, evidence and witnesses. Each party shall have the right to be represented by a single advisor but not a licensed attorney.
   e. The accused person and/or representative may be present as well as the aggrieved person and/or his/her representative. No other persons except scheduled single witnesses and the Grievance Committee members shall be present.
   f. The person making the charge shall assume the burden of proof. The rule of confidentiality shall prevail at all stages of the hearing.
   g. The committee shall judge the relevancy and weight of testimony and evidence. It shall make its findings on fact and limit investigation to the formal charge. It shall also make a recommendation for disposition of the charge to the college President. Actions in this procedure shall be completed within five working days.
   h. The committee shall submit its findings of fact and recommend action to both parties and to the President of the college. Upon receipt of the findings and recommendations, the President of the college shall:
      (1) Concur with the committee's recommendation.
      (2) Not concur with the committee's recommendation.
      (3) Take alternative action.
      (4) The college President shall state in writing the reasons for the action taken on the committee's recommendation. The President shall act within ten working days.
   i. If either party does not agree with the decision of the college President at this time, an appeal may be made to the Chancellor of the Ventura County Community College District.
   j. If he/she is still dissatisfied with the decision, an appeal may be made to the Governing Board who shall render the final decision.
   k. Records of all proceedings shall be maintained by the college President in accordance with rules of confidentiality and board/state/federal laws, rules, regulations and contracts. Insertion of information regarding a case in employee's personnel records will only be made in compliance with board/state/federal laws, rules, regulations and contracts.

Appendix VI
Student Conduct Code

STANDARDS OF STUDENT CONDUCT (E.C.S. 66300)

In joining the academic community, the student enjoys the right and shares the responsibility in exercising the freedom to learn. Like members of the academic community, the students are expected to conduct themselves in accordance with the standards of the college that are designed to perpetuate its educational purposes. Students shall respect and obey civil and criminal law, and shall be subject to legal penalties for violation of laws of the city, county, state, and nation. A charge of misconduct may be imposed upon a student for violating provisions of college regulations and the State Education and Administrative Codes. Where a student is subject to a charge of misconduct, such charge shall be processed in accordance with the following policy and procedure.

Disciplinary action may be imposed upon a student by an instructor, an administrator or the Governing Board for proven misconduct or actual violation of specified college rules and state regulations. Instructors and administrators may place students on probation or temporary exclusion with respect to actions in a classroom, on campus or at a college-sponsored activity within the procedures specified in this document. The Vice President, Student and Educational Services shall have the power to impose suspension and to recommend expulsion.

Students are subject to charges of misconduct for any of the following acts on college-owned or controlled property or at a college-sponsored activity:

1. Willful disobedience to directions of college officials acting in performance of their duties.
2. Violation of college rules and regulations including those concerning student organizations, the use of college facilities, or the time, place and manner of public expression or distribution of materials.
3. Dishonesty, such as cheating, or knowingly furnishing false information to the college.
4. Unauthorized entry to or use of the college facilities.

5. Forgery, alteration, or misuse of college documents, records of identification.
6. Obstruction or disruption of classes, administration, disciplinary procedures, or authorized college activities.
7. Theft of or damage to property or possession of stolen property belonging to the college, a member of the college community, or a campus visitor.
8. Disorderly, lewd, indecent, obscene, or offensive conduct or expression which interferes with the college's primary educational responsibility.
9. Assault or battery, abuse, or any threat of force or violence directed toward any member of the college community or campus visitor engaged in authorized activities.
10. Use, possession, distribution of alcoholic beverages, narcotics, hallucinogenic drugs, marijuana, or other dangerous drugs, or presence on campus while under the influence of alchoholic beverages, narcotics, hallucinogenic drugs, marijuana, or other dangerous drugs, except as expressly permitted by law.
11. Possession, while on the college campus or at an on- or off-campus college-sponsored function, of any of the following weapons (except persons given permission by the college President or his/her designated representatives or members of the law enforcement agencies, as police officers); any instrument or weapon of any kind commonly known as blackjack, sling shot, fire bomb, billy club, sandclub, sandbag, metal knuckles; any dirk, dagger, firearm (loaded or unloaded), as pistol, revolver, rifle, etc.; any knife having a blade longer than five inches, any switchblade longer than two inches, any razor with an unguarded blade; any metal pipe or bar used or intended to be used as a club; or any item used to threaten bodily harm.

STUDENT CONDUCT: DISCIPLINARY ACTION

Student conduct must conform to the Student Rules of Conduct established by the Governing Board of the Ventura County Community College District in collaboration with college administrators and students. Violations of such rules are subject to the following types of disciplinary actions which are to be administered by appropriate college authorities against students who stand in violation. The Ventura County Community College District has established due process for the administration of the penalties enumerated here. Penalties are listed in degree of severity. College authorities will determine the appropriate penalty(ies):

1. WARNING* — Notice to the student that continuation or repetition of specified conduct may be cause for other disciplinary action.
2. REPRIMAND* — Written reprimand for violation of specified rules. A reprimand serves to place on record that a student's conduct in a specific instance does not meet the standards expected at the college. A person receiving a reprimand is notified that this is a warning that continued conduct of the type described in the reprimand may result in a formal action against the student.

   *Note: Warnings and reprimands may be appealed directly to the President. They are not subject to a student conduct hearing.
3. DISCIPLINARY PROBATION — Exclusion from participation in privileges or extracurricular college activities set forth in the notice of disciplinary probation involves notification in writing of the reason for disciplinary probation to the student(s) or president of the student organization involved.
4. RESTITUTION — Reimbursement for damage or for misappropriation of property. Reimbursement may take the form of appropriate service to repair or otherwise compensate for damage.
5. SUMMARY SUSPENSION — A summary suspension is for the purposes of investigation. It is a means of relieving the tension of the student body or individual class due to a serious infraction of student behavior standards, removing a threat to the well-being of the students, or removing for the good order of the college a student or students whose presence would prevent the continued normal conduct of the academic community. Summary suspension is limited to that period of time necessary to ensure that the purpose of the summary suspension is accomplished and in any case, no more than a maximum of five school days. Summary suspension is a type of suspension other than that ordinarily invoked by the instructor for disciplinary reasons in the classroom. The college President, Vice President, Student and Educational Services, or other staff member designated by the President may summarily suspend a student when he or she deems it necessary for the safety and welfare of the college.
6. DISCIPLINARY SUSPENSION — Disciplinary suspension follows a hearing based on due process. It shall be invoked by the college President, appropriate administrator, or other staff member disignated by the President, upon the student for misconduct when other corrective measures have failed or when the seriousness of the situation warrants such action.
7. EXPULSION — An expulsion is a long term or permanent denial of all campus privileges including class attendance. The Governing Board may expel a student who has been convicted of a crime arising out of a campus disturbance, or after a hearing by a campus body, and has been found to have willfully disrupted the orderly operation of the campus.

STUDENT CONDUCT: DUE PROCESS

A. Preliminary Action
   1. The Vice President, Student and Educational Services shall receive and may issue any charge of alleged misconduct made against a student by another student, faculty member, administrator, or classified personnel. Such person shall sign and submit a written statement specifying the time(s), place(s), and nature of the alleged misconduct.
   2. The Vice President, Student and Educational Services shall confer with the student for the purpose of advising the student of the charge, possible sanctions imposed upon him/her and his/her rights under college regulations, state and federal laws.
   3. The Vice President, Student and Educational Services may also procure information relating to the charge from the student and other persons or sources. Whenever appropriate, the Vice President, Student and Educational Services shall assess, or cause to have assessed, damage to property and injury to persons or other forms of misconduct.
   4. At this point, the Vice President, Student and Educational Services may take any of the following actions:
      a. Dismiss the charge for lack of merit.
      b. Issue a warning or letter of reprimand.
      c. Place the student on disciplinary probation, require restitution, place on summary or disciplinary suspension.
      d. Recommend expulsion.
      e. Remand the case to a Student Conduct Hearing.
   5. At this time, if the student does not accept the Vice President, Student and Educational Services' decision, the Vice President, Student and Educational Services shall arrange for the meeting of the Student Conduct Hearing Committee, following the procedures outlined in Sections B and C of this document.

B. Composition of Student Conduct Hearing Committee
   1. The Student Conduct Hearing Committee, hereafter referred to as the Hearing Committee, shall be set up as follows:
      a. One student, one faculty member, and one administrator (other than the Vice President, Student and Educational Services and his/her immediate staff). These persons are appointed by the college President.
      b. The President shall designate the chairperson of the Hearing Committee.

c. A minimum of one committee shall be selected annually.
d. Upon notification of the committee composition, each party is allowed one pre-emptory challenge, excluding the chairperson.
e. A quorum shall consist of all three members of the committee.
f. The chairperson will allow any proposed member of the committee to decline participation in the hearing.

C. Formal Hearing Procedures

1. A hearing will be called by the chairperson within fifteen working days of the receipt of the Vice President, Student and Educational Services' request.
2. Both parties will be asked to attend the hearing and will be given sufficient notice in writing as to the time and place. Notice shall be given by certified mail at least five working days prior to the hearing date.
3. At the time of the hearing, the chairperson shall state the charge. The committee shall hear testimony, examine witnesses and receive all evidence pertaining to the charge.
4. Both parties shall have the right to present statements, testimony, evidence and witnesses. Each party shall have the right to be represented by a single advisor but not a licensed attorney.
5. The accused person and/or representative may be present as well as the aggrieved person and/or his/her representative. No other persons except scheduled single witnesses and the Hearing Committee members shall be present.
6. The person making the charge shall assume the burden of proof. The rule of confidentiality shall prevail at all stages of the hearing.
7. The Hearing Committee shall judge the relevancy and weight of testimony and evidence. It shall make a recommendation for disposition of the charge to the college President. Actions in this procedure shall be completed within five working days.
8. The Hearing Committee shall submit its findings of fact and recommend action to both parties and to the President of the college. Upon receipt of the findings and recommendations, the President of the college shall:
   a. Concur with the committee's recommendation.
   b. Not concur with the committee's recommendation.
   c. Take alternative action.
   d. The college President shall state in writing the reasons for the action taken on the committee's recommendations. The President shall act within ten working days.
9. If either party does not agree with the decision of the college President at this time, an appeal may be made to the Chancellor of the Ventura County Community College District; if he/she is still dissatisfied with the decision, an appeal may be made to the Governing Board who shall render the final decision.

Appendix VII

Ventura County Community College District

1989-90 Nonresident Tuition Fee Charges and Refund Schedule

Units Enrolled	Tuition Charge	1st Week Refund	2nd Week Refund		3rd Week Refund		4th Week Refund
		Regular and Summer	Regular	Summer	Regular	Summer	**Regular Only
0.5*	47.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0*	94.00	44.00	44.00	44.00	44.00	23.50	23.50
1.5*	141.00	91.00	91.00	70.50	70.50	35.25	35.25
2.0*	188.00	138.00	138.00	94.00	94.00	47.00	47.00
2.5	235.00	185.00	176.25	117.50	117.50	58.75	58.75
3.0	282.00	232.00	211.50	141.00	141.00	70.50	70.50
3.5	329.00	279.00	246.75	164.50	164.50	82.25	82.25
4.0	376.00	326.00	282.00	188.00	188.00	94.00	94.00
4.5	423.00	373.00	317.25	211.50	211.50	105.75	105.75
5.0	470.00	420.00	352.50	235.00	235.00	117.50	117.50
5.5	517.00	467.00	387.75	258.50	258.50	129.25	129.25
6.0	564.00	514.00	423.00	282.00	282.00	141.00	141.00
6.5	611.00	561.00	458.25	305.50	305.50	152.75	152.75
7.0	658.00	608.00	493.50	329.00	329.00	164.50	164.50
7.5	705.00	655.00	528.75	352.50	352.50	176.25	176.25
8.0	752.00	702.00	564.00	376.00	376.00	188.00	188.00
8.5	799.00	749.00	599.25	399.50	399.50	199.75	199.75
9.0	846.00	796.00	634.50	423.00	423.00	211.50	211.50
9.5	893.00	843.00	669.75	446.50	446.50	223.25	223.25
10.0	940.00	890.00	705.00	470.00	470.00	235.00	235.00
10.5	987.00	937.00	740.25	493.50	493.50	246.75	246.75
11.0	1,034.00	984.00	775.50	517.00	517.00	258.50	258.50
11.5	1,081.00	1,031.00	810.75	540.50	540.50	270.25	270.25
12.0	1,128.00	1,078.00	846.00	564.00	564.00	282.00	282.00
12.5	1,175.00	1,125.00	881.25	587.50	587.50	293.75	293.75
13.0	1,222.00	1,172.00	916.50	611.00	611.00	305.50	305.50
13.5	1,269.00	1,219.00	951.75	634.50	634.50	317.25	317.25
14.0	1,316.00	1,266.00	987.00	658.00	658.00	329.00	329.00
14.5	1,363.00	1,313.00	1,022.25	681.50	681.50	340.75	340.75
15.0	1,410.00	1,360.00	1,057.50	705.00	705.00	352.50	352.50
15.5	1,457.00	1,407.00	1,092.75	728.50	728.50	364.25	364.25
16.0	1,504.00	1,454.00	1,128.00	752.00	752.00	376.00	376.00
16.5	1,551.00	1,501.00	1,163.25	775.50	775.50	387.75	387.75
17.0	1,598.00	1,548.00	1,198.50	799.00	799.00	399.50	399.50
17.5	1,645.00	1,595.00	1,233.75	822.50	822.50	411.25	411.25
18.0	1,692.00	1,642.00	1,269.00	846.00	846.00	423.00	423.00
18.5	1,739.00	1,689.00	1,304.25	869.50	869.50	434.75	434.75
19.0	1,786.00	1,736.00	1,339.50	893.00	893.00	446.50	446.50
19.5	1,833.00	1,783.00	1,374.75	916.50	916.50	458.25	458.25
20.0	1,880.00	1,830.00	1,410.00	940.00	940.00	470.00	470.00
20.5	1,927.00	1,877.00	1,445.25	963.50	963.50	481.75	481.75
21.0	1,974.00	1,924.00	1,480.50	987.00	987.00	493.50	493.50
21.5	2,021.00	1,971.00	1,515.75	1,010.50	1,010.50	505.25	505.25
22.0	2,068.00	2,018.00	1,551.00	1,034.00	1,034.00	517.00	517.00
		$50 Admin. Fee Charge	$50 Admin. Fee Charge		$50 Admin. Fee Charge		$50 Admin. Fee Charge
			75% Refund	50% Refund	50% Refund	25% Refund	25% Refund

*Indicates that a minimum administrative fee of $50 is deducted from those refunds.
**No refunds permissable after the 3rd week of summer session.

INDEX

F

G

H

I

J

L

M

N

O

P

R

S

T

U

V

W

Z

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