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Academic Calendar

FALL SEMESTER 2004

August 16	*Instruction Begins*
September 6	**Labor Day*
November 12	**Veterans Day*
November 24	*No Evening Classes*
November 25	**Thanksgiving*
November 26–27	*No Classes*
December 13–18	*Final Examinations*
December 18	*End of Fall Semester*

SPRING SEMESTER 2005

January 19	**Martin Luther King, Jr. Day*
January 21	*Instruction Begins*
February 18	**Lincoln's Birthday*
February 19	*No Saturday Classes*
February 21	**Washington's Birthday*
March 21–26	*Spring Break*
March 31	**Cesar Chavez Day*
May 22–27	*Final Examinations*
May 27	*End of Spring Semester*
May 27	*Graduation*
May 30	**Memorial Day*

SUMMER SESSIONS 2005 (TENTATIVE)

June 6–July 7	*5-week session*
June 6–July 14	*6-week session*
June 13–August 11	*9-week session*
June 27–July 28	*6-week session*
June 27–August 11	*7-week session*
July 11–August 11	*5-week session*
July 4	**Independence Day*

****Legal Holiday***

NOTE: *2004–2005 dates subject to change.*

While efforts have been made to ensure the accuracy of statements in this catalog, it must be understood that all fees, courses, course descriptions, designations of instructors, and all curricular and degree requirements contained herein are subject to change or elimination without notice. Students should consult the appropriate school or department for current information, as well as for any special rules or requirements imposed.

GENERAL CATALOG 2004–2005
Effective Fall 2004 through Summer 2005

SOUTHWESTERN COLLEGE
Chula Vista, CA 91910-7299

TO REQUEST THIS MATERIAL IN AN ALTERNATE FORMAT, CONTACT DISABILITY SUPPORT SERVICES AT 619-482-6512 OR TTY 619-482-6470.

Frequently Called Numbers • Area Code 619

OFFICE	PHONE	EXT.
Academic Information Services	*482-6373*	
Adjunct Faculty Voicemail	*482-6565*	
Admissions	*482-6550*	
Associated Student Organization (ASO)	*482-6443*	
Assessment (Placement Tests)	*482-6385*	
Athletics	*482-6370*	
Basic Police Academy	*482-6462*	
Bookstore	*482-6416*	
Cafeteria	*482-6359*	
Cashiering	*482-6307*	
College Police	*482-6380*	
Career Center	*421-6700*	*5247*
Center for Technical Education and Career Success (CTECS)	*421-6700*	*5805*
Community Relations/Public Info	*482-6304*	
Continuing Education	*482-6376*	
Counseling	*482-6317*	
Customized Training	*482-6376*	
Disability Support Services	*482-6512*	
Economic Development	*482-6479*	
Education Center at San Ysidro	*690-6083*	
Extended Opportunities Programs and Services (EOPS)	*482-6456*	
Evaluations Office	*482-6326*	
Evening Office	*421-6700*	*5261*
Extension Courses	*435-2720*	
Facilities Use	*482-6319*	
Financial Aid	*482-6357*	
Fiscal Services	*482-6312*	
Grade Information	*482-6550*	
Higher Education Center at National City	*477-9683*	
Learning Success Center	*482-6346*	
Learning Resource Center	*482-6397*	
Nurse	*482-6354*	
Nursing Programs/Courses	*482-6427*	
Office of Instruction	*482-6442*	
Outreach	*482-6582*	
Registration Information	*482-6550*	
Regional Occupational Program (ROP)	*482-6377*	
Schools:		
Academic Information Systems	*482-6373*	
Arts and Communication	*482-6372*	
Business and Information Systems	*482-6457*	
Counseling and Personal Development	*482-6471*	
Health, Exercise Science, and Athletics	*216-6626*	
Languages and Humanities	*482-6461*	
Mathematics, Science, and Engineering	*482-6459*	
Social Sciences and International Studies	*482-6582*	
Technology and Human Services	*482-6460*	
Security	*482-6380*	
Student Accounts and Cashiering	*482-6307*	
Student Activities	*482-6568*	
Student Employment Office	*482-6356*	
Student Newspaper	*482-6368*	
Superintendent/President	*482-6301*	
Telephone Registration and Grades by Phone	*482-9057*	
Tennis Courts/Tennis Center	*421-6622*	
Theatre Box Office	*482-6367*	
Transfer Center	*482-6472*	
Veterans Office	*482-6324*	
Women's Resource Center	*421-6700*	*5625*

President's Message

Welcome to Southwestern College!

It is my pleasure to present to you the 2004 catalog, which includes a host of information on Southwestern College and the programs and classes offered and supported by its distinguished faculty and staff. Whether your interests lie in art or women's studies, we have curriculum that meets your needs and helps fulfill your educational goals.

Southwestern College is the only public institution of higher education in the southern portion of San Diego County. As such, we take our role very seriously and strive to provide students of all ages and backgrounds with the resources they need to succeed.

Within the pages of this catalog, you will find information on everything from financial aid to veterans services. It is important to remember that this information is intended to serve as an introduction to these services. You can learn more by visiting the new One-Stop Student Services Center. Recently opened, this building is home to all the services utilized most by you—the student.

Take advantage of all that is awaiting you at Southwestern College. Only you can decide your future, but we are here to help.

Norma L. Hernandez

Norma L. Hernandez
Superintendent/President

SPANISH TRANSLATION

¡Bienvenido al Colegio Southwestern!

Es un placer presentarle nuestro Catálogo 2004 en el cual encontrará diversa información sobre nuestra institución, los programas y cursos que ofrecemos y que son impartidos y apoyados por nuestro distinguido personal y profesorado. Ya sea que su interés sea seguir estudios técnicos o profesionales, contamos con un plan de estudios flexible y que le ayudará a lograr sus metas educativas.

El Colegio Southwestern es la única institución pública de estudios superiores en el sur del condado. Por ende, sabemos el gran compromiso que tenemos con usted y nos esforzamos por ofrecer a todos los estudiantes los recursos necesarios para triunfar.

En nuestro catálogo, encontrará información variada desde cómo conseguir Ayuda Financiera a Servicios para Veteranos. Su enfoque es servir como una introducción a los servicios que ofrecemos. También, lo invitamos a visitar nuestro nuevo Centro de Servicios Estudiantiles, recientemente inaugurado y la sede principal de todos los servicios a disposición del estudiante.

El Colegio Southwestern le ofrece una multitud de servicios, cursos, y programas académicos. Espero que tome ventaja de todas estas oportunidades. Sólo usted puede decidir cual será su futuro, pero recuerde que estamos aquí para ayudarle.

Norma L. Hernández
Superintendente/Rectora

TAGALOG TRANSLATION

Maligayang pagdating sa Kolehiyo ng Southwestern!

Ikinagagalak kong ibigay sa inyo ang katalogo ng 2004, na kasama ang maraming impormasyon sa Kolehiyo ng Southwestern at ang mga programa at mga klase na inaalok sa tulong ng mga guro at mga kawani. Kahit na ang inyong interes ay nasa sining o sa pag-aaral ng tungkol sa mga kababaihan, mayroon kaming kurikulum na makapagbibigay ng inyong pangangailangan at iba pang mga tulong upang matupad ang inyong layunin sa edukasyon.

Ang Kolehiyo ng Southwestern ay nag-iisang publiko sa mataas na intitusyon ng edukasyon na matatagpuan sa dakong timog, bahagi ng territoryo ng San Diego. Gayon pa man, ginagawa naming mabuti ang aming tungkulin at nagsisikap kami upang mabigyan ang mga estudyante sa lahat ng gulang at anuman ang karanasan sa pamamagitan ng kanilang pangangailangan upang sila ay magtagumpay.

Sa loob ng mga pahina nitong katalogo, makikita ninyo ang lahat ng impormasyon mula sa pagtulong sa pagbabayad ng matrikula para sa mga beterano. Mahalagang tandaan ang impormasyon na ito na nauukol sa pagsisilbi sa pagsisimula nitong mga serbisyo. Pag-aralan lahat ng ito sa pag-bisita sa bagong-One Stop Student Services Center. Kamakailan, kabubukas lamang ang gusaling ito na naging tahanan para sa lahat ng serbisyo na ginamit ng karamihan sa inyo-ang estudyante.

Samantalahin ang lahat ng naghihintay sa inyo sa Kolehiyo ng Southwestern. Kayo lamang ang makapag-papasiya sa inyong kinabukasan, ngunit nadito kami para tumulong.

Norma L. Hernandez
Superintendente/Presidente

CHINESE TRANSLATION

欢迎你来到到西南学院!
我很高兴给你推荐这本2004年校刊。它包揽了西南学院的全部信息以及优秀教职员工所开设及支持的各类项目课程。不论你的兴趣是在艺术领域还是妇女研究，我们的课程设置能满足于你的需要，帮助你实现你的教育目标。
西南学院是圣地亚哥南部唯一的一所公立高等学校。为此，我们认真地履行我们的教育职能，努力为各年龄段和不同背景的学生提供其成功所需的资源。鏀

这本校刊为你提供了从助学金到退役军人服务等每一项有关信息。但重要的是要记住这些信息仅仅是服务项目的介绍，你到我们新建的学生服务中心便会了解到更多你要了解的东西。这栋大楼新近开放，主要为学生提供各项服务。
充分利用西南学院为你提供的一切。只有你才能决定自己的未来，而我们在这儿帮助你。

代理校区总督/校长
诺尔曼 赫南德斯

JAPANESE TRANSLATION

サウスウエスタン大学へ、ようこそ！

２００４年度の大学目録をここにご案内申し上げます。目録には本学の優秀な教員スタッフによるプログラム及び授業に関する情報が掲載されています。サウスウェスタン大学ではみなさんのニーズに柔軟に対応できるよう、アートから女性学に至るまで、みなさんの教育目標が達成できるよう充実したカリキュラムを用意しています。

サウスウェスタン大学はサンディエゴ郡南部における唯一の公立高等教育機関としてその社会的な任務を自負し、幅広い年齢層や多様なバックグランドを持つ学生が学業の面でも立派に目標が達成できるよう実に様々なリソースを提供し支援しております。

目録には奨学金や退役軍人サポートに関する情報も記載されています。学生サービスに関する詳細は最近オープンした「ワンストップ学生サービスセンター」にぜひ足をお運びください。くわしい情報が得られる場所として学生の憩いの場となっています。

学内で利用できるサービスは大いにご活用ください。将来の計画をたてるのはみなさん自身です。教職員スタッフ一同、学生のみなさんを応援します。

サウスウェスタン大学学長・
ノーマ・L・ヘルナンデス

Mission Statement

Southwestern College is committed to meeting the educational goals of its students in an environment that promotes intellectual growth and develops human potential.

Guiding Principles

Southwestern College is chartered by the State of California to provide lower-division educational programs that prepare students for transfer to senior institutions, career and technical programs leading to direct entry into the workforce, or career advancement. It is also chartered to provide basic skills that prepare students for college-level educational pursuits, and to contribute to the economic development of the region it serves. Within that context, the Governing Board adopted the Southwestern College Mission Statement.

Selecting a program of studies is one of the most important decisions a student will ever make. The following pages present a complete listing of programs, degree requirements, and courses, as well as information on the many services the College provides in order to assist students in reaching their educational goals. Southwestern College provides an environment that encourages exploration of many exciting educational opportunities.

Southwestern College offers many transfer and vocational/career programs of study in a variety of departments which are needed to prepare a student for transfer to a college or university or for employment in business and industry. In addition to the major educational programs taught at the main campus, the College also provides off-campus courses at selected extension centers throughout the South County area.

Faculty and staff at Southwestern College have earned an outstanding reputation. Faculty possess substantial academic and professional backgrounds, as presented on pages 399–412. Whether they are writing books, composing music, or digging for the archaeological remains of ancient civilizations, Southwestern College faculty members distinguish themselves among college educators. Faculty are appreciated by their students because they are excellent teachers, are accessible, and are committed to student success.

Southwestern College History

The Southwestern Community College District, located south of San Diego and extending to the U.S.—Mexico border, is one of 71 community college districts in the California community college system. It serves as the primary source of college education for approximately 400,000 residents of the South San Diego County area including the communities of Bonita, Chula Vista, Coronado, Imperial Beach, National City, Nestor, Otay Mesa, Palm City, San Ysidro, and Sunnyside.

The College began offering classes to 1,657 students in 1961 with temporary quarters at Chula Vista High School. Groundbreaking for the present 156-acre campus was in 1963 and, by September 1964, initial construction was completed and classes were being held at the new campus on the corner of Otay Lakes Road and East H Street in Chula Vista.

In 1988, Southwestern College established its Education Center at San Ysidro on the memorial site of the McDonald's tragedy. The College again expanded its off-campus locations in 1998 by establishing the Higher Education Center at National City in partnership with San Diego State University.

In addition to its Centers, Southwestern College also provides off-campus classes at several extension sites throughout the District and operates an Aquatic Center in Coronado in conjunction with the California Department of Boating and Waterways. Current enrollment—at all locations—exceeds 19,000 students. More than a half-million students have attended Southwestern College since opening its doors 43 years ago.

The Western Association of Schools and Colleges has continuously accredited Southwestern College. The College offers a comprehensive curriculum, preparing students for transfer to four-year colleges or universities as well as preparing students for jobs and career advancement. Of more than 1,100 community colleges nationwide, Southwestern College consistently places in the top 100 in the number of associate degrees conferred.

Education Centers

Education Center at San Ysidro

Academic excellence, growth, success, and learning typify the educational operations at the Southwestern College Education Center at San Ysidro. The Education Center was established in 1988 and is located at 460 W. San Ysidro Boulevard, San Ysidro.

The Education Center is a full-service center in that students are provided with instruction, student services, and instructional support programs. The transfer and career/technical programs provide entry-level instruction in general and vocational education, learning skills, and personal development courses. The Education Center has expanded its offerings and now includes a fast track and weekend college program.

The student services area includes Admissions, Assessment, Advisement, EOPS, Counseling, Financial Aid, Career Orientation, Outreach, and Transfer programs. Additionally, students are provided some support services such as library access and assistance, tutoring, and computer lab technical support.

Higher Education Center at National City

Established in 1998, the Higher Education Center at National City (HEC, NC) was created to serve the educational needs of the residents of National City and its surrounding communities. Part of a unique collaborative effort with San Diego State University (SDSU), the HEC, NC offers both graduate and undergraduate preparatory classes from one convenient South County location, 701 National City Boulevard, National City.

Proposition AA funding will provide for the next phase of the Southwestern College presence in the most northerly area of the District. A partnership with the City of National City, San Diego State University, and the San Diego County Office of Education (SDCOE) will result in an innovative new "educational village" that Southwestern College will anchor.

The Education Center offers broad-based curriculum including graduate courses in education technology and administration, lower-division preparation courses ideal for transfer-bound students, and basic skills, and occupational courses like those in the Dental Hygiene program.

Diversity Awareness

Southwestern Community College District does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, disability, or age in any of its policies, procedures, or practices. This nondiscrimination policy covers admission, access, and employment. Inquiries regarding the Equal Employment Opportunity policies should be directed to the Director of Human Resources, 619-482-6330.

Governing Board of the Southwestern Community College District

DAVID J. AGOSTO

CHRISTINE ARANDA, ED.D.

JEAN ROESCH, ED.D.

YOLANDA SALCIDO

TERRI VALLADOLID

NORMA L. HERNANDEZ,
Superintendent/President

TERRY NEWTON
Student Trustee, Term of Office (June 2004–May 2005)

Southwestern College—Approvals and Accreditations

Approvals

Southwestern College offers programs which are approved by:

STATE OF CALIFORNIA DEPARTMENT OF JUSTICE COMMISSION ON PEACE OFFICERS STANDARDS AND TRAINING
1601 Alhambra Boulevard
Sacramento, CA 95816-7083
(No website)

AMERICAN DENTAL ASSOCIATION COMMISSION ON ACCREDITATION
211 E. Chicago Avenue
Chicago, IL 60611-2637
312-440-4653
http://www.ada.org

CALIFORNIA BOARD OF REGISTERED NURSING
400 R Street, Suite 4030
Sacramento, CA 94244-2100
916-322-3350
http://www.rn.ca.gov

CALIFORNIA BOARD OF VOCATIONAL NURSING
2535 Capitol Oaks Drive, Suite 205
Sacramento, CA 95833-2919
916-263-7800
http://www.bvnpt.ca.gov

CALIFORNIA DEPARTMENT OF HEALTH SERVICES LICENSING AND CERTIFICATION AIDE AND TECHNICIAN CERTIFICATION SECTION (ATCS)
1800 Third Street, Suite 200
Sacramento, CA 94234-7320
916-327-2445
http://www.dhs.cahwnet.gov

COMMISSION ON ACCREDITATION OF ALLIED HEALTH EDUCATION PROGRAMS (CAAHEP)
35 East Wacker Drive, Suite 1970
Chicago, IL 60601-2208
312-553-9355
http://www.caahep.org

COUNTY OF SAN DIEGO EMERGENCY MEDICAL SERVICES (EMS)
6255 Mission Gorge Road
San Diego, CA 92120-3599
619-285-6429
(No website)

INTERNATIONAL ASSOCIATION OF HEALTHCARE CENTRAL SERVICE MATERIEL MANAGEMENT (IAHCSMM)
213 West Institute Place, Suite 307
Chicago, IL 60610-9432
312-440-0078
http://www.iahcsmm.com

NATIONAL INSTITUTE OF AUTOMOTIVE SERVICE EXCELLENCE (ASE)
101 Blue Seal Drive, S.E., Suite 101
Leesburg, VA 20175-5646
703-669-6600
http://www.asecert.org

Accreditations

Southwestern College is accredited by the following agencies:

THE ACCREDITING COMMISSION FOR COMMUNITY AND JUNIOR COLLEGES OF THE WESTERN ASSOCIATION OF SCHOOLS AND COLLEGES (WASC)
10 Commercial Boulevard, Suite 204
Novato, CA 94949-6107
415-506-0234
http://www.wascweb.org

NATIONAL LEAGUE FOR NURSING ACCREDITING COMMISSION, INC. (NLNAC)
61 Broadway, 33rd Floor
New York, NY 10006-2701
212-363-5555
http://www.nlnac.org

Foundation Officers

PRESIDENT—ADELA C. GARCIA
IBM Corporation

VICE PRESIDENT—J.R. CHANTENGCO
The Triwest Group

SECRETARY—DAN HOM
Aradiant Corporation

TREASURER—JOSE GARCIA
Wells Fargo Bank

EX-OFFICIO—JEAN ROESCH, ED.D.
Governing Board Member Southwestern College

EX-OFFICIO—NORMA L. HERNANDEZ
Superintendent/President Southwestern College

Foundation Directors

BILL ABASOLO—ATTORNEY AT LAW

HENRY BARROS—DWIGHT GOVE AGENCY, INC.

DAVID BEJARANO '81—U.S. MARSHAL, SOUTHERN DISTRICT OF CALIFORNIA

HOLLY HIDINGER—CPA AND SWC ADJUNCT FACULTY

PETER MABREY—SCRIPPS MEMORIAL HOSPITAL

IRENE WELLS—WELLS CONSULTING GROUP

Honorary Director

HARRY SHANK—SOUTHWEST COMMUNITY BANK

Southwestern College Foundation

The Southwestern College Foundation was established as a separate private nonprofit corporation in 1982 to solicit and receive real and personal property from public agencies, individuals or estates; and to manage, invest and/or distribute such real and personal property for the promotion of educational services, programs, and facilities at Southwestern College and/or within the Southwestern Community College District.

Southwestern College Foundation funds are primarily used to award student scholarships, sponsor campus activities, participate in community events, and build the College's endowment.

"The Southwestern College Foundation provides financial assistance and community support to help the College sponsor activities for students that would otherwise not be possible. My involvement with the Foundation for the past 20 plus years has been especially rewarding because we help the College maintain the highest educational standards." —Harry M. Shank, Honorary Director, SWC Foundation

"The Foundation has made it easy for us to contribute to Southwestern College, our community's most precious resource. The legacy of the College will be measured by generations to come as we endeavor to fulfill the ever-evolving potential of this institution."—Adela C. Garcia, President, Southwestern College Foundation

For further information, call Linda Gilstrap, Director of Grants, at 619-482-6497.

The SWC Foundation Directors are goodwill ambassadors for the College, giving of their time, talent, and treasury. Members are elected to serve three-year terms and officers are elected on an annual basis.

How to Apply and Register

Steps to Success—Matriculation

Matriculation is a process that enhances your college success. It includes access to important services and programs that Southwestern College offers you. It is a series of services you will receive before you attend your first class. Matriculation is an agreement between you and the College for the purpose of achieving your educational goals. It can be considered your steps to success to make sure that you get started on the right track.

1 ADMISSIONS—APPLY TO ATTEND SOUTHWESTERN COLLEGE

If you were not registered for the previous semester, you must complete an application and submit it to the Admissions Center on the main campus, the Education Center at San Ysidro, the Higher Education Center at National City, or online at **www.swc.cc.ca.us**

Upon filling out an application you will receive a student ID Card (former students use the same card previously issued; replacement cards will be issued for a fee), registration information, and other related materials.

2 ASSESSMENT—SCHEDULE AN ASSESSMENT APPOINTMENT

Take placement tests prior to orientation and advisements sessions. Assessment is highly recommended for students who plan to:

1. Enroll in courses with recommended reading preparation.
2. Enroll in any English, ESL, reading, or math courses requiring or recommending specified assessment skill levels.

Plan to take the tests at least two days before your orientation group session.

3 ORIENTATION AND ADVISEMENT

All new students are recommended to attend a group orientation and advisement sessions before enrolling in classes. It is important to an schedule an appointment for assessment, then go to the Counseling Center to schedule an orientation and advisement session. Orientation and advisement sessions will last two and one-half hours. You will receive assessment results, and counselors will assist you in selecting classes. Bring a pencil.

4 REGISTRATION

Complete registration and pay all required fees.

In the Admissions and Records Center, Evaluations Office, and Veteran Services we are always looking at ways to provide better service and greater access for our students. This past year we implemented web advisor which students can use to apply to the college, register for classes, pay fees and access their academic records all from the comfort of their home via the internet. We will be expanding these and others services in the near future.

—GEORGIA COPELAND,
Director, Admissions and Records

Step 1 • Admissions

Apply to Attend Southwestern College

Admission to Southwestern College is open to anyone who has graduated from high school, has equivalency, or is 18 years of age or older and is able to benefit from instruction at Southwestern College. Anyone who is not 18 years of age by the day immediately preceding the opening day of the semester or summer session must provide a high school transcript and proof of graduation, or completion of the high school proficiency exam or GED test, when applying for admission. In addition, a limited number of high school students are admitted to advanced study while concurrently completing their high school programs.

Application Procedure

Persons wishing to enroll at Southwestern College must file an Application for Admission. Students may apply online at **www.swc.cc.ca.us** or by obtaining an application from the Admissions Center on the main campus, the Southwestern College Education Center at San Ysidro, or the Higher Education Center at National City.

Transcripts from Other Institutions

A transcript is a record of course work completed at a school (i.e., high schools, colleges, and universities). Students who have attended other colleges or universities are required to provide transcripts from those institutions.

NOTE: *Official transcripts must be sent directly from the other school to the Southwestern College Admissions Center. Hand-carried copies will NOT be accepted.*

Programs Requiring Special Application for Admission

Air Force Reserve Officers Training Corps

Through an agreement between the Southwestern Community College District and the Air Force ROTC at San Diego State University, students can enroll in Air Force ROTC while attending Southwestern College. For further information on enrollment, contact the Department of Aerospace Studies at San Diego State University.

Army Reserve Officers Training Corps

Through an agreement between the Southwestern Community College District and the Army ROTC at San Diego State University, students can enroll in Army ROTC while attending Southwestern College. For further information on enrollment, contact the Department of Military Science at San Diego State University.

High School Students

The Advanced Student Program is a cooperative venture with the public and private high schools located in the Southwestern Community College District.

Qualified students who have completed the tenth grade may be admitted for concurrent enrollment at Southwestern College. A high school student residing within the College District may enroll in courses for advanced academic or vocational education if approved by his/her principal or counselor, provided the student is also enrolled in the high school for a minimum day. Students admitted in this category are subject to college regulations regarding admissions, attendance, prerequisites, scholarship, and personal conduct. All courses attempted and the units earned will be recorded on the student's permanent record for future use toward College graduation requirements. Interested students should contact their high school counselors or the Outreach Office for further information.

International Students

Southwestern College encourages enrollment of students from other countries who have the academic background and potential to succeed in a collegiate institution.

To be considered for admission, a prospective student must file an application no later than April 30, for the fall semester or October 1, for the spring semester and must provide documentation of the following:

- a minimum score of 460 or above on the TOEFL (Test of English as a Foreign Language), if his/her native language is not English;
- the last three years of secondary school and any college work completed to date as evidenced by a transcript in English translation;
- high school graduation with a "B" (or 3.0 on a 4.0 scale) grade average;
- financial means of support; and
- the educational objectives of the international student as explained in a 300–500 word essay.

An international student with an F-1 Student Visa status must:

- attend the Southwestern College International Student Orientation;
- take the Southwestern College basic skills placement tests. Assessment results will be used in directing students to the appropriate class levels;
- enroll in a program of study approved in advance by the International Student Counselor;
- enroll each semester and complete a minimum of 12 units with a minimum 2.0 grade point average to maintain F-1 student status; and
- maintain satisfactory progress toward an educational goal aimed at completion of the requirements for graduation with an associate degree.

An international student transferring from another United States college or university must:

- fulfill all the admissions requirements previously listed;
- be in valid F-1 Student Visa status (currently attending the school specified on the Visa); and
- have completed 15 units of college-level work at that college or university with a "C" grade average or 2.5 grade point average on a 4.0 scale.

Financial resources are important for the international student, and scholarship aid is not available from Southwestern College. Each international student must

- submit a complete financial statement, indicating the student's ability to finance the year's education to the satisfaction of the Director of Admissions Center;
- pay the nonresident tuition and other fees as required at registration. (International students may not work while attending Southwestern College unless the Immigration and Naturalization Service and the International Student Advisor grant approval); and
- enroll in a "Student's Accident and Sickness Medical Expenses Plan" or present satisfactory evidence of an active health and accident insurance policy.

NOTE: *Healthcare is required of international students.*

Southwestern College does not assist with housing, and each student and/or sponsor is responsible for arranging living accommodations within the adjacent community.

International students are subject to the same academic standards for grading, probation, and disqualification as all other students. Upon acceptance of admission to Southwestern College, a U.S. Immigration and Naturalization I-20 form will be issued to enable the student to apply for the F-1 Student Visa. Under special circumstances, persons in the United States on business may attend Southwestern College during their stay; however, they are not eligible for the I-20 form to be issued by this institution.

Students with an associate degree or its equivalent are considered beyond the scope of the community college and are encouraged to apply to a four-year college or university.

Students will be notified of acceptance by letter on or before May 30, for the fall semester and by October 30, for the spring semester. The College will issue the I-20 form after a $100 nonrefundable deposit has been received from the student. This deposit must be received within 30 days of the date of the letter of acceptance. Upon the student's arrival and enrollment at Southwestern College, the $100 deposit will be applied toward nonresident tuition fees. Students are required to be available for the International Student Orientation scheduled two weeks prior to the start of the semester. For more information, call the International Student Advisor at 619-482-6531.

International Programs

Residing in the School of Social Sciences and International Studies, International Programs ensures that international students studying at Southwestern College and local students who wish a global experience have full access to a wealth of curricula and services.

- International Programs offers semester-length and short-term study abroad options in a variety of disciplines.
- International students studying at Southwestern College are provided support services including housing referrals, transportation information, and services assistance.
- Southwestern College offers the Advanced Studies program to participating countries. Currently, the College has an agreement with cities and universities in the Republic of China. Delegates study at the College, expanding their understanding of public administration, the market economy, English-as-a-Second Language, and other relevant subjects.

NOTE: *A separate application is required for this program. For more information, visit our website* ***www.swc.cc.ca.us*** *or contact: International Programs Center, Room 651, 619-482-6504.*

Health and Law Enforcement Occupation Programs

A special admission procedure has been instituted for the following occupation programs:

- Certified Nursing Assistant (CNA)
- Dental Hygiene (DH)
- Emergency Medical Technology (EMT)
- Emergency Medical Technology and Paramedic (EMTP)
- Nursing (RN)
- Vocational Nursing (LVN)
- Operating Room Nurse (ORN)
- Surgical Technology (ST)
- Law Enforcement Training Academy

NOTE: *A separate application is required for these programs.*

Contact Information

BASIC POLICE ACADEMY
Room 560J, 619-482-6462

DENTAL HYGIENE PROGRAM
Higher Education Center at National City
619-477-9683 extension 3006.

SURGICAL TECHNOLOGY PROGRAM-ROP
Room 213B, 619-482-6377

OTHER HEALTH PROGRAMS LISTED
School of Technology and Human Services
Room 570B, 619-482-6352

Regional Occupational Program (ROP)

The San Diego County Board of Education contracts with the Southwestern Community College District to offer a variety of ROP courses. Students should see the schedule of classes for more information. Students wishing to enroll in any ROP course must complete both an ROP application and a college application available in the ROP Office on campus. College credit is available upon request. For more information contact ROP, Room 213B, 619-482-6377.

NOTE: *Enrollment in ROP courses is on a first-come, first-served basis. A separate application is required for this program.*

Residency Requirements

General Guidelines

The California Education Code states that all public institutions of higher education shall apply uniform rules in determining a student's residency classification. Each student applying for admission to Southwestern College will, therefore, be classified as a district resident, nondistrict resident, or nonresident of California in accordance with the Education Code. Each student shall provide such information and evidence of residency as deemed necessary. The day immediately preceding the first day of instruction for the semester, and the day immediately preceding the first day of instruction for classes beginning the tenth week, shall be the residency determination date for the fall and spring semesters. The day immediately preceding the first day of instruction for the first summer session shall be the residency determination date for all summer sessions.

Residency Categories

Applicants for admission to Southwestern College shall be classified under one of the three categories listed below.

District

Applicant whose legal residence is in the Southwestern Community College District and who is classified as a resident of the State of California.

Nondistrict

Applicant whose legal residence is in California, but not within the area of the Southwestern Community College District.

Nonresident

Applicant who has not maintained a full year of continuous legal residency in California immediately prior to the residency determination date for the summer session or semester for which he/she seeks admission.

Establishing Residency

In order to establish residency, a student must first be a citizen of the United States, a permanent resident or an applicant for permanent residency, or on another visa status that does not preclude him/her from establishing domicile in the United States. It is then necessary that there be a union of act and intent. The act necessary to establish legal residency is physical presence in California. While intent may be subjective, there are many possible indications of one's intent to maintain legal residency in California. It is the responsibility of the applicant to furnish information and evidence of both physical presence and intent, as requested by the Admissions Center.

Residency Determination of Student

The following items are pertinent to community colleges and are quoted from specific sections of the Education Code:

Legal Requirement

California State law requires that each student enrolled in or applying for admission to a California community college provide such information and evidence as deemed necessary by the Governing Board of the Southwestern Community College District to determine his/her residency classification.

Statutes

The statutes regarding residency determination are found in Sections 68000–68090 and 76140 of the Education Code, Sections 54000–54082 of the California Administrative Code, and Regulations of the Southwestern Community College District. These regulations are available in the Admissions Center and are subject to the interpretation of the College.

Rules of Residency

Adults over 19 years of age and married minors may establish California residency. A California resident, for purposes of postsecondary education, is defined as a person who has not only lived in the state for a minimum of one year prior to the residency determination date for the semester or summer session to which he/she is applying but can also verify clear intent to become a permanent resident of the state. (The residency determination date is the day before classes begin.)

NOTE: *It must be understood that although no one factor is controlling, the burden of proof to establish residency is upon the student.*

Primary Determinants

- Paying California state income tax as a resident.
- Maintaining California as legal state of residency on Leave and Earnings statement and W-2 form while in the armed forces for one year prior to enrollment.
- Possessing California resident motor vehicle license plates and registration.
- Possessing valid California driver's license.
- Registering to vote and voting in California.

Secondary Determinants

- Showing California as a home address on federal tax forms.
- Being a petitioner for divorce in California.
- Obtaining license from California for professional practice.
- Establishing and maintaining active California bank accounts.
- Owning residential property in California.
- Holding active membership in service or social clubs.
- Having spouse, children, or other close relatives reside in California.

Inconsistent Claim

Being involved in conduct inconsistent with a claim of California residency. Some examples of inconsistent conduct which nullify intent are:

- Maintaining voter registration in another state.
- Being a petitioner for a divorce in another state.
- Attending an out-of-state institution as a resident of that state.
- Declaring nonresident for state income tax purposes.
- Retaining a driver's license and/or keeping a vehicle registered in another state during the time period for which California residency is claimed.
- Paying as a resident state income tax in another state.

Rules of Residency, Married Minors

A married student under 18 years of age may establish residency in the same manner as an adult.

Rules of Residency, Unmarried Minors

An unmarried student under 18 years of age derives residency from the parent with whom he or she is residing. If the student lives with neither parent, residency is derived from the parent with whom he or she last lived. The student may be classified as a resident if the parent has been a legal resident of California for more than one year immediately preceding the semester of admission.

Other Residency Options

A student is also entitled to residency classification under the following circumstances:

- Student has been present with intent to become a resident in California for more than one year prior to the semester of admission.
- Student is over 18 years of age and has resided in California as a permanent resident more than one year prior to the semester of admission.
- Student is under 18 years of age and has resided with parent(s) as permanent resident(s) more than one year prior to the semester of admission.
- Student is a full-time employee of a public school district in a position requiring certification.
- Student is an apprentice as defined in Section 3077 of the labor code and enrolling in apprentice or related classes only.
- Student has earned livelihood primarily by performing agricultural labor for hire in California for at least two months per year in each of the two years preceding the semester of admission.
- Student has lived with parent(s) who is/are agricultural laborer(s) as specified above and is claimed as a tax dependent.
- Minor student has been under continuous care and control of adult(s) not a parent, for more than two years prior to the semester of admission. Such adult(s) must have been a California resident during the most recent year. Minor students must be enrolled full-time.
- Student is active military.

A student is entitled to resident classification for the minimum time necessary to become a resident if the following circumstances apply:

- Minor student in continuous full-time attendance, whose parents had established California residency (one year) and left the state, may be classified as a resident until he/she has attained the age of 18 and can achieve residency on his/her own.
- Student is a dependent natural or adopted child, stepchild, or spouse of active military service person stationed in California.
- Student is a full-time employee of the Southwestern Community College District.
- Student has not been an adult resident for one year and is a dependent child of a California resident.
- Student is a member of the armed forces who was stationed in California on active duty for more than one year prior to being discharged from the service.

Nonresident Student

A student classified as a nonresident will be required to pay tuition as a condition of and at the time of enrollment in an amount set forth by the Board of Trustees of the Southwestern Community College District. Information regarding tuition fees and refunds is found in the fee section of this catalog.

Incorrect Classification

A student incorrectly classified as a California resident is subject to reclassification as a nonresident and to payment of nonresident tuition. If incorrect classification results from false or misleading facts, a student may be excluded from class or classes upon notification.

Reclassification

Reclassification to resident status must be requested by the student. Financial independence during the current year and preceding two years will be considered at the time the student requests reclassification. Information regarding requirements for reclassification is available in the Admissions Center located in the Student Services Center.

Tuition fees will not be refunded to a student classified as a nonresident due to lack of documentation if at a later date documentation is presented for that previous semester.

Limitation of Residency Rules

The student is cautioned that this summation of rules regarding residency determination is by no means a complete explanation of their meaning. For further information, contact the residency clerk in the Admissions Center. The student should also note that changes might have been made in the statutes and in the regulations between the time this statement is published and the beginning of the semester.

Appeal of Residency

A student may petition and appeal the residency classification decision within three days to the Director of Admissions and Records. If the student is not in agreement with that decision, a written appeal may be made to the Superintendent/President or designee.

The determination will be made based on the statement of legal residency, pertinent information contained in the student's file, and student's appeal. Notification will be sent to the student by United States mail.

Admission in Error

Nonresident students, subject to payment of nonresident fees, who have been admitted to a class or classes in error without payment of the required fees, shall be excluded from such class or classes upon discovery pending payment of the fees.

Admission by Falsification

Falsification of information submitted on the application for admission will be grounds for exclusion from the College. Students excluded shall not be readmitted during that session or semester from which they were excluded. All debts incurred as a result of falsification must be paid prior to readmission.

Step 2 • Assessment

Schedule an assessment appointment

English, reading and mathematics assessments are essential to evaluate skill levels and to assist students in the selection of the proper level of course work. These assessments are recommended before enrolling in reading, English, and mathematics courses. Many courses also have a recommended reading level that may be attained on the SWC Reading Assessment prior to enrollment.

Who Should be Assessed

Assessment is strongly recommended if you indicate on your admissions application that your primary educational objective at Southwestern College is:

- Career/Technical
- Associate Degree
- Transfer to a four-year college/university
- Undecided
- Major other than self-improvement or job advancement

Assessment is also highly recommended if you plan to:

- Enroll in courses with recommended reading preparation.
- Enroll in any reading, math, English, or English as a Second Language course requiring or recommending specified assessment skill levels.

It is important to take all three assessments before registering for your first semester at Southwestern College. Results are considered valid for only three years. You may attempt each of the placement tests twice in any one semester and a total of three times during your enrollment at Southwestern College. If your assessment results have become invalid due to a three-year lapse, you may retake the tests but are subject to the same retest policy (twice in one semester and a total of three times). You may attempt to have the three-test limitation waived by filing an appeal through the Assessment Center.

All placement tests are strongly recommended but not mandatory. Assessment assists in matching you with courses most appropriate to your skill levels. If you decide not to be assessed, it is recommended that you complete a self-exemption form, available in the Assessment Center.

You may also be matched with appropriate courses without taking the placement tests if you have:

- Completed courses (with a grade of "C" or better, or "Credit") that are equivalent to Southwestern College courses requiring or recommending specified assessment skill levels (proof of successful course completion must be submitted with a Course Advisement and Prerequisite Review Request form to the Counseling Center).
- Assessment results from other colleges or universities (proof of assessment results must be submitted with a Course Advisement and Prerequisite Review Request form to the Assessment Center).

Assessment and Graduation Requirements

All students who plan to graduate with an associate degree are required to meet reading, writing, and mathematics proficiencies. The reading and mathematics proficiencies may be met by satisfactory performance on specific assessments:

The **reading proficiency** requirement is met by satisfactory performance on the Southwestern College Reading Assessment. This requirement may also be met by satisfactory completion (with a grade of "C" or better) of English 158 or English 116 or credit in English 12.

The **mathematics proficiency** requirement can be satisfied by any one of the following:

- satisfactory completion (with a grade of "C" or better, or "Credit") of Math 45 (Elementary Algebra) or a higher-numbered math course; or
- mathematics assessment results that indicate eligibility for Math 65 (Intermediate Algebra) or a higher-numbered math course; or
- satisfactory completion (with a grade of "C" or better, or "Credit") of any course from the established list of equivalent courses, including but not limited to Bus 183.

The **writing proficiency** requirement cannot be met by an assessment, but requires satisfactory completion of one of the courses listed on page 38.

If you have received an associate or higher degree from an accredited U.S. institution, you are not required to take the tests to meet proficiency requirements for graduation (with the exception of the Transfer Studies degree). See page 36 or graduation requirement information.

An additional graduation requirement in health education may be met by satisfactory completion (with a grade of "C" or better) of Health 101 or Health 116 or satisfactory performance on the Health Inventory Test. Information about the Health Inventory Test is available in the Assessment Center located in the Student Services Center.

Step 3 • Orientation and Advisement

Orientation and Advisement

Schedule an appointment for orientation and advisement in the Counseling Center located in the Student Services Center. Attend an orientation/preregistration workshop after you receive your assessment results and prior to your registration appointment. For an in-depth orientation to college, enroll in Personal Development 101 (PD 101).

Orientation and Advisement Sessions

Orientation, preregistration, and advisement sessions will last two and one-half (2.5) hours. You will receive assessment results. Counselors will assist you in selecting classes. Bring a pencil and photo ID. Take your assessment placement tests **prior** to orientation and advisement.

Topics of discussion include:

- Assessment results
- Course selection
- Degree requirements
- Recommended course preparation
- Prerequisites
- Campus resources

Information on Orientation

For information regarding dates and times or to schedule an appointment for orientation, please contact the Counseling Center, located in the Student Services Center, 619-482-6317. The Education Center at San Ysidro, 619-690-6083, and the Higher Education Center at National City, 619-477-9683, also offer orientation and preregistration sessions. Please contact the Centers for scheduled dates and times.

Step 4 • Registration

Enrolling in courses at Southwestern College requires you to complete several steps in the registration process. Registration information and materials to enroll in classes may be obtained with an application to the College in the Admissions Center in the Student Services Center on the main campus, the Education Center at San Ysidro, and the Higher Education Center at National City. Southwestern College publishes a schedule of classes prior to the beginning of each semester and summer session. The schedule delineates registration timelines, enrollment procedures, fees and tuition, and a complete listing of all courses to be offered that term both on- and off-campus.

Before registering, you should read each course description carefully to ensure you are registering for the courses you need to meet your educational goals. It is recommended that you make an appointment to see a counselor to develop a Student Educational Plan and to determine the classes you need to take.

Further, many courses restrict enrollment to students who have met—or are currently meeting—a level of preparation that is deemed essential to student success in those courses. These restrictions are called prerequisites, corequisites and limitations on enrollment. Courses may also have a recommended preparation that will also enhance your chances of success in these classes.

Recognizing that the proper establishment of prerequisites, corequisites, limitations on enrollment, and recommendations is critical to student learning, the Southwestern College faculty has taken great effort to ensure your success by diligently reviewing each requisite and recommendation prior to its implementation. The College endeavors to inform you of the skills needed to succeed in courses before enrolling in these courses without denying access to the college curriculum, and, at the same time, to uphold academic standards in establishing efficient and effective educational programs.

Therefore, you should plan to follow all course prerequisites, corequisites, limitations on enrollment, recommended preparation, and recommended concurrent enrollment. Being adequately prepared for courses will expedite your progress in reaching your educational goals.

Classification of Students

Students admitted to the College will be classified under one or more of the following designations:

- **FRESHMAN**
  Has earned fewer than 30 semester units of college credit.
- **SOPHOMORE**
  Has earned 30 semester units or more of college credit and has not attained an associate degree or higher degree.
- **OTHER**
  Attained an associate degree or higher degree.
- **FULL-TIME**
  Enrolled in 12 or more units.
- **3/4-TIME**
  Enrolled in 9 to 11.5 units.
- **HALF-TIME**
  Enrolled in 6 to 8.5 units.
- **PART-TIME**
  Enrolled in fewer than 6 units.
- **DAY**
  Enrolled in class(es) meeting before 4:30 p.m.
- **EVENING**
  Enrolled in class(es) meeting 4:30 p.m. or later.
- **NEW**
  Not previously enrolled at Southwestern College.
- **CONTINUING**
  Enrolled in the previous semester at Southwestern College.
- **FORMER**
  Enrolled in the past; but not in the previous semester at Southwestern College.

Prerequisite

A prerequisite is a course or qualification that must be satisfactorily completed before you may register for another course. A minimum grade of "C" or "Credit" must be earned in the prerequisite course.

Prerequisites are enforced at Southwestern College. If you have not met the listed prerequisites, you will not be able to enroll in courses requiring the prerequisites. Prerequisites may be met by satisfactory completion of courses at Southwestern College or equivalent coursework at another college or university. Some prerequisites may also be fulfilled by satisfactory results on the appropriate validated Southwestern College Assessment. If prerequisites were completed at another college or university, you will need to bring copies of appropriate transcripts and/or assessment results and clear the requirements through the Assessment Center (located in the new Student Services Center) prior to registration. Students may challenge prerequisites; see Prerequisite/Corequisite Challenge on page 21.

Limitation on Enrollment

Performance courses may require students to try out for intercollegiate athletic teams or to audition for courses involving public performances (for example, band, chorus, competitive speech, and theatre) prior to enrollment.

Enrollment in blocks of courses or sections may be a requirement so that a group of students will enroll together in that set of classes. Typically the students are part of a special program such as PUENTE or Future Teachers.

Enrollment may be limited due to legal requirements (imposed by statute, regulation, and/or contract). For example, some courses may require that the student have a valid driver license, a health clearance, a nursing license or certificate, etc.

Limitations on Enrollment are enforced at Southwestern College.

Corequisite

A corequisite is a course which must be taken at the same time as the indicated course. Students who do not take corequisites can be dropped from the courses requiring the corequisites. Corequisites are enforced at Southwestern College. Students may challenge corequisites; see Prerequisite/Corequisite Challenge on page 21.

Recommended Preparation

Recommended preparation is previous training or coursework that helps a student successfully complete a subsequent course. Completion of the recommended preparation course with a grade of "C" or better increases student success.

Recommended Concurrent Enrollment

Recommended concurrent enrollment is a course that a student should complete-but is not required to complete-while enrolled for another course. Enrollment in such a course improves student success.

You are strongly encouraged to follow recommended preparation and recommended concurrent enrollment wherever they are listed in the catalog to improved your chances for success in Southwestern College courses. Enrollment may not be denied to any student not meeting a recommended preparation or recommended concurrent enrollment.

Change of Records

Change of Address

Any change of a student's address or residence should be reported immediately to the Admissions Center. Failure to comply with this regulation may result in an administrative hold.

Change of Name

Any change of the student's name should be reported to the Admissions Center. Students reporting name changes during a semester are advised also to notify their instructors in order to maintain proper recognition and identification.

Course Enrollment Policies

Attendance Regulations

Each student is responsible for his/her registration of classes, for attending every class meeting, for informing instructors in case of absence, and for officially withdrawing from classes. Furthermore, each student is responsible for following the rules and regulations in this catalog.

Educational Program

The College offers a number of resources to assist the student in planning an educational program.

Class Changes

Students are responsible for each course he/she enrolls in during registration. Official class withdrawals (made the first week of classes through the end of the fourth week for a regular semester and until the deadline published for fast track courses or summer session) will not appear on the student's record. See page 18 or refund information.

Adding a Class After the Semester or Session Begins

Students may add a class only by attending class and obtaining an add code from the instructor or by having the instructor sign a Class Add form. Students may register on-line or by calling the telephone registration line to add by telephone or submit the class add form at the Admissions Center on the main campus, at the Higher Education Center at National City, or at the Education Center at San Ysidro during the class change period.

NOTE: *A class enrollment is not official until the Class Add is processed and fees are paid. A request to add a course may be accepted but rejected later if found to be a repeated course or if prerequisites have not been met..*

NOTE: *A student changing classes (adding or dropping) must present a valid student identification card to complete the transaction.*

An instructor adding a student's name to the class roster is only the first step. The instructor, after granting approval to the student to add, must direct the student to add the class on-line, by telephone or in the Admissions Center located in the Student Services Center..

NOTE: *The student should present, by the next class meeting, a validated form to verify adding the class.*

Withdrawing from Class After Registration

A student must officially withdraw from a course he/she no longer wishes to attend. Students may drop classes by going on-line, by calling telephone registration or by filing a Class Withdrawal form in the Admissions Center on the main campus, the Higher Education Center at National City, or the Education Center at San Ysidro.

Students are permitted to withdraw from a course through the twelfth week of the regular semester and the deadline established for fast track classes or a summer session. The result will be a "W" grade. After the withdrawal deadline, students must be assigned a grade (A, B, C, D, F, I, CR, or NC)

Waiver or Substitution of a Course

A student may request permission to waive or substitute a course for one that is required to complete graduation requirements. Petitions regarding requirements in the major must be approved by the appropriate school dean; requirements outside the major must be approved by the Director of Admissions and Records. Petitions are available in the Admissions Center.

Instructors May Drop Any Student

- Who fails to attend the first class meeting.
- For excessive tardiness. Excessive tardiness is defined as arriving late to class or required class activity more than three times after the first two weeks of the semester or the first week of a fast track or summer session. If the instructor intends to drop the student after the third tardiness, the instructor shall warn the student verbally or in writing. Following such a warning, the instructor may drop a student from class upon the next instance of tardiness.
- With or without an explanation for never attending class during the first week of the term, unless the student has contacted the instructor and the instructor has granted an excused absence.
- If the hours of unexcused absences for the semester exceed the number of hours the class meets per week (based on a traditional 18 week semester), or if the student's total hours of absence for any reason exceed twice the number of hours the class meets per week.
- Who has not been in attendance during a period of 14 consecutive calendar days.
- For lack of a prerequisite where applicable.

NOTE: *Students are responsible for officially withdrawing from classes they are no longer attending.*

NOTE: *An instructor may not lock a classroom door. However, instructors may temporarily restrict entry to the classroom due to an unusual learning activity such as (but not limited to) tests, group dynamic exercises, experiments, or guest speakers.*

Misconduct

Instructors may exclude a student for up to two class meetings pursuant to misconduct. Instructors must contact the Dean of Student Activities and Health Services after exclusion.

Misconduct is defined as:

- Academic cheating and plagiarism.
- Disruption of instruction activity, administrative procedures, or public service functions; continued disruptive behavior; continued willful disobedience; habitual profanity or vulgarity; or the open and persistent abuse of college personnel.
- On-campus use, sale, possession, or under the influence of alcoholic beverages, narcotics, other hallucinogenic drugs or substances, or any poison classified as such by schedule "D" in Section 4160 of the Business and Professions Code.
- Alteration or misuse of college documents, including acts of forgery and furnishing false information.
- Acts or threats of damage to or theft of property belonging to or located on college-controlled property or facilities.
- Act or threat of physical abuse of any person, assault or battery upon any student, college personnel, authorized college guest, or any other person.
- Violation of college regulation or State law.

Students have the right to appeal any actions taken under this policy through the Grievance and Order Committee. If the exclusion is appealed, the student will have the right to return to class pending action by the Grievance and Order Committee provided there is no repetition of the original cause for exclusion.

NOTE: *Attendance requirements may vary in programs where attendance regulations are established by an outside regulatory agency. In these cases, students will be notified in advance of the attendance requirements of the program.*

Leave of Absence

In case of an extreme emergency, which makes it impossible for a student to attend classes for a short period of time, the student may petition the instructor for a Leave of Absence. Petitions for a Leave of Absence are obtained from the Admissions Center. Absences incurred while on Leave of Absence are not counted toward excessive absence. Approval is at the discretion of the instructor.

Money Matters

Enrollment Fees and Nonresident Tuition

All students (California residents and nonresidents) are required to pay an enrollment fee and, if applicable, nonresident tuition. The fee structure is as follows:

Enrollment Fee

.5 unit $9
1 unit or more ..... $18 per unit

Nonresident Tuition

In addition to Enrollment Fees
Fee per unit $149

NOTE: *The fees listed in this catalog are those in effect at the time of printing. Enrollment fees are subject to change through California State Legislation, and other fees are subject to change through Southwestern College Governing Board action as judged to be in the best interest of the California Community Colleges and the students of Southwestern College. Please consult your current class schedule for the appropriate fee.*

Nonresident Fee Exemption

Effective January 1, 2002, a new law (AB540) went into effect in the State of California providing an exemption from paying nonresident fees for certain nonresident students. While this exemption allows students to pay resident fees, it does not grant them resident status that would give them eligibility for any state-funded program. To be eligible for this exemption a student must meet the following criteria:

- Attendance at a high school in California for three or more years
- Graduation or attainment of a high school equivalency from a California high school
- Enrollment in college not earlier than the fall 2001 semester

For more information on this fee exemption, contact the Admissions Center.

Nonresident Fees

The nonresident tuition fee shall be paid at registration each semester or summer session and shall be set by the Governing Board of Southwestern College no later than January 1 of each year. Fees are subject to change on an annual basis.

Collection of Nonresident Fees

Payment of nonresident tuition must be made at the time of registration, in accordance with the number of units in which the student enrolls. The full amount of the tuition required must be paid at this time; there is no provision for deferment of payment.

Enrollment in Error

Nonresident students, subject to payment of nonresident fees, who have been admitted to a class or classes in error without payment of the required fees, shall be excluded from such class or classes upon discovery pending payment of the fees.

Refunds

Other than fees collected in error, all fees will be refunded only for courses dropped before the end of the second week of the semester for full semester classes.

Dates vary for fast track courses. Fee refunds will be mailed and may take up to four weeks.

NOTE: *It is the responsibility of the student to officially withdraw from classes to be eligible for refunds.*

Southwestern Community College participates in a complete range of Financial Aid Programs. These programs are designed to assist you in funding your educational expenses. Financial Aid Staff are aware of the rising cost of education and the complexity of the application process. Our objective is to support your educational goals, as well as to provide you with the financial aid you are eligible to receive.

Please remember to file your Free Application for Federal Student Aid (FAFSA) to be considered for these wonderful programs that will assist you obtain your educational endeavors.

ARTHUR LOPEZ,
Director of Financial Aid

Additional Fees

Student Center Fee

Main Campus Classes Only

Fee per unit $1
Maximum per academic year *$10

**Beginning summer session extending through following spring semester.*

Parking Fee

Main campus/Education Center at San Ysidro

Fall Semester

Multi vehicle/car $30
Motorcycle $15
Daily parking (per day) $2

Spring Semester

Multi vehicle/car $35
Motorcycle $17.50
Daily parking (per day) $2

Summer Sessions

Multi vehicle/car $19.50
Motorcycle $10.50
Daily parking (per day) $2

Health Fee/Accident Insurance/Liability Fee

Health Fee (includes the accident insurance/ liability fee)

.5 Unit to 5.5 Units $9
6 Units or more $12

A health fee is collected to cover the cost of student accident insurance and to help fund the operational expenses of the Health Services Center.

Students may be exempted for the following reasons:

- Students who depend exclusively upon prayer for healing according to the teaching of a bona fide religious sect, denomination, or organization may petition for exemption from the health fee (forms available in the Admissions Center).
- Students who qualify for a Board of Governors Fee Waiver (BOGW) to cover enrollment fees.
- High school students enrolled at the Sweetwater Union High School District taking designated classes at high school sites only.
- Students attending under an approved apprenticeship training program are exempt from health fee.

Accident Insurance/Liability Fee $2

Students will pay a $2 accident insurance/ liability fee only if they are enrolled in:

- Off-campus classes where no health services are available.
- Classes at the main campus which meet at times when no health services are available.
- Travel study classes which meet outside of California.

Student Activities Card

Student Activities Card $8

Student Activities cardholders are eligible for scholarships, emergency book loans, TI-86 calculator rentals, use of the computer lab in the Student Center, and on/off-campus coupons and discounts.

Proceeds from the Student Activities Card are monitored and allocated by the Associated Students Organization, to provide leadership opportunities and sponsor cultural, social, and educational programs for all students. Student Activities Card, coupons, and other information will be sent by U.S. mail.

For credit/refund information, call 619-482-6568, or stop by the Student Center information counter.

General Expenses

All students must purchase their own textbooks and instructional supplies. The cost of textbooks will vary according to the major selected by the student and is dependent upon whether used books are available. The average cost is approximately $200 per semester for full-time students and $100 per semester for part-time students.

There are many courses offered by the College which require moderate to extensive supply and/ or equipment expenses. For example, supply costs in jewelry, photography, ceramics, engineering, drawing, and architecture classes are high. In addition, equipment costs for photography (i.e., 35 mm SLR camera) could be prohibitive for some individuals. Students are encouraged to review course equipment and supply costs with counselors, school deans, and instructors before registration.

No science laboratory fee or deposit is required at this time; however, breakage is charged to the student.

Experience has demonstrated that student activities are essential to the college program. These activities are financed by money received from discount membership in the Associated Students Organization. Receipts are budgeted to activities concerned with health, convenience, and the general welfare of the students in accordance with policies, rules, and regulations defined by the Governing Board.

Course Materials Fees for 2004–2005

Courses may require additional materials fees. These are subject to change without notice. See the current schedule of classes for most recent fees. **(See course descriptions for materials fees).**

Fees for Records

Students may obtain copies of any of their own records to which they have legal access for a fee of $1 per page. The fee for transcripts, however, is $3 per copy after the student has requested two copies at no cost. See Transcript of Credit Earned, page 32.

Financial Aid

The Financial Aid Office helps students who might otherwise be unable to continue their education because of financial problems. Students who need financial assistance to attend Southwestern College are urged to contact the Financial Aid Office located in the Student Services Center for information and application forms.

Eligibility for Financial Aid

Conditions to be met by all students applying for financial aid are citizenship or permanent U.S. residency status and established financial need.

Enrollment Fee Financial Aid Program

The Board of Governors Waiver (BOGW) helps low-income students pay the enrollment fee. A student may qualify in one of the following ways:

- at the time of enrollment, a student must be a recipient of Temporary Assistance to Needy Families (TANF)/CalWORKs or Supplemental Security Income (SSI) or General Relief;
- student must meet specific income standards; or
- student must demonstrate eligibility for state and/or federal need-based financial aid.

To qualify for the Board of Governors Fee Waiver, students must establish California residency as specified by Admissions Center guidelines.

Cal Grant A

Cal Grant A provides tuition assistance to students from low- and middle-income families. Students who enroll initially at a public community college, planning to transfer later to a tuition-fee charging institution, may apply for a Cal Grant A Reserve Grant. Grants will be awarded by GPA rank to applicants demonstrating financial need.

Cal Grant B

Cal Grant B is intended to aid high-potential students from disadvantaged low-income families. To be eligible for Cal Grant B, an applicant cannot have completed more than the equivalent of 16 semester units of part-time college work, or one semester full-time. Grants range up to $1,551 for living expenses for initial grant recipients.

Cal Grant C

Cal Grant C provides assistance for vocational training to students from low- and middle-income families. To be eligible for Cal Grant C, an applicant must enroll in an authorized vocational program at Southwestern College. Applicants with financial need are ranked according to their vocational aptitude as determined by the selection process. Grant amounts are up to $576 for training-related costs.

Pell Grant

This grant is available to eligible students who need financial assistance to continue their college education. It provides funds ranging from $400 to $3,938 per year.

Federal Supplemental Educational Opportunity Grant (FSEOG)

Under this program, an eligible student may receive a grant to help cover his/her educational expenses. Grants vary according to funds available.

Federal Work-Study (FWS)

Eligible students may work at a variety of jobs on campus. Work-study positions are usually 15 hours per week.

Stafford Student Loans

Institutions, such as banks or savings and loan companies, provide loans to students to help pay school expenses. Repayment and interest begin six months after the student ceases to be at least a half-time student at any accredited school or university.

Emergency Loans

Loans are available to all students for books or personal emergencies. The maximum amount a student can borrow during the regular semester is $100. These loans are to be repaid within thirty (30) days, and a nominal service fee will be charged. Failure to repay the loan will result in an administrative hold on records, grades, and transcripts. Carryover of an outstanding loan into the succeeding semester will automatically result in the account being turned over to an outside agency for collection. Inquire at the Financial Aid Office located or if you are a veteran, contact Veterans Services, both located in the Student Services Center.

Scholarships

Scholarships are available at Southwestern College based on various factors, including: majors, career goals, grade point average and club involvement. On-campus scholarships for continuing and transferring students are available each spring semester and the application deadline is in February.

Scholarships are also available from outside sources. These scholarships are listed in a monthly bulletin published by the Transfer Center located in the Student Services Center). Selection criteria, award amounts, and application deadlines are determined by the donors and vary.

Students are encouraged to stop by the Student Services Center for more information. You may also find additional scholarship sources in the reference section of any library or on the Internet at **www.finaid.org** or **www.fastweb.com**

Matriculation Appeals Petition

Review of Placement Decision

Students may challenge any placement decision by appealing to the Dean of the School of Counseling and Personal Development. The Dean of the School Counseling and Personal Development will see the student within five working days, if appropriate. If the dean is unavailable within that time, then the student petition will be directed to the Dean of the School of Languages and Humanities or the Dean of the School of Mathematics, Science, and Engineering, as appropriate. The student must attach documents (transcripts, evidence of work experience) and information to support the appeal. Students will be notified in writing. A student wishing to appeal the decision of the dean may request a meeting with the Vice President for Student Affairs or designee. The student shall receive a response within five days.

Waiver of Prerequisites/ Corequisites

A prerequisite is a course that must be taken before another course. A corequisite is a course that must be taken at the same time as another course.

If a prerequisite/corequisite for a course is not offered within a given semester, the student may request a waiver of the prerequisite. The dean of the school or designee responsible for the course will determine (within five working days) whether the required course was available, and if not, waive the prerequisite/corequisite because: the prerequisite/corequisite has not been offered for two-consecutive semesters, or the prerequisite/corequisite is necessary for graduation, transfer, or a certificate, and the prerequisite/corequisite is unavailable due to the number of course sections offered. A substitute course may be recommended in lieu of prerequisite.

The request for waiver of prerequisite/ corequisite must be made during the first week of classes.

Students will be notified in writing. Those students wishing to appeal the decision of the dean may do so by meeting with the Vice President for Academic Affairs or designee. The student shall receive a response within five working days.

Prerequisite/ Corequisite Challenge

Students may challenge a prerequisite/ corequisite on one or more of the grounds listed below. The student shall bear the initial burden of showing that grounds exist for the challenge. Grounds for challenge are:

- The prerequisite/corequisite has not been established in accordance with the District's process for establishing prerequisites and corequisites.
- The prerequisite/corequisite is in violation of Article 55201 of Title 5.
- The prerequisite/corequisite is either unlawfully discriminatory or is being applied in an unlawfully discriminatory manner.
- The student has the knowledge or ability to succeed in the course or program despite not meeting the prerequisite/ corequisite (the student will be required to demonstrate or verify this knowledge or skill).
- The student will be subject to undue delay in attaining the goal of his or her educational plan because the prerequisite/ corequisite course has not been made reasonably available.
- Such other grounds for challenge as may be established by the District Governing Board.

The dean or designee of the appropriate school shall review the petition and provide written notification to the student within five working days.

A student wishing to appeal the decision of the dean(s) or designee may do so by requesting a meeting with the Vice President for Academic Affairs or designee. The student shall receive a response within five working days.

Complaint of Unlawful Discrimination

A petition may be filed if a student feels that assessment, orientation, counseling, prerequisite/corequisite (or any other matriculation procedure) is being applied in a discriminatory manner. Where a student believes an injustice is being done, the student may seek redress through established grievance policy and procedure. Procedural due process, under the student grievance policy, shall be adhered to in accordance with the following exceptions:

- When a student files a petition that relates to matriculation, the designated administrator shall be the Dean of Student Support Services.
- If a formal hearing procedure is necessary, the Matriculation Appeals Committee membership shall consist of the Dean of Student Support Services, the Affirmative Action Officer, an Associated Student Organization (ASO) representative, and a member of the Matriculation Advisory Committee.

How to Maintain Good Academic Standing

SWC is governed by Title V of the Education Code which requires that you maintain Good Academic Standing.

Good Academic Standing includes:

1. Good Academic Progress, which requires that you maintain a 2.00 grade point average. If you fall below this grade point average, you will be placed on Academic Probation. (See page 35)

2. Good Progress requires that you successfully complete more than half of all units you attempt. If you earn more than half of your grades as "W", "I", or "NC", you will be placed on Progress Probation.

Disqualification

If you do not meet the above stated standards for two consecutive semesters, you will be disqualified from the college. (See page 35)

Academic Success

We suggest:

- Only enroll in the courses you are confident you will complete, and
- Be disciplined, complete your assignments, and;
- attend class regularly.

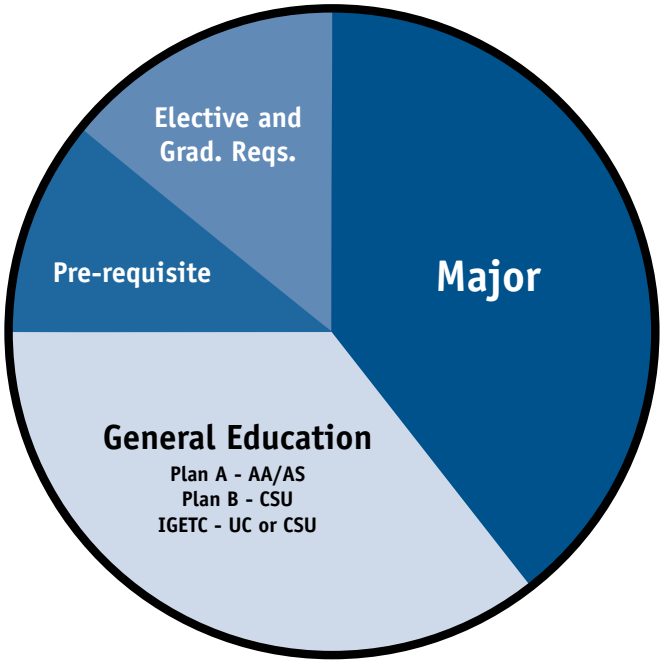
For more assistance in strengthening study skills strategies, enroll in Learning Skills/Personal Development 110 or visit the Learning Assistance Center in building 420.

How to achieve an AA/AS Degree

AN AA/AS DEGREE INCLUDES:

Major
Graduation Requirements
Prerequisites
General Education
Electives

DISTRIBUTION OF REQUIREMENTS FOR TRANSFER TO UC, CSU



AA/AS Degree-SWC: 60 units • Transfer Prep: G.E., Major 60–70 units

- Complete each piece of the pie to earn an AA/AS Degree.
- Earn a minimum of 60 degree applicable units
- Declare a major and complete a minimum of 18 units within that major. (Visit the Career Center or enroll in Personal Development 100 for assistance in determining your major.)
- Earn a minimum 2.00 Grade Point Average. (Visit the Learning Assistance Services Center in the LRC or enroll in Learning Skills/Personal Development 110 for study skills improvement.)
- Complete 21 units of General Education requirements as listed on Plan A, see page 39.
  - Language and Analytical Thinking-6 units
  - Natural Science-3 units
  - Humanities-6 units
  - Social Sciences-6 units

- Complete SWC Graduation Requirements, see page 36.
  - Computer Literacy-1 unit
  - Physical Education-2 classes
  - Health Education-3 units
  - Reading, Writing, and Mathematics Proficiency

- Complete prerequisite courses as required for more advanced coursework.
- Complete elective units if needed to earn a minimum of 60 units for graduation.

It is recommended that you schedule an appointment with a college counseling located in the Student Services Center to develop an educational plan that will ensure that you meet all degree requirements and educational goals.

How to achieve a transfer to another college or university...

Step 1.

Identify your major field of study

- Research careers in the Career Center, Student Services Center, or in the library.
- Schedule a counseling appointment to discuss options—Student Services Center.
- Discuss your field of interest and goals with faculty in the discipline(s) you are considering.

Step 2.

Identify universities offering your major.

- Visit the Transfer Center or Library to
  1. consider the geographic location of the university
  2. consider the setting of the university (urban/rural)
  3. consider the size of the university
  4. consider the ranking of the university
  5. consider the size, cost, housing options, etc.

Step 3.

Visit two or three universities/colleges

- Plan a visit to feel and see the environment early on (at least three semesters in advance of transferring).
- If you cannot go there, take a virtual tour on the Internet, if possible.

Step 4.

Identify course requirements for your major and for admission criteria.

Step 5.

Develop a plan for at least 2–3 potential options.

- Schedule an appointment with a counselor located in the Student Services Center to develop a Student Educational Plan and a Semester-by-Semester Plan.

Step 6.

Adhere to grade point requirements and complete your courses successfully.

- Enhance your transfer potential with internships, leadership experience, volunteer service, etc.

Step 7.

Identify a timeline for:

- applying for admission;
- collecting letters of recommendations from faculty and counselors (remember to notify them when you are accepted);
- preparing a personal statement; and
- applying for financial aid and scholarships.

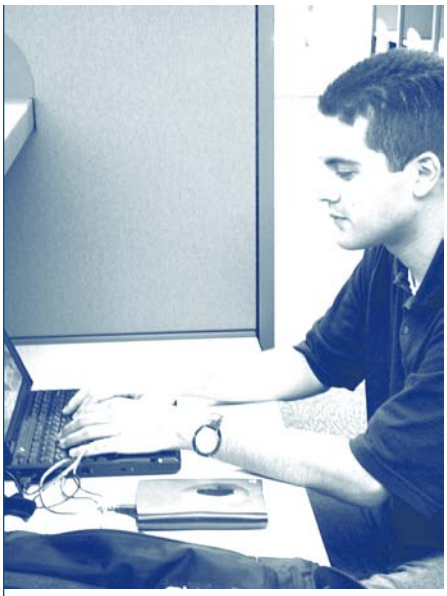
Step 8.

Keep informed on the progress of your application:

- read all letters/emails sent to you by the transfer institution;
- send transcripts as requested;
- take any required assessment exams requested on time;
- follow up with the transfer institution with any questions you have;
- attend orientation sessions, university tours, etc.;
- make arrangements for housing far in advance; and
- inform your family and significant friends about your plans-ask them for encouragement and support.

Step 9.

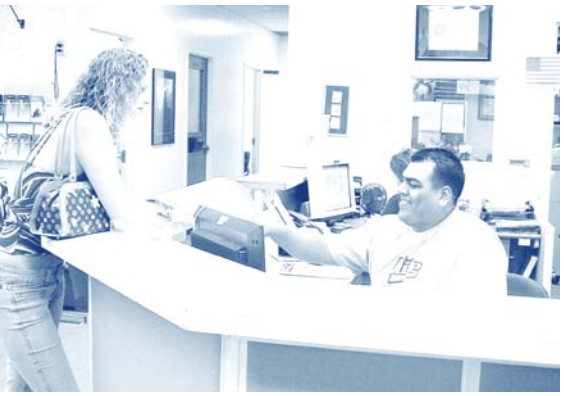
CONGRATULATIONS!



Academics—Policies, Regulations, Graduation Requirements, and Educational Options

Courses and Credit

A course is a planned study in a distinct subject area of a department. Each course has educational objectives which must be achieved in order to receive a final passing grade and to be awarded specified units. Each course has methods of evaluation to determine if the student has met the educational objectives, including written and oral assignments, problem-solving exercises, class and/or lab activities, quizzes, and examinations. Each course employs teaching techniques which can include lecture, individual student assistance, demonstrations, and discussions. All credit courses require a minimum of three hours of work per unit including class time per week.



Basic Credit Information

The California Education Code defines one credit hour of community college work as approximately three hours of recitation, study, or laboratory work per week throughout a term of 16 weeks. Where a term is more or less than 16 weeks, more or less than one credit hour shall be allowed in the same ratio that the length of the term is to 16 weeks. In as much as the semesters at Southwestern College are approximately 18 weeks in length, and the periods are approximately one hour in duration, the College has provided that one unit of credit shall be given for each lecture hour that the class meets per week per semester.

Carnegie Unit Standard

- One hour of lecture (plus 2 hours of homework) equals 1 unit.
- 3 hours of laboratory (plus 1 hour of homework) equals 1 unit.

Course Classifications

Career and Technical Courses

Career/technical courses are designed to provide education and experiences that give the student competency in the specific content of the course. The courses have been developed with the help of advisory committees representing business and industries reflective of the course content and program of study. In some cases career/technical courses may be transferable to other colleges and universities. The student should consult a counselor regarding the status of all career/technical course transfers.

A degree or certificate is awarded to students who have completed a selected sequence of courses leading toward a career/technical objective. Courses can be either required or elective with the units applied to fulfillment of the major.

Developmental Education, Academic Skills Courses

Special courses in English, mathematics, reading, and study skills are designed to assist students in developing the basic skills needed to successfully pursue educational or vocational goals. The student should consult a counselor about assessment and appropriate placement.

Independent Study Courses

Independent study is not a substitute for any course listed in the catalog nor a substitute for other requirements in the curriculum. It is individual study or research in an area of a department of particular interest to the student and not included in regular course offerings of the College.

Independent study courses are listed in the Course Description section of the catalog with the designation number 299. A petition to take an independent study course must be approved by both the instructor and the school dean, and it must be filed in the Admissions Center during the first three weeks of the semester or the first week of summer session. See page 26 for additional eligibility requirements information.

Distance Education

Hybrid Online Course

A hybrid online course has a limited but regular number of classroom meetings and also requires participation online (via the Internet). Students enrolled in hybrid courses must have access to a computer with reliable Internet connection as well as a valid personal email address.

Online Course

An online course provides all of the course content and class communication over the Internet. There are no regular classroom meetings; participation is required online (via the Internet). Students enrolled in online courses must have access to a computer with reliable Internet connection as well as a valid personal email address.

Online Class Orientation

Once you have enrolled in an online course at Southwestern College, you are strongly encouraged to take advantage of the Online Learning Student Orientation by going to **http://www.swc.cc.ca.us**, then clicking on the Online Learning hyperlink. You may then enter the orientation by clicking on Student Pages, then on Student Orientation Information and following the directions through the orientation. This orientation information contains information that will help you successfully complete your online course. It is important that you complete your orientation before the first day of classes.

Beginning Your Online Class

You may access your online course by going to **http://www.swc.cc.ca.us** and clicking on the Online Learning hyperlink or by going to **http://southwesterncollege.blackboard.com.** Access to your class may not be available before the first day of class.

- You will log onto the site with your user name, which will be your student ID number with a zero in front of the number. For example, if your student ID number were 123456, your user name would be 0123456.
- Enter your password, which has been set up as the first letter of your first name and your last name. For example, if your name were Albert Einstein, your password would be aeinstein (no capital letters and no spaces).

- After you successfully log onto the Blackboard site, you will see a list of the courses in which you are enrolled on the right hand side of your screen under My Courses. To begin the class you must email your instructor using the email address given in the course. Click on your course hyperlink, and you have started your online class.
- On the first day of class, it is very important that you go into the Tools area of the course and select Personal Information, then go to Enter Personal Information, and enter your email address in the appropriate space. You may also change your password for security reasons in the Tools area of the course.

Transfer Courses

Southwestern is a regionally accredited college with courses appropriately designated for transfer and/or baccalaureate credit. Southwestern College courses are generally accepted throughout the nation by other colleges and universities. However, acceptance of a Southwestern College course is ultimately determined by the receiving institution. In addition, there may be a limit to the number of units a college or university may allow from a community college. Career/technical and developmental courses, in most cases, do not transfer to other colleges or universities.

The following are examples by which a community college course may transfer:

- As meeting a lower-division major requirement at the intended transfer college or university. To be accepted for this purpose, the course usually corresponds exactly to the comparable course at the transfer institution in content, prerequisite, and unit.
- As meeting general education requirements. The student should review the general education patterns for the college or university to which he/she intends to transfer. A list of the transferable general education courses for the California State University (Plan B/IGETC) and the University of California (IGETC) systems are provided on page 39. All students, however, should consult with a counselor for assistance in selecting the appropriate general education course pattern.
- As elective credit. Elective credit may be applied to the total unit requirement for the bachelor's or higher degree. The receiving institution reserves the right to determine the extent to which transfer credit satisfies the specific and elective requirements of degree programs.

Courses not accepted to meet specific subject requirements are usually the result of one of the following occurrences:

- The units have exceeded the maximum amount of community college units allowed by the transfer institution.
- The corresponding course at the transfer institution is designated as upper-division.
- The course is a prerequisite for a course in the student's major, which is normally completed in high school.

Nontraditional and Alternative Course Credit

Auditing/Not for Credit

The Governing Board of the Southwestern Community College District, under the provisions of Chapter 5, Section 76370.3 of the Education Code, hereby authorizes individuals to audit regularly scheduled credit courses, subject to the following conditions and stipulations:

- A person must meet college eligibility requirements for admission to audit courses.
- A fifteen dollar ($15) fee per unit per semester shall be charged for each class audited. Students enrolled in classes to receive credit for 10 or more units shall not be charged a fee to audit three or fewer semester units per semester. Additionally, the mandatory health fee and course fees must be paid.
- No student auditing a course shall be permitted to change his or her enrollment in that course to receive credit for the course.
- Priority in class enrollment shall be given to students desiring to take the course for credit.
- Audit registration will be limited to the last day of the scheduled add/drop period and will require permission of the instructor of record, including his or her signature authorizing audit registration in the class.
- A maximum of six semester units may be audited in any regular instruction term (fall, spring, or summer).
- Classroom attendance of students auditing a course shall not be included in computing the apportionment due the District.

Credit by Challenge Examination

A student may obtain credit by challenge examination for graded courses at Southwestern College. Credit by challenge examination for courses identified in the high school district articulation agreements is included under this policy.

The school approving the challenge by examination shall determine the type of examination to evaluate comprehension or knowledge and the condition for its administration.

Credit by challenge examination is restricted and excludes physical education activity courses. Challenge by examination will be provided for all courses which are not exempt. A list of courses exempt from challenge examination is found in the Office of Instruction, the appropriate school office, and the Admissions Center.

Eligibility Requirements

A student must satisfy all of the following:

- Be currently enrolled in at least one other graded course.
- Be in good academic standing (minimum 2.0 GPA) and maintain a nonprobationary status at Southwestern College.
- Not be currently enrolled in or have received any previous college credit for the course being petitioned. Credit will not be awarded if the course is a prerequisite for another course already completed.
- Not have challenged more than 15 units by examination at Southwestern College, or more than two courses a semester, or more than one course during the summer.

The student will receive a grade of Credit (CR) or No Credit (NC) for the course at the end of the semester. The transcript will be annotated to indicate that the course was by examination.

Credits obtained by challenge examination are not accepted for meeting the unit load enrollment requirement for VA, Social Security benefits, financial aid, cooperative education, or for satisfying graduation residency requirements.

A student must complete all of the following steps:

- Complete and file petition with the Admissions Center prior to the end of the sixth week of the semester or the second week of the summer session.
- Return to the Admissions Center in two days to pick up the petition.
- By the eighth week of the semester or the third week of the summer session, obtain approval signature from the evaluating instructor and cognizant department chair/dean responsible for the course being challenged. Arrangements to take the exam will be made at that time.
- Pay appropriate fees in the Cashier's Office.

NOTE: *Students transferring to colleges and universities should check those institutions' policies on acceptance of courses taken as credit by exam.*

Credit for Cooperative Work Experience Education (CWEE)

Cooperative Work Experience Education (CWEE) allows students with declared majors to earn up to 16 units of college credit by engaging in an internship program (either paid or unpaid) related to their major. CWEE uses the entire community as the laboratory, allowing students to apply theoretical information learned in the classroom to a practical environment. It enables students to compare their career goals and expectations with specific career requirements and to learn from professional and technical experts working in their career field.

Title 5 regulations establish the basis for eligibility for Work Experience. To be eligible for CWEE, you must:

- Be enrolled in and successfully complete at least seven units, including your CWEE class for fall and spring semesters, or at least one class besides work experience class during the summer.
- Have a declared major.
- Work in either a paid or unpaid position related to your major.
- Develop job performance objectives each semester of participation.
- Enroll in the class during the regular college registration period.

Section 55254 of the Title 5 regulations further requires that you meet the following criteria for CWEE:

- Your planned program of CWEE must, in the opinion of your departmental instructor/coordinator, include new or expanded responsibilities or learning opportunities beyond those experienced during previous employment.
- Your CWEE program must have on-the-job learning experiences that contribute to your occupational or education goals.
- Your CWEE experience must have the approval of your instructor/coordinator.
- If you are self-employed, you must identify a person who is approved by your instructor/coordinator to serve as the designated employer representative. This person must agree in writing to accept responsibility for assisting you to identify new or expanded on-the-job learning objectives, for assisting in the evaluation of these objectives, and for validating the hours you worked.

For further information or enrollment procedures, contact the Cooperative Education Office located in Student Employment Services located in the Student Services Center, or call 619-482-6356.

Auditing Cooperative Work Experience Education (CWEE)

Students may audit the CWEE courses after completing the 16-unit level. Students interested in further information about Cooperative Education should contact Student Employment Services, located in the Student Services Center, by telephone 619-482-6356, or email ses@swc.cc.ca.us.

Course Equivalency

Southwestern College grants credit for college units earned at any regionally accredited postsecondary institution (e.g., Western Association of Schools and Colleges) other than course work identified by such institutions as nondegree level course work. Southwestern College will honor articulation agreements made with other postsecondary institutions.

Course work deemed to be equivalent in scope and content to course work taught at Southwestern College is determined by the Evaluations Office in consultation with the appropriate dean and/or faculty. Credits transferred from institutions on the quarter system will be converted to semester credits by multiplying quarter-unit totals by two-thirds. All credit summaries will be completed upon a student's petitioning for graduation or through consultation with a counselor. In the areas of mathematics and foreign language, credit will not be granted for a lower-level course completed after the higher-level course.

Students who wish to receive credit toward degrees at Southwestern College for course work taken at an accredited foreign institution must have their foreign transcripts evaluated by a foreign transcript evaluation service (preferably the International Education Research Foundation IERF). The following items should be noted:

- Courses cannot be used to satisfy the general education breadth or IGETC requirements.
- Credit cannot be awarded for English or speech courses.

Credit for Independent Study

To be eligible for independent study, a student must be enrolled in one graded course, have completed at least one course in the subject or related areas, or have demonstrated competence in the area in which he/she wishes to study, and be in good academic standing (minimum of 2.0 GPA) maintaining a nonprobationary status.

The maximum number of units a student can take in independent study courses is nine, with a maximum of six in any one department. A student taking an independent study course must turn in to the instructor of the course, at the end of the semester, an abstract of his/her independent study project or the project itself. Petition forms may be obtained in the Admissions Center.

Enrollment fees and nonresident fees must be paid at the time of acceptance of petition. (Southwestern College Policy 6019)

Other Nontraditional Credit

Southwestern College will recognize other sources of external credit from nontraditional sources upon receipt of official transcripts or score reports and a petition requesting that credit be awarded. Credit awarded from these sources will be general elective credit, unless specifically requested by the student. Course-to-course equivalency requests will be forwarded to the chair of the appropriate department who will make the equivalency decision. All requests for evaluation of nontraditional credit should be submitted to the Admissions Center.

NOTE: *For all alternative credit options, credit will not be posted to the student's permanent record.*

Credit Granted for Military Experience

Basic Training or Recruit Training

Four units of credit are awarded to all active duty students and service veterans who have attained at least six months active duty status with an honorable discharge. Additional credit may be granted according to the recommendations of the American Council on Education (ACE) Guide to Military Credit for students pursuing certain majors.

- Two of these units will be applied toward the PE graduation requirement.
- The remaining two units will be applied toward elective credit.
- The graduation requirement in health education is met by completion of Basic or Recruit Training.
- Air Force veterans will be awarded credit based on the transcripts of the Community College of the Air Force (CCAF).

Credit will be awarded for lower-division baccalaureate, associate degree, and upper-division baccalaureate recommended courses with the following conditions:

- Member copy 4 of DD-214 or a DD-295 must be on file with the Admissions Center.
- Student must petition the Veterans Office for credit.
- Appropriate school deans must approve course equivalency when credit is sought for specific military course work beyond basic training.
- If military course work does not match with specific college course work, the military credits will be listed as electives.

Credit may also be awarded based on recommendations provided on a Community College of the Air Force transcript (CCAF), and/or the Army and American Council on Education Registry Transcript (AARTS), and/or the Sailor/Marines American Consul on Education Registry Transcript (SMART). (See exception below for Military Occupation Specialty (MOS) course work.)

Southwestern College conducts an evaluation of all previous education and training of the veteran or eligible person, shorten the duration of the training course (or degree program) and notifies the veteran and the DVA accordingly.

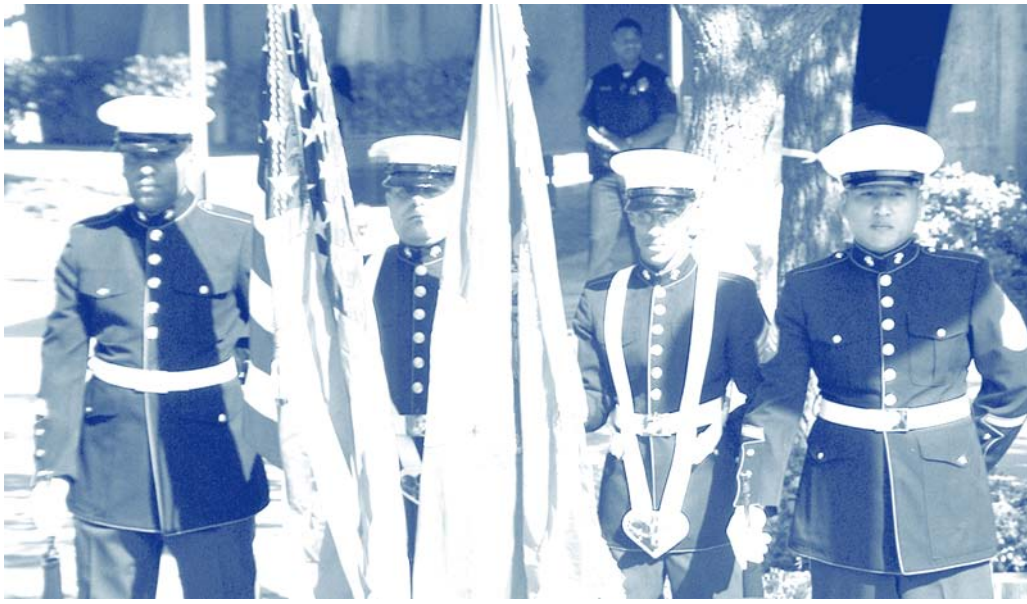
EXCEPTION: *Credit will not automatically be awarded for Military Occupation Specialty (MOS) or Navy Enlisted Classifications (NEC).*

NOTE: *A veteran or active duty student may petition for individual review. Waiver or credit by examination procedures are available methods for granting credit in these cases.*

Service members Opportunity Colleges/Navy (SOC/SOCNAV)

Southwestern College has been designated as a member of the Service Members Opportunity Colleges (SOC). As a member, the college provides educational assistance to active duty service members and their dependants and agrees to accept credit for selected military service schools as recommended by the American Council on Education. Southwestern College is also committed to Navy personnel who may choose to participate in the SOCNAV (Service Members Opportunity Colleges/Navy) Program Network. SOCNAV was established to better serve highly mobile service members. Southwestern College has approved programs in Administration of Justice, Corrections Emphasis, Law Enforcement Emphasis, Business Management, Financial Services Emphasis, Entrepreneurship/Small Business Emphasis, Marketing Emphasis, and General Studies.

To receive credit for military experience, follow the information listed above. You may submit all paperwork and receive further information at the Southwestern College Military Education Liaison Office located at the Naval Amphibious Base 619-435-2720.



International Baccalaureate

Southwestern College, on recommendation of the faculty, will award six or more units of credit for each International Baccalaureate (IB) higher-level subject examination passed with a score of four or better. To receive credit, the student must request that his/her IB scores (transcripts) be sent to Southwestern College. Once the scores are on file with the College, the student must petition for the awarding of credit. Petitions are available in the Admissions Center.

Please be aware that each university sets its own criteria for the awarding of international baccalaureate credit. For instance, the UC system will only award credit for a score of five or higher on each higher-level exam.

NOTE: *Credit will not be posted to the student's permanent record.*

The following table is a sampling of credit recommendations for the listed exams:

Examination	Score	Semester Units Awarded	SWC Course Equivalencies	Remarks
Art/Design	Higher 4–7	6	See Department	Need portfolio of work completed
Biology	Higher 4–7	6	BIOL 100,101	2 additional units of Biol 299
Chemistry	Higher 4–7	10	CHEM 200, 210	
Economics	Higher 4–7	6	ECON 101, 102	
Engl A	Higher 4–7	3	ENGL 115	Meets Writing Proficiency Requirements for Graduation
Geography	Higher 4–7	6	GEOG 100, 120	
History Americas	Higher 4–7	6	HIST 121, 122	
Languages:				
French	Higher 4–7	6	FREN 220, 230	
Italian	Higher 4–7	6	ITAL 130, 220	
Spanish A	Higher 4–7	6	SPAN 226, 230	
Spanish B	Higher 4–7	6	SPAN 226, 230	
Japanese	Higher 4–7	6	JPN 120, 130	
Music	Higher 4–7	14	MUS 101, 102, 111, 112, 116, 117	
Organization Studies	Higher 4–7	3	BUS 120	
Philosophy	Higher 4–7	6	PHIL 101, 299	
Physical Science	Higher 4–7	6	PHS 101, 299	
Social Anthropology	Higher 4–7	6	ANTH 102, 299	

Credit By Advanced Placement

Southwestern College and San Diego State University grant credit toward their undergraduate degrees for successful completion of examinations of the Advanced Placement Program of the College Board. No credit will be granted for a score of less than three.
High school students who intend to participate in this program should make the necessary arrangements with their high schools and should indicate at the time they take the Advanced Placement Examinations that their scores be sent to Southwestern College and to San Diego State University if planning to transfer there. To obtain credit and advanced placement, the student should complete a petition in the Admissions Center. Credit may not be earned at Southwestern College for courses which duplicate credit already allowed for examinations as listed under course equivalents.
The table below indicates the score necessary, the credit allowed, and the course equivalents for each of the examinations Southwestern College will accept for credit. To have official scores sent to Southwestern College, write: The College Board, SAT Program, Princeton, NJ 08541.

NOTE: *Credit will not be posted to the student's permanent record.*

Examination	Score	Southwestern College Credit Allowed Toward Degree	San Diego State Course Equivalents *	Southwestern College Course Equivalents +	CSU-GE (Plan B) Credit Allowed
Art History	3, 4, 5	6 semester units	ART 258, 259	ART 150, 151	3 units toward Area C1
Art Studio: General Drawing General, Drawing	3, 4, 5 3, 4, 5 3, 4, 5	6 semester units 6 semester units 12 semester units	ART 100, 101 ART 100, 101 ART 100, 101, 102, 103	ART 100, 101 ART 100, 101 ART 100, 101, 102, 103	
Biology	3, 4, 5	4 semester units	BIOL 100, 100L, 299	BIOL 100, 101, Free Electives	3 units toward Area B2
Chemistry	3, 4, 5	6 semester units	CHEM 200, 201	CHEM 200, 210	6 units toward Area B1 and B3
Computer Science: A** AB**	3 4, 5 3 4, 5	3 semester units 3 semester units 6 semester units 6 semester units	CS 299 CS 107 CS 107, 299 CS 107, 108	Free Electives MATH 130 MATH 130, Free Electives MATH 130, 140	.
Economics: Macro Micro	3, 4, 5 3, 4, 5	3 semester units 3 semester units	ECON 101 ECON 102	ECON 101 ECON 102	3 units toward Area D2 3 units toward Area D2
English: Language and Composition Composition and Literature	3, 4, 5 3, 4, 5	6 semester units 6 semester units	RWS 100, 200 RWS 100, ENGL 220	ENGL 115, 116 ENGL 115, 220 OR 270	3 units toward Area A2 6 units toward Area A2 and C2
French Language	3 4, 5	6 semester units 6 semester units	FRENC 201, 210 FRENC 220, 221	FREN 220 FREN 230	6 units toward Area C2

Examination	Score	Southwestern College Credit Allowed Toward Degree	San Diego State Course Equivalents *	Southwestern College Course Equivalents +	CSU-GE (Plan B) Credit Allowed
History: American European	3, 4, 5 3, 4, 5	6 semester units 6 semester units	HIST 109, 110 HIST 106, 299	HIST 100, 101 HIST 105, Free Elective	3 units toward Area D6 3 units toward Area D6
Mathematics: Calculus AB Calculus BC Calculus AB and BC	3, 4, 5 3, 4, 5 3, 4, 5	5 semester units 9 semester units 9 semester units	MATH 150 MATH 150, 151 MATH 150, 151	MATH 250 MATH 250, 251 MATH 250, 251	3 units toward Area B4 3 units toward Area B4 3 units toward Area B4
Music	3, 4, 5	4 semester units	MUSIC 205A–205B***	MUS 101, 102	3 units toward Area C1
Music Listening and Literature	3, 4, 5	6 semester units	MUSIC 151, 345	MUS 105, NE	
Physics: B C (Mechanics)	4, 5 4, 5	3 semester units 3 semester units	PHYS 180A PHYS 195	PHYS 110 OR 120 PHYS 270	3 units toward area B1 and B3 3 units toward Area B1 and B3
Political Science: Govt./Politics: American Govt./Politics: Comparative Govt./Politics: American, Comparative	3, 4, 5 3, 4, 5 3, 4, 5	6 semester units 6 semester units 12 semester units	POL S 101, 102 POL S 101, 102 POL S 101, 102, 103, 296	PS 101, 102 PS 101, 102 PS 101, 102, 103, NE	3 units toward Area D8 3 units toward Area D8 3 units toward Area D8
Psychology	3, 4, 5	3 semester units	PSY 101	PSYC 101	3 units toward Area D9
Spanish Language	3 4, 5	6 semester units 6 semester units	SPAN 103, 211 SPAN 202, 212	SPAN 220, 225 SPAN 230, 226	6 units toward Area C2
Statistics	3, 4, 5	3 semester units	STAT 250	MATH 119	3 units toward Area B4

+ Based on SDSU's 2003–2004 Catalog and 2003–2004 Articulation Agreements.

* *Credit may not be earned at SDSU for courses which duplicate credit already allowed for examinations as listed under SDSU course equivalents.*

** *Maximum combined credit six units allowed for Computer Science A and AB examinations.*

*** *Student must also take Music Placement Examination.*

NOTES:

- *Please consult with a counselor for single courses at Southwestern College with multiple course articulation at SDSU. In certain instances a blanket waiver may apply for those courses included in some majors (e.g. SWC MATH 119 articulation with STAT 119, STAT 250 or ECON 201 at SDSU for the Business Administration Major).*

- *A student planning to transfer to a four-year college or university should consult that transfer institution's catalog regarding its awarding of Advanced Placement credit. Credit awarded at Southwestern College for use at that college or university and/or for the completion of a CSU general education area is as noted above.*

Credit for College Level Examination Program (CLEP)

College credit may be granted for the General and Subject examinations offered through the College Level Examination Program (CLEP) by the College Examination Board when satisfactory scores have been earned. Southwestern College will grant credit to students who have attained the minimum passing score as listed below for each type of examination. No credit will be allowed in subject areas wherein previous college credit has been earned.

A maximum of six semester units of credit will be granted for each General Examination or three units of credit granted for each subject test passed.

To apply for credit, students are required to file a petition in the Admissions Center and attach a copy of their CLEP test results. To request an official CLEP transcript, write to: Educational Testing Service, P.O. Box 6604, Princeton, NJ 08541.

NOTE: *Credit will not be posted to the student's permanent record.*

Examination	Passing Score	Maximum Credit Granted	General Education Credit (San Diego State University)	General Education Credit (Southwestern College Plan A)
Natural Science	500	6 units	3 units in Life Science 3 units in Physical Science	3 units in Life Science 3 units in Physical Science
Social Science	500	6 units	3 units in Social Science 3 units in History	3 units in Social Science 3 units in History
Humanities	500	6 units	3 units in Literature 3 units in Fine Arts	3 units in Cultural Studies 3 units in Fine Arts
Mathematics	500	3 units	None: Satisfies Mathematics Competency only	Partial Credit for Math 65 Satisfies Math Proficiency

Examination	Passing Score	Maximum Credit Granted	San Diego State University Course Equivalent	Southwestern College Course Equivalent	General Education Credit Granted
College Algebra/Trigonometry	49	3 units	None	None	Yes
Calculus with Elementary Functions	51	3 units	Math 121	Math 121	Yes
General Chemistry	48	3 units	Chem 200	Chem 200	Yes

Transcript of Credit Earned

Each student who has an academic record at Southwestern College is entitled to two transcripts without charge. Additional copies may be obtained for a fee.

A student may request a transcript by mailing a written request to the Admissions Center or by completing a transcript request form available in the Admissions Center. The office must have the signature of the student before any transcript can be forwarded.

Schedule of fees for transcripts

REGULAR REQUEST	$3
EMERGENCY	$5
FAX (SAN DIEGO COUNTY)*	$5
FAX (OUTSIDE SAN DIEGO COUNTY)*	$10
FEDERAL EXPRESS* *(includes emergency fee)*	$20

Course Restrictions

Unit Enrollment Limit

The number of units or credits for full-time status is 12 or more per semester. On average, a student should expect to spend three hours per week in class and in study for each unit of college credit. Students enrolling in 15–16 units per semester are, therefore, usually committing themselves to more than 40 hours per week of study.

The maximum number of units a student may register for is 18. Anyone wishing to enroll for more than the maximum per semester must petition for exception with the Dean of Student Support Services prior to adding the classes. However, prior to filing a petition of exception, a student should meet with a counselor to verify the advisability of enrolling in additional units. Petitions must be filed with the Admissions Center prior to the deadline to add classes.

Course Overlays

State law prohibits a student from enrolling in courses that meet at the same time. Should a slight time overlap occur, an overlay petition may be submitted for approval. Petitions and information are available in the Admissions Center.

Course Repetition

Course repetitions are allowed only under the following conditions:

- A student may repeat a course in which he or she received a grade of "D", "F" or "NC" grade. When such a course is repeated, the last grade assigned will be used for computation of the grade point average, and the first grade will be ignored.
- A student may petition to repeat a course in which he/she previously received a grade of "C" or better or "CR" if the student believes either of the following:
- His/her grade would have been higher, except for extenuating circumstances caused by verifiable accidents, illness, or other circumstances beyond the control of the student.
- He/she should repeat the course because there has been a significant lapse of time since the student previously took the course, and the student needs to refresh his/her knowledge of skills in the subject in order to achieve the student's educational objective.

When a course is repeated pursuant to an approved petition, the first grade assigned will be used for computation of Grade Point Average, the second grade will not be calculated.

- A student with a verified disability who is enrolled in a special class within Disability Support Services may repeat the special class under the following circumstances:
- when continuing success of the student in the class is dependent on additional repetition of a specific class;
- when additional repetition of a specific special class is essential to completing a student's preparation for enrollment into other regular or special classes; or
- when the student has a student education contract goal, which requires repetition of the special class to meet that goal.

All petitions will be reviewed in accordance with Title 5 Regulations and a determination made to approve or deny the request. Petitions are available in the Admissions Center.

Students who repeat a class without satisfying conditions will automatically be withdrawn from the class and will not be entitled to receive a refund for enrollment fee or tuition. Course repetition for a substandard grade will not be removed when the repeated course is taken on the Credit/No Credit option.

Repeatable Activity Courses

A student may enroll more than once in an activity, performance and/or studio art course that is designated as repeatable. Courses designated as AB may be taken twice; ABC may be taken three times; ABCD may be taken four times. Example: A student who has taken beginning volleyball three times and intermediate volleyball once has completed the maximum number of repetitions allowed for the course, despite the different skill levels. This policy applies to activity courses in exercise science, music, art, technology, and engineering.

Field Trips

Throughout the school year, the District may sponsor voluntary field trips and excursions in connection with courses. Students should be advised as stated in the California Code of Regulations, Title 5, Section 55450, that if they participate in a voluntary field trip or excursion, they will be deemed to have held harmless the District, its officers, agents, and employees from all liability or claims which may arise out of or in connection with their participation in this activity. Normally, when a class meets off campus, the students will be responsible for arranging their own transportation to those locations.

Transportation

Throughout the school year, some college activities and classes may meet at off–campus locations. The College will not be providing transportation to these sites, and all transportation arrangements are the responsibility of each student enrolled in the activity or in the class. Although District personnel may assist in coordinating this transportation and/or may recommend travel time, routes, caravanning, etc.; these are only recommendations and are not mandatory. The District is in no way responsible for, and does not assume liability for, any injuries or losses resulting from this nondistrict sponsored transportation. If transportation is arranged with another student, that student is not an agent of, or driving on behalf of the District.

Grades: Grading System, Academic Progress, Probation, and Disqualification

Grading System

The grade assigned to each student in a course directly reflects the student's achievement of a specific set of objectives. A student entering a course assumes the responsibility to master the objectives of the course to the best of his/her ability. The degree to which the student fulfills the responsibility is reflected in the final grade assigned by the instructor.

Grades are assigned in each course, recorded on a student's permanent record and affect the student's future; therefore it is important that careful consideration be given to the grades assigned by the instructors.

The two types of grading systems are the grading scale and the Credit/No Credit evaluation. The grading scale consists of the letters A, B, C, D, and F. In specific courses indicated in the college catalog, students may elect to be graded on a Credit/No Credit basis. A student transferring to a four-year institution should check its policy on acceptance of Credit/No Credit grades.

Grade Point Average

The overall level of academic success is measured in terms of a student's grade point average (GPA). To determine the student's GPA, the total number of grade points accumulated is divided by the total number of units attempted.

The grade point average is used in determining eligibility for academic achievement such as the President's and Vice President's lists, academic probation, scholastic dismissal, eligibility for an associate degree, certificate of completion, graduation with honors, and some scholarships. Students are encouraged to pay constant attention to their grade point standing.

Grade Assignment, Grade Change, and Disputes

Final grades will be available at the end of each semester and summer session. The instructor of the course shall determine the grade given to each student in the absence of mistake, fraud, incompetence, or bad faith.

Only the instructor who teaches a class has the authority to issue grades to students enrolled in that class or to change grades that have already been issued. A student who wishes to request a grade change may take the following steps:

- Contact the instructor. If there were mistakes in reporting the grade, the instructor will institute a record change through the Admissions Center.
- If the request for a grade change is denied by the instructor, the student may ask for a review of the grade by the appropriate school dean.

Any change to a grade after it has been submitted to the Admissions Center must be done within one year following the end of the term in which the grade was assigned.

NOTE: *The policy for changing penalty WITHDRAWAL grades (issued prior to 1970) is as follows: When a student completes 15 units with a 2.0 grade point average or above, at any college, a petition may be filed to remove Withdraw, Failing (WF) grades received at Southwestern College. Petition forms are available in the Admissions Center.*

NOTE: *When a course is repeated pursuant to an approved petition, the first grade assigned will be used for computation of Grade Point Average, the second grade will not be calculated.*

Credit/No Credit Grade (CR/NC)

Credit/No Credit grades are used in two ways:

- Some courses are offered on a Credit/No Credit grading basis only.
- Other courses have a Credit/No Credit grading option available.

Courses in which only Credit/No Credit grades are available are identified in this catalog by the statement: Credit/No Credit only.

In courses where Credit/No Credit grades are used, credit is assigned for student achievement at the "C" grade level or above.

In courses offered on an optional basis, students may take courses during a semester, short session, or summer session on a Credit/No Credit basis. Students who desire to be evaluated on this basis must request this option during the first 30 percent of the semester, or the first week of a short session or summer session. Request forms are available in the Admissions Center.

An evaluation on a Credit/No Credit basis may not be changed later to a letter grade. Credit/No Credit grades cannot be used for removal of an unsatisfactory grade (D or F only).

All units earned on a Credit/No Credit basis in California institutions of higher education or equivalent out-of-state institutions shall be counted in satisfaction of college curriculum requirements. However, such courses shall be disregarded in determining a student's grade point average for all purposes for which a grade point average is required. Units attempted for which "NC" is recorded shall be considered in probation and dismissal procedures.

NOTE: *A student interested in transferring to a four-year institution should check the institution's policy on acceptance of Credit/No Credit grades.*

Incomplete Grade (I)

The "I" (Incomplete) is used in some special circumstances to indicate that the student did not complete certain essential requirements due to unforeseeable circumstances or emergency with justifiable reasons over which the student had no control (generally of such nature that the student was unable to attend class to perform class assignments during the last two weeks of the semester or was unable to take the final examination). A student may not repeat a class to remove the "I" grade.

Instructors are required to complete an Incomplete Grade report (Form I-7), stating the requirements for removing the "I" and the criteria for determining a new final grade. The Incomplete Grade Report forms are to be turned in to the Admission Center. If a written test is required, a copy of the test and scoring key must be filed with the form.

A copy of this record will be mailed to the student with a copy on file in the Admissions Center. Incomplete Grade Reports and attached documents will be forwarded to the Office of Instructional Services. Arrangements must be made with the Office of Instructional Services for completion of course requirement(s) for removal of the "I" grade. The final grade shall be given 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 in which it was assigned.

Units for which the "I" symbol is received shall not be used in calculating grade point averages. A student may petition for a time extension by submitting a petition to the instructor of record. A petition may be granted if, in the judgment of the instructor, an extension was warranted because of extenuating circumstances of verified cases of accident, illness, or other circumstances beyond the control of the student.

For further information, please contact the Office of Instructional Services and Academic Affairs, Room 213.

In Progress (IP)

The "IP" (In Progress) grade is to be used for students who enroll in a 'self-paced' course and do not finish the course during the semester. Students who do not complete the course will be assigned the "IP" and will be required to enroll and complete the course during the following term.

Instructors are required to complete an In Progress Grade Report, giving the student a copy and submitting the original along with the Final Grade Roster to the Admissions Center. The "IP" must be completed during the following regular term. The "IP" remains on the student's permanent record unless the student does not enroll the following term at which point the "IP" grade will be changed to an "F". When the student re-enrolls the following term, the evaluative grade will be assigned for that term.

Withdrawal Grade (W)

Students should always officially withdraw from a class by processing a Class Withdrawal form in the Admissions Center. No record of course enrollment will be posted for students withdrawing from courses during the first four weeks of the semester. A withdrawal initiated either by student or instructor from the fifth week through the twelfth week of the semester will be recorded on the student's permanent record as a "W" grade. Students who are officially enrolled beyond the twelfth week of the semester will receive an evaluative grade (A, B, C, D, F, CR, NC or an I).

Students enrolled in less than semester length courses who withdraw during the first 30 percent of class will have no record of enrollment posted. Students who withdraw after the first 30 percent of class, but before 75 percent of class, will receive a "W" notation. Students who maintain short course enrollment past the 75 percent point of the class will receive an evaluative grade (A, B, C, D, F, CR, NC, or I).

Academic Record Symbols

Grades are earned for each course in which a student is officially enrolled and are recorded on the student's permanent record at the end of each semester or summer session.

Academic achievement is reported in terms of grade point average. Grades and grade point averages should be interpreted as follows:

Grading Scale

SYMBOL	DEFINITION	GRADE POINT
A	Excellent	4
B	Good	3
C	Satisfactory	2
D	Passing-less than Satisfactory	1
F	Failing	0

CREDIT/NO CREDIT GRADES*

CR	Credit (at least satisfactory; units awarded not computed in GPA)
NC	No Credit (less than satisfactory or failing; no units awarded nor computed in GPA)

NON-EVALUATIVE SYMBOLS*

I	Incomplete
IP	In Progress
W	Withdrawal
RD	Report Delayed

* ***NOTE:*** *Units received for courses with these symbols are not used in computing the GPA.*

Report Delayed Grade (RD)

The "RD" is used to indicate that the grade(s) was/were not turned in to the Admissions Center for processing. The "RD" is a temporary notation, which is removed when the grade is reported.

Grades: Final Examination

Final examinations are held in all subjects according to schedule. No examination exceeds two hours in length. No student will be excused from the final examination. Should circumstances develop requiring a special examination at a time other than that scheduled, special authorization must be secured from the instructor and dean of the school in which the course is offered.

Grades: President's and Vice President's Lists

Each semester Southwestern College recognizes outstanding academic achievement of students who have completed at least 12 or more units with grades demonstrating an excellent scholastic record (Credit/No Credit courses are not included). The grade point average (GPA) required for academic recognition is defined as follows:

- **PRESIDENT'S LIST:**
  4.00 GPA
- **VICE PRESIDENT'S LIST:**
  3.50 to 3.99 GPA

Grades: Graduation with Honors

Students who achieve a cumulative grade point average of 3.5 or higher of degree applicable units (in all college work completed, including coursework taken elsewhere) will be graduated with honors. This status as an honor graduate will be noted on both the degree and the permanent record (transcripts) for all such students.

Academic Progress, Probation, and Disqualification

Probation is a system of monitoring student progress. Students who are experiencing difficulty in making satisfactory progress toward an educational objective are encouraged to reassess their objectives and the means required to achieve educational success.

The Probation Policy has been in effect since spring 1983. Units attempted prior to spring 1983 will not be considered in this policy.

Academic Probation

A student who has attempted 12 units or more at Southwestern College shall be placed on Academic Probation when his/her cumulative grade point average (GPA) at Southwestern College falls below 2.0.

Progress Probation

A student who has attempted 12 units or more at Southwestern College shall be placed on Progress Probation when his/her total units at Southwestern College include 50 percent or more of "W", "I", or "NC" grades.

Removal from Academic Probation

A student is removed from Academic Probation status when his/her total grade point average at Southwestern College is 2.0 or above.

Removal from Progress Probation

A student is removed from Progress Probation status when his/her total units of "W", "I", or "NC" at Southwestern College are less than 50 percent of the total units attempted.

Academic Disqualification

A student on Academic Probation status is disqualified when his/her semester grade point average falls below 2.0 for two consecutive semesters. A student whose semester grade point average equals or exceeds 2.0 but whose overall grade point average remains below 2.0 shall remain on Academic Probation.

Progress Disqualification

A student on Progress Probation is disqualified when his/her semester units of "W", "I", or "NC" exceed 50 percent of the units attempted for two consecutive semesters. A student whose semester units completed equals or exceeds 50 percent of the units attempted but whose overall units show 50 percent or more of "W", "I", or "NC" shall remain on Progress Probation.

Reinstatement After Disqualification

A student who is disqualified for the first time (academically or for progress) is eligible to return after one semester. Students who are disqualified lose their continuing student status and must reapply to the College.

A student who is disqualified for the second time (academically or for progress) is eligible to return after two semesters. Students who are disqualified lose their continuing student status and must reapply to the College.

A student who is disqualified may petition the Probation and Disqualification Committee requesting reconsideration and reinstatement. Petitions may be approved because of extenuating circumstances such as verified cases of accidents, illness, or other circumstances beyond the control of the student. Students who are reinstated remain on probationary status and are subject to disqualification if their GPA remains below 2.0 or their total units completed remain below 50 percent.

NOTE: *Petitions are available in the Counseling Center.*

Academic Renewal: Elimination of Substandard Course Work

A student may request, under certain circumstances, to have the College disregard up to a maximum of 15 units of substandard course work in computation of grade point average and/or for meeting the requirements for an associate degree. The circumstances for alleviation of substandard academic performance will be subject to all of the following:

- five years must have elapsed since the most recent work to be disregarded was completed;
- the student must have completed at least 24 units of subsequent course work with a 2.5 (C+) grade point average;
- the student must request the action formally; and
- the student must present evidence that the substandard course work completed the semester(s) under consideration is not representative of present scholastic ability.

Southwestern College will honor the academic renewal policy of other accredited institutions in disregarding or removing previous work completed at those institutions from degree consideration. A student may request academic renewal only once during all periods of attendance at Southwestern College. Petitions to request academic renewal without course repetition are available in the Admissions Center.

Graduation Requirements and Educational Options

Southwestern College recognizes the educational achievement of its students by granting the Associate in Arts degree, the Associate in Science degree, and the certificate of achievement. Associate degree programs allow the student the benefits of a general college education and the option of choosing occupational training, liberal arts, or a concentration in a department offered by the College.

Graduation Evaluation

Students are encouraged to plan their educational objectives in such a manner as to qualify for graduation with an associate degree. Degrees or certificates are not awarded automatically upon completion of the requirements. A candidate must submit a petition for graduation in the Admissions Center. Petitions for graduation may be filed at any time; however, students wishing to graduate in a specified semester (fall, spring, summer) must submit a petition according to dates published in the semester course schedule.

Students who have attended other colleges/universities must have all official transcripts forwarded directly to the Admissions Center. All previous course work must be evaluated whether or not it is needed for the associate degree at Southwestern College.

NOTE: *Hand-carried copies of transcripts are not accepted.*

Graduation and Certification Requirements

General Education Requirements

Southwestern College is committed to providing general education encompassing communication skills, natural sciences, arts, humanities, and social and behavioral sciences, which are basic to effective living and full participation in a democratic society.

The College believes that a comprehensive education introduces the student to the fundamentals of human experience and knowledge in the context of a global society. Such experience provides a common base of learning for all students and seeks to meet the needs of a student body diverse in social, cultural, and educational backgrounds. It also serves to develop creativity and critical thinking skills essential to the attainment of personal goals and to the ability of the individual to make a positive contribution to society.

The purpose of general education is to enhance learning and to add breadth to the college experience in order to complement the specialization in the major. The general education curriculum thus provides coherence to undergraduate education, affording the student the opportunity to develop an integrated overview of the diverse fields of human knowledge.

A student may meet the general education requirements for an associate degree by completing any of the plans offered by Southwestern College (Plan A, Plan B, TAG, or IGETC).

Major Requirements

A student may be enrolled for one or more semesters without declaring a specific major. He/she may also change majors. The requirements for the major will be determined by the catalog in effect during the semester in which the student declared or changed the major or any subsequent catalog within periods of continuous enrollment. All major requirements must be completed using the same catalog.

Unit and Scholarship Requirement

Students must satisfactorily complete 60 or more units of course work which will satisfy all the graduation requirements. "Satisfactorily completed" means either credit earned on a Credit/No Credit basis or cumulative grade point average of 2.0 or better for credit earned on a grading scale basis for all college course work attempted, for all Southwestern College course work attempted, and all courses required for the major.

Computer Literacy Requirement

The requirement for the associate degree is satisfactory completion (grade "C" or better or credit) in one course (minimum 1 unit) selected from those listed below. Computer literacy is defined as an awareness of the impact that the electronic digital computer is having on contemporary society and the ability to use the computer to perform fundamental tasks that would be encountered in educational and job-related areas where it has the most widespread use. Students who have a background in computers may substitute a more advanced computer course or may have this requirement waived by verified work experience in the computer field. For (ADN) nursing majors the Computer Literacy requirement is met by completion of courses for the major.

ARCH 200	*Introduction to Computer Aided Design*
ART 159	*Graphic Design Layout*
CAD 220	*Introduction to CAD/CAM Systems*
CL 115	*Microcomputer Program Using BASIC*
CL 120	*Computer Literacy*
CIS 101	*Introduction to Computers and Information Processing*
ENGR 120C	*Engineering Problem Analysis-C/C++ Language*
ENGR 120F	*Engineering Problem Analysis-FORTRAN*
JOUR 200	*Campus Newspaper Production I*
JOUR 201	*Campus Newspaper Production II*
JOUR 202	*Campus Newspaper Production III*
LA 200	*Introduction to Computer Aided Landscape Design*
MATH 130	*Introduction to Computer Programming*
MUS 100	*Computers and Music*
MUS 155	*Electronic Music*

NOTE: *A student who has received a college degree from an accredited U.S. institution will not be required to meet proficiency requirements for graduation (with the exception of the Transfer Studies degree).*

Exercise Science Requirements

Students must satisfactorily complete two classes of physical education, dance, or one of each. A student is exempt from this requirement under any of the following circumstances:

- The student presents a physician's statement detailing a physical disability that would prevent them from participating in an adaptive physical education activity class.
- The student provides verification of graduation from a two-year or four-year college or university.
- The student provides a military form (DD-214 or DD-295) showing at least one year of active duty. The College will grant two units of credit for physical education.

The student has taken the majority of classes as an evening student at Southwestern College.

- The student has been accepted and has enrolled with the ADN (Associate Degree Nursing) Program.

The following courses **DO NOT** fulfill the physical education activity requirement for graduation:

DANC 200	*Dance History and Appreciation*
ES/A 109	*Fitness Assessment Lab*
ES/T 200	*Physical Education in the Elementary School*
ES/T 201	*Skills Competency in Physical Education*
ES/T 202	*Introduction to Physical Education*
ES/T 204	*Theory and Technical Analysis of Offensive Football*
ES/T 205	*Theory and Technical Analysis of Defensive Football*
ES/T 206	*Theory and Technical Analysis of Offensive Basketball*
ES/T 207	*Theory and Technical Analysis of Defensive Basketball*
ES/T 250	*Prevention and Care of Athletic Injuries*

Health Education Requirement

Students must satisfactorily complete (grade of "C" or better or "Credit") Health 101 or 116 or have a satisfactory score on the health inventory test. Military DD-214 and DD-295 forms will satisfy this requirement under certain conditions, (See SWC Policy 6039 for details). For (ADN and VN) nursing and (DH) Dental Hygiene majors the Health Education requirement is met by completion of courses for the major.

NOTE: *The health inventory test may not be taken after Health 101 has been completed with an unsatisfactory grade.*

NOTE: *A student who has received a college degree from an accredited U.S. institution will not be required to meet proficiency requirements for graduation (with the exception of the Transfer Studies degree).*

Proficiency Requirements

Mathematics Proficiency Requirement

In meeting the mathematics proficiencies through the Southwestern College Assessment Process, the college grade point average may be substituted for the high school grade point average. The student must have completed a minimum of 24 degree units in residence, have completed those units within the past seven years, and be in good standing with the college.

The student must submit a student petition to the Admissions Center to be considered for this substitution.

Students are encouraged to satisfy the mathematics proficiency through course work and to pursue mathematics education beyond minimum proficiency. Transfer students should be aware that the CSU and UC entry-level mathematics examination requires proficiency above the level of Intermediate Algebra (Math 65). In addition, most careers require a level of mathematics beyond the minimum proficiency levels.

Mathematics proficiency can be satisfied in any one of the following ways:

- satisfactory completion (credit or grade of "C" or better) of MATH 45 (Elementary Algebra) or a higher-numbered mathematics course;
- mathematics assessment results that indicate eligibility for MATH 65 (Intermediate Algebra), or a higher-numbered mathematics course; or
- satisfactory completion (Credit or grade of "C" or better) of BUS 183.

The Southwestern College Mathematics Assessment Process may be taken throughout the year. It is advised that students take these tests as soon as possible before or following enrollment. Educational review can be arranged for students who are deficient in these areas. However, it is the responsibility of each student to arrange to take these tests, review his/her test results, and meet with a counselor regarding his/her results. Review material will be available upon request.

NOTE: *A student who has received a college degree from an accredited U.S. institution will not be required to meet proficiency requirements for graduation (with the exception of the Transfer Studies degree).*

Reading Proficiency Requirement

In meeting reading proficiencies through the Southwestern College Assessment Process, the college grade point average may be substituted for the high school grade point average. The student must have completed a minimum of 24 units at Southwestern College, have completed those units within the past seven years, and be in good standing with the College. The student must submit a student petition to the Admissions Center to be considered for this substitution.

Satisfactory score on the Southwestern College Reading Assessment Process or satisfactory completion (grade of "C" or better or "Credit") of English 158 or English 116 or Credit in English 12 is required.

NOTE: *A student who has received a college degree from an accredited U.S. institution will not be required to meet proficiency requirements for graduation (with the exception of the Transfer Studies degree).*

Writing Proficiency Requirement

English writing proficiency requires satisfactory completion (grade of "C" or better or "Credit") of one of the following:

AJ 167 *Written Communication in Administration of Justice*
BUS 211 *Communication in Business and Industry*
BUS 212 *Business Communication*
ENGL 105 *Practical Writing*
ENGL 114 *Introduction to Composition*
ENGL 115 *Reading and Composition: Exposition/ Argumentation*
ENGL 116 *Critical Thinking and Composition*

NOTE: *The student should select a course that will also satisfy the General Education requirement for Communications in Plan A, SWC or Plan B, CSU or IGETC Plan, UC and CSU.*

NOTE: *A student who has received a college degree from an accredited U.S. institution will not be required to meet proficiency requirements for graduation (with the exception of the Transfer Studies degree).*

Residency Requirement

The student must satisfactorily complete at Southwestern College a minimum of 12 units used to satisfy degree requirements.

Plan A 2004–2005
Associate Degree (A.S. or A.A.)
General Education Requirements

Plan A, SWC

A. Language and Analytical Thinking

Six units must be distributed as follows: select one course from Group 1 and one course from Group 2 or Group 3.

GROUP 1: WRITTEN COMMUNICATION

AJ 167	Written Communication in Administration of Justice
BUS 211	Communication in Business and Industry
BUS 212	Business Communication
ENGL 105	Practical Writing
ENGL 114	Introduction to Composition
ENGL 115	Reading and Composition: Exposition and Argumentation
ENGL 116	Critical Thinking and Composition

GROUP 2: ANALYTICAL THINKING

CIS 101	Introduction to Computers and Information Processing
COMM 160	Argumentation and Debate
ENGL 158	College Reading
MATH 65	Intermediate Algebra (or any higher-numbered math course)
MATH 130	Introduction to Computer Programming
PHIL 103	Logic and Critical Thinking
PSYC/SOC 270	Statistical Methods of Sociology

GROUP 3: ORAL COMMUNICATION

COMM 103	Oral Communication
COMM 104	Public Speaking
COMM 174	Interpersonal Communication

B. Natural Science

Three units must be distributed as follows: select one course.

GROUP 1: NATURAL SCIENCE

ANTH 101	Biological Anthropology
ASTR 100	Principles of Astronomy
ASTR 120	Solar System Astronomy
ASTR 150	Discovery of the Cosmos
ASTR 170	The Radical Universe
ASTR 180	Life in the Universe
ASTR 205	Elementary Astrophysics
BIOL 100	Principles of Biology
BIOL 130	Animal Biology: A Behavioral Approach
BIOL 140	Environmental Biology
BIOL 145	EcoMundo: Ecology and Environmental Science
# BIOL 150	Natural History of Plants and Animals
BIOL 160	Marine Biology
# BIOL 170	Field Botany
BIOL 180	Human Heredity, Evolution, and Society
# BIOL 190	Human Anatomy and Physiology
# BIOL 210	General Zoology
# BIOL 211	Introduction to Cell and Molecular Biology
# BIOL 212	Biology of Plants
# BIOL 260	Human Anatomy
# BIOL 261	Principles of Human Physiology
# BIOL 265	General Microbiology
BIOL/GEOG 143	Biology, Oceanography, and Geoscience of Baja California
# CHEM 100	Introduction to General Chemistry
# CHEM 110	Elementary Organic and Biological Chemistry
CHEM 160	Introductory Biochemistry
# CHEM 170	Preparation for General Chemistry
# CHEM 200	General Chemistry I
# CHEM 210	General Chemistry II
# CHEM 240	Organic Chemistry
CHEM 244	Organic Analysis and Spectroscopy
# CHEM 250	Analytical Chemistry
GEOG 100	Introduction to Geography: Physical Elements
GEOG 130	Weather and Climate
GEOG 160	Geography of California
GEOG/BIOL 143	Biology, Oceanography, and Geoscience of Baja California
GEOL 100	Principles of Geology
LNT 100	Plant and Horticultural Science
PHS 110	Introduction to Oceanography
PHS/PS 250	Our Global Future: Values for Survival
# PHYS 110	General Physics I
# PHYS 120	General Physics II
PHYS 170	College Physics I
PHYS 171	College Physics Laboratory I
PHYS 172	College Physics II
PHYS 173	College Physics Laboratory II
PHYS 174	College Physics III
PHYS 175	College Physics Laboratory III
PHYS 270	Principles of Physics I
PHYS 271	Principles of Physics Laboratory I
# PHYS 272	Principles of Physics II
# PHYS 274	Principles of Physics III

C. Humanities

Six units must be distributed as follows: select one course from Group 1 and one course from Group 2.

GROUP 1: FINE ARTS

ARCH 208	World Architecture I
ARCH 210	World Architecture II
ART 100	Drawing I
ART 101	Design I
ART 104	Introduction to Art
ART 105	Life Drawing I
ART 107	Painting I
ART 110	Sculpture I
ART 112	Arts of Africa, Oceania, and Native America
ART 113	Art and Culture of Pre-Hispanic México
ART 116	Printmaking I
ART 121	Basic Photography
ART 129	Asian Art and Culture Production
ART 149	Women in Western Art History, 1550–Present
ART 150	Appreciation and History of Art I
ART 151	Appreciation and History of Art II
ART 156	History of Photography
ART 157	Nineteenth and Twentieth Century Art
ART 160	Graphic Design—Typography
ART 170	Beginning Ceramics
ART 182	Design in Wood I
ART 185A	Jewelry and Metalwork I
ART 185B	Jewelry and Metalwork II
ART/TELE 128	Multimedia Photography
ART/TELE 131	Introduction to Video and Film Production
ART/TELE 132	Intermediate Video and Film
ART/TELE 161	Graphic Design—Draw
ART 130/TELE 113	History of Film as Art
COMM 111	Oral Interpretation
COMM 142	Oral History
COMM/TELE 180	Introduction to Electronic Media
COMM 185/TELE 114	Cinema as a Form of Expression
DANC 200	Dance History and Appreciation
JOUR 171	Writing for Publication
MUS 105	Introduction to Music
MUS 106	Introduction to Jazz
MUS 107	The Contemporary Scene of American Popular Music
MUS 108	Introduction to Music of México
MUS 116	Survey of Music Literature I
MUS 117	Survey of Music Literature II
MUS 155	Electronic Music
MUS 194	Survey of Music from Africa and the African Diaspora
MUS 195	Survey of World Music and Cultures
MUS 202	Development of Mariachi: Style and Culture
MUS/TELE 151	Recording Techniques
TA 100	Survey of Drama
TA 101	Introduction to Theatre
TA 105	Survey of Hispanic American Theatre
TA 110	Elementary Acting
TA 117	Pantomime Stage Movement I
TA 120	Theatre Workshop Performance I
TA/TELE 115	Acting for TV and Film
TA/TELE 150	Technical Design and Production
TA/TELE 152	Lighting and Sound Techniques
TA/TELE 153	Sound Reinforcement
TA/TELE 242	Television and Film Directing
TELE 110	Writing for the Media
TELE 116	Media Performance
TELE 163	Video Computer Graphics
TELE 183	Video Studio Production
TELE 233	Film Production
TELE 234	Electronic Field Production
TELE/ART 128	Multimedia Photography
TELE/ART 131	Introduction to Video and Film Production
TELE/ART 132	Intermediate Video and Film Production
TELE/ART 161	Graphic Design—Draw
TELE 113/ART 130	History of Film as Art
TELE 114/COMM 185	Cinema as a Form of Expression and Communication
TELE/COMM 180	Introduction to Electronic Media
TELE/MUS 151	Recording Techniques
TELE/TA 115	Acting for TV and Film
TELE/TA 150	Technical Design and Production
TELE/TA 152	Lighting and Sound Techniques
TELE/TA 153	Sound Reinforcement
TELE/TA 242	TV and Film Directing

GROUP 2: CULTURAL STUDIES

AFRO/HUM 150	Introduction to African-American Culture
CHIN 120	Mandarin Chinese I
CHIN 130	Mandarin Chinese II
ENGL 117A	Creative Writing I
ENGL 170A	Advanced Creative Writing: Fiction I
ENGL 172A	Advanced Creative Writing: Poetry I
ENGL 175A	Advanced Creative Writing: Writing About Your Life I
ENGL 220	Introduction to Literature
ENGL 225	Introduction to Children's Literature
ENGL 230	World Literature I
ENGL 231	World Literature II
ENGL 240	English Literature I
ENGL 241	English Literature II
ENGL 250	American Literature I
ENGL 251	American Literature II
ENGL 255	Twentieth Century Literature
ENGL 256	Introduction to Shakespeare
ENGL 260	Mythology in Literature
ENGL 265	Literature and Film
ENGL 270	Multicultural Literature
ENGL 271	Latin-American Literature
ENGL 272	Chicano Literature
ENGL 273	African-American Literature
ENGL 280	Literature by Women
ENGL 281	Horror, Madness, and the Macabre
FREN 120	Elementary French I
FREN 130	Elementary French II
FREN 220	Intermediate French I
FREN 230	Intermediate French II
HUM 101	Humanities Through the Arts I
HUM 102	Humanities Through the Arts II
HUM 104	Introduction to Humanities: Arts and Ideas
HUM 140	World Mythology
HUM/AFRO 150	Introduction to African-American Culture
HUM/TELE 112	Culture and the Media
ITAL 120	Elementary Italian I
ITAL 130	Elementary Italian II
ITAL 220	Intermediate Italian
JPN 120	Beginning Japanese I
JPN 120A	Introductory Elementary Japanese
JPN 120B	Continuation of Elementary Japanese
JPN 130	Beginning Japanese II
JPN 220	Intermediate Japanese
MAS/SOC 150	Mexican and Latino Culture in the United States

PHIL 101	Introduction to Philosophy
PHIL 106	World Religions
PHIL 107	Asian Philosophy
PHIL 120	Ethics: Theory and Practice
PIL 120	Elementary Tagalog I
PIL 130	Elementary Tagalog II
PIL 220	Intermediate Tagalog I
PORT 120	Elementary Portuguese I
PORT 130	Elementary Portuguese II
PORT 220	Intermediate Portuguese I
SOC/MAS 150	Mexican and Latino Culture in the United States
SPAN 120	Elementary Spanish I
SPAN 120A	Introduction to Elementary Spanish
SPAN 120B	Continuing Elementary Spanish
SPAN 127	Beginning Conversation and Writing on Spanish Culture
SPAN 130	Elementary Spanish II
SPAN 215	Spanish for Bilinguals I
SPAN 216	Spanish for Bilinguals II
SPAN 220	Intermediate Spanish I
SPAN 221	Introduction to Literature for Bilinguals
SPAN 225	Intermediate Conversation and Writing on Spanish Culture
SPAN 226	Intermediate Conversation and Writing on Latin American Culture
SPAN 230	Intermediate Spanish II
TELE/HUM 112	Culture and the Media

D. Social, Political, and Economic Institutions and Behavior, Historical Background

Six units must be distributed as follows: select two courses from two different groups.

GROUP 1: ANTHROPOLOGY AND ARCHAEOLOGY

ANTH 102	Cultural Anthropology
ANTH 103	Archaeology and Prehistory
ANTH 110	Indians of North America
ANTH 112	Culture of México

GROUP 2: ECONOMICS

BUS 121	Financial Planning and Money Management
ECON 100	Contemporary Economic Problems
ECON 101	Principles of Economics I
ECON 102	Principles of Economics II

GROUP 3: ETHNIC STUDIES

AFRO/HIST 110	African-American History I
AFRO/HIST 111	African-American History II
AFRO/HUM 150	Introduction to African-American Culture
ASIA/HIST 112	Asian-American History I
ASIA/HIST 113	Asian-American History II
ASIA/HIST 114	Filipino-American History
ASIA/SOC 115	Filipino-American Culture
MAS/HIST 141	Mexican-American History I
MAS/HIST 142	Mexican-American History II
MAS/SOC 150	Mexican and Latino Culture in the United States

GROUP 4: GENDER STUDIES

HIST 132	Herstory: Women in Historical Perspective

GROUP 5: GEOGRAPHY

GEOG 120	Introduction to Geography: Cultural Elements

GROUP 6: HISTORY

HIST 100	American Civilization I
HIST 101	American Civilization II
HIST 104	Western Civilization I
HIST 105	Western Civilization II
HIST 106	World History I
HIST 107	World History II
HIST 121	Comparative History of the Americas I
HIST 122	Comparative History of the Americas II
HIST 132	Herstory: Women in Historical Studies
HIST/AFRO 110	African-American History I
HIST/AFRO 111	African-American History II
HIST/ASIA 112	Asian-American History I
HIST/ASIA 113	Asian-American History II
HIST/ASIA 114	Filipino-American History
HIST/MAS 141	Mexican-American History I
HIST/MAS 142	Mexican-American History II

GROUP 7: INTERDISCIPLINARY SOCIAL OR BEHAVIORAL SCIENCE

CD 135	Principles of Family Development
CD 170	Principles of Child Development
COMM 176	Intercultural Communication
COMM 200/ JOUR 101	Introduction to Mass Communication and Society
PS/PHS 250	Our Global Future: Values for Survival

GROUP 8: POLITICAL SCIENCE, GOVERNMENT, AND LEGAL INSTITUTIONS

AJ 110	Ethics and Administration of Justice
AJ 111	Administration of Justice
PS 101	Introduction to Political Science
PS 102	Introduction to American Government and Politics
PS 103	Introduction to Comparative Government
PS 104	Introduction to International Relations

GROUP 9: PSYCHOLOGY

PSYC 101	General Psychology
PSYC 116	Introduction to Social Psychology
PSYC 230	Developmental Psychology
PSYC 250	Abnormal Psychology
PSYC 260	Introduction to Physiological Psychology

GROUP 10: SOCIOLOGY AND CRIMINOLOGY

AJ 114	Fundamentals of Crime and Criminal Behavior
SOC 101	Introduction to Sociology
SOC 110	Contemporary Social Problems
SOC 116	Introduction to Social Psychology
SOC 135	Sociology of the Family

NOTE: SWC minimum required General Education units for degree

A. Language and Analytical Thinking	*6*
B. Natural Science	*3*
C. Humanities	*6*
D. Social, Political and Economic Institutions and Behavior, Historical Background	*6*
	21

Legend

/ Same as course

^ Modified course name or number

◆ New Courses

Courses include lecture and laboratory

Plan B 2004–2005
California State University General Education Breadth Requirements (Transfer Information)

This plan is a 40-unit pattern designed for the student planning to transfer to the California State University system, including San Diego State University.

Southwestern College will certify course work completed at another California community college or any institution that participates in certifying general education course work to the CSU, including a CSU campus other than the one to which the student is transferring, only if the courses are on the approved CSU general education list at the college where they were completed. Such a course will be certified in the general education breadth area that is shown on the official certification list for the institution at which it was taken.

When course work has been taken at a regionally accredited institution that does not maintain a CSU certification list, Southwestern College can certify the course work provided that Southwestern College faculty determine that the course work is equivalent to course work on the approved Southwestern College general education breadth list (Plan B).

Any category of required general education courses not completed at the time of certification will have to be fulfilled according to the requirement of the transfer institution.

Students who desire to transfer to one of the 22 California State University (CSU) campuses must complete 48 units of general education breadth courses, of which nine shall be at the upper-division level. Southwestern College can certify only the 39 lower-division units of general education breadth courses.

Plan B, CSU

A. Communication in the English Language and Critical Thinking

Nine units must be distributed as follows: one course from Group 1, one course from Group 2, and one course from Group 3.

All courses must be completed with a grade of "C" or better.

GROUP 1: ORAL COMMUNICATION

COMM 103	Oral Communication
COMM 104	Public Speaking
COMM 174	Interpersonal Communication

GROUP 2: WRITTEN COMMUNICATION

ENGL 115	Reading and Composition: Exposition and Argumentation

GROUP 3: CRITICAL THINKING

COMM 160	Argumentation and Debate
ENGL 116	Critical Thinking and Composition
PHIL 103	Logic and Critical Thinking

B. Physical Universe and Its Life Forms; Mathematics/ Quantitative Reasoning

Nine units, plus laboratory, must be distributed as follows: one course from Group 1, one course from Group 2, one course from Group 3 (if a lab is not completed in either Group 1 or Group 2, then complete a lab course from Group 3); and one course from Group 4.

GROUP 1: PHYSICAL SCIENCES

ASTR 100	Principles of Astronomy
ASTR 120	Solar System Astronomy
ASTR 150	Discovery of the Cosmos
ASTR 170	The Radical Universe
ASTR 180	Life in the Universe
ASTR 205	Elementary Astrophysics
# CHEM 100	Introduction to General Chemistry
# CHEM 110	Elementary Organic and Biological Chemistry
# CHEM 170	Preparation for General Chemistry
# CHEM 200	General Chemistry I
# CHEM 210	General Chemistry II
# CHEM 240	Organic Chemistry
# CHEM 242	Organic Chemistry II
# CHEM 250	Analytical Chemistry
GEOG 100	Introduction to Geography: Physical Elements
GEOG 130	Weather and Climate
GEOG 160	Geography of California
GEOL 100	Principles of Geology
PHS 110	Introduction to Oceanography
PHS/PS 250	Our Global Future: Values for Survival
# PHYS 110	General Physics I
# PHYS 120	General Physics II
PHYS 170	College Physics I
PHYS 172	College Physics II
PHYS 174	College Physics III
PHYS 270	Principles of Physics I
# PHYS 272	Principles of Physics II
# PHYS 274	Principles of Physics III

GROUP 2: LIFE SCIENCES

ANTH 101	Biological Anthropology
BIOL 100	Principles of Biology
BIOL 130	Animal Biology: A Behavioral Approach
BIOL 140	Environmental Biology
BIOL 145	EcoMundo: Ecology and Environmental Science
# BIOL 150	Natural History of Plants and Animals

BIOL 160	Marine Biology
# BIOL 170	Field Botany Biology
BIOL 180	Human Heredity, Evolution, and Society
◆BIOL 185	Biology of Alcohol and Other Drugs
# BIOL 190	Human Anatomy and Physiology
# BIOL 210	General Zoology
# BIOL 211	Introduction to Cell and Molecular Biology
# BIOL 212	Biology of Plants
# BIOL 260	Human Anatomy
# BIOL 261	Principles of Human Physiology
# BIOL 265	General Microbiology

GROUP 3: LABORATORY ACTIVITY

ASTR 109	Astronomy Laboratory
BIOL 101	Principles of Biology Laboratory
BIOL 131	Animal Biology Laboratory
**BIOL 146	EcoMundo: Field Studies and Laboratory Investigations in Ecology And Environmental Science
**BIOL 147	EcoMundo: Field Studies in Marine Ecology
BIOL 149	EcoMundo: Field Studies in Natural History
# BIOL 150	Natural History of Plants and Animals
BIOL 161	Marine Biology Laboratory
# BIOL 170	Field Botany Biology
# BIOL 190	Human Anatomy and Physiology
# BIOL 210	General Zoology
# BIOL 211	Introduction to Cell and Molecular Biology
# BIOL 212	Biology of Plants
# BIOL 260	Human Anatomy
# BIOL 261	Principles of Human Physiology
# BIOL 265	General Microbiology
# CHEM 100	Introduction to General Chemistry
# CHEM 110	Elementary Organic and Biological Chemistry
# CHEM 170	Preparation for General Chemistry
# CHEM 200	General Chemistry I
# CHEM 210	General Chemistry II
# CHEM 240	Organic Chemistry
# CHEM 242	Organic Chemistry II
CHEM 244	Organic Analysis and Spectroscopy
# CHEM 250	Analytical Chemistry
GEOG 101	Physical Geography Laboratory
GEOL 101	General Geology Laboratory
PHS 111	Oceanography Laboratory
# PHYS 110	General Physics I
# PHYS 120	General Physics II
PHYS 171	College Physics Laboratory I
PHYS 173	College Physics Laboratory II
PHYS 175	College Physics Laboratory III
PHYS 271	Principles of Physics Laboratory I
# PHYS 272	Principles of Physics II
# PHYS 274	Principles of Physics III

GROUP 4: MATHEMATICS (MUST PASS WITH A GRADE OF "C" OR BETTER)

MATH 101	College Algebra
MATH 104	Trigonometry
MATH 110	Math for Elementary School Teachers I
MATH 118	Finite Mathematics
MATH 119	Elementary Statistics
MATH 120	Calculus for Business Analysis
MATH 121	Applied Calculus I
MATH 122	Applied Calculus II
◆MATH 244	Pre-Calculus with Trigonometry
MATH 250	Analytic Geometry and Calculus I
MATH 251	Analytic Geometry and Calculus II
MATH 252	Analytic Geometry and Calculus III
MATH 253	Introduction to Differential Equations
MATH 254	Introduction to Linear Algebra
MATH 260	Discrete Mathematics
PSYC/SOC 270	Statistical Methods of Psychology

C. Art, Literature, Philosophy, and Foreign Languages

Nine units must be distributed as follows: one course from Group 1, one course from Group 2, and one more course from either Group 1 or Group 2.

GROUP 1: ARTS

ARCH 208	World Architecture I
ARCH 210	World Architecture II
ART 100	Drawing I
ART 101	Design I
ART 104	Introduction to Art
ART 105	Life Drawing I
ART 107	Painting I
ART 110	Sculpture I
ART 112	Arts of Africa, Oceania, and Native America
ART 113	Art and Culture of Pre-Hispanic México
ART 116	Printmaking I
ART 121	Basic Photography
ART 129	Asian Art and Culture
ART130/TELE 113	History of Film as Art
ART 149	Women in Western Art History, 1550–Present
ART 150	Appreciation and History of Art I
ART 151	Appreciation and History of Art II
ART 156	History of Photography
ART 157	Nineteenth and Twentieth Century Art
ART 160	Graphic Design—Typography
ART 170	Beginning Ceramics
ART 182	Design in Wood I
ART 185A	Jewelry and Metal Work I
ART 185B	Jewelry and Metal Work II
COMM 111	Oral Interpretation
COMM 142	Oral History
COMM 185/TELE 114	Cinema as a Form of Expression
✳ DANC 121	Dance Choreography I
DANC 200	Dance History and Appreciation
MUS 105	Introduction to Music
MUS 106	Introduction to Jazz
MUS 107	Contemporary Scene of American Popular Music
MUS 108	Introduction to the Music of México
MUS 116	Survey of Music Literature I
MUS 117	Survey of Music Literature II
✳ MUS 125–127	Applied Music I–III
✳ MUS 145-146	Vocal Techniques for Musical Theatre I-II
✳ MUS 147	Singing for Musical Theatre I
MUS 155	Electronic Music
✳ MUS 166–168	Jazz Ensemble I–III
✳ MUS 170–172	Small Performance Groups I–III
✳ MUS 175–177	Orchestra I–III
✳ MUS 180–182	Chamber Singers I–III
✳ MUS 185–187	Concert Choir I–III
✳ MUS 189–192	Music and Rhythms of Africa I–IV
MUS 194	Survey of Music from Africa and The African Diaspora

MUS 195	Survey of World Music and Cultures
MUS 202	Development of Mariachi: Style and Culture
TA 100	Survey of Drama
TA 101	Introduction to the Theatre
TA 105	Survey Hispanic American Theatre
TA 110	Elementary Acting I
TA/TELE 115	Acting for TV and Film
TA 117	Pantomime and Stage Movement I
TA 120	Theatre Workshop Performance
TELE 116	Media Performance
TELE 113/ART 130	History of Film as Art
TELE 114/ COMM 185	Cinema as a Form of Expression and Communication
TELE/TA 115	Acting for TV and Film

GROUP 2: HUMANITIES

AFRO/HUM 150	Introduction to African-American Culture
CHIN 120	Mandarin Chinese I
CHIN 130	Mandarin Chinese II
ENGL 117A	Creative Writing I
ENGL 170A	Advanced Creative Writing: Fiction I
ENGL 172A	Advanced Creative Writing: Poetry I
ENGL 175A	Advanced Creative Writing: Creative Nonfiction I
ENGL 220	Introduction to Literature
ENGL 225	Introduction to Children's Literature
ENGL 230	World Literature I
ENGL 231	World Literature II
ENGL 240	English Literature I
ENGL 241	English Literature II
ENGL 250	American Literature I
ENGL 251	American Literature II
ENGL 255	Twentieth Century Literature
ENGL 256	Introduction to Shakespeare
ENGL 260	Mythology in Literature
ENGL 265	Literature and Film
ENGL 270	Multicultural Literature
ENGL 271	Latin American Literature
ENGL 272	Chicano Literature
ENGL 273	African-American Literature
ENGL 274	Literature of the Border and Baja California
ENGL 280	Literature by Women
ENGL 281	Horror, Madness, and the Macabre
FREN 120	Elementary French I
FREN 130	Elementary French II
FREN 220	Intermediate French I
FREN 230	Intermediate French II
HUM 101	Humanities Through the Arts I
HUM 102	Humanities Through the Arts II
HUM 104	Humanities: Arts and Ideas
HUM/TELE 112	Culture and the Media
HUM 140	World Mythology
HUM/AFRO 150	
ITAL 120	Elementary Italian I
ITAL 130	Elementary Italian II
ITAL 220	Intermediate Italian
JOUR 171	Writing for Publication
JPN 120	Beginning Japanese I
JPN 120A	Introductory Elementary Japanese
JPN 120B	Continuation of Elementary Japanese
JPN 130	Beginning Japanese II
JPN 220	Intermediate Japanese I
PHIL 101	Introduction to Philosophy
PHIL 106	World Religions
PHIL 107	Asian Philosophy
PHIL 120	Ethics: Theory and Practice
PIL 120	Elementary Tagalog I
PIL 220	Intermediate Tagalog I
PORT 120	Elementary Portuguese I
PORT 130	Elementary Portuguese II
PORT 220	Intermediate Portuguese I
SPAN 120	Elementary Spanish I
SPAN 120A	Introduction to Elementary Spanish
SPAN 120B	Continuing Elementary Spanish
SPAN 127	Beginning Conversation and Writing on Spanish Culture
SPAN 130	Elementary Spanish II
SPAN 215	Spanish for Bilinguals I
SPAN 216	Spanish for Bilinguals II
SPAN 220	Intermediate Spanish I
SPAN 221	Introduction to Literature for Bilinguals
SPAN 225	Intermediate Conversation and Writing on Spanish Culture
SPAN 226	Intermediate Conversation and Writing on Latin American Culture
SPAN 230	Intermediate Spanish II

D. Social, Political and Economic Institutions and Behavior, Historical Background

Nine units must be distributed as follows: two courses from two different groups and one additional course.

GROUP 1: ANTHROPOLOGY AND ARCHAEOLOGY

ANTH 102	Cultural Anthropology
ANTH 103	Archaeology and Prehistory
ANTH 110	Indians of North America
ANTH 112	Cultures of México

GROUP 2: ECONOMICS

ECON 100	Contemporary Economic Problems
ECON 101	Principles of Economics I
ECON 102	Principles of Economics II

GROUP 3: ETHNIC STUDIES

AFRO/HIST 110	African-American History I
AFRO/HIST 111	African-American History II
AFRO/HUM 150	Introduction to African-American Culture
ASIA/HIST 112	Asian-American History I
ASIA/HIST 113	Asian-American History II
ASIA/HIST 114	Filipino-American History
ASIA/SOC 115	Filipino-American Culture
MAS/HIST 141	Mexican-American History I
MAS/HIST 142	Mexican-American History II
MAS/SOC 150	Mexican and Latino Culture in the United States

GROUP 4: GENDER STUDIES

HIST 132	Herstory: Women in Historical Perspective

GROUP 5: GEOGRAPHY

GEOG 120	Introduction to Geography: Cultural Elements

GROUP 6: HISTORY

HIST 100	American Civilization I
HIST 101	American Civilization II

HIST 104	Western Civilization I
HIST 105	Western Civilization II
HIST 106	World History I
HIST 107	World History II
HIST 121	Comparative History of the Americas I
HIST 122	Comparative History of the Americas II
HIST 132	Herstory: Women in Historical Perspective
HIST/AFRO 110	African-American History I
HIST/AFRO 111	African-American History II
HIST/ASIA 112	Asian-American History I
HIST/ASIA 113	Asian-American History II
HIST/ASIA 114	Filipino-American History
HIST/MAS 141	Mexican-American History I
HIST/MAS 142	Mexican-American History II

GROUP 7: INTERDISCIPLINARY SOCIAL OR BEHAVIORAL SCIENCE

CD 135	Principles of Family Development
CD 170	Principles of Child Development
◆COMM 174	Interpersonal Communication
COMM 176	Intercultural Communication
COMM 200/ JOUR 101	Introduction to Mass Communication and Society
PS/PHS 250	Our Global Future: Values for Survival

GROUP 8: POLITICAL SCIENCE, GOVERNMENT AND LEGAL INSTITUTIONS

AJ 110	Ethics and the Administration of Justice
AJ 111	Introduction to Administration of Justice
PS 101	Introduction to Political Science
PS 102	American Government and Politics
PS 103	Comparative Government
PS 104	Introduction to International Relations

GROUP 9: PSYCHOLOGY

PSYC 101	General Psychology
PSYC 116	Introduction to Social Psychology
PSYC 230	Developmental Psychology
PSYC 250	Abnormal Psychology
PSYC 260	Introduction to Physiological Psychology

GROUP 10: SOCIOLOGY AND CRIMINOLOGY

AJ 114	Fundamentals of Crime and Delinquency
SOC 101	Introduction to Sociology
SOC 110	Contemporary Social Problems
SOC/ASIA 115	Filipino-American Culture
SOC 116	Introduction to Social Psychology
SOC 135	Sociology of the Family

E. Lifelong Understanding and Self-Development

Three units must be distributed as follows: one course.

CD/◆HLTH 204	Fundamentals of Nutrition
HLTH 101	Principles of Healthful Living
HLTH 102	Border Health Issues: HIV
HLTH 116	Women's Health and Well Being
PD 100	Lifelong Success
PSYC 106	Human Sexuality
PSYC 109	Psychology of Death and Dying

NOTE: California State University (CSU) graduation requirement: *Courses in American Institutions (U.S. History, Constitution, and American ideals) are required for graduation by the CSU. Although the American Institutions requirement is not a part of the CSU GE Breadth (Plan B), students are encouraged to complete the requirement prior to transfer. This requirement can be satisfied by passing one course from Group 1 and one course from Group 2. The courses used to satisfy this requirement, may also be used to fulfill CSU General Education Breadth Area D requirements.*

GROUP 1:

AFRO/HIST 110	African-American History I
ASIA/HIST 112	Asian-American History I
HIST 100	American Civilization I
HIST/AFRO 110	African-American History I
HIST/ASIA 112	Asian-American History I
HIST 121	
HIST/MAS 142	Comparative History of the Americas I
HIST/MAS 141	Mexican-American History I
MAS/HIST 141	Mexican-American History I

GROUP 2:

AFRO/HIST 111	African-American History II
ASIA/HIST 113	Asian-American History II
HIST 101	American Civilization II
HIST/AFRO 111	African-American History II
HIST/ASIA 113	Asian-American History II
HIST 122	Comparative History of the Americas II
HIST/MAS 142	Mexican-American History II
MAS/HIST 142	Mexican-American History II
PS 102	Introduction to American Government and Politics

NOTE: A minimum of 56–60 transferable units are required for transfer.

A. Communication in the English Language and Critical Thinking	*9*
B. Physical Universe and Its Life Forms; Mathematics/ Quantitative Reasoning	*10*
C. Arts, Literature, Philosophy, and Foreign Language	*9*
D. Social, Political, and Economic Institutions and Behavior, Historical Background	*9*
E. Lifelong Understanding and Self Development	*3*
	40

Legend

/	*Same as courses*
◆	*New Courses*
✳	*Less than three units*
**	*Acceptance only with prior or concurrent enrollment in BIOL 145*
#	*Courses include lecture and laboratory*

Intersegmental General Education Transfer Curriculum (IGETC) 2004–2005

This plan is a 37- to 39-unit, general education pattern which meets all lower-division general education requirements at most CSU or UC campuses. It should be noted that completion of the IGETC is not a requirement for admission to a CSU or UC, nor will its completion guarantee admission to a CSU or UC campus.

The IGETC plan is not the only way to fulfill lower-division general education requirements. Depending on a student's major or field of interest, the student may find it advantageous to fulfill the CSU's general education requirements or those of the UC campus or college to which the student plans to transfer. Some colleges within the UC system will not accept IGETC, depending on the major. Students wishing to use a course to meet General Education Breadth or IGETC requirements must be sure that the course is approved for the academic year in which it was taken.

It is strongly recommended that the student consult with a counselor to determine which general education pattern is the most appropriate for him/her.

The course requirements for all areas must be completed before the IGETC can be certified. Each course must be completed with a grade of "C" or better.

An acceptable score on an English Advanced Placement (AP) exam may be used to meet the English composition requirement but may not be used to meet the Critical Thinking English composition requirement.

NOTE: *The IGETC will permit a student to transfer from a community college to a campus in either the California State University system or the University of California system without the need, after transfer, to take additional lower-division, general education courses to satisfy campus G.E. requirements.*

San Diego State University Foreign Language Requirement

In addition to meeting the transfer general education breadth requirements, students planning to graduate from San Diego State University with a Bachelor of Arts in Liberal Arts and Sciences must satisfy the Foreign Language requirement.

The requirement may be met by a language competency equivalent to that which is normally attained through three consecutive semesters of college study in one foreign language as part of the preparation for the major. Such competency may be demonstrated by one of the following:

- successfully completing the third college semester of one foreign language;
- successfully completing fourth year of high school courses in one foreign language; or,
- successfully completing a challenge examination in one foreign language.

Any combination of the preceding is also acceptable. For example, a student may combine two years of high school study, one semester of college study, and a challenge examination for one semester's work, all in the same language. The San Diego State University catalog states: "Native speakers from foreign countries when English is not the principal language and who have finished high school or the equivalent in that country will be considered to have satisfied the Foreign Language requirement and will not be given credit for taking lower-division courses in their native language except with advance approval from the department."

UC Foreign Language Requirement

In addition to meeting the transfer general education breadth requirements, students planning to graduate from the University of California must satisfy the foreign language requirement.

The requirement may be met by demonstrating one of the following:

- Proficiency equivalent to two years of high school study in the same language with a grade of "C" or better.
- A score of three or higher on the Foreign Language Advanced Placement Test.
- Completion of one of the following courses or sequences of courses with a grade of "C" or better. The following courses (or higher level course) at Southwestern College fulfill the requirement.

CHIN 120	*Mandarin Chinese I*
FREN 120	*Elementary French I*
FREN 130	*Elementary French II*
ITAL 120	*Elementary Italian I*
ITAL 130	*Elementary Italian II*
JPN 120 or	*Beginning Japanese I*
◆ ***JPN 120A***	*Introductory Elementary Japanese*
and	
◆ ***JPN 120B***	*Continuation Elementary Japanese*
PIL 120	*Elementary Tagalog I*
PORT 120	*Elementary Portuguese I*
SPAN 120 or	*Elementary Spanish I*
SPAN 120A	*Introduction to Elementary Spanish*
and	
SPAN 120B	*Continuation of Elementary Spanish*
SPAN 215	*Spanish for Bilinguals*

IGETC Plan, UC and California State University

Area 1: English Communication

CSU—three courses required, one each from Group A, B, and C.
UC—two courses required, one from Group A and B.

GROUP A: ENGLISH COMPOSITION

ENGL 115	Reading and Composition: Exposition and Argumentation

GROUP B: CRITICAL THINKING-ENGLISH COMPOSITION

ENGL 116	Critical Thinking and Composition
PHIL 103	Logic and Critical Thinking

GROUP C: ORAL COMMUNICATION (CSU ONLY)

COMM 103	Oral Communication
COMM 104	Public Speaking

NOTE: *If English 116 or Philosophy 103 were completed prior to fall 1993, both courses are required for IGETC certification. Beginning fall 1993, only one course is required.*

Area 2: Mathematical Concepts and Quantitative Reasoning

Three units must be distributed as follows: one course.

GROUP A: MATHEMATICS

MATH 101	College Algebra
**MATH 118	Finite Mathematics
**MATH 119	Elementary Statistics
**MATH 120	Calculus for Business Analysis
**MATH 121	Applied Calculus I
**MATH 122	Applied Calculus II
**MATH 250	Analytic Geometry and Calculus I
**MATH 251	Analytic Geometry and Calculus II
**MATH 252	Analytic Geometry and Calculus III
MATH 253	Introduction to Differential Equations
MATH 254	Introduction to Linear Algebra
MATH 260	Discrete Mathematics
PSYC/SOC 270	Statistical Methods of Psychology

NOTE: *Mathematics 118, 119, 120, 121, 122, 250, 251 and 252 may have transfer unit credits limited by either UC or CSU or both. Consult with a counselor for additional information. Please refer to the UC Transferable Course Agreement.*

Area 3: Arts and Humanities

Nine units must be distributed as follows: one course from Group A, one course from Group B and one more course from Groups A or B.

GROUP A: ARTS

ART 104	Introduction to Art
ART 112	Arts of Africa, Oceania, and Native America
ART 113	Art and Culture of Pre-Hispanic México
ART 129	Asian Art and Culture
ART 149	Women in Western Art History, 1550 to Present
ART 150	Appreciation and History of Art I
ART 151	Appreciation and History of Art II
ART 156	History of Photography
ART 157	Nineteenth and Twentieth Century Art
ART 130/ ✶TELE 113	History of Film as Art
MUS 105	Introduction to Music
MUS 106	Introduction to Jazz
MUS 107	American Popular Music
MUS 108	Introduction to Music of México
MUS 194	Survey of World Music and Cultures
MUS 195	Survey of World Music and Cultures
MUS 202	Development of Mariachi: Style and Culture
TA 100	Survey of Drama
TA 101	Introduction to the Theatre
TELE113/ ✶ART 130	History of Film as Art

GROUP B: HUMANITIES

✶AFRO/HUM 150	Introduction to African-American Culture
CHIN 130	Mandarin Chinese II
ENGL 220	Introduction to Literature
ENGL 225	Introduction to Children's Literature
ENGL 230	World Literature I
ENGL 231	World Literature II
ENGL 240	English Literature I
ENGL 241	English Literature II
ENGL 250	American Literature I
ENGL 251	American Literature II
ENGL 256	Introduction to Shakespeare
ENGL 260	Mythology in Literature
ENGL 265	Literature and Film
ENGL 270	Multicultural Literature
ENGL 271	Latin American Literature
ENGL 272	Chicano Literature
ENGL 273	African-American Literature
ENGL 280	Literature by Women
FREN 220	Intermediate French I
FREN 230	Intermediate French II
HIST 104	Western Civilization I
HIST 105	Western Civilization II
HIST 106	World History I
HIST 107	World History II
HUM 101	Humanities Through the Arts I
HUM 102	Humanities Through the Arts II

HUM 104	Humanities: Arts and Ideas
HUM 140	World Mythology
✳HUM/AFRO 150	Introduction to African-America Culture
**HUM/TELE 112	Culture and the Media
ITAL 220	Intermediate Italian
◆JPN 220	Intermediate Japanese I
PHIL 101	Introduction to Philosophy
PHIL 106	World Religions
PHIL 120	Ethics: Theory and Practice
PIL 220	Intermediate Tagalog I
PORT 130	Elementary Portuguese I
PORT 220	Intermediate Portuguese
SPAN 130	Elementary Spanish II
SPAN 216	Spanish for Bilinguals II
SPAN 220	Intermediate Spanish I
SPAN 221	Introduction to Literature for Bilinguals
SPAN 225	Intermediate Conversation and Writing on Spanish Culture
SPAN 226	Intermediate Conversation and Writing on Latin American Culture
SPAN 230	Intermediate Spanish II
TA 105	Survey of Hispanic-American Theatre

Area 4: Social and Behavioral Sciences

Nine units must be distributed as follows: three courses from at least two groups. Courses that appear in more than one group can only be counted once.

GROUP A: ANTHROPOLOGY AND ARCHAEOLOGY

ANTH 102	Cultural Anthropology
ANTH 103	Archaeology and Prehistory
ANTH 110	Indians of North America
ANTH 112	Cultures of México

GROUP B: ECONOMICS

ECON 101	Principles of Economics I
ECON 102	Principles of Economics II

GROUP C: ETHNIC STUDIES

✳ AFRO/HIST 110	African-American History I
✳ AFRO/HIST 111	African-American History II
✳ ASIA/HIST 112	Asian-American History I
✳ ASIA/HIST 113	Asian-American History II
✳ ASIA/HIST 114	Filipino -American History
✳ ASIA/SOC 115	Filipino -American Culture
✳ MAS/HIST 141	Mexican-American History I
✳ MAS/HIST 142	Mexican-American History II

GROUP D: GENDER STUDIES

◆✳ HIST 132	Herstory: Women in Historical Perspective

GROUP E: GEOGRAPHY

GEOG 120	Geography: Cultural Elements

GROUP F: HISTORY

HIST 100	American Civilization I
HIST 101	American Civilization II
HIST 121	Comparative History of the Americas I
HIST 122	Comparative History of the Americas II
◆✳ HIST 132	Herstory: Women in Historical Perspective
✳ HIST/AFRO 110	African-American History I
✳ HIST/AFRO 111	African-American History II
✳ HIST/ASIA 112	Asian-American History I
✳ HIST/ASIA 113	Asian-American History II
✳ HIST/ASIA 114	Filipino-American History
✳ HIST/MAS 141	Mexican-American History I
✳ HIST/MAS 142	Mexican-American History II

GROUP G: INTERDISCIPLINARY, SOCIAL AND BEHAVIORAL SCIENCES

CD 170	Principles of Child Development
COMM 176	Intercultural Communication
✳ COMM 200/ ✳JOUR 101	Introduction to Mass Communication and Society

GROUP H: POLITICAL SCIENCE, GOVERNMENT AND LEGAL INSTITUTIONS

AJ 111	Introduction to Administration of Justice
PS 101	Introduction to Political Science
PS 102	American Government and Politics
PS 103	Comparative Government
PS 104	Introduction to International Relations

GROUP I: PSYCHOLOGY

PSYC 101	General Psychology
PSYC 106	Human Sexuality
PSYC 116	Introduction to Social Psychology
PSYC 230	Developmental Psychology
PSYC 250	Abnormal Psychology
PSYC 260	Introduction to Physiological Psychology

GROUP J: SOCIOLOGY

✳COMM 200/ ✳JOUR 101	Introduction to Mass Communication and Society
SOC 101	Introduction to Sociology
SOC 110	Contemporary Social Problems
SOC 116	Introduction to Social Psychology
SOC 135	Sociology of the Family
SOC/ASIA 115	Filipino-American Culture

Area 5: Physical and Biological Sciences

Two courses required, 7–9 semester units, one Physical Science course and one Biological Science course. One must include a laboratory; and the laboratory course must coincide with the lecture course (i.e. BIOL 100 & 101 or GEOG 100 & 101).

GROUP A: PHYSICAL SCIENCE

ASTR 100	Principles of Astronomy
ASTR 109	Astronomy Laboratory
ASTR 120	Solar System Astrology
◆ ASTR 150	Discovery of the Cosmos
ASTR 170	The Radical Universe
ASTR 180	Life in the Universe
ASTR 205	Elementary Astrophysics
#** CHEM 100	General Chemistry
#** CHEM 110	Elementary Organic and Biological Chemistry
#** CHEM 170	Preparation for General Chemistry
# CHEM 200	General Chemistry I
# CHEM 210	General Chemistry II
#** CHEM 240	Organic Chemistry
# CHEM 250	Analytical Chemistry
GEOG 100	Physical Elements

	GEOG 101	Physical Geography Laboratory
	GEOG 130	Weather and Climate
	GEOL 100	Principles of Geology
	GEOL 101	General Geology Laboratory
	PHS 110	Introduction to Oceanography
	PHS 111	Oceanography Laboratory
◆	PHYS 170	College Physics I
◆	PHYS 171	College Physics Laboratory I
◆	PHYS 172	College Physics II
◆	PHYS 173	College Physics Laboratory II
◆	PHYS 174	College Physics III
◆	PHYS 175	College Physics Laboratory III
**	PHYS 270	Principles of Physics I
**	PHYS 271	Principles of Physics
#**	PHYS 272	Principles of Physics II
#**	PHYS 274	Principles of Physics III

GROUP B: BIOLOGICAL SCIENCE

	ANTH 101	Biological Anthropology
**	BIOL 100	Principles of Biology
**	BIOL 101	Principles of Biology Laboratory
	BIOL 130	Animal Biology: A Behavioral Approach
	BIOL 140	Environmental Biology
	BIOL 145	EcoMundo: Ecology and Environmental Science
#	BIOL 150	Natural History of Plants and Animals
	BIOL 160	Marine Biology
	BIOL 161	Marine Biology Laboratory
	BIOL 180	Human Heredity, Evolution, and Society
◆	BIOL 185	Biology of Alcohol and Other Drugs
#	BIOL 190	Human Anatomy and Physiology
#	BIOL 210	General Zoology
#	BIOL 211	Introduction to Cell and Molecular Biology
#	BIOL 212	Biology of Plants
#**	BIOL 260	Human Anatomy (lab)
#**	BIOL 261	Principles of Human Physiology
#	BIOL 265	General Microbiology

Other: Languages other than English (UC Requirement Only)

- Proficiency equivalent to two years of high school study in the same language with a grade of "C" or better.
- A score of three or higher on the Foreign Language Advanced Placement Test.
- Completion of one of the following courses or sequences courses with a grade of "C" or better. The following courses (or higher level course) at Southwestern College fulfill the requirement.

CHIN 120	Mandarin Chinese I
FREN 120	Elementary French I
FREN 130	Elementary French II
ITAL 120	Elementary French I
ITAL 130	Elementary Italian II
JPN 120	Beginning Japanese I
◆JPN 120A	Introductory Elementary Japanese
and	
◆JPN 120B	Continuation of Elementary Japanese
PIL 120	Elementary Tagalog I
PORT 120	Elementary Portuguese I
SPAN 120	Elementary Spanish I
SPAN 120A	Introduction to Elementary Spanish
and	
SPAN 120B	Continuing Elementary Spanish
SPAN 215	Spanish for Bilinguals I

Other: California State University (CSU) Graduation Requirement

CSU GRADUATION REQUIREMENT: Courses in America Institutions (United States History, Constitution and American Ideals) are required for graduation by the CSU. Although the American Institutions requirement is not part or the IGETC pattern, students who plan to transfer to the CSU are encouraged to complete the requirement prior to transfer. This requirement can be satisfied by passing one course from Group 1 and one course from Group 2.

NOTE: *Courses used to meet this requirement may not be used to satisfy requirements for IGETC in Area 4, Social and Behavioral Sciences.*

GROUP 1:

AFRO/HIST 110	African-American History I
ASIA/HIST 112	Asian-American History I
HIST 100	American Civilization I
HIST/AFRO 110	African-American History I
HIST/ASIA 112	Asian-American History I
HIST 121	Comparative History of the Americas I
HIST/MAS 141	Mexican-American History I
MAS/HIST 141	Mexican-American History I

GROUP 2:

AFRO/HIST 111	African-American History II
ASIA/HIST 113	Asian-American History II
HIST 101	American Civilization II
HIST/AFRO 111	African-American History II
HIST/ASIA 113	Asian-American History II
HIST 122	Comparative History of the Americas II
HIST/MAS 142	Mexican-American History II
MAS/HIST 142	Mexican-American History II
PS 102	Introduction to American Government and Politics

NOTE: IGETC minimum required General Education units for transfer

English Communication	*9*
Mathematical Concepts and Quantitative Reasoning	*3*
Arts and Humanities	*9*
Social and Behavioral Sciences	*9*
Physical and Biological Sciences	*7–9*
	37–39

Legend

/ Same as Courses
◆ New Courses
^ Modified course name and number
✳ Course may be listed under more than one department
** Transfer unit credits may be limited by either the UC or CSU or both
# Course includes lecture and laboratory

(Please consult with a counselor for additional information.)

Educational Options

Course Certificate

A course certificate verifying the satisfactory completion of a course will be issued upon request to any student who completes a course with a grade of "C" or better. A student who desires such a certificate should make application to the instructor during the last four weeks of the semester.

Certificate of Achievement

Certificates of achievement are designed to convey evidence that defined levels of proficiency have been attained in career or technical areas. Certificates of achievement are available in most of the majors for which the College offers the associate degree. Students select a certificate of achievement area with specified course requirements from the Program of Study section of the catalog.

To qualify for a certificate of achievement, a student must do all of the following:

- complete all courses listed for a particular certificate;
- achieve a cumulative grade point average of "C" (2.0) for ALL certificate courses required for that specific certificate;
- achieve a grade point average of "C" (2.0) for all certificate courses required for that specific certificate attempted at Southwestern College;
- file a petition for certificate of achievement; and
- satisfactorily complete at least one required course at Southwestern College during the semester in which the certificate is earned.

Degree Programs

Students are encouraged to plan their educational objectives in such a manner as to qualify for graduation with an associate degree. A candidate does not automatically receive the degree upon completion of graduation requirements but must submit a Petition for Graduation, which must be filed by the deadline dates listed in the class schedule for the appropriate semester. A minimum of 60 total units, including general education courses, degree program course requirements and elective courses, is required to earn an associate degree. Students are strongly advised to see their counselor for assistance in setting up their educational plan.

Associate in Arts Degree

A degree program consisting of a minimum of 18 units typically from the fields of humanities, fine and communication arts, social and behavioral sciences, and related fields. Some programs may mirror the lower-division requirements for a bachelor's degree in the same department. Others may lead to entry-level skills in the chosen field.

Associate in Science Degree

A degree program consisting of a minimum of 18 units typically from the fields of engineering, physical and biological sciences, and other occupational curricula. Some programs may mirror the lower-division requirements for a bachelor's degree in the same department. Others may lead to entry-level skills in the chosen field.

Multiple Degrees

Students who qualify may receive additional associate degrees providing the designated degree to be earned will represent a change in major from the degree or degrees previously earned. A student who has already earned a bachelor's or higher degree may qualify for an associate degree providing that the designated major is different from the bachelor's or higher degree.

NOTE: *For each additional degree, the student must complete all requirements for the new major with a minimum of 18 new units. The additional units must include a minimum of 12 units in the major. In addition, the student must meet all graduation requirements enforced at time of declaration of additional major.*

General Studies Major Associate in Arts Degree (Major Code: 01000)

Students who choose a General Studies major should plan the program with the assistance of a counselor. The General Studies major consists of courses which would best assist the student in achieving a personal educational goal. It is a program of 18 or more units selected from any of the transferable courses offered at Southwestern College. Students will be eligible for an Associate in Arts degree pending the completion of additional graduation requirements. (See Graduation Requirements.)

Transfer Studies Major Associate in Arts Degree (Major Code: 03000)

A program of course work selected from courses transferable to the University of California system (UC), California State University system (CSU), and other colleges and universities. Transfer programs are designed to help the student complete the first two years of a four-year college program. The student should complete the lower-division requirements for the college or university to which he/she plans to transfer. Available transfer programs and recommended courses are listed for each program in the Program of Study section of the catalog.

The Associate in Arts degree will be granted to students who meet the following requirements:

- complete 60 transferable units;
- complete and obtain certification for one of the general education plans: B, IGETC, or TAG; and
- achieve a cumulative "C" grade point average (2.0) or better for all course work used for the degree.

NOTE: *This is in addition to college scholarship requirements listed on page 20.*

Special Notes

Continuous Enrollment

Continuous enrollment is defined as completion of a course during at least one semester in a calendar year excluding summer session.

Completing a course is defined as receiving a grade of A, B, C, D, F, I, Credit (CR), or No Credit (NC). Receiving a grade of "W" will not satisfy the requirement for completing a course.

Catalog Rights

For General Education

Provided that continuous enrollment is maintained, students may elect the general education and graduation requirements in effect at the time of entrance to Southwestern College, or any catalog year thereafter.

For the Major

The requirements for the major will be determined by either the catalog in effect during the semester in which a student declared or changed the major or any subsequent catalog provided the student maintains continuous enrollment.

Student Affairs and Services

Services for Students

Please refer to page 52 for offices located in the NEW Student Services Center

Academic Success

The Academic Success Center, provides free tutoring to all registered students. Highly trained tutors provide academic support on an individual basis, in small groups, or in open labs. Learning assistance is provided in almost every subject area and is designed to assist students in successful completion of college course work.

The Academic Success Center cooperates with faculty to offer assistance in the Writing Center, Reading Center, Math/Science Center, Open Labs, and other learning support areas, both-on-campus and at the satellite education centers.

Students are encouraged to visit the Academic Success Center office (Building 420) early in the semester to schedule appointments for tutorial assistance. Walk-in assistance is provided in some centers.

Health Center

The Health Services/Wellness Center is located in Room 601F in the Student Center and is open Monday through Saturday. At the Education Center at San Ysidro and the Higher Education Center at National City, the hours vary during the week. A registered nurse and a medical practitioner are on duty to provide emergency treatment, health counseling, and referrals to appropriate agencies. Dental consultation is available by appointment only. Immunizations and TB skin tests are available at no charge. Cholesterol, glucose, anemia testing, tetanus and Hepatitis B vaccines are available at cost.

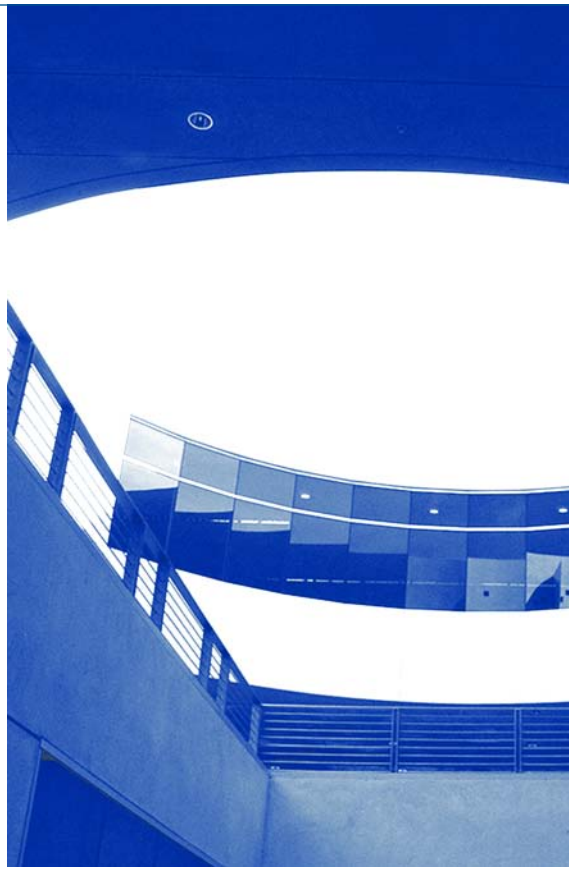
All students* (day and evening) who register on campus are covered by an insurance policy which applies to accidents in college-sponsored and supervised activities. An optional student accident and sickness insurance plan is available.

*Except those students enrolled in Regional Occupational Program (ROP)-sponsored courses/programs, who are not electing to take college credit, and students in noncredit, fee-funded courses.

Learning Resource Center

The Learning Resource Center (LRC) is a library of microcomputer programs. It houses five microcomputer laboratories, and an interactive area. Students may use the programs in the collection for computer applications, self-paced computer-assisted instruction and practice, drill and practice in basic skills, and supplementary information for classes in a wide range of subjects. Other services include a coin-operated copier. LRC holdings are listed in the automated public catalog along with library holdings. The student ID card is the Library/LRC card. Programs are available to all Southwestern students, faculty, and staff. Other community residents may use the collection by obtaining a community borrower's card at the library circulation desk. The collection is constantly updated.

Computer literacy and basic applications classes are also taught in the LRC Microcomputer Laboratories.



Library

The library, located on the perimeter of the campus, is open Monday through Saturday. Its resources, including in excess of 100,000 books and approximately 400 current periodical subscriptions, are available to Southwestern College students, staff, and faculty and to adult residents of San Diego County.

Library collection information may be accessed through the easy-to-use online catalog, or by accessing the College library website **http://www.swc.cc.ca.us/~library** . In addition students may obtain passwords at the Library Reference Desk to gain access to many of the online databases which provide abstracts or full text of articles from thousands of magazines, journals, and newspapers. Internet access is available for research purposes. If student or staff research requires books or articles not owned by Southwestern College Library or available in our electronic databases, the Interlibrary Loan Service may be able to obtain these materials from other collections.

For convenience, a typewriter and copy machines are provided.

Professional librarians are always on duty during open hours to assist library users. Appointments may be made for individual reference service. Each semester, the librarians teach credit courses on college-level research skills (LIB 110) and on research using the Internet (LIB 151).

Instructors may make appointments for customized orientations for their classes. These orientations are available in the library or the professor's classroom. Call the Reference Desk to make arrangements early in the semester.

The student ID card is the Library/LRC card. Each semester the student will receive, either in the mail or at registration, a registration sticker. Students can borrow library materials after placing their registration sticker on their ID card. If an ID card is lost or stolen, report the loss immediately to the staff at the library circulation desk. Students are responsible for all library materials borrowed with their cards.

The library continuously adds new materials and new services in order to contribute to student academic success.

Student Services Center

The Student Services Center is designed to streamline operations, improve efficiency, and make it easier and more convenient for students to access critical services. At 48,000 square feet, the $10.5 million Prop AA-funded facility will house all services associated with the matriculation of students under one roof, including Admissions, Counseling, Financial Aid, and Disability Support Services. Departments also housed in the new center are: Outreach, Transfer Center, Assessment, SES, EOPS, CTECs/WRC, Evaluations and Veterans.

Admissions Center

Assists students applying for Admission to the college and enrollment in classes. The center also refers students to other student services. Provides students with assistance with transfer transcripts (incoming and outgoing) and petitions for exceptional actions.

AmeriCorps/Service Learning

Promotes and assists students with finding valuable volunteer opportunities in the community. Students can earn up to two AmeriCorps Education Awards to pay for student educational expenses or to repay previous Federal Student Loans.

Assessment Center

Assessment services improve students' chances for success. The College Assessment Center provides a comprehensive and timely assessment of student skill levels in English, reading, and math, and recommends appropriate course placement.

A highly qualified and trained staff ensures a secure yet relaxed testing environment aimed at minimizing student anxiety. Individualized accommodations are provided to meet the needs of students with disabilities. Assessments are available in alternate media upon request from Disability Support Services.

All students receive a comprehensive report summarizing their assessment results.

Assessment Center staff will also review assessment results from other colleges to determine if appropriate course placements can be made in lieu of Southwestern College's placement tests.

NOTE: *See this catalog under Matriculation Procedures and Graduation Requirements, page 36.*

Career Center

Experienced career and academic counselors are on hand for individual career planning and exploration. Access to computerized workstations to assess student's interests, personality type, skill sets, and study skills are available. A variety of resources and services are available for student use, such as:

- Career Center tours;
- Individualized career planning and exploration with a counselor;
- Computerized career assessments including interests, personality type skills, and values;
- Monthly workshops focusing on various career and job preparation topics;
- Major day fairs, and annual Career Fair;
- Job shadowing opportunities; and
- Extensive video library, software programs, hardback resources, and Internet resource directories.

Cashiers Office

Assists students with student account balance inquiries. Receives student payments for processing billed fee charges. Disburses Financial Aid Grant & Student Loan checks to students and processes student reimbursement checks as applicable.

Counseling Center

The Counseling Center under the School of Counseling and Personal Development, offers academic advisement and individual counseling to all students. Professional counselors are prepared to answer inquiries or talk with students about their academic performance, choice of career, personal goals, and transfer opportunities to other colleges and/or universities.

Students may request assistance in improving their study skills, understanding their interests, assessing their abilities, or exploring short-term and long-range goals. All communication between student and counselor is considered confidential.

The counseling faculty will assist each student in developing a Student Educational Plan. Appointments should be made with a counselor to discuss the student's goals and develop the plan after admission to the College.

CTECS & Women's Resource Center

Center for Technical Education and Career Success in collaboration with the ROP program is a specialized support services program for students in vocational and technical classes. The Women's Resource Center primarily serves as a referral service to inform, support, and encourage, female students with academic and personal matters.

Disability Support Services

Southwestern College provides programs and services that promote access for students with disabilities to all campus, academic, and vocational activities. The goal of the program is to support the students' educational goals.

Disability Support Services offers special counseling, specialized assessment for learning and speech/language disabilities, sign language interpreters, note takers, test proctoring, equipment loans, liaison with campus personnel, and other disability services based on students' needs.

Disability Support Services also offers classes in speech/language, adaptive computers, adaptive physical education courses, and basic academic skills for students with verified disabilities.

Interested students can obtain more information about these services and start their application process by contacting the Disability Support Services Office located in the Student Services Center, by telephone 619-482-6512 or TTY 619-482-6470 or email **dss@swc.cc.ca.us**, for an appointment.

Diagnostic Assessment Services

Diagnostic assessment services are available through Disability Support Services for learning or speech/language disabilities. Students should contact Disability Support Services located in the Student Services Center or telephone 619-482-6512 for an appointment.

High Tech Center

Disability Support Services runs a High Tech Center which includes computer instruction, specialized hardware and software for Macintosh and personal computers, training with assistive technology, and open laboratory hours.

Adaptive Physical Education

Adaptive Physical Education is a program designed to enable students with disabilities to participate in physical education classes.

Adaptive physical education classes include individualized exercise, sports activities, and aquatics.

Student Accommodation Requests

Once a disability is verified, students with disabilities who are authorized for academic accommodations by Disability Support Services should discuss options with their instructors during the first two weeks of classes.

Assistance with accommodations can also be obtained from the Americans with Disabilities Act Coordinator or the Dean of Student Activities.

Evaluations Office

Evaluates academic records for General Education Certification, Certificates of Achievement and Associate Degrees. Determines course to course equivalencies. Coordinates activities for the annual commencement ceremony and distributes diplomas.

Extended Opportunity Programs and Services (EOPS)

EOPS is a state-funded retention program that provides support services to students who are economically disadvantaged and educationally under-prepared to obtain a degree or certificate. Some of the services EOPS provides include book service; academic, career, and personal counseling; transfer assistance; tutoring; job placement; career assistance; emergency loans; and priority registration.

Eligibility for EOPS

Information in this section is subject to change as new state or institutional policies are implemented. Currently, EOPS services are offered to students who meet all of the following selection criteria:

- are residents of California;
- are enrolled full-time (12 or more units) when accepted into the EOPS program;
- have not completed more than 70 units of degree-applicable course work. This includes course work completed at all colleges previously attended;
- are qualified to receive a Board of Governors Fee Waiver (BOGW) A or B; and
- are judged to be educationally disadvantaged.

Students may be judged to be "educationally disadvantaged" if they meet one or more of the following criteria:

- are not qualified for enrollment into the college-level English or mathematics courses;
- have not graduated from high school or obtained the General Education Diploma (G.E.D.);
- have graduated from high school with a grade point average below 2.50 on a 4.00 scale;
- have been previously enrolled in developmental education courses; or
- meet other educational disadvantage criteria as defined by the state.

How to Apply for EOPS

Students interested in applying for the EOPS program at Southwestern College must complete an EOPS application. Applications are available in the EOPS Office. Students are encouraged to apply early to ensure consideration. For further information, contact the EOPS Office located in the Student Services Center , by telephone 619-482-6456, or email **eops@swc.cc.ca.us.**

Financial Aid

The Financial Aid Office helps students who might otherwise be unable to continue their education because of financial problems. Students who need financial assistance to attend Southwestern College are urged to contact the Financial Aid Office located in the Student Services Center for information and application forms. See page 20 for additional financial aid information.

Outreach Office

Serves as an initial source of information about Southwestern College programs, available services, enrollment procedures, and costs. Conducts an Early Admissions program and other Outreach activities for Seniors at local High Schools. Coordinates support activities with Outreach Peer Advisors.

Student Employment Services

Student Employment Services assist students in part-time or full-time employment on- and off-campus. Employment openings, as well as internship opportunities, are posted daily. Workshops are given regularly to assist students in the preparation of resumes, which are required for many positions and internships. An annual Career Fair is sponsored by Student Employment Services, and on-campus recruitment days are frequently held. Interested students should come to the Student Services Center, telephone 619-482-6356, email **ses@swc.cc.ca.us** or website **www.swc.cc.ca.us/~ses/** for additional information, referral hours, and to complete an employment information form.

Transfer Center

The Transfer Center offers students the opportunity to plan for transfer to a four-year college or university through a variety of resources and services that provide assistance in the transfer process.

Resource materials-a library of college catalogs and campus videos, educational computer programs, articulation agreements, and other resource information are available for student use.

Services-academic advising by transfer counselors, university advisors, and organized tours to various colleges and universities are provided. Workshops on the application process, transfer information, scholarship information, transfer writing test preparation, and transfer admission guarantee programs are also offered.

- The UCSD Transfer Admission Guarantee (TAG) program is an agreement between the University of California, San Diego (UCSD) and Southwestern College. After successful completion of the specified criteria, a student is guaranteed admission to one of UCSD's five colleges for a fall, winter, or spring term.
- University Link is a transfer admission guarantee program established between the University of California, San Diego (UCSD), Southwestern College, and the Sweetwater Union High School District. The program is open only to first-time freshmen. After successful completion of the specified criteria, a student is guaranteed admission to one of UCSD's five colleges for a fall term. University Link contains a student support service component.
- The UCR Transfer Admission Guarantee (TAG) program is an agreement between the University of California, Riverside (UCR), and Southwestern College. After completion of specified criteria, a student is guaranteed admission to UCR. The UCR TAG is available for majors in humanities, arts, and social sciences, as well as computer science for the fall, winter, or spring term. UCR accepts TAG students into biochemistry and chemistry for a fall term only. Admission to biological sciences and biology is open for fall and winter terms only.
- The UCSC Guaranteed Admission for Transfer Entry (GATE) program is an agreement between the University of California, Santa Cruz (UCSC), and Southwestern College. After successful completion of the specified criteria, a student is guaranteed admission for a fall term.

Veterans Services

The campus Veterans Services Office provides assistance to veterans and their dependents who may be eligible for various educational benefits. Applications and information for applying and using these benefits may be obtained from the Veterans Services Office on campus located in Student Services Center. Every student who plans to attend under veterans benefits is required to complete the proper paper work at the campus Veterans Services Office each semester.

Information regarding these benefits may also be obtained from the San Diego County Veterans Service Office:
734 West Beech St., Suite 200,
San Diego, CA 92101-2402
619-531-4545
800-827-1000
http://www.va.gov

Student Life

Students will find that the college experience is enhanced by active participation in some social or extracurricular phase of the college program. The College encourages each student to participate in extracurricular activities. A master calendar of events is located in the Student Activities Office in the Student Center. Approval by the administration must be obtained before such events are scheduled or placed on the calendar.

Opportunities are provided to participate in the following: student government; production of campus publications such as the campus newspaper; intercollegiate athletics; band, drama, and choral music performances; a variety of club programs; social, service, cultural, and recreational activities and events.

Two hours each week are designated as college hours. Few classes are scheduled during these hours, allowing for campus activities such as cultural activities, club meetings, and current affairs forums.

Associated Student Organization

The Associated Student Organization (ASO) represents all students at Southwestern College and sponsors activities including cultural performances, awards, student clubs, social activities, and student leadership conferences.

The ASO is the recognized student government body of the College. The students elect representatives to both the Executive and Legislative Branches.

The Executive Branch has six executive officers: president, executive vice president, who serves as senate chairperson, social vice president, vice president for club affairs, secretary, and treasurer. The Senate is the Legislative Branch and is composed of twelve elected and nine appointed divisional senators.

Campus Clubs

Students should plan to participate in at least one social organization or activity with a goal to further develop social skills. A variety of chartered groups are organized on campus for the welfare and extracurricular interests of the general student body. During the school year, the Inter-club Council awards charters to clubs according to the following four categories established in the ASO Constitution:

- Academic clubs stimulate interest in activities related to courses and curricula, encourage high standards of performance in academic work, provide experiences to complement classroom activities, and provide opportunities for service and leadership in areas related to course work.
- Service clubs recognize and honor students for outstanding achievement in the community and service to the College and provide opportunities for students to plan and execute programs of meaningful service to the College community.
- Special interest clubs provide opportunities for students with mutual interests to organize for the purpose of investigating, developing, or expanding their common interests.
- Honorary clubs recognize and encourage outstanding achievement in scholarship and provide opportunities for developing leadership ability.

Intercollegiate Athletics

Southwestern College is a member of the Pacific Coast Conference, which includes Cuyamaca, Grossmont, Imperial Valley, Mira Costa, Palomar, San Diego City and San Diego Mesa colleges.

Southwestern College competes in the following sports: men's football, baseball, water polo, track and field, basketball, cross country, soccer, and tennis; women's basketball, cross country, softball, tennis, soccer, volleyball, water polo, and track and field.

Southwestern College competes in the Foothill Conference in football against Antelope Valley, Chaffey, Citrus, College of the Desert, Grossmont, Mt. San Jacinto, San Bernardino Valley, San Diego Mesa, and Victor Valley colleges.

Eligibility rules, established by the California Association of Community Colleges and Southwestern College, require that:

- A student athlete passes a physical exam prior to competition.
- A student athlete must be continuously and actively enrolled in 12 units during the season of sport.
- A student athlete may not practice and/or participate with more than one postsecondary institution during the sport season.
- In order to be eligible for a second season of a sport, the athlete must complete 24 units prior to the beginning of the semester of the second season of the sport. Units completed during the first season of the sport and summer shall be included in the required 24 units.
- A student entering college after July 1, 1985, must maintain a cumulative 2.0 grade point average in accredited postsecondary course work computed since the start of the semester of the first participation in order to continue athletic competition.
- No athlete shall be allowed more than two seasons of competition in any one sport. Exceptions may be made by the conference only in cases of incapacitating illness or injury.
- A student transferring to a California community college for academic or athletic participation purposes and who has previously participated in intercollegiate athletics and whose most recent participation was at another California community college must complete 12 units in residence prior to the beginning of the semester of competition for that college.
- A student athlete who has participated in a sport dropped by his/her college and has remaining eligibility in that sport is entitled to a waiver of the 12 units in residence requirement.
- Once the season of sport begins, the athlete may not participate on any other team in that sport during the season.

Questions regarding athletic eligibility should be referred to the Dean for the School of Health, Exercise Science, and Athletics, Building 1000.

Fine and Performing Arts

Through the School of Arts and Communication, a variety of courses are offered to provide the student with an opportunity for creative expression in art, music, theatre, speech, dance, telemedia, and journalism. These performing groups/activities include the Concert Choir, Jazz Vocal Ensemble, Chamber Singers, Jazz Ensemble, communication, dance, theatre, forensics, art exhibitions, Sun newspaper, Mariachi Ensemble, African Drum and Dance Ensemble, small performing groups, and musical theatre.

In addition, Southwestern College provides a series of distinguished lectures and performing artists. Performances are held during the day and night to allow every opportunity for students to take part in campus activities.

Southwestern College Honor Society

Honor students may be interested in joining the Alpha Pi Epsilon, Southwestern College's chapter of Phi Theta Kappa, an international honor society for two-year colleges. Students who earn a 3.5 or better GPA in at least 12 units of college course work at Southwestern College are invited to join this prestigious organization and share in its hallmarks of scholarship, leadership, fellowship, and service. Alpha Pi Epsilon has consistently been rated a "five-star" chapter by Phi Theta Kappa's International Office, signaling its excellence in service and scholarly activities.

The purpose of Phi Theta Kappa shall be to recognize and encourage scholarship among two-year college students. To achieve this purpose, Phi Theta Kappa shall provide opportunity for the development of leadership and service, for an intellectual climate for exchange of ideas and ideals, for lively fellowship for scholars, and for stimulation of interest in continuing academic excellence.

For information on membership, call 619-421-6700, ext. 5755.

Student Rights and Responsibilities

Becoming a student at Southwestern College means becoming a member of an academic community of faculty, staff, administrators, and other students. The heart of the community is the student, who has both the right and responsibility to take a primary role in his education. At Southwestern College, the student learns that a good education goes beyond what is taught in lectures and textbooks. Students are encouraged to actively participate in the cultural and social opportunities afforded by the academic community.

Student Right-to-Know

In compliance with the Student Right-to-Know (SRTK) and Campus Security Act of 1990 (Public Law 101–542) and as a service to its community, the Southwestern Community College District makes available its completion and transfer rates to all current and prospective students.

Beginning in fall 2000, a cohort of all college students who were certificate-, degree-, and transfer-seeking first time, full-time students were tracked over a three-year period. The completion and transfer rates are based on information submitted by each college to the U.S. Department of Education. The rates do not represent the success rates of the entire student population at Southwestern College (SWC), nor do they account for student outcomes occurring after this three-year tracking period.

Based on the cohort defined above, 30.8 percent of the SWC cohort attained a certificate or degree or became transfer-prepared from fall 2000 to spring 2003. In addition, 20 percent transferred to another postsecondary institution (University of California, California State University, or another California community college) during the same three-year period. While this transfer rate is calculated the same for all colleges and is accurate, it can be misleading for a variety of reasons.

- The 2000–2003 SRTK cohort is based only on 3 percent of the total SWC student population.
- The SRTK figures do not include those who transferred to private or out-of-state institutions that are not members of the National Student Clearinghouse.
- The SRTK transfer rate does not include those who received a degree or became transfer prepared and later transferred to a UC, CSU, or another California community college.

Finally, the rates do not describe other important features about the College and its students. As one of the top 100 associate degree producers in the nation-and the twelfth highest degree producer for minorities-SWC contributes significantly to the lives of thousands of students in assisting them to meet their educational goals (Community College Week analysis of U.S. Department of Education Data, November 12, 2001).

More information concerning SRTK is available from
the Institutional Advancement and Academic Affairs offices.
Additional information can also be found at the following websites:
http://www.cccco.edu/divisions/tris/mis/srtk.htm
and
http://srtk.cccco.edu/091/99index.htm

Academic Accommodations Policy

The Southwestern Community College District is committed to all provisions of Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. The fundamental principals of nondiscrimination and accommodation in academic programs provide that:

- No qualified handicapped student shall, on the basis of handicap, be excluded from participation in, be denied the benefit of, or otherwise be subjected to discrimination under any... post-secondary education program or activity...[84.43(a)] Section 504, Fed. Rehab. Act, 1973
- [An instructor]...shall make such modifications to academic requirements as are necessary to ensure that such requirements do not discriminate or have the effect of discrimination on the basis of handicap... [84.44(a)] Section 504, Fed. Rehab. Act, 1973

To ensure that students with disabilities receive appropriate accommodation in their instructional activities, the Southwestern Community College District adopted procedures to review any dispute regarding academic accommodations. Primary responsibility for implementation of the Academic Accommodation Review Procedures is assigned to the Academic Accommodations Officer, appointed annually by the Superintendent/ President.

Review Procedures

Based on Section 504 of the Federal Rehabilitation Act of 1973, the following provisions are put forth concerning academic accommodations:

- Students with verified disabilities have the right to receive academic accommodations.
- Students with disabilities who will be using academic accommodations are responsible to identify themselves to the appropriate instructors and Disability Support Services (DSS) Specialist. The student must provide verification of his disability. Students who consult with the DSS Specialist regarding specific accommodation requests will be required to meet timelines and procedural requirements established by the DSS Office.

Academic accommodations involve such adjustments as extended time on examinations, use of tape recorders in class, etc. A student may request an accommodation based on his particular disability. Where there is a difference of opinion between the faculty member and student regarding an academic accommodation, there will be a timely review procedure. This procedure attempts to prevent such cases from becoming student vs. faculty. The purpose of the review procedure is to determine if the particular accommodation is reasonable given the student's disability and instructor's course content. It is the reasonableness of an accommodation that is being determined, not a matter of who is right.

Should a disagreement arise about a particular accommodation, the instructor should go to the DSS Specialist or the Academic Accommodation Officer for advice and/or clarification. If the matter is not resolved within five (5) instructional days following the request for the accommodation, the student can request its review by the Academic Accommodations Panel. This panel will consist of the 504 officer, an Affirmative Action officer, a certificated faculty member from DSS, an Academic Senate representative, a student representative, and two faculty subject matter experts or representatives of a related department.

The role of the Academic Accommodation Panel is to review the disputed academic accommodation with respect to Section 504. Specifically, the panel will review whether the accommodation ensures access for the disabled student to meet the academic standards of the course, while maintaining the integrity of the course content. The panel will then advise pertinent parties as to the most appropriate accommodation.

In instances where a student requests an accommodation(s), a verification of a disabling condition is needed. Students whose disability has not been documented will be granted a three-week grace period during which time the requested accommodation(s) will be provided. The temporary accommodation is subject to review by the Academic Accommodations Officer in cases of undue financial burden to the District. Continuation of said accommodation(s) beyond the three-week time period will be based on the results of the verification. If the verification is not obtained within three weeks, the accommodation(s) may be suspended until such time that the disability is verified.

For students whose disabling condition has been verified, the accommodation will be allowed for a maximum of three weeks during which time a resolution will be achieved. The temporary accommodation is subject to review by the Academic Accommodations Officer in cases of undue financial burden to the District. If the decision of the panel is that the accommodation is not reasonable, the instructor will have the right to have the student redo any work done during those three weeks in which the recommended accommodation was allowed.

Recent case laws mandate the need for this new procedure. While the District is ultimately responsible for providing academic accommodation, an instructor may be held personally liable for not allowing an accommodation. (Wood vs. Strictland, 1979)

Purpose and Definition

The purpose of this document is to explain and put forth Southwestern College's policy ensuring that students with disabilities receive appropriate accommodation in their instructional activities, as mandated by federal and state law. The fundamental principles of nondiscrimination and accommodation in academic programs were set forth in the implementing regulations for Section 504 of the Federal Rehabilitation Act of 1973 (which were published in the May 4, 1977, Federal Register, p. 22684); these regulations provide that:

No qualified handicapped student shall, on the basis of handicap, be excluded from participation in, be denied the benefits of, or otherwise be subject to discrimination under any...post-secondary education program or activity...[84.439a)] [An institution]...shall make such modifications to its academic requirements as are necessary to ensure that such requirements do not discriminate or have the effect of discriminating, on the basis of handicapped applicant or student "... modifications may include changes in the length of time permitted for the completion of degree requirements, substitution of specific courses required for the completion of degree requirements, and adaptation of the manner in which specific courses are conducted." [84.44(a)]

Academic Accommodations

The modification which post-secondary institutions are required to make may be referred to as "reasonable accommodation." Examples of academic accommodation include modification to degree requirements (e.g., additional time, alternative testing measures), modifications to course examinations (e.g., additional time, alternative testing measures) and use of auxiliary aides (e.g., readers, calculators).

The procedures enumerated herein will be available to any student who believes a college decision or action has adversely affected his/her rights as a student as specified in Southwestern College Policy. In cases of academic accommodations, this procedure will take the place of Student Grievance Procedures.

Academic Accommodations Officer and Panel

Each academic year, the president will appoint an Academic Accommodations Officer. The Academic Accommodations Officer will be a certificated employee. The Academic Accommodations Officer will act as the facilitator and is responsible for ensuring that informal process has been attempted, instructor and student are informed of their rights and responsibilities, panel members are notified, and all arrangements for the formal process are in place.

The Academic Accommodations Panel will consist of the 504 Officer, Affirmative Action Officer, a certificated faculty member from Disability Support Services (DSS), an Academic Senate representative, a student representative, and two faculty subject matter experts or representatives of a related department. The role of the Academic Accommodations Panel is to review the disputed academic accommodation with respect to Section 504. Specifically, the panel will review whether the accommodation ensures access for the disabled student to meet the academic standards of the course, while maintaining the integrity of the course content. The panel will then advise pertinent parties as to the most appropriate accommodations.

Informal Resolution

Instructors are urged to be as explicit as possible in describing in the course syllabus the types of classroom activities to be expected throughout the term so potential accommodation needs can be identified. It is the intent of this procedure to address academic accommodation issues as early as possible in the term.

Each student will make a reasonable effort to resolve the matter with the instructor on an informal basis prior to requesting a hearing by the Academic Accommodations Panel. The instructor will inform his/her dean of the matter as soon as possible.

If an instructor has questions about an accommodation requested by a student with a verified disability, the instructor should contact the DSS administrator promptly. Informal meetings and discussion among the instructor, student, and appropriate members of DSS and/or other appropriate members of the College community are essential at the outset and will be completed within five instructional days following the request for the accommodation.

An equitable solution will be sought before the respective persons directly involved in the case have assumed official or public positions that might tend to polarize the issue and render a solution more difficult. At no time will any of the persons directly involved in the case or any other persons use the fact of such informal discussion or the character of the information discussion for the purpose of strengthening the case for or against persons directly involved.

Formal Resolutions

If no informal resolution can be found within five instructional days and the accommodation is not allowed, the student may then seek a review by meeting with the Academic Accommodations Officer as soon as possible.

Academic Accommodations Hearing

The student must complete the Academic Accommodation Appeal Petition. This form, requesting a review by the Academic Accommodations Panel, will be filed by the student with the Academic Accommodations Officer.

The Academic Accommodations Officer will convene the panel within five instructional days following receipt of an Academic Accommodation Appeal Petition.

The accommodation will be allowed for a maximum of three weeks during which time a resolution will be achieved. This temporary accommodation is subject to review by the Academic Accommodations Officer in cases of undue financial burden to the District. If the decision of the panel is that the accommodation is not reasonable, the instructor will have the right to have the student redo any work done during those three weeks with the new accommodation.

Hearing Procedure

The full Academic Accommodations Panel must be present for the hearing to proceed. The 504 Officer will be the chairperson and will inform the participants of the procedures to be followed in the hearing.

- Both the instructor and student may call witnesses and introduce oral and/or written testimony relevant to the issue of the accommodation.
- The Academic Accommodations Officer will assist both parties in the securing of witnesses.
- Formal rules of evidence will not apply. Any relevant evidence which reasonable people are accustomed to consider in dealing with a serious matter will be admitted.
- Parties may represent themselves and will also have the right to be accompanied by a person of their choice who may act as their advisor. Parties will notify the Academic Accommodations Officer of their choice of representation no later than three instructional days prior to the hearing.
- The hearing will be closed and confidential. Both parties and the Academic Accommodations Panel must agree to this condition before the request may be granted.
- In a closed hearing, witnesses will be present only when testifying, unless the Academic Accommodations Panel and both parties 'agree to the contrary. A taped record will be maintained by the Academic Accommodations Officer and, in the case of a confidential hearing, will be the only taped record maintained.

Academic Accommodations Panel's Decision

The Academic Accommodations Panel's decision will be based only upon the evidence presented at the hearing in connection with the relevant sections of state and federal law. Within five instructional days of the hearing, the Academic Accommodations Officer will prepare a written decision for both the student and the faculty member involved in the process. This document will include the accommodation(s) under dispute, a summary of the evidence and the panel's recommendation(s). A copy of the recommendation will also be forwarded to the Vice Presidents for Academic Affairs and Student Services in the event that it becomes necessary for them to make a determination of the case.

If the student disagrees with the recommendation of the Academic Accommodations Panel or if the instructor still refuses to permit academic accommodations despite the recommendation of the panel, the student may, within three instructional days, take the case to the next stage of the process, which is determined by the Vice Presidents of Academic Affairs and Student Services.

Vice Presidential Determination

If disagreement still exists between instructor and student over the use of academic accommodations despite the recommendation of the Academic Accommodations Panel, the two vice presidents (Chief Student Services Officer and the Chief Instructional Officer) will make a joint determination of the case. This determination will be made within five instructional days of receipt of the student appeal.

The determination by the two college vice presidents will take the form of a written report and will be immediately forwarded to the Academic Accommodations Officer. The officer will ensure that all parties involved in the process are immediately notified and provided with copies of the vice presidential determination. The officer will also provide a copy of the vice presidential determination to the Superintendent/President of the College, in the event the process moves into the next stage.

Presidential Authority

If, after all other appropriate measures have been exhausted in the attempt to settle the dispute, disagreement still exists between instructor and student over the use of academic accommodations in the classroom, the process moves into its final stage at the local level. The student may appeal the case to the president within three days of the vice presidential determination. Within five instructional days of receipt of an appeal, the Superintendent/ President of the College will receive from the Academic Accommodation officer all documentation of grievance and will make a final decision. The president of the college will have the final decision-making authority at the local level.

United States Office for Civil Rights

Upon receiving a final decision in the matter from the president of the college, the student who feels that his/her civil rights have been denied or that the college is out of compliance with either Section 504 of the Rehabilitation Act of 1973 or the Americans with Disabilities Act of 1990, may contact:

OFFICE FOR CIVIL RIGHTS
US. Department of Education
221 Main Street, Suite 120
San Francisco, California 94105

Responsibilities of Southwestern College

The College, including all campuses and centers, is required to assure that all programs and services are accessible to individuals with disabilities. It acknowledges that the DSS Office has been delegated the authority by the Office of the Chancellor of California Community Colleges to prescribe academic accommodations for all students who have been certified as having a disability. The College must institute procedures to make modifications in academic requirements to ensure that such requirements do not discriminate on the basis of a disabling condition.

The faculty are responsible for conducting classes and administering examinations. They should be mindful, in developing tests or other procedures for evaluating students' academic achievement, that federal regulations require that:

> "...methods should be provided for evaluating the achievement of students who have a handicap that impairs sensory, manual, or speaking skills as will best ensure that the results of the evaluation represents the student's achievement in the course, rather than reflecting the student's impaired sensory, manual, or speaking skills (except where such skills are the factors that the test is suppose to measure)."[Section 504]

The DSS Office has been delegated the authority to certify disabilities. The certification of a disability by DSS is binding upon the College. The use of Disability Support Services by the student is voluntary.

The DSS Specialist is responsible for verifying a student's disability, estimating the disability's effect on the student's participation in academic activities, and advising the student concerning appropriate learning strategies. The specialist may also determine the nature of accommodations in instruction and testing that might be required for a student in order to demonstrate mastery for the subject matter. He/ she will be available to faculty for consultation.

The 504 Officer is responsible for informing the students of their rights, under 504, to file through the Office for Civil Rights if the desired accommodation is not allowed. An updated file of all college decisions will be kept.

Forms Used

- Disabled Services Academic Accommodation
- Academic Accommodations Appeal Petition

Student Rights Policy

If admitted to Southwestern Community College District in accordance with District admission policies (Education Code Section 76000), a student can exercise the following rights pursuant to Title 5, Sections 55521, 55530, 55534, 58106:

- Enrollment in any course for which the student can meet necessary and valid prerequisites and corequisites that have been established pursuant to Title 5, Section 58106.
- Access to clear and consistent information describing student rights and responsibilities available in college publications and documents such as catalog, schedule, and student educational plan.
- Participation in an efficient matriculation process that encourages student access to college programs.
- Maintaining enrollment status in a course after the beginning of the semester. The student may withdraw voluntarily or can be dropped from the course against his/her will if he/she fails to comply with district attendance policy or exhibits disruptive behavior as identified in district policy. A student who does not meet the mandatory prerequisite or corequisite may be dropped from a course. Therefore, it is incumbent upon the College to ensure that students are informed about mandatory prerequisites and corequisites and that prerequisites and corequisites are enforced in a timely and efficient manner. (Title 5, Section 55758)

A student may petition for waiver or appeal if he feels that assessment, orientation, counseling, prerequisites, corequisites, or any other matriculation procedures are being applied in a discriminatory manner. Where a student believes an injustice is being done, the student may seek redress through established grievance policy and procedure. See this catalog under Matriculation Appeals Petition, page 21

Student Conduct Standards and Discipline

The California State Education Code requires that each community college student be furnished with a copy of the policy regarding student conduct and discipline adopted by the governing board of the community college district.

Disciplinary action may be imposed upon a student by an instructor, administrator, or staff for violation of specified college policy and state regulations. 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.

Academic Dishonesty and Plagiarism

Academic dishonesty of any type by a student provides grounds for disciplinary action by the instructor or college. In written work, no material may be copied from another without proper quotation marks, footnotes, or appropriate documentation.

Violations

- Academic cheating and/or plagiarism.
- Forgery, alteration, or misuse of college documents, records, or identification or furnishing false information. Theft of or nonaccidental damage to or abuse of college premises or property, including, but not limited to, the theft or abuse of computer resources and/or violation of the acceptable use policy.
- Unauthorized entry to or use of college facilities, including, but not limited to, property, buildings, supplies, and equipment.
- Violation of college policies and regulations regarding hate crimes, gambling, and hazing.
- Use, possession, or distribution of alcoholic beverages, narcotics, or illicit drugs on college premises or at college-sponsored events.
- Failure to comply with directions of college officials acting in the performance of their duties, or failure to provide identification for just cause when requested by college officials acting in the performance of their duties.
- Disorderly conduct or lewd, indecent, or obscene conduct or habitual profanity on college premises or at a college-sponsored activity.
- Possession or use of unauthorized firearms or other dangerous weapons on college premises or at college-sponsored events.
- Assault or battery upon a student or college personnel or continued abuse of student or college personnel, or any threat of force or violence toward a student or college personnel.
- Smoking in any area where smoking has been prohibited by law or by regulation of the Governing Board.
- Persistent disruptions, including inordinate demands for time and attention; in the classroom, administration, campus activity, including, but not limited to abuse of the disciplinary process.
- Violation of college regulations or state laws.

In case of sexual harassment or unlawful discrimination, complaints should be filed as Title V and/or Office of Civil Rights complaints. These complaints will be processed through the Human Resources Office.

Disruption in the Classroom, College Offices and/or College Events

In the event a student is involved in either unethical practice or display of disruptive behavior which is considered not conducive to maintaining a proper learning environment in the classroom, and/or disrupting the business of the College, the student will be disciplined as outlined in the College Procedures Guidelines for Due Process.

The instructor has the right to exercise appropriate disciplinary action and may place the student on probation or temporary exclusion with respect to actions in a classroom effective for the remainder of the class period and the following class session.

The administrator has the right to exercise appropriate disciplinary action in temporary exclusion with respect to actions in a college office.

Administrators, college staff, or faculty sponsors may place students on probation or temporary exclusion with respect to action at a college-sponsored activity effective for the duration of the activity.

Disciplinary Actions

- The faculty, college staff member or administrator concerned who believes disruptive behavior has occurred shall first attempt to resolve the misconduct by informal consultation with the student.
- If this proves to be less than satisfactory, the faculty, college staff member or administrator will inform the department chair or dean of the area. The Department chair or dean should meet with the faculty, college staff member or administrator, and student(s) involved in an attempt to resolve the problem.
- If the faculty/college staff member still believes that the issue has not been resolved satisfactorily at these levels, a completed "Report of Student Misconduct" shall be filed with the Dean of Student Activities.
- The Dean of Student Activities shall confer with the student for the purpose of reviewing the misconduct and attempting to resolve the matter.
- The Dean of Student Activities, or designee, may also obtain information relating to the misconduct from other parties involved. Whenever appropriate, the Dean of Student Activities shall assess damage to property and injury to person(s).
- Students charged with misconduct may be subject to the following sanctions: (all sanctions will be documented and misconduct files kept in the Student Activities Office).

- Warning: Student issued a warning will meet the Dean of Student Activities to discuss inappropriate behavior.
- Reprimand: A student receiving a reprimand by the administrator is thereby notified that continued conduct of the type described may result in further disciplinary action against the student.
- Disciplinary Probation: This action by the administrator may be imposed for a period not to exceed one academic year. Any misconduct during the probation period will be cause for suspension or other disciplinary action.
- Disciplinary Suspension: Exclusion from class, privileges or activities for a specified period of time as set forth in the notice of suspension.
- Expulsion: Termination of student status. Expulsion requires formal action by the Governing Board.
- Remanding the case to formal hearing.

The Dean of Student Activities will meet with the student involved and provide the instructor and dean of the area with a follow-up report of the appropriate action taken. It should be noted that the Dean of Student Activities shall have the power to impose suspension and to recommend expulsion. If the student does not accept the action of the instructor and/or Dean of Student Activities, the student has right to challenge and request a formal hearing under Grievance Policy No. 6049.

Guidelines for Due Process

Procedural due process is the method established to resolve faculty, staff, and student conduct issues in a clear, fair, and orderly manner. These procedures apply to actions which interfere with or exert a harmful effect upon the function of the College. Due process is intended to achieve an equitable solution that will resolve the issue with due regard for the rights of the accused, the protection of the student body, and the interest of the College. Any action taken by a student under this due process procedure shall preclude any further action.

I. Preliminary Action Procedure Submitting of Official Forms

The Dean of Student Activities shall receive and may issue any charge of alleged grievance or misconduct made against a student by another student or a member of the College. The complainant shall file a Report of Student Misconduct form or Report of Student Grievance form with the Dean of Student Activities, hereafter called "Administrator."

Notification of Charges

A student charged with violations of the Standards of Student Conduct shall be notified that he/she is required to schedule an appointment with the Administrator to discuss such alleged violations and any disciplinary actions that may or will result if such charges are found to be true. The notice will be mailed to the student's address on file in the College's Admissions Center.

A student who does not report to the Student Activities Department to address a grievance or misconduct report will have an administrative hold placed on his/her records, in addition to possibly being dropped from his/her classes.

Preliminary Meeting

The meeting with the Administrator shall consist of the following:

- A copy of the adopted Standards of Student Conduct to be given to the student.
- A written statement of the charges given to the student.
- Informing the student of any disciplinary action(s) that may be or will be taken.

Administrator Actions

The administrator will obtain information relating to the charge from the student and other persons. Whenever appropriate, the administrator shall assess damage to property and injury to persons. The Administrator may take any of the following actions and will notify the student of that action:

- Dismiss the charge for lack of merit.
- Issue the student one or more of the following types of disciplinary actions, unless the administrator and the student agree to another appropriate disciplinary action:
- Warning: Student issued a warning will meet the Administrator to discuss inappropriate behavior.
- Reprimand: A student receiving reprimand by the administrator is thereby notified that continued conduct of the type described may result in further disciplinary action against the student.
- Disciplinary Probation: This action by the administrator may be imposed for a period not to exceed one academic year. Any misconduct during the probation period will be cause for suspension or other disciplinary action.
- Disciplinary Suspension: Exclusion from class, privileges and/or activities for a specified period of time as set forth in the notice of suspension.
- Expulsion: Termination of student status. Expulsion requires formal action by the Governing Board.
- Remanding the case to formal hearing.

A letter notifying the student of the administrator's decision shall be sent by certified mail, specifying the mailing date of such letter. The administrator is deemed to have notified the student of his or her decision on that date.

Students in violation of any additional College policies and/or state regulations while on disciplinary action may be subject to the extension or addition of disciplinary sanctions. If additional misconduct(s) are filed, while students are on disciplinary action, the due process and procedures may be repeated again.

Appeal to Grievance and Order Committee

From the date the student is notified of the administrator's decision, any request for a hearing to the Student Grievance and Order Committee must be received postmarked or hand delivered in three working days. Any appeal shall be made in writing and delivered to the office of the Dean of Student Activities.

The Administrator will convene the Grievance and Order Committee to conduct the hearing when school is in session.

II. Disciplinary Appeal Procedure

Formal Hearing Process

The formal hearing process is the College's administrative due process to resolve grievances or misconducts. Parties are allowed to present testimony and witnesses to support their positions.

The Hearing Panel

There shall be a standing campus hearing panel from which one or more Student Grievance and Order Committees may be appointed. A Grievance and Order Committee shall be comprised of at least one member from each of the following groups:

- two students and two alternates (enrolled in six or more units) who shall be appointed by ASO president;
- two full-time academic staff and two alternates, except those designated as management, who shall be appointed by the Academic Senate;
- two full-time classified personnel and two alternates, except those designated as management, who shall be appointed by the Classified Senate; and
- two full-time management personnel and two alternates, who shall be appointed by the Superintendent/President, with the exception of the Vice President for Student Affairs and Dean of Student Activities.

Scope of the Student Grievance and Order Committee Hearing

The Student Grievance and Order Committee shall limit the scope of its appeal hearing to the following:

- Determine if the evidence supports the findings of the administrator.
- Determine if the disciplinary action levied by the administrator is within range of disciplinary actions delineated in the Standards of Student Conduct Policy.
- Make recommendations to the Dean of Student Activities or designee.

Responsibilities of the Chairperson

The Chair shall preside over the hearing and make rulings as to its conduct.

Disruptive behavior will not be tolerated and will result in exclusion of the person(s).

Right to Representation

This is an internal due process hearing conducted by Southwestern College. Parties are allowed to present testimony and witnesses to support their positions. However, parties are not allowed to be represented by legal counsel at any time during the hearing process.

Formal Hearing Procedure: Opening

The chair shall call the hearing to order, introduce the participants, explain that the hearing is recorded and proceedings are confidential, and announce the purpose of the hearing, e.g., "The Committee meets to hear an appeal of disciplinary action against (student's name) and/or to submit its findings to the administrator."

EVIDENCE FOR HEARING

- Any and all evidence will be entered for the record.

CHALLENGE OF A COMMITTEE MEMBER

- Refer to Section area III, D "Right to Challenge Committee Composition."

REQUEST FOR OPEN HEARING

- All hearings are closed, unless otherwise requested open by student. (See Section area III, E)

IDENTIFICATION OF WITNESSES

- Witnesses are to identify themselves and state for the record the reason for their presence.

SWEARING IN OF BOTH PARTIES

- Swear in both the complainant and defendant.

OPENING STATEMENTS

- Both parties will make opening statements.
- Person who filed charges will make first opening statement.
- Each party will be given five minutes.

QUESTIONING PROTOCOL

- Grievance and Order Committee members may ask questions of both parties.
- Parties may submit questions to the chair.
- The chair will pose questions to appropriate party.
- Rebuttal two minutes each.

CALLING WITNESSES

- Witnesses are sworn in and are questioned by committee members.
- Parties may submit questions to the Grievance and Order Committee chair.

CLOSING STATEMENTS

- Both parties will make closing statements.
- Person who filed charges will make first closing statement.
- Each party will be given five minutes.

III. Explanation of Formal Hearing

Burden of Proof and of Producing Evidence

The student seeking appeal has the burden of proving that the evidence filed in the Report of Student Misconduct or Report of Student Grievance did not support the Administrator's findings and/or the Administrator acted outside the scope of his/her authority or acted arbitrarily in imposing the appealed disciplinary measure. The student may present evidence in support of his or her position, and then the person filing the misconduct/grievance may present evidence to refute such evidence.

Arguments

Arguments will be presented first by the person filing the Report of Student Misconduct or Report of Student Grievance. The student shall be afforded an opportunity to make or waive an opening statement. After the opening statements, the person filing the Report of Student Misconduct or Student Grievance shall have the first opportunity to present witnesses and other relevant evidence. The student shall have the opportunity to present witnesses and other relevant evidence.

Evidence

- Irrelevant and unduly repetitious evidence shall be excluded.
- All evidence will be submitted 24 hours (one working day) prior to hearing.

Right to Challenge Committee Composition

The student charged in the Report of Student Misconduct or Report of Student Grievance may challenge one member of the Grievance and Order Committee for cause. Grounds for cause shall be limited to any personal involvement in the situation giving rise to the disciplinary action, any statement made on the matters at issue, or any other act or statement indicating that person could not act in a neutral manner. The chair of the committee shall determine validity of any such challenges. A majority of five panel members will be the minimum number to conduct a hearing.

Open and Closed Hearings

- Hearings shall be confidential and closed to the general public, and all witnesses shall be excused before and after testifying, unless the student requests an open hearing. Both the person filing the Report of Student Misconduct or Report of Student Grievance and the student shall be entitled to call witnesses. The questions to witnesses will be directed in writing to the chair.
- Any member of the committee may ask questions at any time upon recognition by the chairperson. Either side may recall a witness, who again may be questioned by the committee.
- A brief caucus may be called by the chair or any member, with all other persons excused except for the Grievance and Order Committee.
- The hearing shall be recorded. The recording may be used by the Superintendent/President in case of an appeal.

Absence of the Complainant and/or the Defendant

It is imperative that all parties are present at the hearing process. Disruptive behavior will result in removal of the person(s), and the hearing will continue in their absence. If the student and/or the college staff person filing the Report of Student Misconduct or Report of Student Grievance does not appear, or if the student and/or the person leaves the hearing before its conclusion, the hearing shall proceed without the absent parties, and the committee shall reach a decision based on the evidence presented.

Conclusion

- First, the student and then the college staff person filing the Report of Misconduct shall be afforded the opportunity to make or waive a closing argument. The committee shall recess to deliberate in closed session with all of the members. The administrator and the College legal advisor are to be present, when appropriate. The committee shall reach its decision based upon the record of the hearing and shall not consider matters outside of that record.
- Within one working day of the hearing, the chair shall deliver to the Administrator a written decision arrived at by majority vote of the Committee. The Committee's decision may include one of the following recommendations:
- Exoneration
- Probation: verbal or written warning
- Disciplinary Probation: conditional continued enrollment
- Disciplinary Suspension: specified period of time
- Expulsion

IV. Final Action

Upon receiving the findings of the committee, the administrator shall render a decision within three working days and transmit it in writing to the student, the committee and other appropriate administrative officers.

Appeal to the Superintendent/ President

From the date the student is notified of the Administrator's decision, any request for an appeal to the Superintendent/President must be received postmarked or hand delivered in three working days. Any appeal shall be made in writing and delivered to the Office of the Superintendent/President.

The student and the Committee chairperson may submit written statements on appeal.

The Superintendent/President may do the following:

- Concur with the Committee's decision.
- Reduce the recommended sanction.
- Reverse the finding of the misconduct.
- Increase the sanction.

The letter rendering the Superintendent/ President's decision shall include a certification of mailing by the Superintendent/President or designee specifying the date of mailing such letter.

The Superintendent/President's action shall be final and binding on all parties, with exception of expulsion (see section V).

V. Expulsion

A student may be expelled only when other means of correction fail to bring about proper conduct or when there is an immediate concern for the safety of the members of the campus community.

In the case of expulsion, the Superintendent/ President's recommendation (see section IV) must be forwarded to the Governing Board. The student must be notified of the intent to expel in writing by registered mail, certified mail or personal service.

The Governing Board must consider the expulsion in closed session unless the student requests to have the matter heard in open session. A written request must be received within the 48 hours of the receipt of the written notice of intent to expel, or the matter will be reviewed in closed session.

Students may not request a public hearing if any discussion might be in conflict with the right to privacy of any student other than the student requesting the public meeting.

- The final action of the Governing Board shall be taken at a public meeting and the result of that action shall be a public record of the District.
- The duration of the expulsion may be indefinite.
- The expulsion shall be noted in the student's permanent and disciplinary file.
- Re-admittance after expulsion requires action by the Governing Board.

Grievance and Order Committee Structure Policy

To assist in the implementation of the student conduct standards and grievance policies, a committee will be established to act as a hearing board. The committee shall be made up of two students selected by the ASO President, two faculty members selected by the Academic Senate, two classified members selected by the Classified Senate, and two management members selected by the Superintendent/ President. The chairperson shall be elected by the committee members. This committee shall determine and recommend to the Dean of Student Activities or designee whatever disciplinary measures, if any, are appropriate for anyone who interferes with or disrupts the process of academic inquiry while participating in college-sponsored on-campus events. The disciplinary measure will be in accordance with the SWC Policy Manual and is not intended to limit the right of individuals to support or oppose causes verbally in an atmosphere of mature responsibility.

Student Grievance Policy

The student is encouraged to pursue academic studies and other college-sponsored activities that will promote intellectual growth and personal development. In pursuing these ends, the student should be free of unfair and improper action by any member of the academic community. A grievance may be initiated by a student when he/she believes he/she has been subject to an unjust action or denial of rights as stipulated in college regulations and in the state education and administrative codes. Such action may be instituted by the student against another student, a faculty member, an administrator or other staff member. A grievance must be initiated no later than 20 working days of the end of the term during which incident occurred. Where a student believes an injustice has been done, the student may seek redress through the following policy and procedure.

Student may initiate grievance for any of the following reasons:

- Prejudicial or capricious action in the evaluation of the student's academic performance. Education Code 76224 states: "When grades are given for any course of instruction taught in community college district, the grade given to each student shall be the grade determined by the instructor of the course, and the determination of the student's grade by the instructor, in the absence of mistake, fraud, bad faith or incompetence, shall be final."
- Intimidation, assault, battery, or harassment (sexual harassment).
- Arbitrary action or imposition of sanctions by a college representative without proper regard to procedural due process as specified in the section on Guidelines for Due Process.

NOTE: *In case of sexual harassment or unlawful discrimination, complaints should be filed as Title V complaints and/or Office of Civil Rights complaints. These complaints will be processed through the Human Resources Office.*

I. Preliminary Action Procedure

- The student who believes an injustice has occurred shall attempt to resolve the grievance by informal consultation with the persons, preferably in sequence:
- The college staff, faculty member, or administrator concerned.
- The administrator in charge of that area.
- If the student still believes that the issue has not been resolved satisfactorily at these levels, the student shall submit a completed "Report of Grievance form to the Dean of Student Activities.
- The Dean of Student Activities shall confer with the student for the purpose of reviewing the grievance and attempting to resolve the matter.
- The Dean of Student Activities, or designee, may also obtain information relating to the grievance from other parties involved. Whenever appropriate, the Dean of Student Activities shall assess damage to property and injury to person(s).
- The Dean of Student Activities will notify each party regarding any of the following actions:

Against the faculty member or college staff member:

- Dismiss the grievance for lack of merit.
- Work towards an equitable solution.
- Remand the case to a formal hearing (see guidelines for Due Process).

Against another student:

- Dismiss the grievance for lack of merit.
- Work towards an equitable solution.
- Issue to the student a Warning, Reprimand, Disciplinary Probation, or Disciplinary Suspension
- Recommend expulsion to the Governing Board.
- The student will notify the dean of Student Activities within three calendar days of:
- Acceptance of the dean's decision.
- Nonacceptance of the dean's decision and request a formal hearing.

No formal hearing may be initiated by the student unless the Dean of Student Activities is notified, in writing, within three calendar working days following the initial conference notifying the student of the action being taken by the College.

The Dean of Student Activities shall arrange a review of case by formal hearing by a committee within fourteen working days to consider disposition of the following cases:

- Any appeal by the student of the misconduct charge.
- Any appeal by a student regarding proposed sanctions for alleged misconduct.
- Any case which may result in the possible suspension or expulsion of the student.
- Any other cause which the Dean of Student Activities may wish committee advice.

For Formal Hearing Procedure and Final Action, refer to the District Administrative Guidelines for Due Process.

II. Grade Disputes

DEFINITIONS: The California Education Code (Section 76224) specifies that the instructor's determination of student grades shall be final except in cases of mistake, fraud, bad faith or incompetence.

Students should note the following definitions which are taken from Black's Law Dictionary:

- **Mistake:** some unintentional act, omission, or error by the instructor;
- **Fraud:** an intentional perversion of the truth for the purpose of inducing another to part with something valuable or to surrender a legal right;
- **Bad Faith:** synonymous with fraud neglect, or refusal to fulfill some duty or contractual obligation, not prompted by an honest mistake as to one's rights or duties;
- **Incompetence:** lack of ability, legal qualification, or fitness to discharge a required duty.

If the student feels that an instructor has given a grade based on a mistake, fraud, bad faith, or incompetence, and the student has evidence to substantiate the claim, these steps must be followed:

- First, the student must discuss the matter with his/her professor in person via, electronic mail, or in writing within 30 working days of the time the official grade report was sent to the student. If the concern is not resolved satisfactorily, then:
- Second, the student must within 10 working days discuss the matter with the school dean or designee in person, via electronic mail or in writing. The school dean or designee will try to resolve the dispute and will respond to the student in writing. The school dean or designee will try to resolve the dispute and will respond to the student in writing within 10 days.
- Third, if the concern is still unresolved, the student must within 10 working days discuss the matter with the Vice President for Academic Affairs in person, via electronic mail or in writing. The Vice President for Academic Affairs, in consultation with the Academic Senate President, will render a final decision in writing within 15 working days.

Sexual Assault Policy

In accordance with the Education Code 67385, Southwestern Community College District has implemented written procedures to ensure, to the fullest extent possible, that students, faculty, and staff who are victims of sexual assault committed at or upon the grounds of or upon off-campus grounds or facilities maintained by the District, will receive treatment and information. The procedures will provide for referrals to local community treatment centers. "'Sexual assault" includes, but is not limited to, rape, forced sodomy, forced oral copulation, rape by foreign object, sexual battery, or threat of sexual assault. (Education Code 67385)

The District has developed written procedures which contain the following information:

- The District policy regarding sexual assault on campus.
- Personnel on campus who should be notified, and procedures for notification, with the consent of the victim.
- Legal reporting requirements and procedures for fulfilling them.
- A description of campus services and resources available to victims, as well as appropriate off-campus services.
- Procedures for ongoing case management, including procedures for keeping the victim informed of the status of any student disciplinary proceedings in connection with the sexual assault, and the results of any disciplinary action or appeal.
- Procedures for helping the victim deal with academic difficulties that may arise because of the victimization and its impact.
- Procedures for guaranteeing confidentiality and appropriately handling requests for information from the press, concerned students, and parents.
- Information about the existence of at least the following options: criminal prosecution, civil actions, the disciplinary process through the District, mediation, academic assistance, alternatives, and mental health counseling.

The policy and procedures are published in student, faculty, and staff handbooks and shall be given to any student or employee who is the victim of a sexual assault.

Sexual Harassment Policy

Southwestern Community College District recognizes that harassment on the basis of sex is a violation of both Federal and State employment discrimination laws as well as District Policy. The District is committed to providing all employees, applicants for employment, students and other persons in a business, service or professional relationship with the District with an environment free from sexual harassment, and will not tolerate such conduct on the part of any District employee or student.

Any employee, applicant for employment, student or any other person in a business, service or professional relationship with the District with a complaint of sexual harassment should implement these complaint procedures as soon as possible. No complainant will suffer reprisals for reporting any incidents of sexual harassment or making any complaints.

Sexual harassment is unacceptable conduct, is unlawful, and will not be tolerated by the Southwestern Community College District. The District will promptly and thoroughly investigate any complaints of sexual harassment, and will take expeditious action to resolve such complaints, in accordance with these policies.

Definitions

Sexual Harassment-Sexual harassment consists of unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature made by someone from or in the work or college setting.

Sexual harassment may be considered to occur under any of the following conditions:

- Submission to the conduct is explicitly or implicitly made a term or condition of an individual's employment or progress or a student's progress at the college.
- Submission to, or rejection of, the conduct by the individual is used as the basis of employment or academic decisions affecting the individual.
- The conduct has the purpose or effect of having a negative impact upon the individual's work or academic performance, or of creating an intimidating, hostile or offensive work or academic environment.
- Submission to, or rejection of, the conduct by the individual is used as the basis for any decision affecting the individual regarding benefits and services, honors, programs or activities available at or through Southwestern Community College District.

Forms of sexual harassment include, but are not limited to:

- Deliberate verbal comments, gestures, or physical contacts of a sexual nature or demeaning to one's gender which are unwelcome and/or interfere with work productivity or academic progress.
- Generalized sexist statements and behavior not necessarily designed to elicit sexual cooperation, but to convey insulting, degrading and/or sexist attitudes.
- Sexual behavior by any employee which has the effect of controlling, influencing or otherwise affecting the job, salary, project, performance evaluation, opportunity for employment, or career of an employee, or applicant for employment, or affecting the academic performance or opportunity for admission of any student or applying student
- Unwelcome sexual, suggestive or obscene letters, notes or other written/printed material, derogatory comments, slurs and/ or jokes.
- Complainant-An individual who brings either a formal or informal complaint of alleged sexual harassment.

Respondent:

A person against whom a claim of sexual harassment has been made.

Informal Complaint:

An oral sexual harassment complaint brought by a complainant or a District employee on behalf of a complainant.

Formal Complaint :

A written complaint of sexual harassment submitted by a complainant.

Superintendent/President:

Where this policy specifies the performance of functions by the Superintendent/President, the Superintendent/President may designate another administrator to perform such functions.

General Provisions

Any questions regarding this policy should be directed to the Affirmative Action Officer. Although this policy anticipates that the Affirmative Action Officer is responsible for investigating all complaints of sexual harassment, nothing in this policy is intended to prohibit the Superintendent/President's appointment of a different District administrator as investigator where appropriate. Where it is determined an administrator other than the Affirmative Action Officer will investigate a sexual harassment complaint, that appointed administrator shall do so in accordance with these policies.

All allegations of sexual harassment should be brought to the District's attention at the earliest possible time. Time schedules provided in this policy are to ensure prompt consideration of complaints. Allegations of sexual harassment shall be investigated in accordance with this policy.

The District recognizes that confidentiality is important to all parties involved in a sexual harassment investigation. To the extent practical, the confidentiality of the complainant, respondent and witness(es) will be protected. Employee(s) and/or student(s) interviewed in accordance with these policies are directed to assist in maintaining such confidentiality.

The District will not tolerate retaliation against any student or employee for initiation, pursuit or assistance with a complaint of sexual harassment. Any individual who retaliates against any District employee and/or student in violation of this policy may be subject to disciplinary action.

Any individual who is determined to have falsely initiated, or participated in, a sexual harassment investigation may be subject to disciplinary action.

The District shall not undertake any disciplinary action involving any respondent or complainant until a final decision has been rendered, except as herein provided. Any individual subject to potential discipline shall have an opportunity to review all materials and provide a response. If, in the opinion of the Superintendent/ President, immediate action is necessary, reasonable efforts to first inform the respondent and allow him/her an opportunity under the circumstances to respond to the allegations will be provided. For the purposes of this policy, placement of an employee on paid administrative leave shall not be considered disciplinary action.

The complainant and the respondent may be assisted by a representative of his/her choice at any stage of these proceedings.

Nothing contained in this policy is intended to discourage informal resolution of complaints. However, prior to any informal resolution of a sexual harassment complaint, the supervisor or administrator shall contact the Affirmative Action Officer to ensure the informal resolution is consistent with the intent of these policies.

Complaint Procedures

Any employee, applicant for employment, student, former student, applying student or any other person in a business, service or professional relationship with the District who believes he/she has been subjected to sexual harassment may inform any supervisor or administrator; the supervisor or administrator shall then have a duty to inform the Affirmative Action Officer. The complainant may also go directly to the Affirmative Action Officer.

Any supervisor, administrator or faculty member who receives information from a complainant, or otherwise learns that sexual harassment has allegedly occurred, shall immediately notify the Affirmative Action Officer. Any other District employee who receives information from a complainant, or otherwise learns that sexual harassment has allegedly occurred, is strongly encouraged to report such information to the Affirmative Action Officer. The Affirmative Action Officer, or designee, will investigate all formal or informal complaints in accordance with the following procedures to determine whether or not corrective action is necessary:

- The complainant will be immediately informed of any rights under any relevant complaint procedure (including the procedure for filing a Title 5 discrimination complaint and the procedure for filing a complaint with the Federal Office For Civil Rights), policy, or in the case of an employee, the collective bargaining agreement. The complainant will be provided with a copy of this policy.
- The Affirmative Action Officer, or designee, may first investigate all complaints on an informal level and must attempt to resolve the complaint informally. However, the complainant is not required to participate in an informal resolution.
- At the very beginning of the process, the complainant must be notified that he/she is not required to participate in an informal resolution and that he/she may proceed to file a complaint directly under Title 5 and/or with the Federal Office for Civil Rights.
- If, after an informal investigation, the Affirmative Action Officer or designee is unable to resolve the complaint to the satisfaction of the complainant and the respondent, the complainant shall be notified of his/her right to file a formal complaint.
- All formal complaints shall be submitted in writing to the Affirmative Action Officer, or designee, within one (1) year after the alleged harassment has occurred.
- All written complaints shall be signed and dated by the complainant, and shall contain at least the name(s) of the individual(s) involved, the date of the event(s) at issue and a detailed description of the action(s) constituting the alleged sexual harassment. Names, addresses and phone numbers of witnesses or potential witnesses should also be included. The Affirmative Action Officer shall immediately notify a complainant if his/her complaint is defective.
- A copy of all written complaints shall be immediately forwarded to the Legal Affairs Division of the Chancellor's Office.
- Nothing in these procedures is intended to limit the discretion of the Affirmative Action Officer, or designee, to investigate relevant facts which are not specified in the written complaint. Where it is appropriate, the scope of the investigation may be broadened.
- All complaints will be reviewed and investigated by the Affirmative Action Officer or designee. The investigation may include interviews with (1) the complainant; (2) the respondent; and, (3) any other person(s) who reasonably may have relevant knowledge concerning the complaint, such as witnesses and victims of similar conduct by the respondent. The Affirmative Action Officer will notify the complainant and the Chancellor's Office that it is commencing its investigation.
- The Affirmative Action Officer shall review all factual information gathered through the investigation to determine whether the alleged conduct constitutes harassment. Consideration must be given to all factual information, the totality of the circumstances, including the nature of the verbal, physical or visual aspects of the action and the context in which the alleged incident(s) occurred.
- Where the Affirmative Action Officer determines sexual harassment may have occurred, the Affirmative Action Officer shall present the respondent with a copy of the complaint and this policy and provide the respondent with an opportunity to respond in writing to the allegations. Such response must be received within a reasonable amount of time, as determined by the Affirmative Action Officer, not to exceed fifteen (15) days.
- Upon receipt of a response by the respondent, the Affirmative Action Officer will again review all factual information presented and incorporate such information into his/her investigation.
- Immediately following review and investigation of the complaint, the Affirmative Action Officer will prepare a written recommendation to resolve the complaint. The recommendation will include at least a description of the nature and extent of the investigation conducted by the District, action taken by the District in the event immediate action was necessary, and a proposed resolution to the complaint.
- Within 90 days of receiving a complaint, the Affirmative Action Officer will forward the following items to the complainant and respondent: a copy of the investigative report, the District's administrative determination, description of action taken, the proposed resolution of the complaint and notice of the complainant's right to appeal to the Governing Board.
- If the complainant or respondent is not satisfied with the administrative determination, he/she may appeal to the Governing Board within fifteen (15) days of receipt of the administrative determination. The appeal must be signed and in writing, and must state each and every reason for the appeal and disagreement with the administrative decision. The Governing Board will review the appeal and will, in its sole discretion, determine what, if any, further proceedings should occur. The determination of the Governing Board as to procedures and resolution of the allegations will be the final District decision. The Governing Board shall forward its final decision, or a statement indicating the date the administrative determination became final, to the complainant and to the Chancellor's Office within 45 days and shall notify the complainant of his/her rights to appeal to the Chancellor's Office. If the Governing Board does not act within 45 days, the complainant shall be notified that the decision of the administration is deemed to be final and that the complainant has the right to appeal to the Chancellor's Office.
- In the event it is determined there is merit to the complaint, the District will take corrective action, including such discipline up to and including suspension and/or immediate termination of employment, or suspension or expulsion from academic programs, as is appropriate, in accordance with applicable law and Governing Board policies and procedures. Severity of the disciplinary action will be based upon the circumstances.

- Within 150 days of receiving a complaint, the District shall forward to the Chancellor: the complaint, the investigative report, a copy of the notice sent to the complainant, pursuant to Section 59336 (b), a copy of the final District decision rendered by the Governing Board or a statement indicating the date on which the administrative determination became final and a copy of the notice to the complainant required pursuant to Section 59338 (a).

Dissemination

- All District employees will be provided with a copy of this policy.
- All new students will be provided with a Student Policy Manual which includes the "Sexual Harassment Policy" (No. 5111) and the "Unlawful Discrimination Complaint Policies and Procedures Policy" (No. 5323) handed out during Registration. In addition, students may obtain a complete copy of these policies at the Student Activities Office, Building 620, Room 621A.
- A copy of this policy shall also be located in the Human Resources Office, Library and Transfer Center.

REFERENCES: California Code of Regulations, Title 5, Section 59300 et seq., Education Code Sections 200 et seq., 212.5, 220, 260, Title 7 of the Civil Rights Act of 1964 including amendments of 1972 and 1991, Title 9 of the Educational Amendments of 1972.

Student Records: Privacy and Rights Policy

Student Access

Former and currently-enrolled students have the right of access to their records. Student records maintained by the College include information relevant to admission, registration, academic history, student benefits or services, extracurricular activities, counseling and guidance, and discipline or matters relating to student conduct. Access to his/her own records shall be granted to any student filing a written request with the Director of Admissions Center. Access shall be granted no later than 15 working days following the request.

Challenge

Any student may file a written request with the chief administrative officer of a community college district to correct or remove information recorded in his/her student records which he/she alleges to be:

- inaccurate;
- an unsubstantiated personal conclusion or inference;
- a conclusion or inference outside of the observer's area of competence; or
- not based on the personal observation of a named person with the time and place of the observation noted.

Within 30 days of receipt of such request, the chief administrative officer or his designee shall meet with the student and the employee who recorded the information in question, if any and if such employee is presently employed by the community college district. The chief administrative officer or designee shall then sustain or deny the allegations. Such decisions shall be in writing.

If the chief administrative officer or designee sustains the allegations, he/she shall order the correction or removal and destruction of the information.

If the chief administrative officer or designee denies any or all of the allegations and refuses to order the correction or removal of the information, the student may, within 30 days of the refusal, appeal the decision in writing to the Governing Board of the Southwestern Community College District.

Within 30 days of receipt of such an appeal, the Governing Board shall, in closed session with the student and the employee who recorded the information in question, if any and if such employee is presently employed by the college district, determine whether to sustain or deny the allegations.

If the Governing Board sustains the allegations, it shall order the chief administrative officer or designee to immediately correct or remove and destroy the information.

The decision of the Governing Board shall be in writing and shall be final. (Records of these administrative proceedings shall be maintained in a confidential manner and shall be destroyed one year after the decision of the Governing Board unless the student initiates legal proceedings relative to the disputed information within the prescribed period).

If the final decision of the Governing Board is unfavorable to the student, or if the student accepts an unfavorable decision by the chief administrative officer or designee, the student shall have the right to submit a written statement of objection. This statement shall become part of the student's record until such time as the objection is corrected or removed.

Access and Confidentiality

The District may permit access to student records to any person for whom the student has executed consent specifying the records to be released and identifying the party or class of parties to whom the records may be released. Such consent must be signed and dated by the student, and the recipient must be notified that the transmission of the information to others is prohibited. The consent notice shall be permanently kept with the record file.

Southwestern Community College District is not authorized to permit access to student records to any person without the written consent of the student or under judicial order except that access may be permitted to the following:

- Officials and employees of Southwestern Community College District provided that such persons have a legitimate educational interest to inspect a record.

- Authorized representatives of the Comptroller General of the United States, the Secretary of Education, and state education officials, or their respective designees, or the United States Office of Civil Rights, where such information is necessary to audit or evaluate a state or federally-supported education program or pursuant to a federal or state law, provided that collection of personally identifiable information is specifically authorized by federal law, and that data collected by such officials shall be protected in a manner which will not permit the personal identification of students or their parents by other than those officials, and such personally identifiable data shall be destroyed when no longer needed for such evaluation and enforcement of federal legal requirements.
- Other state and local officials or authorities to the extent that information is specifically required to be reported pursuant to state law adopted prior to November 19, 1974.
- Officials of other public or private schools or school systems, including local, county, or state correctional facilities providing educational programs where the student seeks or intends to enroll, or is directed to enroll.
- Agencies or organizations in connection with a student's application for, or receipt of financial aid, provided that information concerning the personal identification of students may be disclosed only as may be necessary for such purposes as to determine the eligibility of the student for financial aid, to determine the amount of the financial aid, to determine the conditions which will be imposed regarding the financial aid, or to enforce the terms or conditions of the financial aid.
- Accrediting organizations in order to carry out their accrediting functions.
- Organizations conducting studies for, or on behalf of, educational agencies or institutions for the purpose of developing, validating, or administering predictive tests, administering student aid programs, and improving instruction, if such studies are conducted in such a manner as will not permit the personal identification of students or their parents by persons other than representatives of such organizations and such information will be destroyed when no longer needed for the purpose for which it is conducted.
- Appropriate reasons in connection with an emergency, if the knowledge of such information is necessary to protect the health or safety of a student or other persons, or subject to such regulations as may be issued by the Secretary of Education.

No person, persons, agency or organizations permitted access to student records pursuant to this section shall permit access to any information obtained from such records by any other person, persons, agency or organization without the written consent of the student, provided, however, that this paragraph shall not be construed as to require prior student consent when information obtained pursuant to this section is shared with other persons within the educational institution, agency, or organization obtaining access, so long as such persons have a legitimate educational interest in the information.

Records of Access

Each office officially charged with maintaining student records will also maintain a record of access which lists all persons, agencies, or organizations requesting or receiving information from the record and the legitimate interests. The listing will not include:

- Students granted access to their own records.
- Parties to whom public directory information is released.
- Parties for whom written consent has been given by the student.
- Officials or employees of the District having a legitimate educational interest.

NOTE: *For purposes of this section, "officials or employees" includes any individual employed by the Southwestern Community College District, or such other persons with whom the District has made formal, written agreement for unpaid service. "Legitimate educational interest" exists when access to student records is necessary or appropriate to assist the official or employee in fulfilling his/her assigned responsibilities to the District.*

Fees for Records

Students may obtain copies of any of their own records to which they have legal access for a fee of $1 per page. The fee for transcripts, however, is $3 per copy after the student has requested two copies at no cost. See page 19 or Transcript of Credit Earned information.

Public Directory Information

Southwestern College is authorized to verify public directory information concerning students currently attending the College. Directory information includes the student's name, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, and degrees and awards received.

The student directory information may be released by the Director of Admissions Center or designee, unless prior written objection is received from the student specifying information which the student requests not be released. Students who wish to have information concerning themselves excluded from designation as directory information must inform the Admissions Center in writing.

Southwestern College may, at its discretion, limit or deny the release of student directory information based on a determination of the best interests of students.

Reporting of Violations

Any student who judges that his/her rights of privacy regarding student records are not being adequately observed is requested to inform the chief administrative officer or designee so that a prompt review may be made.

It is also the right of the student to file a complaint with the United States Department of Education concerning an alleged failure by the institution to comply with the legal requirements regarding student privacy and rights with respect to student records.

Majors	A.A.	A.S.	Cert.	Bas. Cert.	Adv. Cert.	Page (s)
Accounting	X	X	X			75, 76
▪ Micro Technician Bookkeeper			X			76
Administration of Justice		X				79, 80
Administration of Justice: Areas of Emphasis						
▪ Corrections		X	X			79, 80
▪ Forensics		X	X			79, 80
▪ Law Enforcement		X	X			79, 80
Administrative Office Assistant—Bilingual			X			333
African-American Studies	X					84
Anthropology	X					87
Anti-Bias Master Teacher Specialty	X					139
Architecture		X				90
Architecture Technology		X		X	X	90, 91
Art	X					94
Asian-American Studies	X					102
Astronomy		X				104
Automotive Technology:						
▪ Automotive Technology		X	X			106, 108
▪ Automotive Break and Suspension Systems			X			107
▪ Automotive Performance Systems			X			108
▪ Emission Specialist—Advanced			X			107
▪ Small Engine and Service Repair		X	X			107, 108
Baja California Studies			X			112
Biology		X				113
Biotechnology		X	X			115
Business Administration	X					119
Business Administration: International Business Emphasis	X					120
Business Management		X				123
Business Management: Areas of Emphasis						123, 125
▪ eBusiness		X		X	X	123, 125
▪ Entrepreneurship and Small Business		X	X			123, 125
▪ Financial Services		X	X			123, 125
▪ International Business		X	X			124, 125
▪ Maquiladora Management		X	X			124, 125
▪ Marketing		X	X			124, 126
▪ Supervision and Management		X	X			124, 126
Chemistry		X				134
Child Development:						
▪ Child Development	X					138
▪ Anti-Bias Master Teacher Specialty	X					139
▪ Child Development Teacher	X		X			139, 140
▪ Early Intervention Master Teacher Specialty	X					139
▪ Family Day Care Provider			X			141
▪ Family Support Specialist				X	X	141
▪ Infant Toddler Master Teacher Specialty	X		X			140
▪ Reggio-Inspired Master Teacher Specialty	X					140
▪ Spanish to English Associate Teacher			X			141
Communication	X					148
Computer Aided Design and Drafting		X		X	X	151, 152

A.A. = Associate in Art Degree
A.S. = Associate in Science Degree
Cert. = Certificate
Bas. Cert. = Basic Certificate
Adv. Cert. = Advanced Certificate

Majors	A.A.	A.S.	Cert.	Bas. Cert.	Adv. Cert.	Page (s)
Computer Information Systems: Areas of Emphasis						
▪ Applications Programming		X	X			156, 160
▪ eCommerce		X		X	X	156, 160, 161
▪ Internet		X		X	X	157, 161
▪ Internet Web Design		X		X	X	157, 161
▪ Internetwork Technician		X		X	X	158, 161, 162
▪ Microcomputer Applications		X		X	X	158, 162
▪ Network Administration		X	X			159, 162
▪ Network Associate Specialist—Intensive Training				X	X	163
▪ Operations/PC Support Specialist		X		X	X	159, 162, 163
▪ Systems Programming		X	X			160, 163
▪ Web Database Programmer/Administrator—LAMP			X			164
▪ Web Designer			X			164
▪ Web Flash Designer			X			164
▪ Web Multimedia Developer Using Director			X			164
Computer Science	X	X	X			175
Construction Inspection		X	X			176, 177
Construction Management		X	X			177
Criminal Investigator		X	X			79, 80
Criminal Justice	X					78
Dance	X					179
Design Technology		X	X			152
Dental Hygiene		X				185
Early Intervention Master Teacher Specialty	X					139
Economics	X					189
Electronics: Areas of Emphasis						
▪ Computer Technician		X		X	X	193, 194
▪ Electronics Technician		X	X			193, 194
▪ Internetwork Technician		X		X	X	193, 195, 196
▪ Network Administrator		X		X	X	194, 195
Emergency Medical Technology and Paramedic		X	X			199, 200
Emission Specialist—Advanced			X			107
Engineering		X				205
English	X					207
Environmental:						
▪ Environmental Management		X	X			222, 223
▪ Occupational Health and Safety		X	X			223
Exercise Science		X				227
▪ Fitness Specialist Certification				X	X	227
Family Day Care Provider			X			141
Family Support Specialist			X	X		141
Finance	X					120
Fire Science Technology		X	X			240
Fitness Specialist Certification				X	X	227
French	X					244
Geography	X					246
Geology		X				248
Graphic Applications			X			96
Graphic Design	X					95
History	X					252
Humanities	X					255
Infant-Toddler Master Teacher Specialty	X		X			140
Information Systems	X					155
Journalism	X					259

Majors	A.A.	A.S.	Cert.	Bas. Cert.	Adv. Cert.	Page (s)
Landscape Architecture and Landscape and Nursery Technology:						
▪ Floral Design		X	X			263, 266
▪ Golf and Sports Turf Management		X	X			262, 264
▪ Landscape Architecture		X	X			262, 265
▪ Landscape Occupations		X	X			263, 266
▪ Landscape Design			X			265
▪ Retail Nursery and Plant Production		X	X			264, 266
Law Enforcement Training Academy			X			80
Legal Interpretation and Translation			X			273, 282
Legal Office Clerk—Bilingual			X			284
Legal Office Professional		X	x			275, 277
Legal Office Professional: Areas of Specialty						
▪ Business Law		X	X			275, 277
▪ Civil Litigation		X	X			275, 277
▪ Criminal Law		X	X			275, 277
▪ Family Law		X	X			276, 277
▪ Immigration Law		X	X			276, 277
▪ International Business Law		X	X			276, 278
▪ Will, Trusts, and Estates		X	X			276, 278
▪ Word Processing		X	X			277, 278
Legal Office Professional—Bilingual		X	X			280, 284
Legal Office Professional: Bilingual—Areas of Specialty						
▪ Business Law		X	X			280, 283
▪ Civil Litigation		X	X			280, 283
▪ Criminal Law		X	X			281, 283
▪ Family Law		X	X			281, 183
▪ Immigration Law		X	X			281, 284
▪ International Business Law		X	X			281, 284
▪ Legal Interpretation and Translation—Bilingual						282
▪ Wills, Trusts, and Estates		X	X			282, 284
▪ Word Processing		X	X			282, 285
Liberal Studies: Elementary Education	X					288
Literature	X					209
Mathematics	X					292
Management	X					121
Marketing	X					121
Medical Office Assistant—Bilingual			X			297
Medical Office Professional: Areas of Specialists						
Medical Office Professional		X	X			298, 300
▪ Medical Coding		X	X			298, 300
▪ Medical Insurance		X	X			298, 300
▪ Medical Interpretation/Translation		X	X			298, 300
▪ Medical Transcription		X	X			299, 300
▪ Medical Word Processing		X	X			299, 301
Mexican-American Studies	X					301
Micro Technician Bookkeeper			X			76
Music	X					306
Music—Mariachi Specialization	X		X			307
Music: Commercial		X	X			308

A.A. = Associate in Art Degree
A.S. = Associate in Science Degree
Cert. = Certificate
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Adv. Cert. = Advanced Certificate

Majors	A.A.	A.S.	Cert.	Bas. Cert.	Adv. Cert.	Page (s)
Nursing:						
▪ Nursing		X				318
▪ Central Service Technology			X			321
▪ Certified Nursing Assistant (CNA)			X			321
▪ Nursing, Vocational		X	X			320, 322
▪ Operating Room Nursing			X			321
▪ Surgical Technology		X	X			319, 322
▪ Transfer Education/Preparation for Nursing	X					320
Occupational Health and Safety		X	X			223
Office Information Systems Professional		X		X	X	327, 330
Office Information Systems Professional—Bilingual		X		X	X	331, 332
OIS: Microsoft Office Specialist (MOS)				X	X	330
Photography	X					95
Paralegal Studies		X	X			335
Paralegal Studies—Bilingual		X	X			336, 337
Philosophy	X					342
Physical Science		X				346
Physics		X				347
Political Sciences	X					350
Public Administration	X					351
Psychology	X					354
Real Estate:						
▪ Broker License			X			358
▪ Real Estate	X	X	X			357, 358
▪ Salesperson License			X			358
Recreation and Leisure Studies	X					360
Small Engine and Service Repair		X	X			107
Sociology	X					362
Social Work	X					363
Spanish	X					365
Spanish for Bilinguals	X					366
Spanish-to-English Associate Teacher Certificate			X			141
Surgical Technology		X	X			319, 322
Telemedia	X					369
Telemedia Production Specialist		X		X	X	370, 371
Telemedia Technology		X	X			370, 371
Theatre Arts (Drama)		X				375
Travel and Tourism		X	X			379, 380
Women's Studies	X					382

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A.S. = Associate in Science Degree
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Disciplines

ACCT	Accounting	**ES/A**	Exercise Science/Activity
ADN	Associate Degree Nursing	**ES/I**	Exercise Science/Intercollegiate
AFRO	African-American Studies	**ES/L**	Exercise Science/Limited
AJ	Administration of Justice	**FREN**	French
ANTH	Anthropology	**FS**	Fire Science
ARCH	Architecture	**HUM**	Humanities
ART	Art	**JOUR**	Journalism
ASL	American Sign Language	**LA**	Landscape Architecture
ASIA	Asian-American Studies	**LEGL**	Legal
ASTR	Astronomy	**LIB**	Library
AT	Automotive Technology	**LNT**	Landscape and Nursery Technology
BIOL	Biology	**LS**	Learning Skills
BUS	Business	**MATH**	Mathematics
CAD	Computer Aided Design	**MAS**	Mexican-American Studies
CD	Child Development	**MEDOP**	Medical Office Professionals
CE	Cooperative Work Experience	**MUS**	Music
CHEM	Chemistry	**ORN**	Operating Room Nurse
CHIN	Chinese	**PD**	Personal Development
CI	Construction Inspection	**PHIL**	Philosophy
CIS	Computer Information Systems	**PHS**	Physical Science
CL	Computer Literacy	**PHYS**	Physics
CNA	Certified Nursing Assistant	**PORT**	Portuguese
COMM	Communication	**PS**	Political Science
DANC	Dance	**PSYC**	Psychology
DH	Dental Hygiene	**RE**	Real Estate
ECON	Economics	**REC**	Recreation
ED	Education	**SOC**	Sociology
EHMT	Environmental Hazardous Materials Technology	**SPAN**	Spanish
ELEC	Electronics	**ST**	Surgical Technology
EMT	Emergency Medical Technology	**TA**	Theatre Arts
EMTP	Emergency Medical Technology and Paramedic	**TELE**	Telemedia
ENGL	English	**T&T**	Travel and Tourism
ENGR	Engineering	**VN**	Vocational Nursing

Associate Degree, Certificate Programs and Courses

Accounting

School of Business and Information Systems

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Dick Wasson, M.B.A.

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Larry Christiansen, J.D.

General Description

Accountancy is the study of theories, principles, and practices in the recording, analyzing, and communication of financial information. This department explores the flow of transactions in quantitative form and the role of reporting in the overall system for financial control in business, industry, and government. Accounting processes and information are frequently the foundation for decision making and business planning.

Career Options

The following list is a sample of the many career options available for the accounting major. There are three kinds of accountants: public, management, and government. Some positions require an associate degree, many require a baccalaureate degree, and a few may require a graduate-level degree. Entry-level career opportunities are available in government, industry, banking, educational institutions, hospitals, small business, public agencies, investment firms, real estate, stock brokerage, tax accounting, service organizations, international trade, transportation, high technology, marketing, savings and loans, human resources, and accounting firms.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Accounting	*01110*
Associate in Science Degree: Career/Technical	
Accounting	*02011*
Certificates of Achievement	
Accounting	*02012*
Micro Technician Bookkeeper	*02320*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Arts Degree

Accounting

Transfer Preparation* (Major Code: 01110)

Designed to equip students with the knowledge, skills, practices, and values to understand the complex and changing global business environment. Individual courses promote comprehension of the field, foster problem solving, and provide basic analytical and conceptual skills. Lower-division requirements are not the same for all universities, and there are differences among the areas of specialization. However, the courses listed below meet the lower-division requirements for most universities offering a bachelor's degree with a major in accounting. Students usually start with the two-year undergraduate Common Core curriculum in business administration, as these are required for most business-related majors.

ACCT 101	*Principles of Accounting I*	*4*
ACCT 102	*Principles of Accounting II—Managerial*	*4*
BUS 140	*Business Law*	*3*
CIS 101	*Introduction to Computers and Information Processing*	*4*
ECON 101	*Principles of Economics I*	*3*
ECON 102	*Principles of Economics II*	*3*
MATH 119	*Elementary Statistics*	*4*
MATH 120	*Calculus for Business Analysis*	*3*
	Total units	***28***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Associate in Science Degree

Accounting

Career/Technical (Major Code: 02011)

The associate in science degree provides training in accounting theory and practice, sole proprietorship, partnership, corporation accounting procedures, cost accounting, income tax procedures, and the application of microcomputers to accounting problems. The objective of the curriculum is to prepare students for employment as junior members of the accounting staff of a private business or industrial enterprise, a public accounting firm, or a governmental agency.

ACCT 12	*Microcomputer Accounting*	*3*
ACCT 101	*Principles of Accounting I*	*4*
ACCT 102	*Principles of Accounting II—Managerial*	*4*
ACCT 105	*Intermediate Accounting*	*3*
ACCT 107	*Cost Accounting*	
	or	*3*
ACCT 109	*Federal Income Tax*	
BUS 123	*Introduction to Investments and Securities*	*3*
BUS 140	*Business Law*	*3*
BUS 142	*Business Ethics: Corporate and Personal*	*1*
BUS 150	*Management*	*3*
BUS 211	*Communication in Business and Industry*	
	or	*3*
BUS 212	*Business Communication*	
CIS 101	*Introduction to Computers and Information Processing*	*4*
	Total units	***34***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Certificates of Achievement

Accounting

Career/Technical (Major Code: 02012)

ACCT 12	*Microcomputer Accounting*	*3*
ACCT 101	*Principles of Accounting I*	*4*
ACCT 102	*Principles of Accounting II—Managerial*	*4*
ACCT 105	*Intermediate Accounting*	*3*
ACCT 107	*Cost Accounting*	
	or	*3*
ACCT 109	*Federal Income Tax*	
BUS 123	*Introduction to Investments and Securities*	*3*
BUS 140	*Business Law*	*3*
BUS 142	*Business Ethics: Corporate and Personal*	*1*
BUS 150	*Management*	*3*
BUS 211	*Communication in Business and Industry*	
	or	*3*
BUS 212	*Business Communication*	
	Total units	***30***

Micro Technician Bookkeeper

Career/Technical (Major Code: 02320)

Designed for those students with no prior accounting or computer experience and who want to learn how to use the microcomputer as a tool for accounting applications. Students will gain essential accounting and computer skills necessary for today's entry-level bookkeeping positions.

ACCT 12	*Microcomputer Accounting*	*3*
ACCT 101	*Principles of Accounting I*	*4*
CIS 122A	*Spreadsheet Software-Lotus*	
	or	*1*
CIS 122B	*Spreadsheet Software—Excel*	
CIS 133	*Adv. Microcomputer Spreadsheets Software*	*1*
	Total units	***9***

Accounting Courses

ACCT 3.
Bookkeeping Specialist
3 units

Lecture 2 hours, laboratory 3 hours
Offered: Variable
Introduction to the theory, practice, and methods of computerized bookkeeping. Emphasis on accounts receivable, accounts payable, and payroll. Introduction to the general ledger. Preparation and input of bookkeeping records to the computer for the accounting cycle. (ROP option) [D]

ACCT 4.
Accounting with the Microcomputer
3 units

Recommended Preparation: *Completion of one semester of accounting or bookkeeping*
Lecture 2 hours; laboratory 3 hours
Offered: Variable
Uses the microcomputer for general ledger, A/R, A/P, payroll, depreciation recording, and reporting. Electronic spreadsheet development utilizing Lotus 1-2-3 in the recording of accounting data for records and decision making. Computer income tax and inventory control programs available. (ROP option) [D]

ACCT 7.
Basic Business Bookkeeping
3 units

Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Fee: $2. Introduction to the theory, practice, and methods of bookkeeping with primary emphasis on sole proprietorship and payroll accounting. Emphasis on the complete bookkeeping cycle including the use of special journals, general and subsidiary ledgers, worksheets, and financial statements. [D]

ACCT 12.
Microcomputer Accounting
3 units

Recommended Preparation: *ACCT 101 or equivalent; ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 2 hours, laboratory 3 hours
Offered: Variable
Fee: $4. Uses the microcomputer to include recording and reporting for accounts payable, accounts receivable, payroll, and depreciation accounting. Students will use an automated general ledger system and will complete an integrated practice set. [D]

ACCT 101.
Principles of Accounting I
4 units

Grade only
Recommended Preparation: *MATH 45 or ACCT 7 or equivalent; ENGL 54 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 4 hours
Offered: Variable
Fee: $2. Introduction to the theory, practice, and principles of accounting as related to single proprietorship, partnership, and corporate forms of business organizations.
[D; CSU; UC; CAN-BUS 2;
ACCT 101 + ACCT 102 = CAN BUS SEQ A]

ACCT 102.
Principles of Accounting II—Managerial
4 units

Grade only
Prerequisite: *ACCT 101 or equivalent*
Lecture 4 hours
Offered: Variable
Fee: $2. Emphasizes an understanding of managerial accounting concepts necessary to effectively utilize accounting information for business decision making. Encompasses cost estimation, cost-volume-profit analysis, job and process costing, cost accounting in the new manufacturing environment, cost allocation, budgets, standard costs, product pricing, capital budgeting, cash flows and financial statements analysis. [D; CSU; UC; CAN-BUS 4;
ACCT 101 + ACCT 102 = CAN BUS SEQ A]

ACCT 105.
Intermediate Accounting
3 units

Grade only
Recommended Preparation: *ACCT 102 or equivalent*
Lecture 3 hours
Offered: Variable
Intermediate accounting procedures providing a background for accounting practice and the financial accounting aspects for the CPA examination. Accounting theory and practice applicable to handling cash receivable, inventories, investments, plant and property, liabilities, and owner's equity. [D; CSU]

ACCT 107.
Cost Accounting
3 units

Grade only
Prerequisite: *ACCT 102 or equivalent*
Lecture 3 hours
Offered: Variable
Cost accounting introduction with emphasis on cost-volume-profit relationships, job and process costing, master and flexible budgets, standard costing, cost behavior systems choice, pricing decisions, and capital budgeting. [D; CSU]

ACCT 109.
Federal Income Tax
3 units

Grade only
Recommended Preparation: *A one-semester introductory bookkeeping or accounting course*
Lecture 3 hours
Offered: Variable
Theory and practice in the preparation of Federal and California income tax returns for individuals, with limited review of partnerships and corporations. Filing requirements, income inclusions and exclusions, capital gains and losses, business and personal deductions, alternate tax methods, tax credit, installment and deferred payment sales. [D; CSU]

ACCT 295.
Selected Topics in Accounting
1–3 units

Offered: Variable
Permits students to study relevant subjects within the field of accounting. The specific objectives, methods of instruction, and units of credit to be determined individually for projects proposed under this course description.
(May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

ACCT 299.
Independent Study
1–3 units

Limitation on Enrollment: Eligibility for independent study. See page 26.
Offered: Variable
Individual study or research in some area of accounting of particular interest to the student and not included in the regular courses of the college. [D; CSU]

Administration of Justice

School of Technology and Human Services

■ Dean

Patricia Axsom, M.S.
Office 570B
619-482-6460

■ Faculty

Paul Azevedo, J.D.
Janet DeLay, Ph.D.
Edward Selby, A.S.

■ Department Chair

Edward Selby, A.S.

General Description

Administration of Justice and Criminal Justice are the study of theories, concepts, statutes, laws, procedures, and methodologies governing the criminal justice system. These programs explore the historical development of criminal law, the interrelationship between criminal law and the criminal justice system, and its contemporary application in juvenile and adult crime.

Career Options

The following list is a sample of the many career options available for the administration of justice or criminal justice majors. Many require an associate degree, some require a baccalaureate degree, and a few of these require a graduate- level degree: adjudicator/judge, arson investigator, bar examiner, border patrol officer/INS agent, correctional officer, crime laboratory/evidence technologist, customs agent, district attorney, lawyer/prosecutor/public defender, forensic scientist, FBI/Treasury/Secret Service agent, U.S. Marshal, fraud/forgery investigator, parole/probation officer, police officer, sheriff, postal inspector, and traffic officer.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Criminal Justice	*01250*
Associate in Science Degree: Career/Technical	
Administration of Justice	*02520*
Corrections Emphasis	
Forensics Emphasis	
Law Enforcement Emphasis	
Criminal Investigator	*A2705*
Certificates of Achievement	
Administration of Justice	*02520*
Corrections Emphasis	*02700*
Forensics Emphasis	*02713*
Law Enforcement Emphasis	*02710*
Criminal Investigator	*A2705*
Law Enforcement Training Academy	*02711*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Arts Degree
Criminal Justice

Transfer Preparation * (Major Code: 01250)

Students who wish to major in the administration of justice program and plan to go on to a four-year institution are encouraged to pursue an associate in arts degree in Criminal Justice. The coursework is designed to offer the student a two-year degree program while preparing the student for typically required courses at a college offering a bachelors or higher- degree program. Criminal Justice majors may complete all of their lower-division requirements at Southwestern College.

The associate in science degree in Administration of Justice and the associate in arts in Criminal Justice differ in that the A.S. is designed to offer those skills required for immediate employment in the areas of Corrections and Law Enforcement, while the A.A. is intended to meet the needs of transferring students with long range educational goals in the criminal justice field.

AJ 111	*Introduction to Administration of Justice*	*3*
AJ 151	*Concepts of Criminal Law*	*3*
AJ 156	*Legal Aspects of Evidence*	*3*
AJ 188	*Community Relations*	*3*
AJ 161	*Principles and Procedures of the Justice System*	
	or	*3*
AJ 252	*Constitutional Law*	
PS 102	*American Government and Politics*	*3*
SOC 101	*Introduction to Sociology*	*3*
SOC 110	*Contemporary Social Problems*	*3*
MATH 119	*Elementary Statistics (4)*	
	or	*3–4*
PSYC 270	*Statistical Methods of Psychology (3)*	
	or	
SOC 270	*Statistical Methods of Sociology (3)*	
	Total units	***27–28***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Associate in Science Degree
Administration of Justice

Career/Technical (Major Code: 02520)

Students in administration of justice may obtain an associate in science degree in Administration of Justice and Criminal Justice programs. In addition, the student may obtain three certificates of achievement in Law Enforcement, Corrections, and/or Forensics. Degree candidates for the Administration of Justice degree must complete the courses required for the major and at least one emphasis listed as the "Corrections Emphasis," the "Law Enforcement Emphasis," or the "Forensics Emphasis." In addition, degree candidates must complete the requirements listed under Graduate Requirements in this catalog.

AJ 110	*Ethics and Administration of Justice*	*3*
AJ 111	*Introduction to Administration of Justice*	*3*
AJ 151	*Concepts of Criminal Law*	*3*
AJ 156	*Legal Aspects of Evidence*	*3*
AJ 161	*Principles and Procedures of the Justice System*	
	or	*3*
AJ 252	*Constitutional Law*	
AJ 167	*Written Communication in AJ*	*3*
AJ 181	*Juvenile Procedures*	*3*
AJ 188	*Community Relations*	*3*
	Plus at least one emphasis below	*4–8*
	Total units	***28–32***

Corrections Emphasis

AJ 114	*Fundamentals of Crime and Delinquency*	*3*
AJ 115	*Adult Probation and Parole*	*3*
	Total units	***6***

Recommended Electives: *AJ 113, 290–293; MAS 141; PSYC 101 or SOC 101.*

Forensics Emphasis

AJ 166	*Principles of Investigation*	*4*
AJ 171	*Evidence Technology*	*4*
	Total units	***8***

Recommended Electives: *ANTH 101; BIOL 260; CAD 220; PHIL 103.*

NOTE: *Students pursuing an Administration of Justice degree with the Forensics Emphasis will take AJ 171 in lieu of AJ 181.*

Law Enforcement Emphasis

AJ 166	*Principles of Investigation*	*4*
	Total units	***4***

Recommended Electives: *AJ 290–293; BUS 210; MAS 141; PSYC 101; SOC 101.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

NOTE: *There are recommended preparations for each course which the students are encouraged to complete. In addition, students should note that AJ 167 has a mandatory prerequisite of ENGL 71 or English Assessment Process. AJ 110, 111, 114, and 167 meet the General Education and Administration of Justice requirements.*

Criminal Investigator

Career/Technical (Major Code: A2705)

Students with an interest in the field of criminal justice, but with a particular interest in science and evidence collection, are encouraged to pursue the criminal investigator associate in science degree. This program was designed to prepare interested persons for careers as field evidence technicians. Persons engaged in this vocational area aid investigators at crime scenes. Specifically, they locate, collect, and analyze evidence. Typically, they work with field investigators in the course of criminal or civil investigations.

The Criminal Investigator associate in science degree satisfies entry-level job requirements in the area of forensics. Students interested in careers in this area should be aware that some practical experience is usually required prior to paid employment. This is a technical field requiring a combination of education and practical experience. Many students find it helpful, if not necessary, to volunteer at crime laboratories and police agencies in order to gain the requisite experience.

AJ 111	*Introduction to Administration of Justice*	*3*
AJ 151	*Concepts of Criminal Law*	*3*
AJ 156	*Legal Aspects of Evidence*	*3*
AJ 166	*Principles of Investigation*	*4*
AJ 167	*Written Communication in Administration of Justice*	*3*
AJ 171	*Evidence Technology*	*4*
AJ 221	*Forensic Photography*	*2.5*
ART 121	*Basic Photography*	*3*
BIOL 100	*Principles of Biology*	*3*
BIOL 101	*Principles of Biology Laboratory*	*1*
CHEM 100	*Introduction to General Chemistry*	*4*
	Total units	***33.5***

Recommended Electives: *ANTH 101; BIOL 260; CAD 220; PHIL 103; TELE 100.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Certificates of Achievement

Administration of Justice: Corrections Emphasis

Career/Technical (Major Code: 02700)

Designed for students seeking careers in parole, probation, correctional institutions, and community corrections.

AJ 114	*Fundamentals of Crime and Delinquency*	*3*
AJ 115	*Adult Probation and Parole*	*3*
	Plus courses required for the Administration of Justice program	*24*
	Total units	***30***

Administration of Justice: Forensics Emphasis

Career/Technical (Major Code: 02713)

Designed for students interested in careers in the forensics and criminalistic fields.

AJ 166	*Principles of Investigation*	*4*
AJ 171	*Evidence Technology*	*4*
	*Plus courses required for the Administration of Justice program (*excluding AJ 181)*	*21*
	Total units	***29***

* Students pursuing an Administration of Justice degree with the Forensics Emphasis will take AJ 171 in lieu of AJ 181.

Administration of Justice: Law Enforcement Emphasis

Career/Technical (Major Code: 02710)

Designed for students seeking careers with local, state, and federal enforcement agencies, and private security.

AJ 166	*Principles of Investigation*	*4*
	Plus courses required for the Administration of Justice program	*24*
	Total units	***28***

Criminal Investigator

Career/Technical (Major Code: A2706)

Designed for students interested in careers as field evidence technicians.

AJ 111	*Introduction to Administration of Justice*	*3*
AJ 151	*Concepts of Criminal Law*	*3*
AJ 156	*Legal Aspects of Evidence*	*3*
AJ 166	*Principles of Investigation*	*4*
AJ 167	*Written Communication in Administration of Justice*	*3*
AJ 171	*Evidence Technology*	*4*
AJ 221	*Forensic Photography*	*2.5*
ART 121	*Basic Photography*	*3*
BIOL 100	*Principles of Biology*	*3*
BIOL 101	*Principles of Biology Laboratory*	*1*
CHEM 100	*Introduction to General Chemistry*	*4*
	Total units	***33.5***

Law Enforcement Training Academy

Career/Technical (Major Code: 02711)

The Basic Police Academy is a Commission on Peace Officers Standards and Training (POST) certified training academy for California Law Enforcement. It meets the basic requirement for employment as a municipal, county, and state law enforcement officer. (State law requires completion of a POST-certified basic course for employment in law enforcement.) The academy is made up of two phases; Phase I takes place during the fall semester, Phase II during the spring semester.

Student must apply to the Academy Office (Room 560J) approximately two months prior to the beginning of Phase I. Acceptance into the academy requires that the student meets both college and state mandates. Those not meeting the mandates will not be allowed to enroll.

The units earned in the academy may be used towards graduation and, in addition, a certificate will be awarded. The academy meets the requirements for veterans' benefits.

NOTE: *This is a two-phase program, which requires 10 months to complete.*

AJ 41	*Basic Police Academy I*	*12*
AJ 42	*Basic Police Academy II*	*12*
	Total units	***24***

Administration of Justice Courses

AJ 30.
Penal Code 832—Arrest and Firearms
4 units

Grade only
Limitation on Enrollment: *18 years of age, no felony convictions, fingerprinting, and criminal background investigation required*
Lecture 4 hours, laboratory 1 hour
Offered: Variable
Orientation and basic training in such matters as laws of arrest, search, and seizure; discretionary decision making, police ethics, and other matters required under Penal Code 832. [D]

AJ 41.
Basic Police Academy I
12 units

Grade only
Limitation on Enrollment: *18 years of age, no felony convictions, valid driver's license, and high school graduate*
Recommended Preparation: *Southwestern College Reading Assessment*
Lecture 8 hours, laboratory 14 hours
Offered: Variable
Concentrated program of study that satisfies the requirements for training of reserve officers, and for completion of the first half of the Basic Police Academy for peace officers. Program is certified by POST (Commission on Peace Officers Standards and Training). Students must complete AJ 42 in order to receive a certificate. [D]

AJ 42.
Basic Police Academy II
12 units

Grade only
Prerequisite: *AJ 41 or equivalent*
Limitation on Enrollment: *No felony convictions and valid driver's license*
Recommended Preparation: *Southwestern College Reading Assessment*
Lecture 8 hours, laboratory 14 hours
Offered: Variable
Part two of a concentrated two-semester program of study that satisfies the entry-level requirements to become a peace officer. Program is certified by POST (Commission on Peace Officers Standards and Training). [D]

AJ 66.
Law Enforcement Re-Qualification
6 units

Grade only
Prerequisite: *AJ 41 and 42, or equivalent*
Lecture 6 hours, laboratory 1 hour
Offered: Variable
Designed to meet POST's requirements for persons qualifying or re-qualifying under Regulation 1008, three-year rule. The content of the course includes; portions of the basic course which are most likely to rapidly change; critical manipulative skills related to officer safety or civil liability in areas where persons are most likely to experience reduced proficiency; and other related critical subjects. [ND]

AJ 110.
Ethics and the Administration of Justice
3 units

Grade only.
Recommended Preparation: *ENGL 52 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Exploring ethics and ethical practices in our government, schools, businesses, and the administration of justice system. An in-depth look at the influences created by various segments in society and how these influences impact members of the administration of justice profession and their conduct. [D; CSU]

AJ 111.
Introduction to Administration of Justice
3 units

Recommended Preparation: *ENGL 54 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
History and philosophy of criminal justice; overview of the criminal justice system identifying the various segments; the roles and interrelationships; overview of crime, criminals and causal theories: jurisdiction of local, state, and federal criminal justice agencies; survey of professional career opportunities; ethics and professionalism. [D; CSU; UC; CAN-AJ 2]

AJ 113.
Correctional Institutions
3 units

Recommended Preparation: *ENGL 52 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Investigation of correctional institutions in the U.S. with particular emphasis on trends and application at the county, state, and federal institutional levels. Several field trips to institutions added as part of curriculum offering. A discussion of correctional employees' responsibilities. [D; CSU]

AJ 114.
Fundamentals of Crime and Criminal Behavior
3 units

Recommended Preparation: *ENGL 52 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
An exploration of historical and contemporary explanations of crime causation. A study of the fundamentals of crime and criminal behavior with emphasis on criminal career typologies. [D; CSU; UC]

AJ 115.
Adult Probation, Prison, and Parole
3 units

Recommended Preparation: *ENGL 52 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
History, philosophy, and administration of adult probation, prison, and parole. Principles of investigation, supervision, and socialized treatment as practiced in probation, prison, and parole. [D; CSU]

AJ 151.
Concepts of Criminal Law
3 units

Recommended Preparation: *AJ 111 or equivalent; ENGL 54 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Historical development, philosophy of law and constitutional provisions; definitions, classification of crime, and application to the administration of justice system; legal research, study of case law, methodology and concepts of law as a social force. A study of the most frequently used sections of the penal code. [D; CSU; UC; CAN-AJ 4]

AJ 156.
Legal Aspects of Evidence
3 units

Grade only
Recommended Preparation: *AJ 161 or equivalent; ENGL 52 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours.
Offered: Variable
Origin, philosophy, development, and trends as constitutional basis of evidence. The kinds and degrees of evidence and the rules governing the admissibility of evidence in court, judicial decisions interpreting individual rights, and case studies. [D; CSU; CAN-AJ 6]

AJ 161.
Principles and Procedures of the Justice System
3 units

Grade only
Recommended Preparation: *AJ 111 or equivalent; ENGL 54 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Explores the many functions of the varied criminal justice systems throughout the country, with special reference to California. It examines the adjudication process from arrest to release from prison. The constitutions of the United States and California are studied in their relationship to the criminal justice system. [D; CSU]

AJ 166.
Principles of Investigation
4 units

Grade only
Recommended Preparation: *AJ 111 or equivalent; ENGL 52 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Variable
Fee: $5. Fundamentals of investigation; crime scene search and recording; collection and preservation of physical evidence; scientific aids; general procedures involved in the investigation of major crimes; procedures involved in preparing cases for court trial; general duties and problems of the detective. Appropriate for paralegals, private investigators, insurance investigators, law enforcement, and criminologists. [D; CSU; CAN-AJ 8]

AJ 167.
Written Communication in Administration of Justice
3 units

Grade only
Prerequisite: *ENGL 71 or the equivalent skill level as determined by the Southwestern College English Assessment or equivalent*
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Designed for students enrolled in technical or vocational career programs such as, but not limited to, administration of justice. Stresses clear, correct, well-organized expression of ideas in writing. Stresses origination and preparation of written communications required by criminal justice personnel. Use of word processor with legal format. [D; CSU]

AJ 171.
Evidence Technology
4 units

Grade only
Prerequisite: *AJ 166 or equivalent*
Recommended Preparation: *AJ 111 or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Fall, Spring
Fee: $5. Provides a working understanding of the elements, required skills, and future trends of evidence technology. Focus on the specific areas of the forensic sciences that apply to career choices in field evidence technology, law enforcement, and private investigations. [D; CSU]

AJ 181.
Juvenile Law and Procedures
3 units

Recommended Preparation: *ENGL 54 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Organization, functions, and procedures of juvenile justice; juvenile statutes, custody, detention, and court processing of juveniles; and case dispositions of probation and parole. [D; CSU]

AJ 188.
Community Relations
3 units

Lecture 3 hours
Offered: Variable
Overview of the historical and present-day communications between the criminal justice system and the community. An understanding of the social, and ethnic sub-cultures in our society, and their relationships with the administration of justice process. A study of the interpersonal relations from an individual perspective. [D; CSU; UC]

AJ 221.
Forensic Photography
2.5 units

Recommended Preparation: AJ 166 or equivalent
Lecture 2 hours, laboratory 2 hours
Offered: Variable
Provides training and practical experience in forensic photography. Primary focus is on crime scene investigation. Students are instructed in the use of 35mm film, digital and video photography under various circumstances and lighting conditions. Additional topics include selection of film types, processing, and use of accessories. [D; CSU]

AJ 252.
Constitutional Law
3 units

Grade only
Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Involves the study of fundamental rights as provided by the U.S. Constitution with emphasis on the Bill of Rights. Students will develop an understanding of the role of the courts and key court cases interpreting individual rights. [D; CSU]

AJ 290-293.
Administration of Justice Cooperative Work Experience I–IV
2–4 units

Grade only
Limitation on Enrollment: *Declared Administration of Justice major. Student must complete no less than seven units, including work experience, during each semester in order to receive credit*
Lecture 1 hour, laboratory 5–15 hours
Offered: Variable
Application of the principles and skills learned in the administration of justice program to on-the-job work assignments. The student is required to attend a one-hour coordinating class weekly. The student's field performance will be evaluated by his employer and by the teacher. [D; CSU]

AJ 295.
Selected Topics in Administration of Justice
1–3 units

*Permits students to study relevant topics within the field of administration of justice. (May be repeated for additional credit with new content.) [D; * CSU]*

* *Please refer to the class schedule for specific course description and transferability information.*

AJ 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of administration of justice of particular interest to the student and not included in regular courses of the college. [D; CSU]

African-American Studies

School of Social Sciences and International Studies

■ Dean

Viara Giraffe, Ph.D.
Office 470K
619-482-6582

■ Faculty

Stanley James, M.A.

■ Department Chair

Gary A. Neely, M.A.

General Description

African-American Studies examines the truth and fiction regarding the African experience in the United States. This department explores the history, anthropology, sociology, psychology, economic, and political aspects of African Americans in the U.S. In addition, studies focus on the literary, musical, and artistic heritage of people of African descent leading to a heightening of self-awareness and cultural understanding for African-American students. This strengthens connections between students and the African community that can hasten social change and enhance human dignity.

Career Options

The following list is a sample of the many career options available for the African-American Studies major. A few of these require an associate degree, most require a baccalaureate degree, and some require a graduate-level degree: lawyer, high school or college teacher, researcher, government or foreign service officer, business administrator, library technician, historian, writer, publisher, anthropologist, political scientist, politician, economist, philosopher, cultural arts director, social service agency worker, business manager, consultant, counselor, and urbanologist.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
African-American Studies	*01700*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Arts Degree
African-American Studies

Transfer Preparation * (Major Code: 01700)

The associate in arts degree is intended to emphasize history from an African-American perspective, the development and role of African-American culture today, and the African American in the political system.

African-American History (AFRO 110, 111) fulfills the American Institutions requirement at SDSU and most other campuses of the California State Universities and colleges system.

AFRO 110	*African-American History I*	*3*
AFRO 111	*African-American History II*	*3*
AFRO 150	*Introduction to African-American Culture*	*3*
Select 9 units from electives		*9*
	Total units	***18***

Electives: *ASIA 112, 113; DANC 145, 146, 147, 148; ENGL 273; HIST 106, 107; MAS 141, 142; MUS 189, 190, 191, 192.*

To earn an associate degree, additional General education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 43 for further information.**

African-American Studies Courses

AFRO 110.
African-American History I
3 units

Grade only
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
An In-depth study of the African-American experience from African origins to the conclusion of the Civil War. Emphases on the Atlantic slave trade and American slavery, the African in the New World, and the United States Constitution. (Partially fulfills American Institutions requirement at CSU.)
(Same as HIST 110.) [D; CSU; UC]

AFRO 111.
African-American History II
3 units

Grade only
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Covers the history of African Americans from the Civil War to the present emphasizing their contributions to the growth and development of the United States. Includes a study of the Constitution of California and its impact on state and local governments. (Partially fulfills American Institutions requirement at CSU.)
(Same as HIST 111.) [D; CSU; UC]

AFRO 150.
Introduction to African-American Culture
3 units

Grade only
Lecture 3 hours
Offered: Variable
Introduction to the origins and development of African-American culture in United States history between 1619 and the present. Emphasis on the critical analysis of significant works in art, music, theatre, and literature through examination of examples and comparison of dominant cultural themes. (Same as HUM 150.)
[D; CSU; UC]

AFRO 295.
Selected Topics in African-American Studies
1–3 units

Lecture 1–3 hours
Offered: Variable
Study of relevant topics within the field of African-American studies. [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

AFRO 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of African-American studies of particular interest to the student and not included in regular courses of the college. [D; CSU; * UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

American Sign Language

School of Languages and Humanities

- **Dean**

  Renee M. Kilmer, Ph.D.
  Office 430J
  619-482-6461

- **Department Chair**

  Esther Alonso, M.A.

"Keep raising the bar of academic goals and expectations, because if you don't, you will never know how high you could have achieved."

—ANITA HOLT,
Professor, Vocational Nursing

American Sign Language Courses

ASL 120.
American Sign Language I
3 units

Lecture 3 hours
Offered: Variable
Introduction to the language of signs and manual communication used by hearing-impaired persons in the United States. Provides a basis for communication between hearing and hearing-impaired individuals. Increased awareness of deafness and resources related to the deaf in the United States. [D; CSU; UC]

ASL 130.
American Sign Language II
3 units

Prerequisite: *ASL 120 or equivalent*
Lecture 3 hours
Offered: Variable
Continuation of ASL 120. Designed to provide increased proficiency in sign language and finger spelling, including communication of complex messages, idiomatic expressions, subtleties, and nuances of language.
[D; CSU; UC]

ASL 295.
Selected Topics in American Sign Language
1–3 units

Offered: Variable
Permits students to study relevant topics within the field of American sign language.
(May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

ASL 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of American sign language of particular interest to the student and not included in regular courses of the college. [D; CSU; * UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Anthropology

School of Social Sciences and International Studies

■ Dean

Viara Giraffe, Ph.D.
Office 470K
619-482-6582

■ Faculty

Erin Browder, Ph.D.
Robin Franck, Cand. Ph.D.

■ Department Chair

Robin Franck, Cand. Ph.D.

General Description

Anthropology is the broadest of the social sciences and is the study of humankind. An important aspect of anthropology as a department is its integrative view linking the natural sciences such as biology with the humanities such as linguistics and the fine arts. Anthropological study is appropriate for individuals with a wide range of interests in human cultures and civilizations past and present, human and animal behavior, history and ecology of specific areas, language in society, and evolution and contemporary existence in a technological age.

Career Options

There are four recognized fields of study in anthropology: archaeology, physical anthropology, sociocultural anthropology, and linguistic anthropology. A few of these require an associate degree, some require a baccalaureate degree, and most require a graduate-level degree. The following list is a sample of many career options available to the anthropology major: high school or college teacher, archaeologist, linguist, anthropologist, environmental impact analyst, health researcher, zoo director, resource manager, ethnic relations specialist, exhibition technician, museum curator, folklorist, urban planner, and film ethnographer.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Anthropology	*01720*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Arts Degree
Anthropology

Transfer Preparation * (Major Code: 01720)

Lower-division requirements are not the same for all universities, and there are differences among the areas of specialization. However, the courses listed below meet the lower-division requirements for most universities offering a bachelors degree with a major in anthropology.

ANTH 101	*Biological Anthropology*	*3*
ANTH 102	*Cultural Anthropology*	*3*
	Foreign Language	*12–15*
	Total units	***18–21***

Recommended Electives: *ANTH 103, 110, 112.*

To earn an associate degree, additional General Education and Graduation requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Anthropology Courses

ANTH 101.
Biological Anthropology
3 units

Recommended Preparation: *ENGL 54 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Our place in nature, the organic basis of life, the relationships between human biology and culture, structure and behavior of living primates, fossil and cultural evidence for human evolution, genetics, the biological basis of human variability. [D; CSU; UC; CAN-ANTH 2]

ANTH 102.
Cultural Anthropology
3 units

Recommended Preparation: *ENGL 54 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Human social and cultural adaptations to varied environments; the role of language and nonverbal communication; types of nonliterate and traditional societies; comparative systems of economics, family and kin organization, government, religion, and the arts; the dynamics of culture; anthropology in modern life. [D; CSU; UC; CAN-ANTH 4]

ANTH 103.
Archaeology and Prehistory
3 units

Recommended Preparation: *ENGL 54 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Archaeological theory, method, and interpretation; the prehistory of humankind; basic inventions and innovations; comparative development in the emergence of civilizations. [D; CSU; UC; CAN-ANTH 6]

ANTH 110.
Indians of North America
3 units

Recommended Preparation: *ENGL 54 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Native American cultures and their origin and diversity at the time of European contact. The domestication of native plants and animals. The different cultures and their methods of solving the basic problems of humankind such as food, shelter, social and religious organizations, and worldview. The blending of Indian and European cultures. [D; CSU; UC]

ANTH 112.
Cultures of Mexico
3 units

Recommended Preparation: *ENGL 54 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Native cultures of Mexico, ancient and modern. Classic cultures represented by the Maya and Aztec and their origin and cultural characteristics at the time of European contact and today. The contemporary Indian cultures represented by the Seri, Yaqui, Tarahumara, Huaxtec, etc. The national character of México today as it has been influenced by the indigenous groups. [D; CSU; UC]

ANTH 295.
Selected Topics in Anthropology
1–3 units

Offered: Variable
Permits students to study relevant topics within the field of Anthropology. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

ANTH 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of anthropology of particular interest to the student and not included in regular courses of the college. [D; CSU; * UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Architecture

School of Technology and Human Services

- **Dean**

  Patricia Axsom, M.S.
  Room 570B
  619-482-6460

- **Faculty**

  Corey Breininger, M.A.Ed.
  Thomas Rogo, M.Arch.

- **Department Chair**

  Corey Breininger, M.A.Ed.

General Description

Architecture is the study of creating livable and workable environments balancing social, political, economic, technical, and aesthetic requirements with human needs. Although building design is the ultimate goal of the program of study, knowledge about how people affect environments and manage resources in the creation of structure is of major importance. Architects rely on an understanding of a diversity of subjects including mathematics, physics, design, graphics, engineering, architecture history, visual art, social sciences, and humanities.

Career Options

The following list is a sample of the many career options available to the architecture major. A few of these require an associate degree, some require a baccalaureate degree, and most require a graduate-level degree: architect, urban planner, environmental researcher, architectural technician, vocational teacher, college instructor, landscape architect or technician, building contractor, construction supervisor, CAD specialist, architectural engineer, construction manager, drafting technician, and the allied professions such as business, marketing, and interior design.

Degree/Certificate Options

	Major Code
Associate in Science Degree: Transfer Preparation	
Architecture	*01940*
Associate in Science Degree: Career/Technical	
Architecture Technology	*02840*
Certificates of Achievement	
Architecture Technology—Basic	*02842*
Architecture Technology—Advanced	*02841*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

NOTE: *Some transfer institutions require work experience prior to graduation with a five-year bachelor's degree in architecture. It is strongly recommended that students enroll in ARCH 290–293 to partially fulfill this requirement.*

Associate in Science Degree
Architecture

Transfer Preparation * (Major Code: 01940)

Designed to provide the student with the creative problem-solving skills and critical thinking processes necessary to successfully complete upper-division baccalaureate work leading to the professional Bachelor of Architecture degree.

The curriculum is articulated to Cal Poly, San Luis Obispo and fulfills most of the first and second year requirements at Cal Poly, Pomona; UC Berkeley, the New School of Architecture, San Diego State, and other baccalaureate institutions.

Academic placement at the transfer institution is based upon evaluation of a portfolio of the student's work. Students will be required to develop a portfolio of their work for purposes of evaluation by the transfer institution.

The courses listed are the architecture courses required to obtain the associate degree in architecture. Students wishing to transfer to the California State University should follow Plan B, General Education Breadth Requirement California State University. Students should review specific course requirements of the transfer institution and consult with a counselor as to which courses taken at Southwestern College will articulate to their chosen college.

FIRST SEMESTER

ARCH 110	*Freehand Drawing*	*3*
ARCH 115	*Architectural Graphics*	*3*
ARCH 150	*Architectural Design I*	*5*

SECOND SEMESTER

ARCH 112	*Architectural Rendering*	*3*
ARCH 151	*Architectural Design II*	*3*
ARCH 165	*Architectural Practice I*	*2*

THIRD SEMESTER

ARCH 200	*Introduction to Computer Aided Design*	*3*
ARCH 235	*Structures*	*3*
ARCH 252	*Architectural Design III*	*3*
ARCH 265	*Architectural Practice II*	*2*

FOURTH SEMESTER

ARCH 222	*Environmental Controls*	*2*
ARCH 253	*Architectural Design IV*	*3*
ARCH 266	*Architectural Practice III*	*2*
	Total units	***37***

Recommended Electives: *ARCH 114, 205, 210, 290–293.*

To earn an associate degree, additional General education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 43 for further information.**

Architecture Technology

Career/Technical (Major Code: 02840)

Designed to provide the student with the skills and technical knowledge required for employment as technicians in the environmental design departments of architecture, landscape architecture, urban planning, and environmental research. Students also are placed within the building construction industry and its allied professions.

FIRST SEMESTER

ARCH 110	*Freehand Drawing*	*3*
ARCH 115	*Architectural Graphics*	*3*
ARCH 150	*Architectural Design I*	*5*

SECOND SEMESTER

ARCH 112	*Architectural Rendering*	*3*
ARCH 151	*Architectural Design II*	*3*
ARCH 165	*Architectural Practice I*	*2*

THIRD SEMESTER

ARCH 200	*Introduction to Computer Aided Design*	*3*
ARCH 235	*Structures*	*3*
ARCH 265	*Architectural Practice II*	*2*

FOURTH SEMESTER

ARCH 209	*Construction Surveying*	*3*
ARCH 210	*World Architecture II*	*3*
ARCH 222	*Environmental Controls*	*2*
ARCH 266	*Architectural Practice III*	*2*
	Total units	***37***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Certificates of Achievement

Architecture Technology–Basic

Career/Technical (Major Code: 02842)

FIRST SEMESTER

ARCH 110	*Freehand Drawing*	*3*
ARCH 115	*Architectural Graphics*	*3*
ARCH 150	*Architectural Design I*	*5*

SECOND SEMESTER

ARCH 112	*Architectural Rendering*	*3*
ARCH 151	*Architectural Design II*	*3*
ARCH 165	*Architectural Practice I*	*2*

THIRD SEMESTER

ARCH 200	*Introduction to Computer Aided Design*	*3*
ARCH 235	*Structures*	*3*
ARCH 265	*Architectural Practice II*	*2*

FOURTH SEMESTER

ARCH 209	*Construction Surveying*	*3*
ARCH 210	*World Architecture II*	*3*
ARCH 222	*Environmental Controls*	*2*
ARCH 266	*Architectural Practice III*	*2*
	Total units	***37***

Architecture Technology–Advanced

Career/Technical (Major Code: 02841)

FIRST SEMESTER

ARCH 110	*Freehand Drawing*	*3*
ARCH 115	*Architectural Graphics*	*3*
ARCH 150	*Architectural Design I*	*5*

SECOND SEMESTER

ARCH 112	*Architectural Rendering*	*3*
ARCH 151	*Architectural Design II*	*3*
ARCH 165	*Architectural Practice I*	*2*

THIRD SEMESTER

ARCH 200	*Introduction to Computer Aided Design*	*3*
ARCH 235	*Structures*	*3*
ARCH 265	*Architectural Practice II*	*2*

FOURTH SEMESTER

ARCH 209	*Construction Surveying*	*3*
ARCH 210	*World Architecture II*	*3*
ARCH 222	*Environmental Controls*	*2*
ARCH 266	*Architectural Practice III*	*2*

ADDITIONAL COURSES

ARCH 114	*Advanced Architectural Rendering*	*3*
ARCH 205	*Advanced Architectural CAD*	*3*
ARCH 210	*World Architecture II*	*3*
ARCH 290–293	*Architecture Cooperative Work Experience I–IV*	*2–4*
	Total units	***48–50***

Architecture Courses

ARCH 110.
Freehand Drawing
3 units

Grade only
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Drawing in graphite pencil, felt marker, pen, and ink. A study of light, form, value, composition, proportion, and scale drawing from elements found in the built environment and from nature. [D; CSU]

ARCH 112.
Architectural Rendering
3 units

Grade only
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $5. Making of finished renderings buildings. Study and practice in the use of various media (color marker, ink, and acrylics) and the techniques involved. [D; CSU]

ARCH 114.
Advanced Architectural Rendering
3 units

Recommended Preparation: ARCH 112 or equivalent
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Advanced rendering techniques using color marker, color pencil, and exploration of other medium. Portfolio preparation. [D; CSU]

ARCH 115.
Architectural Graphics
3 units

Grade only
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $5. Fundamental principles of perspective drawing and the casting of shades and shadows through the application of basic descriptive geometry. Construction of drawings suitable for architectural rendering. [D; CSU; UC]

ARCH 150.
Architectural Design I
5 units

Grade only
Lecture 3 hours, laboratory 6 hours
Offered: Fall, Spring
Fee: $5. Introduction to the theories and principles of architectural design and the development of problem-solving skills as related to three-dimensional spatial design problems. An emphasis on drawing and modeling as a means to design. [D; CSU]

ARCH 151.
Architectural Design II
3 units

Grade only
Prerequisite: *ARCH 150 or equivalent*
Lecture 1.5 hours, laboratory 4.5 hours
Offered: Spring, Summer
Fee: $5. Theories and principles of design as applied to the development of architectural space. Analysis of architectural form through three-dimensional modeling. A study of methods and problem-solving strategies with application to architectural design. [D; CSU; UC]

ARCH 165.
Architectural Practice I
2 units

Grade only
Lecture 1 hour, laboratory 3 hours
Offered: Spring, Summer
Introduction to the principles of building construction. Overview of the major systems of a building. Introduction to construction document preparation, architectural drafting, and detailing. [D; CSU]

ARCH 200.
Introduction to Computer Aided Design
3 units

Grade only
Recommended Preparation: *ARCH 150 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Introduction to computer aided design as applied to the architectural field—using Auto CAD. [D; CSU]

ARCH 205.
Advanced Architectural CAD
3 units

Prerequisite: *ARCH 200 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Summer
Designed as a continuation of ARCH 200 and for students who wish to develop advanced CAD skills as applied to the architectural field—using Auto CAD. [D; CSU]

ARCH 208.
World Architecture I
3 units

Grade only
Lecture 3 hours
Offered: Fall
Study of architecture in which the formal, cultural, aesthetic and sociopolitical dimensions of architecture from prehistory to the beginning of the Industrial Revolution in the 1850s will be visually explored and discussed. Provides an understanding of the influences and the forces that most critically impact the design and building practices of past cultures and societies. [D; CSU; UC]

ARCH 209.
Construction Surveying
3 units

Grade only
Lecture 1 hour, laboratory 5 hours
Offered: Spring
Basic surveying as related directly to building construction. Use of the standard surveying instruments in the measuring and laying out of buildings, topographic surveying, and the establishing of levels and profiles. [D; CSU]

ARCH 210.
World Architecture II
3 units

Grade only
Lecture 3 hours
Offered: Spring
Study of architecture in which the formal, cultural, aesthetic and sociopolitical dimensions of architecture from the mid-eighteenth century to the present day will be visually explored and discussed. Provides an understanding of the influences and the forces that most critically impact the design and building practices of both the past and the present. [D; CSU; UC]

ARCH 222.
Environmental Controls
2 units

Grade only
Lecture 2 hours
Offered: Spring
Introduction to the physical relationship between man and his environment. Study of the physical phenomena (heat, light, and sound) as it relates to our existence and comfort. Fundamentals of climate-responsive design of the built environment. [D; CSU]

ARCH 235.
Structures
3 units

Grade only
Recommended Preparation: *MATH 65 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Lecture 3 hours
Offered: Fall
Forces on building structures. Static equilibrium, shear, and bending moment diagrams. Stress and strain relationships and deformation in structures. [D; CSU]

ARCH 252.
Architectural Design III
3 units

Grade only
Prerequisite: *ARCH 151 or equivalent*
Lecture 1.5 hours, laboratory 4.5 hours
Offered: Fall
Fee: $5. Continuation of the study of the principles of architectural design. Formative analysis techniques as applied to space adjacency, contextual issues of architectural design, and the meaning of architectural form. [D; CSU; UC]

ARCH 253.
Architectural Design IV
3 units

Grade only
Prerequisite: *ARCH 252 or equivalent*
Lecture 1.5 hours, laboratory 4.5 hours
Offered: Spring
Fee: $5. Continuation of the study of the principles of architectural design. Application of design techniques and strategies to the solution of an architectural design problem. Application of building code requirements to building design. [D; CSU]

ARCH 265.
Architectural Practice II
2 units

Grade only
Lecture 1 hour, laboratory 3 hours
Offered: Fall
Study of the processes of building from design through construction. The application of codes and standards to the design and construction of a building. A study of building nomenclature and construction technology. [D; CSU]

ARCH 266.
Architectural Practice III
2 units

Grade only
Prerequisite: *ARCH 265 or equivalent*
Lecture 1 hour, laboratory 3 hours
Offered: Spring
Continuation of ARCH 265. Building construction processes including a study of thermal and moisture protection, types of doors and windows, and their detailing. Application of building codes and standards to building construction. [D; CSU]

ARCH 290–293.
Architecture Cooperative Work Experience I–IV
2–4 units

Grade only
Prerequisite: *ARCH 151 and 165, or equivalent*
Limitation on Enrollment: Declared Architecture major. Student must complete no less than seven units, including work experience, during each semester in order to receive credit
Lecture 1 hour, laboratory 5–15 hours
Offered: Variable
Application of the principles and skills learned in the architecture program to on-the-job work experience. The student is required to attend a one-hour coordinating class weekly. Student's work experience performance will be evaluated by his/her employment supervisor and by the instructor. [D; CSU]

ARCH 295.
Selected Topics in Architectural Technology
1–3 units

Offered: Variable
Relevant topics within the field of architecture. The specific objectives, methods of instruction and evaluation to be determined by the students and the instructor throughout the semester. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

ARCH 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of architecture of particular interest to the student and not included in regular courses of the college. [D; CSU]

"The campus and instructors are great. I truly enjoy the courses offered here and feel that the classes are well organized."

—**NOZOMI GARCIA,**
Architecture Major

Art

School of Arts and Communication

■ Interim Dean

Donna Arnold
Office 702B
619-482-6372

■ Faculty

Judi Nicolaidis, M.A.
David Quattrociocchi, M.F.A.
Michael W. Schnorr, M.A.
Elizabeth Sisco, M.F.A.
Matt Micajah Truitt, M.F.A.
Mark Van Stone, M.A.

■ Department Chair

Elizabeth Sisco, M.F.A.

General Description

Art is the study of visual thinking, idea generation, and the creation of aesthetic objects. This department explores concepts of creative intelligence and artmaking techniques for a full range of two- and three-dimensional forms and investigates the history of art in both Western and non-Western cultures. Students learn the language of art, design principles, and elements of composition, as the foundation for the communication of visual ideas into such forms as painting, drawing, photography, computer imagery, ceramics, sculpture, printmaking, and graphic design. Art analysis, theory, and criticism serve as the basis for problem solving.

Career Options

The following list is a sample of some of the career options in the art major. Most require an associate degree, some require a baccalaureate degree, and a few require a graduate-level degree: artist, graphic artist, computer technician, photographer, elementary school or high school teacher, college instructor, gallery director, museum technician, salesperson, museum director or curator, materials supplier, film/video maker, collector, consultant, and the allied professions of architecture, telemedia, and interior design.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Art	*01210*
Graphic Design	*01090*
Photography	*01380*
Certificate of Achievement	
Graphic Applications	*02574*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Arts Degree

Art

Transfer Preparation * (Major Code: 01210)

Stresses the study of art as form and content. Designed to develop the student's perceptual and conceptual abilities in the context of art history and society. Designed to give the student an opportunity to develop his/her technical skills, aesthetic awareness, personal expression, and critical analysis.

The art courses listed fulfill lower-division requirements at most universities. Most universities require students to present a portfolio for evaluation to be admitted; therefore, students should keep a portfolio of their work at Southwestern College.

FIRST SEMESTER		
ART 100	*Drawing I*	*3*
ART 101	*Design I*	*3*
SECOND SEMESTER		
ART 102	*Drawing II*	*3*
ART 103	*Design II*	*3*
*Select 3 units from Art History courses listed below **		*3*
THIRD SEMESTER		
ART 197	*Portfolio Development for the Visual Artist*	*3*
*Select 3 units from Art History courses listed below **		*3*
Select 3 units from electives		*3*
FOURTH SEMESTER		
Select 6 units from electives		*6*
***ART HISTORY COURSES:**		
ART 150	*History and Appreciation of Art I (3)*	
ART 151	*History and Appreciation of Art II (3)*	
ART 157	*Nineteenth and Twentieth Century Art (3)*	
	Total units	***30***

Electives: *ART 100L, 104, 105, 107, 110, 111, 112, 113, 116, 121, 127, 129, 130, 131, 137, 148A, 149, 156, 165, 170, 173A, 182, 185A, 189, 192, 195, 200.*

To earn an associate degree, additional General education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Graphic Design

Transfer Preparation * (Major Code: 01090)

Designed for the art student desiring to enter the field of graphic communication and intended for students who plan to transfer to a university or seek employment after completion of coursework at Southwestern College. Employment is possible at advertising agencies, design studios, printers, typesetters, sign companies, newspapers, corporate art departments, government agencies, television studios, and publishers. Self-employment as a freelance artist is also an option. In all cases, internships should be part of the preparation for employment.

FIRST SEMESTER		
ART 100	*Drawing I*	*3*
ART 101	*Design I*	*3*
ART 150	*Appreciation and History of Art I*	*3*
ART 159	*Graphic Design—Layout*	*3*
SECOND SEMESTER		
ART 102	*Drawing II*	*3*
ART 103	*Design II*	*3*
ART/TELE 161	*Graphic Design—Draw*	*3*
THIRD SEMESTER		
ART 151	*Appreciation and History of Art II*	*3*
ART 160	*Graphic Design—Typography*	*3*
FOURTH SEMESTER		
ART 164	*Graphic Design—Production*	*3*
	Total units	***30***

Recommended Electives: *ART 112, 116, 121, 148, 157, 169, 192.*

To earn an associate degree, additional General education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Photography

Transfer Preparation * (Major Code: 01380)

Designed to give students a sound background in technical skills and theory while increasing their visual awareness and conceptual abilities.

Two groups within this program of studies, traditional photography and digital imaging, provide the student with basic aesthetic principles and technical skills needed for entry into the field of professional photography. Students are encouraged to develop critical and aesthetic judgment while achieving technical experience.

ART 101	*Design I*	*3*
ART 121	*Basic Photography*	*3*
ART 126	*Beginning Color Photography*	*3*
ART 156	*History of Photography*	*3*
ART 192	*Introduction to Digital Imaging*	*3*

Choose group 1 or group 2 to complete degree program.

GROUP 1: TRADITIONAL PHOTOGRAPHY		
ART 122	*Intermediate Photography (3)*	
ART 123	*Advanced Photography (3)*	
ART 127	*Advanced Color Photography (3)*	
	or	*9–11*
GROUP 2: DIGITAL PHOTOGRAPHY		
ART 137	*Web site Development for Artists and Graphic Designers (4)*	
ART 138	*Digital Imaging for Photographers and Production Artists (3)*	
ART 193	*Digital Imaging for CD-ROM Production (4)*	
	Total units	***24–26***

Recommended Electives:
For Group 1: *ART 116, 118, 119, 120, 130, 138, 151, 159, 197, 199, 201; HUM 112.*
For Group 2: *ART 120, 127, 130, 151, 157, 159; HUM 112.*

To earn an associate degree, additional General education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Certificate of Achievement
Graphic Applications

Career/Technical/(Major Code: 02574)

Designed for those students with no prior computer graphic design experience or who want to learn how to use the computer as a tool for graphic applications. Students will gain essential computer graphic skills necessary for today's entry-level positions in graphic design.

ART 159	*Graphic Design—Layout*	*3*
ART 161	*Graphic Design—Draw*	*3*
ART 192	*Introduction to Digital Imaging*	*3*
CL 120	*Computer Literacy*	*1*
	Total units	***10***

ART 100.
Drawing I
3 units

Grade only
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $5. Introduction to drawing including objective and subjective experiences. Exploration of two- and three-dimensional imagery. For art and nonart majors. The art major should take ART 100 and ART 101 concurrently if possible.
[D; CSU; UC; CAN-ART 8]

ART 100L.
Drawing Laboratory I
1 unit

Credit/No Credit only
Laboratory 3 hours
Offered: Variable
Intended to substantiate the skill development for students portfolios and encourage the use of materials methods, creative thinking, and problem solving introduced to the student in the ART 100. [D; CSU]

ART 101.
Design I
3 units

Grade only
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $5. Composition and two- and three-dimensional design principles. For art and nonart majors. Art majors should take ART 100 and 101 concurrently if possible.
[D; CSU; UC; CAN-ART 14]

ART 102.
Drawing II
3 units

Grade only
Prerequisite: *ART 100 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $5. Continuation of drawing concepts in ART 100 including advanced problems in aesthetics and visual concepts. [D; CSU; UC]

ART 102L.
Drawing Laboratory II
1 unit

Credit/No Credit only
Laboratory 3 hours
Offered: Variable
Intended to substantiate the skill development for students portfolios and encourage the use of materials methods, creative thinking, and problem solving introduced to the student in ART 100. [D; CSU]

ART 103.
Design II
3 units

Grade only
Recommended Preparation: *ART 101 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $10. Design principles applied to three-dimensional materials and methods. [D; CSU; UC; CAN-ART 16]

ART 104.
Introduction to Art
3 units

Lecture 3 hours
Offered: Fall, Spring
Designed to provide the student with a visual mode for interpreting experience including the skills needed for the intelligent judgment of painting, sculpture, and architecture and the humanistic priorities of a modern technological society. [D; CSU; UC]

ART 105.
Life Drawing I
3 units

Grade only
Prerequisite: *ART 100 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $5. Creative drawing from the model in a variety of media. [D; CSU; UC; CAN-ART 24]

ART 106.
Life Drawing II
3 units

Grade only
Prerequisite: *ART 105 or equivalent*
Recommended Preparation: *ART 100 or 101 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $5. Creative drawings from the model in a variety of media. [D; CSU; UC]

ART 107.
Painting I
3 units

Grade only
Recommended Preparation: *ART 100 and 101, or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $5. Painting activity centered around the study of color and structure. Emphasis is upon the command of materials, both traditional and experimental. [D; CSU; UC; CAN-ART 10]

ART 108.
Painting II
3 units

Grade only
Prerequisite: *ART 107 or equivalent*
Recommended Preparation: *ART 100 and 101, or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $5. Continuation of ART 107 with problems related to color and structure. Emphasis on the individual means of expression. [D; CSU; UC]

ART 110.
Sculpture I
3 units

Grade only
Recommended Preparation: *ART 100 or 101 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $10. Creative design in materials such as clay, wood, stone, plaster, plastics, and metal. Personal development of expression, content, and symbolism. [D: CSU; UC; CAN-ART 12]

ART 111.
Sculpture II
3 units

Grade only
Prerequisite: *ART 110 or equivalent*
Recommended Preparation: *ART 100 or 101 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $10. Advanced three-dimensional design in wood, clay, metal, stone, and plaster. Refinement of personal style, content, and symbolism. [D; CSU; UC]

ART 112.
Arts of Africa, Oceania, and Native America
3 units

Lecture 3 hours
Offered: Variable
Introduction to the arts of Sub-Saharan Africa, Oceania, and Native North America with a look at environmental, economic, social, political, religious, and philosophical issues that help to mold the aesthetics and art of small scale societies. The influences of non-Western art on the mainstream Western art world will also be discussed. [D; CSU; UC]

ART 113.
Art and Culture of Pre-Hispanic México
3 units

Lecture 3 hours
Offered: Fall, Spring
Survey of Mesoamerican art viewed within the context of economic, sociopolitical, religious, and philosophical systems to show how the worldview affected the art aesthetic. The influence of Mesoamerican art on contemporary Mexican artists will also be explored. [D; CSU; UC]

ART 116.
Printmaking I
3 units

Grade only
Recommended Preparation: *ART 100 or 101 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $10. Design and production of original prints utilizing a variety of materials and techniques including intaglio, etching, relief printing, calligraphy, embossing, and lino printing. [D; CSU; UC]

ART 117.
Printmaking II
3 units

Grade only
Prerequisite: *ART 116 or equivalent*
Recommended Preparation: *ART 100 or 101 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $10. Continuation of ART 116 with an introduction to a variety of color printing and related registration problems. A more advanced exploration of contemporary experimental techniques and imagery. [D; CSU; UC]

ART 118.
Photography Portfolio Laboratory
1 unit

Credit/No Credit only
Corequisite: *ART 121*
Laboratory 3 hours
Offered: Fall, Spring
Open lab designed for photography students to practice and review darkroom techniques, camera usage, and exposure control. [D; CSU]

ART 119.
Photography Portfolio Laboratory II
1 unit

Credit/No Credit only
Corequisite: *ART 122 or 126 or 138 or 192*
Laboratory 3 hours
Offered: Fall, Spring
Open lab designed for intermediate photography students to practice and review more advanced methods of exposure control, darkroom techniques, and presentation. [D; CSU]

ART 120.
Photography Portfolio Laboratory III
1 unit

Credit/No Credit only
Corequisite: *ART 123 or 127*
Laboratory 3 hours
Offered: Fall, Spring
Open lab designed for advanced photography students to work on portfolio preparation and presentation. [D; CSU]

ART 121.
Basic Photography
3 units

Grade only
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $15. Photography as a creative art with additional concentration on the technical aspects of the media. Instruction in the use of various types of cameras, light meters, lenses, chemicals, and darkroom equipment.
[D; CSU; UC; CAN-ART 18]

ART 122.
Intermediate Photography
3 units

Grade only
Prerequisite: *ART 121 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $15. Creative assignments in a variety of photographic styles. A continuation of the technical, aesthetic, and conceptual information covered in ART 121. Advanced techniques of exposure control and printing. [D; CSU; UC]

ART 123.
Advanced Photography
3 units

Grade only
Prerequisite: *ART 122 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $15. Advanced problem solving in the photographic medium with the production of an individual student portfolio. [D; CSU]

ART 126.
Beginning Color Photography
3 units

Grade only
Prerequisite: *ART 121 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $15. Introductory projects in color photography as a creative medium with emphasis on color printing and color theory.
[D; CSU]

ART 127.
Advanced Color Photography
3 units

Grade only
Prerequisite: *ART 126 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $15. Advanced study and projects in color photography emphasizing the use of color as a means of creative expression. [D; CSU]

ART 128.
Multimedia Photography
3 units

Recommended Preparation: *ART 121 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Study of photography in multimedia with emphasis on the history, design production, and evaluation of multi-image and sound presentation. Story boarding, graphics, and basic sound recording techniques included.
(Same as TELE 128.) [D; CSU]

ART 129.
Asian Art and Culture
3 units

Lecture 3 hours
Offered: Variable
Introduction to the art of China, Japan, India, Southeast Asia, and Indonesia viewed within the social, political, religious, and philosophical framework that helps to mold Eastern sensibilities. The influences of Eastern art on mainstream art of the Western world will also be addressed. [D; CSU; UC]

ART 130.
History of Film as Art
3 units

Lecture 3 hours
Offered: Fall, Spring
Appreciative survey of cinema with emphasis on the chronological development of styles and techniques within the medium. Aesthetic and historical influences on cinema, as well as the effects of cinema upon society.
(Same as TELE 113.) [D; CSU; UC]

ART 131.
Introduction to Video and Film Production
3 units

Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Basic instruction to camera operation, editing, and sound production techniques. Introduction to significant examples of filmmaking and video as a creative stimulus and a basis for the development of critical judgment.
(Same as TELE 131.) [D; CSU; UC]

ART 132.
Intermediate Video and Film Production
3 units

Prerequisite: *ART/TELE 131 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Use of film and videotape as a means of creative expression with emphasis on advanced photographic, sound recording, and editing techniques. Script writing, directing, producing, and acting will be included. (Same as TELE 132.)
[D; CSU; UC]

ART 136.
Multimedia Development (Director)
4 units

Lecture 3 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Hands-on use and manipulation of Director to develop computer-based multimedia authoring systems to plan and produce multimedia-based application composed of integrated text, audio, graphics, and digital video. (Same as CIS 159A.) [D; CSU]

ART 137.
Web Site Development for Artists and Graphic Designers
4 units

Prerequisite: *ART 192 or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Fall, Spring
Fee: $10. Comprehensive introduction to Web page development with an emphasis on the information design and graphic design strategies necessary for the creation of successful user interfaces. The course teaches the use of Macromedia's Dreamweaver software for the construction of Web sites. Topics include preparing images for the Web, page layout, and working with type and animation. [D; CSU]

ART 138.
Digital Imaging for Photographers and Production Artists
3 units

Prerequisite: *ART 192 or equivalent*
Recommended Preparation: *Advanced skills on Macintosh computers, Adobe Photoshop, and advanced photographic skills*
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Fee: $10. Presents advanced techniques in the use of Adobe Photoshop with an emphasis on the production of photographic images. Students will be introduced to system calibration, color theory and the use of the zone system for precise control of digital output. Students will apply these concepts to the production of a portfolio of digital photographs. [D; CSU]

ART 139.
Photographing Baja California
3 units

Lecture 2 hours, laboratory 4 hours
Offered: Variable
Photography course with assignments focusing on the literature, culture, and natural history of Baja California. Photographs will be presented digitally. Instruction will include camera use, photographic expression, and introduction to computer manipulation of digital images. Examples for assignments will be drawn from Mexican photographers. [D; CSU]

ART 140.
The House and Its Environment
3 units

Lecture 3 hours
Offered: Variable
Introduction to architectural living environments, interior design, landscape, and city planning as aspects of man's physical and aesthetic environment. [D; CSU]

ART 148A.
Airbrush I
3 units

Recommended Preparation: *ART 100, 101, and 107, or equivalent*
Offered: Fall, Spring
Lecture 2 hours, laboratory 4 hours
Fee: $5. Provides the student of little or no airbrush experience with comprehensive instruction and application of basic airbrush. Students will disassemble and reassemble the airbrush; all adjustments and controls will be learned through the appropriate terminology as the same terminology displayed in Photoshop and Illustrator software. (Formerly ART 148.) [D; CSU]

ART 148B.
Airbrush II
3 units

Prerequisite: *ART 148A or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Fee: $5. Fundamentals of airbrushing with intermediate demands on bolder compositions and novel texture synthesis for a deeper understanding of the dynamics of the airbrush process. Focus on assigned still-life projects with dynamic lighting, value grouping, and varied color-gradient challenges. (Formerly ART 295M.) [D; CSU]

ART 148C.
Airbrush III
3 units

Prerequisite: *ART 148B or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Fee: $5. Advanced level of airbrushing involving compositional principles of a complex order. Explores stencil management and a wider use of color-gradient combinations. Focus on planning and completing of an airbrush art piece to reflect the tenets of a particular historical art style interpreted through personal vision. (Formerly ART 295N.) [D; CSU]

ART 148D.
Airbrush IV
3 units

Prerequisite: *ART 148C or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Fee: $5. Designed to increase student autonomy in airbrush at a more demanding pace. Provides techniques to allow additional exploration and mastery of the airbrush. Emphasis on deeper personal level of connectedness between form and content within a self-directed and challenging environment. [D; CSU]

ART 149.
Women in Western Art History, 1550–Present
3 units

Grade only
Lecture 3 hours
Offered: Variable
Survey of women artists in Western art history from the Renaissance to the present with emphasis on the emergence of the female artist including her education, exhibition record, styles, techniques, subject matter, and social circumstances. Includes an examination of the major art periods, theories, criticism, and feminist criticism. [D; CSU; UC]

ART 150.
Appreciation and History of Art I
3 units

Lecture 3 hours
Offered: Fall, Spring
Survey of the development of art in painting, sculpture, architecture, and handicrafts from the dawn of art to the Renaissance.
[D; CSU; UC; CAN-ART 2;
ART 150 + ART 151 = CAN ART SEQ A]

ART 151.
Appreciation and History of Art II
3 units

Lecture 3 hours
Offered: Fall, Spring
The period from the Renaissance through the modern school. [D; CSU; UC-ART 4;
ART 150 + ART 151 = CAN ART SEQ A]

ART 156.
History of Photography
3 units

Lecture 3 hours
Offered: Spring
Survey of the history of photography from its invention to its continued use as an art and communication form. Emphasis on aesthetic and historical influences on photography, as well as photography's effects upon society and culture. [D; CSU; UC]

ART 157.
Nineteenth and Twentieth Century Art
3 units

Lecture 3 hours
Offered: Variable
Art of the nineteenth and twentieth centuries from Neoclassicism to contemporary trends. [D; CSU; UC]

ART 159.
Graphic Design—Layout
3 units

Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $10. Introductory course that emphasizes elements and principles of design as they relate to the publication layout. (ROP option) [D; CSU]

ART 160.
Graphic Design—Typography
3 units

Grade only
Prerequisite: *ART 159 and ART/TELE 161, or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Fee: $10. Creative and practical use of the alphabet in graphic communication. Exploration of typographic form through traditional and Macintosh graphics applications. [D; CSU]

ART 161.
Graphic Design—Draw
3 units

Grade only
Prerequisite: *ART 159 or equivalent*
Recommended Preparation: *ART 100 or 101 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $10. Application of basic design principles, skills, and concepts related to the combination of words and images in graphic communications. (ROP option) (Same as TELE 161.) [D; CSU]

ART 164.
Graphic Design—Production
3 units

Grade only
Prerequisite: *ART 159 and ART/TELE 161, or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Fee: $10. Preparation of camera-ready art for printing using traditional and Macintosh graphics applications. [D; CSU]

ART 169.
Gallery Exhibition Design
3 units

Grade only
Lecture 1 hour, laboratory 6 hours
The theory, instruction, and practice of installing art exhibitions. Includes instruction and experience in designing shows, publicity, installation, and proper care and handling of works of art. [D; CSU]

ART 170.
Beginning Ceramics
3 units

Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $20. Introduction to design and construction of clay forms including use of potter's wheel. Emphasis on form and its enhancement through a variety of glazing and firing processes. [D; CSU; UC; CAN-ART 6]

ART 171.
Advanced Ceramics I
3 units

Prerequisite: *ART 170 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $20. Emphasis on further development of thrown and sculptural forms, glaze mixing, and kiln loading. [D; CSU; UC]

ART 172.
Advanced Ceramics II
3 units

Prerequisite: *ART 171 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $20. Advanced problems in clay media with greater emphasis on individual solutions. [D; CSU; UC]

ART 173A.
Figural Sculpture in Clay I
3 units

Prerequisite: *ART 105, 110, or 170, or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Spring
Fee: $10. Realistic and expressive rendering of the human figure in clay media. [D; CSU; UC]

ART 173B.
Figural Sculpture in Clay II
3 units

Prerequisite: *ART 173A or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Spring
Fee: $10. Continued realistic and expressive modeling of the human figure in clay media. [D; CSU; UC]

ART 177.
Functional Wheel Pottery I
3 units

Prerequisite: *ART 170 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $20. Concentration on the production of functional pottery made primarily on the potter's wheel. Instruction in surface decoration, basic glaze mixing, and mold making. [D; CSU]

ART 178.
Functional Wheel Pottery II
3 units

Prerequisite: *ART 177 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $20. Continued development of design and technical skills as applied to functional pottery. [D; CSU]

ART 182.
Design in Wood I
3 units

Grade only
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $15. Exploration of the uses of wood as a creative medium. Projects include functional and non-functional forms with instruction in woodworking techniques and use of power tools. [D; CSU]

ART 183.
Design In Wood II
3 units

Grade only
Prerequisite: *ART 182 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $15. Exploration of design through the creation of furniture forms. [D; CSU]

ART 185A.
Jewelry and Metalwork I
3 units

Grade only
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $15. Introduction to the fundamentals of design, construction, and fabrication of jewelry and metalwork. [D; CSU]

ART 185B.
Jewelry and Metalwork II
3 units

Grade only
Prerequisite: *ART 185A or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $15. Continues the instruction in the fundamentals of design, construction, and fabrication of jewelry and metalwork. [D; CSU]

ART 185C.
Jewelry and Metalwork III
3 units

Grade only
Prerequisite: *ART 185B or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $15. Continues the instruction in construction, fabrication, and an intermediate level of technical methodology with an emphasis on increased technical competence. [D; CSU]

ART 185D.
Jewelry and Metalwork IV
3 units

Grade only
Prerequisite: *ART 185C or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $15. Continues the instruction in technical methodology of jewelry and metalwork and encourages a more self-directed exploration of personal design statements. [D; CSU]

ART 189.
Explorations in Drawing
1 unit

Lecture 1 hour, laboratory 1 hour
Offered: Variable
Fee: $15. Explorations in drawing in the field in various regions of the world. Emphasis on basic drawing concepts, tools, and creative interaction and adaptation to the environment and subjects encountered. Field trips required. [D; CSU]

ART 192.
Introduction to Digital Imaging
3 units

Recommended Preparation: *ART 121 or 159 or equivalent; experience with Macintosh computers*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $10. Designed for graphic artists and photographers. Covers basic instruction in the electronic operation of photographic imagery, composites, and collages. Instruction will include basic training on Macintosh computers using Adobe Photoshop software, film and flatbed scanners, black and white, and color printers. (ROP option) [D; CSU; UC]

ART 193.
Digital Imaging for CD-ROM Production
4 units

Prerequisite: *ART 192 or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Fall, Spring
Fee: $10. Studio course offering hands-on experience with the technologies defining multimedia including digital imaging, digital audio, and digital video. Covers the theory and practice of CD-ROM production and the stages of multimedia production from conception to finished product. Emphasis on screen and interface design. Students will produce an interactive CD-ROM. [D; CSU]

ART 197.
Portfolio Development for Visual Artists
3 units

Lecture 2 hours, laboratory 4 hours
Offered: Variable
Designed to allow third semester art majors to develop both a traditional and digital portfolio of their work. Includes contemporary issues in art research on career opportunities, galleries, art schools, methods of documentation, and resume writing. Includes visits to local museums and art galleries. [D; CSU]

ART 198.
Multidisciplinary Perspectives in Baja Studies: Web Design
4 units

Grade only
Lecture 3 hours, laboratory 4 hours
Offered: Variable
Students will use knowledge gained in the Baja Studies program to collaboratively design a Web site that examines a particular social or ecological issue pertaining to Baja California from a multidisciplinary perspective. The course will include instruction in HTML, Web design, and the group process. [D; CSU]

ART 199A.
Portrait Photography I
3 units

Prerequisite: *ART 121 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Fee: $15. Introductory course in studio, environmental, and fashion photography; equipment including camera formats, light meters, lens, film, and studio/outdoor lighting for portraits. Includes black and white and color films. The physical, psychological, and compositional aspects and characteristics of different portrait styles will be exposed. (Formerly ART 199.) [D; CSU]

ART 199B.
Portrait Photography II
3 units

Prerequisite: *ART 199A or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Refine the basic portraiture skills learned in ART 199A and learn more complex studio lighting techniques. Advanced level of studio sets, stroboscopic lighting, metering systems, exposure methods, film processing, and various output techniques including digital. Technical skills linked with aesthetic and conceptual issues relevant to portraiture. [D; CSU]

ART 200.
New Genre: Installation and Site-Specific Art
3 units

Grade only
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Designed as an in-depth study of new genres in contemporary art. Through research on the Internet, readings, screening, and field trips, students will examine the history of installation and site-specific art. Students will create individual and collaborative installation artwork. [D; CSU]

ART 201.
Photographic Concepts and Field Studies Application
3 units

Lecture 2.5 hours, laboratory 2 hours
Offered: Variable
Basic concepts of photography with emphasis on documenting and recording the environment, indigenous people, and animals, as well as the visual images of the social, cultural, and political uniqueness of the country. Hands-on photographic field trip and field studies. [D; CSU]

ART 295.
Selected Topics in Art
1–3 units

Offered: Variable
Permits students to study relevant topics within the field. The specific objectives and methods of instruction to be determined individually for each course offered under this course designation. [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

ART 299. Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of art of particular interest to the student and not included in regular courses of the college. [D; CSU; * UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Asian-American Studies

School of Social Sciences and International Studies

■ Dean

Viara Giraffe, Ph.D.
Office 470K
619-482-6582

■ Faculty

Felix Tuyay, M.A.

■ Department Chair

Gary A. Neely, M.A.

General Description

Asian-American Studies examines the needs, conditions and contributions of Japanese, Chinese, Filipino, Korean, and Asian Indians to the United States. This department explores the hitherto neglected aspects of the social, political, economic, and cultural factors of Asians in America. In doing so, the program addresses common experiences of immigration, race relations, community development, traditional values, U.S. policies, and issues of adoption within a complex society.

Career Options

The following list is a sample of the many career options available for the Asian-American Studies major. A few of these require an associate degree, most require a baccalaureate degree, and some require a graduate-level degree: lawyer, high school or college instructor, researcher, international trade specialist, foreign service officer, business administrator, historian, politician, political scientist, philosopher, writer, publisher, librarian, library technician, economist, cultural arts director, social service worker, business manager, consultant, counselor, and urbanologist.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Asian-American Studies	*01202*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Arts Degree
Asian-American Studies

Transfer Preparation* (Major Code: 01202)

The associate in arts degree is designed to emphasize history from an Asian-American perspective, the development and role of Asian-American culture today, and the Asian American in the political system.

Asian-American History (Asian 112, 113) fulfills the American Institutions requirement at SDSU and most other campuses of the California State Universities and college system.

ASIA 112	*Asian-American History I*	*3*
ASIA 113	*Asian-American History II*	*3*
HIST 106	*World History I*	*3*
HIST 107	*World History II*	*3*
SOC 112	*Pilipino-American Culture*	*3*
	Foreign Language	*6–10*
	Total units	***21–25***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Asian-American Studies Courses

ASIA 112.
Asian-American History I
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Covers the history of Asian Americans in the social, political, economic, and cultural development of the United States from the colonial era to the annexation of California in 1848. The course will emphasize the Filipino, Japanese, Chinese, Korean, Asian-Indian, and Southeast Asian experiences. Includes study of the United States Constitution. (Partially fulfills American Institutions requirement at CSU.) (Same as HIST 112.) [D; CSU; UC]

ASIA 113.
Asian-American History II
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
The history of Asian Americans in the United States from 1846 to the present. Major themes include the study of economic developments, occupational patterns, anti-Asian movements, inter-ethnic exchanges, gender, and intergenerational issues. Includes a study of the Constitution of California. (Partially fulfills American Institutions requirement at CSU.) (Same as HIST 113.) [D; CSU; UC]

ASIA 114.
Filipino-American History
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Survey of the economic, political, and social history of Filipinos in the Philippines and in the United States. Focus on the effects of colonization from Spain, United States, and Japan. Filipino-American history will emphasize the major waves of migration and youth, intergenerational, women, gender, and political issues. (Same as HIST 114.) [D; CSU; UC]

ASIA 115.
Filipino-American Culture
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
The roots of Filipino-American culture and role in American society today. Focus on social, political, and economic influences, as well as problems and progress that affect Filipino-American society. Emphasis on family structure, social behavior, family life, language, education, and religion. (Same as SOC 115.) [D; CSU; UC]

ASIA 295.
Selected Topics in Asian-American Studies
1–3 units

Offered: Variable
Permits students to study relevant topics within the field of Asian-American studies. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

ASIA 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of Asian-American studies which is of particular interest to the student and not included in regular courses of the college. [D; CSU; * UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Astronomy

School of Mathematics, Science, and Engineering

■ Dean

Kathy Tyner, M.S.
Office 345
619-482-6459

■ Faculty

Fernando Lopez-Lopez, Ph.D.
Grant J. Miller, M.S.
Jeff Veal, Ph.D.

■ Department Chair

Grant J. Miller, M.S.

General Description

Astronomy, the oldest science, is a physical science that has played an important function in the development of modern science. This discipline explores the universe at large and the physical processes that govern it. Astronomers have historically investigated the laws, physical properties and behavior, chemistry, and composition of astronomical phenomena. Modern astronomers use advanced technology to explain and understand planets, comets, stars, nebulae, galaxies, quasars, pulsars, black holes, and the evolution of the universe.

Career Options

The following list is a sample of the many career options available to the astronomy major. A few require an associate degree, some require a baccalaureate degree, and most require a graduate-level degree: high school or college instructor, space science technician, astronaut, astrophysicist, astronomer, observatory technician, telescope operator, scientific computer programmer, space engineer, mathematician, and positions in planetaria or allied professions of business and industry.

Degree/Certificate Options

	Major Code
Associate in Science Degree: Transfer Preparation	
Astronomy	*01500*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Science Degree

Astronomy

Transfer Preparation * (Major Code: 01500)

Some areas of study in astronomy include the sun, the solar system, stars and stellar evolution, the Milky Way, galaxies, and cosmology. Astronomers work in space industries, for government agencies, and for educational institutions as professors and researchers.

Astronomy curricula stress very strong initial study in mathematics, physics, and computer science. Students are encouraged to start with mathematics and physics in the order listed below since these courses are prerequisites for the subsequent courses.

FIRST SEMESTER		
MATH 250	*Analytic Geometry and Calculus I*	*5*
SECOND SEMESTER		
MATH 251	*Analytic Geometry and Calculus II*	*4*
PHYS 270	*Principles of Physics I*	*3*
PHYS 271	*Principles of Physics Laboratory I*	*1*
THIRD SEMESTER		
ASTR 205	*Elementary Astrophysics*	*3*
MATH 252	*Analytic Geometry and Calculus III*	*4*
PHYS 272	*Principles of Physics II*	*4*
FOURTH SEMESTER		
PHYS 274	*Principles of Physics III*	*4*
	Total units	***28***

Recommended Electives: *CHEM 200.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Astronomy Courses

ASTR 100.
Principles of Astronomy
3 units

Recommended Preparation: *MATH 45 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent; ENGL 54 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Introduction to the concepts and methods developed in astronomy to describe and understand the physical nature and processes of astronomical phenomena. Topics include the sky, the solar system, stars and stellar evolution, nebulae, the Milky Way Galaxy, galaxies, and cosmology. [D; CSU; UC]

ASTR 109.
Astronomy Laboratory
1 unit

Corequisite: *ASTR 100 (may be taken previously)*
Recommended Preparation: *MATH 45 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Laboratory 3 hours
Offered: Fall, Spring
Demonstration of astronomical principles through observation, simulation, and analysis of data. Topics may include the sky, the solar system, stars, nebulae, galaxies, and cosmology. [D; CSU; UC]

ASTR 120.
Solar System Astronomy
3 units

Recommended Preparation: *MATH 45 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent; ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Investigates the origin of the Sun and planets and how they change. Analyzes the physical properties of planets, moons, rings, comets, and asteroids. Surveys the history of space exploration. Topics include: solar system formation and evolution; comparative planetology; recent discoveries regarding our solar system and planets around distant stars. [D; CSU; UC]

ASTR 150.
Discovery of the Cosmos
3 units

Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Chronological exploration of the major astronomical observations and discoveries-from ancient times to the mid-twentieth century—that have shaped our current understanding of the universe. Topics include: constellations and astronomical lore; the sky; ancient cosmologies; heliocentrism; pre- and early-telescopic discoveries; stars; nebulae; the Galaxy; galaxies; the expanding universe. [D; CSU; UC]

ASTR 170.
The Radical Universe
3 units

Recommended Preparation: *MATH 45 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent; ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall
Modern advances in human understanding of the physical nature of the universe—relativity, quantum mechanics, and cosmology—show that the universe often radically defies intuition. Physical behavior of the universe extends far beyond expectations derived from daily experiences. Topics include: black holes, curved space-time, origin, and fate of the universe. [D; CSU; UC]

ASTR 180.
Life in the Universe
3 units

Recommended Preparation: *MATH 45 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent; ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Explores how the universe evolved from a mix of subatomic particles into intelligent life itself. Examines the probability that extraterrestrial intelligence exists and the possibility of communication. Topics include: origin and evolution of universe; birth, aging, and deaths of stars; chemical enrichment of the galaxy; comets; and origin of life. [D; CSU; UC]

ASTR 205.
Elementary Astrophysics
3 units

Prerequisite: *PHYS 270 or equivalent*
Lecture 3 hours
Offered: Variable
Modern observational advances and theoretical results concerning the physical properties and processes in stars and their relationship to stellar evolution. Topics include interstellar nebulae, stellar associations, the Milky Way, galaxies, active galaxies and quasars, and modern cosmology. [D; CSU; UC]

ASTR 295.
Selected Topics in Astronomy
1–3 units

Offered: Variable
Study relevant topics within the field of astronomy. The students and the instructor throughout the semester will determine the specific objectives, methods of instruction, and evaluation. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

ASTR 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
A special study course for individual observations throughout one semester under direction of instructor. [D; CSU; * UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Automotive Technology

School of Technology and Human Services

■ Dean

Patricia Axsom, M.S.
Office 570B
619-482-6460

■ Department Chair

Corey Breininger, M.A. Ed.

General Description

Automotive technology is a study of the complete automobile divided into a subsystem approach. This program of study explores and instructs students in the operation of all automotive systems. Processes are emphasized including problem solving, repair procedures, service techniques, diagnostic analysis, and shop safety. All automotive system instruction meets Automotive Service Excellence (ASE) guidelines and National Automotive Technicians Education Foundation (NATEF) certification.

Career Options

The following list is a sample of the many career options for the automotive major. Most require a certificate or associate degree. Automotive Service Excellence Certification will allow entry-level employment as: mechanic, automotive technician, service station attendant, repair shop operator, automotive engineer, automotive salesperson or dealer, vocational teacher, automotive designer, race car driver or mechanic, supplier or distributor, and positions in allied professions of business, marketing, and industry.

Degree/Certificate Options

	Major Code
Associate in Science Degree: Career /Technical	
Automotive Technology	*02870*
Small Engine and Service Repair	*02650*
Certificates of Achievement	
Advanced Emission Specialist	*02766*
Automotive Brake and Suspension Systems (ABS and Four-Wheel Alignment)	*02750*
Automotive Performance Systems	*02765*
Automotive Technology	*02871*
Small Engine and Service Repair	*02651*

Areas of Preparation for ASE Certification exam:

ASE Brakes
ASE Suspension
ASE Engine Performance
ASE Heating, Clg. and Air Conditioning
ASE Electrical Systems
ASE Engine Repair
ASE Automotive Transmissions
ASE Manual Transmission

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Science Degree
Automotive Technology

Career/Technical (Major Code: 02870)

Based on the National Institute for Automotive Service Excellence Certification Program (ASE). Courses fulfill the needs of beginning and advanced students and those in the field who require upgrading. Prepares students for the National ASE Certification exams.

FIRST SEMESTER

AT 101	*Introduction to Basic Automotive Service*	*3*
AT 102	*Automotive Science and Basic Mechanics*	*3*
AT 109	*Automotive Braking Systems*	*3*
AT 110	*Automotive Suspension, Alignment and Steering*	*3*

SECOND SEMESTER

AT 120	*Engine Performance I*	*3*
AT 130	*Automotive Electrical Systems*	*3*
AT 131	*Automotive Heating and Cooling Air Conditioning*	*3*
AT 140	*Engine Repair*	*3*

THIRD SEMESTER

AT 220	*Engine Performance II*	*3*
AT 230	*Automotive Electronics*	*3*
AT 234	*Auto. Transmissions and Transaxles*	*3*
AT 236	*Manual Transmission, Transaxles, and Final Drives*	*3*
AT 242	*Clean Air Car*	*3*
AT 244	*Computerized Engine Controls*	*3*
	Total units	***42***

Recommended Electives: *AT 246, 290, 293.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Small Engine and Service Repair

Career/Technical (Major Code: 02650)

Designed for the student seeking entry-level employment in a variety of small engine service and repair shops. Provides the in-depth technical skill training standards required by industry. Includes service repair of small engines, industrial engines, chain saws, outboard/marine, and motorcycles. Intensive, hands-on courses with practical experience in simulated shop conditions.

FIRST SEMESTER

AT 102	*Automotive Science and Basic Mechanics*	*3*
AT 145	*Small Engine Repair—ROP*	*2*
AT 146	*Industrial Engine and Repair—ROP*	*2*
LNT 72	*Horticultural Equipment Care and Operations*	*2*

SECOND SEMESTER

AT 147	*Advanced Industrial Engine and Repair—ROP*	*2*
AT 148	*Small Motorcycle Engine Repair—ROP*	*2*
AT 149	*Large Motorcycle Engine Repair—ROP*	*2*
AT 150	*Advanced Motorcycle Engine Repair—ROP*	*2*

THIRD SEMESTER

AT 151	*Small Outboard Marine Engine Repair—ROP*	*2*
AT 152	*Large Outboard Marine Engine Repair—ROP*	*2*
AT 153	*Outboard Marine Engine Repair—ROP*	*2*

FOURTH SEMESTER

Select 9 units from electives	*9*
Total units	***32***

Electives: *AT 101, 109, 130, 140, 230, 290-293, 295.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Certificates of Achievement

Advanced Emission Specialist

Career/Technical (Major Code: 02766)

Designed to prepare students for the Advanced Emission Specialist Technician license that allows an individual to inspect, diagnose, adjust, repair, and certify emission control systems on vehicles subject to the smog check program at licensed stations in all areas of the state.

FIRST SEMESTER

AT 101	*Introduction and Basic Auto Service*	*3*
AT 102	*Auto Science and Basic Mechanics*	*3*
AT 120	*Engine Performance I*	*3*
AT 130	*Automotive Electrical Systems*	*3*

SECOND SEMESTER

AT 140	*Engine Repair*	*3*
AT 220	*Engine Performance II*	*3*
AT 230	*Automotive Electronics*	*3*
AT 244	*Computerized Engine Controls*	*3*

THIRD SEMESTER

AT 242	*Clean Air Car*	*3*
AT 245	*Advanced Automotive Emission Systems*	*3*
AT 246	*Ford EEC-IV Training Program*	*2.5*
	Total units	***32.5***

Automotive Brake and Suspension Systems

(ABS And Four-Wheel Alignment)

Career/Technical (Major Code: 02750)

AT 101	*Introduction and Basic Automotive Service*	*3*
AT 102	*Automotive Science and Basic Mechanics*	*3*
AT 109	*Automotive Braking Systems*	*3*
AT 110	*Automotive Suspension, Alignment and Steering*	*3*
	Total units	***12***

Automotive Performance Systems

Career/Technical (Major Code: 02765)

AT 101	*Introduction and Basic Automotive Service*	*3*
AT 102	*Automotive Science and Basic Mechanics*	*3*
AT 120	*Engine Performance I*	*3*
AT 220	*Engine Performance II*	*3*
AT 242	*Clean Air Car*	*3*
AT 244	*Computerized Engine Controls*	*3*
	Total units	***18***

Automotive Technology

Career/Technical (Major Code: 02871)

FIRST SEMESTER

AT 101	*Introduction to Basic Automotive Service*	*3*
AT 102	*Automotive Science and Basic Mechanics*	*3*
AT 109	*Automotive Braking Systems*	*3*
AT 110	*Automotive Suspension, Alignment and Steering*	*3*

SECOND SEMESTER

AT 120	*Engine Performance I*	*3*
AT 130	*Automotive Electrical Systems*	*3*
AT 131	*Automotive Heating and Cooling Air Conditioning*	*3*
AT 140	*Engine Repair*	*3*

THIRD SEMESTER

AT 220	*Engine Performance II*	*3*
AT 230	*Automotive Electronics*	*3*
AT 234	*Auto. Transmissions and Transaxles*	*3*
AT 236	*Manual Transmission, Transaxles, and Final Drives*	*3*
AT 242	*Clean Air Car*	*3*
AT 244	*Computerized Engine Controls*	*3*
	Total units	***42***

Recommended Electives: *AT 246, 290, 293.*

ASE CERTIFICATION AREAS:

ASE Brakes Certification	*AT 109*
ASE Suspension Certification	*AT 110*
ASE Engine Perf. Certification	*AT 120/AT 220*
ASE Automotive Heating and Cooling Air Conditioning Certification	*AT 131*
ASE Electrical Systems Certification	*AT 130/AT 230*
ASE Engine Repair Certification	*AT 140*
ASE Automotive Transmissions Certification	*AT 234*
ASE Manual Trans. Certification	*AT 236*

Certificates of Course Achievement are offered in the following areas: *Clean Air Car AT 242 and Computerized Engine Controls AT 244.*

Small Engine and Service Repair

Career/Technical (Major Code: 02651)

FIRST SEMESTER

AT 102	*Automotive Science and Basic Mechanics*	*3*
AT 145	*Small Engine Repair—ROP*	*2*
AT 146	*Industrial Engine and Repair—ROP*	*2*
LNT 72	*Horticultural Equipment Care and Operations*	*2*

SECOND SEMESTER

AT 147	*Advanced Industrial Engine and Repair—ROP*	*2*
AT 148	*Small Motorcycle Engine Repair—ROP*	*2*
AT 149	*Large Motorcycle Engine Repair—ROP*	*2*
AT 150	*Advanced Motorcycle Engine Repair—ROP*	*2*

THIRD SEMESTER

AT 151	*Small Outboard Marine Engine Repair—ROP*	*2*
AT 152	*Large Outboard Marine Engine Repair—ROP*	*2*
AT 153	*Outboard Marine Engine Repair—ROP*	*2*

FOURTH SEMESTER

Select 9 units from electives	*9*
Total units	***32***

Electives: *AT 101, 109, 130, 140, 230, 290–293, 295.*

Automotive Technology Courses

AT 101.
Introduction and Basic Automotive Service
3 units

Grade only
Recommended Preparation: *AT 102, 109, and 110, or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Fee: $13. Introductory course with a laboratory for all automotive enthusiasts. The course details preventative maintenance and fluid replacement service. Also covering engine service, drive line, function, electrical system diagnosis and repair. General safety practice defined for wheels, tires, brakes, and suspension service. [D; CSU]

AT 102.
Automotive Science and Basic Mechanics
3 units

Recommended Preparation: *AT 101, 109, and 110, or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Fee: $13. Introductory course with a laboratory for all interested automotive operators. This course blends science and automotive service with a mathematics review for the technician. The course covers the chemistry of combustion, the physics of engines, and automotive emissions related to the environmental science of air pollution. [D; CSU]

AT 109.
Automotive Braking Systems
3 units

Grade only
Recommended Preparation: *AT 101, 102, and 110, or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall
Fee: $13. Theory and principles of brake systems, inspection and repair. Emphasis on practical experience with drum brakes, disc brakes, power brakes, and wheel bearing service and repair. (Preparation for the California State Brake License and National Automotive Service Excellence Certificate.) [D; CSU]

AT 110.
Automotive Suspension, Alignment, and Steering
3 units

Grade only
Recommended Preparation: *AT 101 and 102, or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall
Fee: $13. Theory and operation of automotive steering and suspension systems. Inspections and repairs are made to all types of suspension systems. Settings are made using a computerized four-wheel alignment rack. Includes the preparation for the Automotive Service Excellence Exam. [D; CSU]

AT 120.
Engine Performance I
3 units

Grade only
Recommended Preparation: *AT 101 and 102, or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Spring
Fee: $13. Engine performance on vehicles in relation to the ignition system function and fuel system delivery. Emphasis on use of ignition scope and fuel system diagnostic equipment. Exhaust out gas analyzer function detailed. Initial phase of preparation for the Automotive Service Excellence Exam Certification in Engine Performance (A-8). [D; CSU]

AT 130.
Automotive Electrical Systems
3 units

Grade only
Prerequisite: *AT 101 and 102, or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Spring
Theory and operation of charging, starting, lighting, and accessory systems. Service and replacement of components using diagnostic tools and equipment. Emphasis on mechanical operated devices. Includes the preparation for Automotive Service Excellence Exam (A-6). [D; CSU]

AT 131.
Automotive Heating and Cooling Air Conditioning
3 units

Grade only
Recommended Preparation: *AT 101, 102, and 130, or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Spring
Fee: $13. Theory and operation of automotive heating, cooling, and air conditioning systems. Service, diagnosis, and repair will be accomplished using state-of-the-art equipment. Includes preparation for the Automotive Service Excellence (ASE), Heating and Air Conditioning Exam (A-7), and Refrigerant Handler Exam and Certification. [D; CSU]

AT 140.
Engine Repair
3 units

Grade only
Recommended Preparation: *AT 101 and 102, or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Spring
Fee: $13. Theory, operation, and repair of automotive engines. Chassis diagnosis and repair is emphasized with engine disassembly and assembly covered. Includes preparation for the Automotive Service Excellence Exam (A-1). [D; CSU]

AT 145.
Small Engine Repair
2 units

Lecture 1 hour, laboratory 2 hours
Offered: Variable
Covers basic maintenance and repair of fuel systems, pull starting systems, air cooling systems and blade sharpening techniques. Emphasis on maintaining two-cycle engines. (ROP option) [D; CSU]

AT 146.
Industrial Engine and Repair
2 units

Lecture 1 hour, laboratory 2 hours
Offered: Variable
Covers basic maintenance operations and repair of fuel, electrical, and starting systems. Emphasis on four-cycle engines. (ROP option) [D; CSU]

AT 147.
Advanced Industrial Engine and Repair
2 units

Recommended Preparation: *AT 145 and 146, or equivalent*
Lecture 1 hour, laboratory 2 hours
Offered: Variable
Designed to prepare the student for entry-level employment as an industrial engine mechanic. Provides lecture and shop experience in advanced repair techniques, including the overhaul of engines and transmissions. (ROP option) [D; CSU]

AT 148.
Small Motorcycle Engine Repair
2 units

Lecture 1 hour, laboratory 2 hours
Offered: Variable
Emphasizes two-cycle dirt and off-road motorcycles. Covers basic maintenance and repair of fuel, electrical, ignition, air-cooled and kick start systems. (ROP option) [D; CSU]

AT 149.
Large Motorcycle Engine Repair
2 units

Lecture 1 hour, laboratory 2 hours
Offered: Variable
Covers basic maintenance and repair of fuel, electrical, ignition, transmission, and water-type cooling systems. Emphasis on four-cycle motorcycle engines. (ROP option) [D; CSU]

AT 150.
Advanced Motorcycle Engine Repair
2 units

Prerequisite: *AT 148 and 149, or equivalent*
Lecture 1 hour, laboratory 2 hours
Offered: Variable
Designed to prepare the student for entry-level employment as a motorcycle engine mechanic. Provides lecture and shop experience in advanced repair techniques, including the overhaul of engines and transmissions. (ROP option) [D; CSU]

AT 151.
Small Outboard Marine Engine Repair
2 units

Lecture 1 hour, laboratory 2 hours
Offered: Variable
Provides classroom lecture and shop experience in the theory, operation, and application of small portable outboard engines. The course covers basic maintenance and repair of fuel, pull start, ignition, lower, and cooling systems. (ROP option) [D; CSU]

AT 152.
Large Outboard Marine Engine Repair
2 units

Lecture 1 hour, laboratory 2 hours
Offered: Variable
Provides classroom lecture and shop experience in the theory, operation, and application of large outboard engines, 40-horsepower and up. The course covers basic maintenance and repair of fuel, electrical, ignition, cooling, and power trim systems. (ROP option) [D; CSU]

AT 153.
Advanced Outboard Marine Engine Repair
2 units

Recommended Concurrent Enrollment: *AT 151 and 152*
Lecture 1 hour, laboratory 2 hours
Offered: Variable
Designed to prepare the student for entry-level employment as an outboard marine engine mechanic. Provides lecture and shop experience in advanced repair techniques including, overhaul of the power head, and lower end units. (ROP option) [D; CSU]

AT 220.
Engine Performance II
3 units

Grade only
Recommended Preparation: *AT 230, 234, and 236, or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall
Fee: $13. Engine performance (tune-up) on vehicles with electronic ignition and fuel injection systems. Use of computerized diagnostic equipment and four-gas analyzers. Completes preparation for ASE Performance Certification. [D; CSU]

AT 230.
Automotive Electronics
3 units

Grade only
Prerequisite: *AT 130 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall
Advanced course in automotive electrical and electronic systems. Emphasis on the charging system, body electrical, electronic instrumentation, and supplemental air bag systems. Designed to increase student's overall understanding of automotive electronics, thereby increasing understanding of diagnostic procedures when troubleshooting electronically controlled systems. Includes preparation for the Automotive Service Excellence Exam (A-6). [D; CSU]

AT 234.
Automatic Transmissions and Transaxles
3 units

Recommended Preparation: *AT 101 and 102, or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall
Fee: $13. Theory, operation, and repair of automatic transmissions and transaxles. Includes practical experience in troubleshooting and rebuilding. Includes preparation for the Automotive Service Excellence Exam (A-2). [D; CSU]

AT 236.
Manual Transmission, Transaxles, and Final Drives
3 units

Grade only
Recommended Preparation: *AT 101 and 102, or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall
Theory, operation, and repair of automotive drive systems. Covers clutches, transmissions, drive shafts, final drives, and transaxles. Includes preparation for the Automotive Service Excellence Exam (A-3). (ROP option) [D; CSU]

AT 237.
Advanced Automotive Transmissions and Transaxles
3 units

Prerequisite: *AT 234 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Theory of operation and repair of automotive transmission and transaxle assemblies. Practical experience in diagnosis of electronically controlled assemblies. Repair and rebuilding procedures using transmission dynamometer. [D; CSU]

AT 242.
Clean Air Car
3 units

Recommended Preparation: *AT 120, 220, and 244, or equivalent*
Limitation on Enrollment: *Eligibility for licensing exam; one year of trade experience in emissions/tune up or equivalent formal education, as verified by the instructor*
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Provides 120-hour minimum instruction required by the State of California and entry-level, upgrading, or advanced training techniques for the automotive field. Uses Bureau of Automotive Repair's curriculum, which prepares students to take the California State Motor Vehicle Pollution Control License Test (I/M Test). Students can take this course without the recommended preparation but will not be certified as eligible to take the licensing examination. (ROP Option) [D; CSU]

AT 244.
Computerized Engine Controls
3 units

Recommended Preparation: *AT 242 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Spring
Fee: $13. Helps student technicians learn to diagnose and repair driveable problems with computerized engine control systems. It covers current models in the automotive field. Preparation for Automotive Service Excellence Exam, L1. [D; CSU]

AT 245.
Advanced Automotive Emission System
3 units

Prerequisite: *AT 242 and 244, or equivalent*
Recommended Preparation: *Two years automotive tune-up experience*
Lecture 2 hours, laboratory 4 hours
Offered: Fall
Fee: $13. Designed to prepare students for advanced emission systems diagnosis. The course incorporates the BAR-97 Transition and Update (20 hours) training courses. Students will receive training in five-gas analysis, ASM dynamometer operations, laboratory scope usage, and waveform interpretation, advanced scan tool usage, and On-Board Diagnostics Two (OBD II). [D; CSU]

AT 246.
Ford EEC-IV Training Program
2.5 units

Lecture 2 hours, laboratory 1 hour
Offered: Variable
Fee: $13. Covers, in detail, the operations of the Ford Electronic Engine Control System (EEC-IV), its components (including the ignition systems), operation and strategy of the microprocessors, and how to diagnose and repair EEC-IV related concerns. [D; CSU]

AT 290-293.
Cooperative Work Experience in Automotive Technology I–IV
2–4 units

Grade only
Limitation on Enrollment: *Declared Automotive Technology major. Student must complete no less than seven units, including work experience, during each semester in order to receive credit*
Lecture 1 hour, 5–15 hours work experience
Offered: Variable
Work experience in Automotive Technology. Application of theory and evaluation of field performance. [D; CSU]

AT 295.
Selected Topics in Automotive Technology
1–3 units

Offered: Variable
Relevant topics within the field of automotive technology. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

AT 299. I
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of automotive technology of particular interest to the student and not included in regular courses of the college. [D; CSU]

"Southwestern College has provided me with a wonderful learning environment. The campus is convenient, by offering affordable tuition to students and having a campus close to home."

—SMITH CLINTON ZIZA,
Psychology Major

Baja California Studies

School of Mathematics, Science, and Engineering

■ Dean

Kathy Tyner, M.S.
Office 345
619-482-6459

■ Faculty

Deana Alonso, M.A.
Esther Alonso, M.A.
Margarita Andrade, M.A.
Linda Hensley, M.A.
Anita Holt, M.S.N.
Patricia Kelly, M.A.
Susan Luzzaro, M.F.A.
Judy Nicolaidis, M.S.
Margery Stinson, M.S.
Terry Thomas, M.S.
Ken Yanow, M.S.

General Description

The Baja California studies certificate allows students to develop a concentration of study devoted to Baja California that complements any major. The certificate is based on interdisciplinary courses that focus on Baja California. It is not a major but provides students, a list of courses that help fulfill general education requirements in various disciplines while focusing intensively on Baja California. Students develop a keen appreciation of the rich connections between the arts, humanities, social life, and physical sciences.

Career Options

The Baja California Studies certificate complements any major; therefore, it is an asset to those who seek employment opportunities in a variety of fields. It prepares recipients to assume leadership roles in the complex educational, environmental, civic, and health issues facing Baja California and the border region. In addition to expanding employment opportunities, it prepares students to transfer to a four-year degree institution to continue interdisciplinary, Mexican-American, or Latin American studies.

Degree/Certificate Options

	Major Code
Certificate of Achievement	
Baja California Studies	*02891*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Certificate of Achievement
Baja California Studies

Career/Technical (Major Code: 02891)

The student must complete 12 units from the courses listed that focus on Baja California. In addition, the student must complete a number of service learning hours in the border communities of San Ysidro, Tijuana, Rosarito, Ensenada, Tecate, or other designated parts of Baja California. The hours will be determined by the individual instructor of each course.

It is recommended that the student demonstrate an intermediate high proficiency in the Spanish language, as measured by the Oral Proficiency Interview (OPI) given and evaluated by an OPI certified Southwestern College Spanish instructor.

SELECT 12 UNITS FROM THE COURSES LISTED BELOW.		**12**
ART 139	*Photographing Baja California (3)*	
ART 198	*Multidisciplinary Perspectives in Baja Studies: Web Design (4)*	
BIOL 145	*EcoMundo: Ecology and Environmental Science (3)*	
BIOL 146	*EcoMundo: Field Studies and Laboratory Investigations in Ecology and Environmental Science (1)*	
BIOL 147	*EcoMundo: Field Studies in Marine Ecology (1)*	
BIOL 148	*EcoMundo: Field Studies of Marine Vertebrates (1)*	
BIOL 149	*EcoMundo: Field Studies in Natural History (1)*	
COMM 142	*Oral History (3)*	
EHMT 105	*EcoMundo: Environmental Technology and Issues (3)*	
ENGL 274	*Literature of the Border and Baja California (3)*	
HLTH 102	*AIDS Needs No Passport (3)*	
SPAN 205	*Intermediate Conversation and Writing on Baja California (3)*	
	Total units	***12***

Biology

School of Mathematics, Science, and Engineering

■ Dean

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■ Faculty

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Michael Riddle, M.S.
Sharon Shapiro, D.P.M.
Margery Stinson, M.S.
Teresa Thomas, M.S.
Kathy Tyner, M.S.
Susan Wing, M.S.

■ Department Chair

Charles Hoyt, M.S.

General Description

Biology is a natural science that focuses on physical and chemical processes in living organisms. This discipline explores how organisms acquire and use energy to maintain homeostasis, how they reproduce, and how they interact with each other and their environment. Biological processes are emphasized as a means of answering these questions. Biologists rely heavily on a chemistry foundation since living organisms are chemical systems.

Career Options

The following list is a sample of the many career options available for the biology major. A few of these require an associate degree, most require a baccalaureate degree, and some require a graduate-level degree: agricultural consultant, animal health technician, biotechnology technician, dentist, environmental consultant, field biologist, forester, horticulturist, genetic counselor, bioinformatics specialist, agricultural scientist, environmental health worker, exercise physiologist, high school or college teacher, marine biologist, microbiologist, public health technician, physician, pharmaceutical researcher, research biologist and veterinarian. In addition, a background in biology may be required for the following: registered nurse, physical therapist, respiratory therapist, dental hygienist, medical technician, physician's assistant, and optometrist.

Degree/Certificate Options

	Major Code
Associate in Science Degree: Transfer Preparation	
Biology	*01510*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Science Degree

Biology

Transfer Preparation* (Major Code: 01510)

Lower-division requirements are not the same for all universities, and there are differences among the areas of specialization. However, the courses listed below meet the lower-division requirements for most universities offering a bachelor's degree with a major in one of the biological sciences.

Students should start with mathematics and chemistry during the first year, as these are required for other science courses. Some of the courses may be applied toward the general education requirement.

Courses offered in biology, other than those listed below, are intended as general education courses for nonscience majors. They are not the acceptable courses for biology majors. Biology majors will take similar but more intensive courses as part of their upper-division requirements.

FIRST SEMESTER		
CHEM 200	*General Chemistry I ***	*5*
MATH 121	*Applied Calculus I ****	*3*
SECOND SEMESTER		
BIOL 210	*General Zoology*	*4*
CHEM 210	*General Chemistry II ***	*5*
MATH 122	*Applied Calculus II ****	*3*
THIRD SEMESTER		
BIOL 211	*Introduction to Cell and Molecular Biology*	*4*
FOURTH SEMESTER		
BIOL 212	*Biology of Plants*	*4*
	Total units	***28***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice (e.g. UCSD molecular biology B.S., requires the MATH 250 sequence instead of MATH 121 and MATH 122). University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

** If you do not meet the prerequisites for CHEM 200, take CHEM 170 in your first semester, then CHEM 200 in the second semester, and CHEM 210 in the third semester.

*** Students who plan to pursue a graduate degree in medicine or veterinary studies at a four-year college or university are advised to substitute MATH 250, 251, and 252 for MATH 121 and 122.

TO TRANSFER TO UCSD AND SDSU:

Beginning with the Fall 2000 all students majoring in biology who wish to transfer to UCSD or SDSU must have satisfied all biology pre-major requirements prior to admission to the biology major. In the event that a transfer student has been unable to complete all required courses prior to enrolling at UCSD, he/she will be allowed a maximum of three quarters at UCSD to complete any remaining required pre-major coursework. For more information see ***http://www.biology.ucsd.edu/sa/ugadmission.html***

WEB SITES FOR BIOLOGY MAJORS:

SDSU ***http://www.sci.sdsu.edu***
UCSD ***http://www.biology.ucsd.edu***
CSU, San Marcos ***http://www.csusm.edu/biology***
Articulation: ***http://www.assist.org***

Biotechnology

School of Mathematics, Science, and Engineering

Dean

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Faculty

Jon Atwater
Nouna Bakhiet

Department Chair

Charles Hoyt

General Description

Biotechnology is a rapidly expanding field of biology that has significant future potential for both improving life and providing a growing source of technical jobs. Biotechnology is the science of using and modifying biological materials in order to develop products and organisms for specific uses. The biotechnology laboratory technician works in a research or industrial laboratory.

Career Options

The following list is a sample of the many career options available for the biotechnology major. Most of these require a certificate or associate degree and are career options at an entry-level technician position in the following areas, which includes but are not limited to the biotechnology industry: food, oil, human genome project, pharmaceutical, forensic science, agriculture, anthropology (specialization), NASA projects (search for biological life in space), and basic research in academic or non profit institutions.

Degree/Certificate Options

	Major Code
Associate in Science Degree: Transfer Preparation	
Biotechnology	*01512*
Certificate of Achievement	
Biotechnology	*01511*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Science Degree
Biotechnology

Transfer Preparation * (Major Code: 01512)

The associate in science degree augments student transfer preparation and qualifies students for entry-level positions in biotechnology research laboratories.

FIRST SEMESTER

MATH 45	*Elementary Algebra ***	*4*

SECOND SEMESTER

BIOL 100	*Principles of Biology ***	*3*
BIOL 101	*Principles of Biology Laboratory ***	*1*
BIOL 205	*DNA Science I*	*2*
BIOL 229	*Introduction to Biological Research I*	*3*
CHEM 100	*Introductory General Chemistry ***	*4*

THIRD SEMESTER

BIOL 206	*DNA Science II*	*2*
BIOL 211	*Introduction to Cell and Molecular Biology*	*4*
BIOL 230	*Introduction to Biological Research II*	*3*
BIOL 265	*General Microbiology*	*5*
	Total units	***31***

** Transfer students should substitute higher-level courses required for their major (e.g.: BIOL 210 can replace BIOL 100/101; CHEM 170 or 200 can replace CHEM 100; and MATH 45 can be replaced by higher-numbered math courses.

To earn an associate degree, additional General Education and Graduation Requirements must be completed. Page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general requirments through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Certificate of Achievement
Biotechnology

Career/Technical (Major Code: 01511)

Provides training in the theory and practices of biotechnology, which include introduction to microbiology, cell biology, and molecular biology techniques. Each participant is required to take a qualifying examination prior to certification.

FIRST SEMESTER

MATH 45	*Elementary Algebra **	*4*

SECOND SEMESTER

BIOL 100	*Principles of Biology **	*3*
BIOL 101	*Principles of Biology Laboratory **	*1*
BIOL 205	*DNA Science I*	*2*
BIOL 229	*Introduction to Biological Research I*	*3*
CHEM 100	*Introductory General Chemistry **	*4*

THIRD SEMESTER

BIOL 206	*DNA Science II*	*2*
BIOL 211	*Introduction to Cell and Molecular Biology*	*4*
BIOL 230	*Introduction to Biological Research II*	*3*
BIOL 265	*General Microbiology*	*5*
	Total units	***31***

* Higher-level courses are also acceptable: BIOL 210 can replace BIOL 100 / 101; CHEM 170 or 200 can replace CHEM 100; and MATH 45 can be replaced by higher-numbered math courses.

Biology Courses

BIOL 100.
Principles of Biology
3 units

Grade only
Corequisite: BIOL 101
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Summer, Fall, Spring
Survey of the basic processes of biology which are common to all life. Includes cellular organization, structure, function, metabolism, genetics, evolution, and ecology of plants and animals. Not intended for biology majors.
[D; CSU; UC; BIOL 100 + BIOL 101 = CAN BIOL 2]

BIOL 101.
Principles of Biology Laboratory
1 unit

Grade only
Corequisite: BIOL 100
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Laboratory 3 hours
Offered: Summer, Fall, Spring
Laboratory experience to supplement Biology 100. Field trips may be required during laboratory periods. [D; CSU; UC;
BIOL 100 + BIOL 101 = CAN BIOL 2]

BIOL 130.
Animal Biology: A Behavioral Approach
3 units

Grade only
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Recommended Concurrent Enrollment: *BIOL 131*
Lecture 3 hours
Offered: Summer, Fall, Spring
Basic biological principles applied to the study of animals. Includes a study of the history, genetics, physiology, and ecology of animal behavior from an evolutionary point of view.
[D; CSU; UC]

BIOL 131.
Animal Biology Laboratory
1 unit

Grade only
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Recommended Concurrent Enrollment: *BIOL 130*
Laboratory 3 hours
Offered: Fall, Spring
Exercises performed will introduce the student to research techniques illustrating the basic concepts of animal biology. Activities will include structured laboratory experiments, field observations, films, and an independent project.
[D; CSU; UC]

BIOL 140.
Environmental Biology
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Basic scientific concepts in biology and ecology with environmental applications. Investigation of environmental interrelationships and the impact of human activities on ecosystem sustainability and the quality of life. Focuses on scientific, economic, social, legal, and health aspects of population dynamics, pollution, solid waste disposal, hazardous wastes, sewage treatment, wildlife, land use, and energy alternatives. Includes field trips. [D; CSU; UC]

BIOL 143.
Biology, Oceanography, and Geoscience of Baja California
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Provides an interdisciplinary, introductory survey of Baja California's diversity in its biology, oceanography, geology, geography, and demographics. Examines the management, use and conservation of its natural resources. Investigates regional issues associated with increased population, modernization, and industrialization of Baja California and Southern California. (Same as GEOG 143.) [D; CSU; UC]

BIOL 145.
EcoMundo: Ecology and Environmental Science
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Basic concepts and scientific processes in ecology with emphasis on international borders, regional, and global environmental interactions and issues. Focuses on scientific, economic, social, psychological, legal and health aspects of population dynamics, pollution, solid waste, sewage, water quality, ecotourism, wildlife, land, and energy use. Includes field trips.
[D; CSU; UC]

BIOL 146.
EcoMundo: Field Studies and Laboratory Investigations in Ecology and Environmental Science
1 unit

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Recommended Concurrent Enrollment: *BIOL 145*
Laboratory 3 hours
Offered: Variable
Field and laboratory investigations of the ecology of selected geographic regions with an emphasis on the ecological relationships on the region's animal and plant species, the impact of humans on the region's ecosystems, and the use of scientific methodologies and principles of ecology and environmental science. Field trips required. [D; CSU; UC]

BIOL 147.
EcoMundo: Field Studies in Marine Ecology
1 unit

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Recommended Concurrent Enrollment: *BIOL 145*
Laboratory 3 hours
Offered: Variable
Field studies of marine and coastal ecosystems in various regions of the world with an emphasis on the methods, theories, and principles of biological science. Includes field identification of species, recognition of structural and functional adaptations, behaviors, and ecological relationships, and investigation of the impact of humans on marine ecosystems. Physical, chemical, and geological oceanography will provide the basis for a biological survey of marine species encountered. Field trips required.
[D; CSU]

BIOL 148.
EcoMundo: Field and Laboratory Studies of Marine Vertebrates
1 unit

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Laboratory 3 hours
Offered: Variable
Extended field and laboratory study of marine vertebrates (marine mammals, seabirds, reptiles, and fishes) with an emphasis on species identification, natural history, distribution, evolution, adaptations, and behavioral ecology. Field trips required. [D; CSU]

BIOL 149.
EcoMundo: Field Studies in Natural History
1 unit

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Recommended Concurrent Enrollment: *BIOL 145*
Laboratory 3 hours
Offered: Variable
Field studies of animal and plant species encountered during expeditions to various areas of the world. Emphasis on structural and functional characteristics of these species' adaptations, behaviors, and ecological relationships, and will investigate the impact of humans on specific ecosystems encountered. Field trips required. [D; CSU]

BIOL 150.
Natural History of Plants and Animals
4 units

Grade only
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Spring
Field-oriented survey of plant and animal life of San Diego including practical experience in observation with emphasis on identification and ecology. Designed for students with little field experience in biology and appropriate for teachers of outdoor programs. [D; CSU; UC]

BIOL 160.
Marine Biology
3 units

Grade only
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Introduces the student to the marine environment and the biology of organisms which reside there. Physical, chemical, and geological oceanography will provide the basis for a biological survey of organisms, relationships, and habitats found in the marine environment. Major themes include evolutionary relationships, organism interactions, and marine ecology. [D; CSU; UC]

BIOL 161.
Marine Biology Laboratory
1 unit

Grade only
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Recommended Concurrent Enrollment: *BIOL 160*
Laboratory 3 hours
Offered: Fall, Spring
Introduces the student to the marine environment and the biology of marine organisms. A survey of marine phyla will be followed by examination of local marine habitats including estuarine, intertidal, and pelagic environments. Field observation and data analysis are integral components of this course. [D; CSU; UC]

BIOL 170.
Field Botany
4 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Variable
Field-oriented study of native plant vegetation covering the flora and ecology of the desert, chaparral, coniferous forest, marsh/lagoon, and coastal communities. Emphasis on phylogenetics and techniques of identification. [D; CSU]

BIOL 180.
Human Heredity, Evolution, and Society
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Principles of heredity, with emphasis on the relationship of genetics to the health and welfare, behavior, and society of humankind. Application of genetics to the origin and evolution of species. [D; CSU; UC]

BIOL 185.
Biology of Alcohol and Other Drugs
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Study of the biological principles underlying the effects of major legal and illegal drugs on the human body. Survey of the commonly abused drugs with regard to their chemical nature, where and how they act, and the factors that modify their effects. [D; CSU; UC]

BIOL 190.
Human Anatomy and Physiology
4 units

Grade only
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent; MATH 35 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Fall, Spring, Summer
Introduction to human body structure and function. Includes structural-functional relationships, scientific method of observation, precise terminology, and related human conditions and diseases. (Not open to students with credit in BIOL 260 or 261.) [D; CSU; UC]

BIOL 205.
DNA Science I
2 units

Grade only
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 2 hours
Offered: Fall
Provides theoretical background useful in the biotechnology job market or for a bachelor's degree in biology. [D; CSU]

BIOL 206.
DNA Science II
2 units

Grade only
Prerequisite: *BIOL 205 or equivalent*
Lecture 2 hours
Offered: Spring
Provides theoretical background useful in the biotechnology job market or for a bachelor's degree in biology. [D; CSU]

BIOL 210.
General Zoology
4 units

Grade only
Recommended Preparation: *One full year of high school biology with grade of "C" or better; ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 2 hours, laboratory 6 hours
Offered: Summer, Fall, Spring
General zoology for biological science and related majors. Comparative approach to the study of animal life: organization, structure, physiology, reproduction, evolution, and behavior of invertebrates and vertebrates. [D; CSU; UC; CAN-BIOL 4]

BIOL 211.
Introduction to Cell and Molecular Biology
4 units

Grade only
Prerequisite: *CHEM 100, 170, or 200, or equivalent*
Recommended Preparation: *BIOL 210 or equivalent; ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Fall, Spring
Introduction to basic biological principles for biology and related science majors. Principles include the chemical basis of life, cell structure and function, energy transformation, cell division, genetics, and the origin of life. [D; CSU; UC]

BIOL 212.
Biology of Plants
4 units

Grade only
Prerequisite: BIOL 211 or equivalent
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Fall, Spring
Study of plant structure and function with emphasis on evolutionary relationships (phylogenetics) in the plant groups. Plant taxonomy, physiology, cytology, and ecology; population biology will also be included. [D; CSU; UC; CAN-BIOL 6]

BIOL 229.
Introduction to Biological Research I
3 units

Recommended Preparation: *CHEM 100, 170, or 200, or equivalent; ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 2 hours, laboratory 3 hours
Offered: Fall, Spring
Design, preparation, and execution of laboratory experiments in modern biology laboratories. Course will emphasize the proper use of controls and methods of data analysis. [D; CSU]

BIOL 230.
Introduction to Biological Research II
3 units

Grade only
Prerequisite: *BIOL 229 or equivalent*
Lecture 2 hours, laboratory 3 hours
Offered: Spring
Emphasis on current concepts and laboratory training in modern molecular biological techniques. Designed for biology majors and students interested in working in a biotechnology laboratory. [D; CSU]

BIOL 260.
Human Anatomy
5 units

Grade only.
Prerequisite: *BIOL 100 and 101, or equivalent*
Lecture 3 hours, laboratory 6 hours
Offered: Fall, Spring, Summer
Systematic study of the fundamental principles of body structure at the cellular, tissue, organ, and systems level of organization. Includes introduction to precise terminology, structural-functional relationships, scientific method of observation, and appreciation of related human diseases.
[D; CSU; UC; CAN-BIOL 10;
BIOL 260 + BIOL 261 = CAN BIOL SEQ B]

BIOL 261.
Principles of Human Physiology
4 units

Grade only
Prerequisite: *CHEM 100 or 170 or equivalent; BIOL 260 or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Fall, Spring
Designed to cover the physiological concepts needed by the nursing paramedical professions or any transfer student requiring a thorough introduction to human physiology in preparation for more advanced upper-division course study.
[D; CSU; UC; CAN-BIOL 12;
BIOL 260 + BIOL 261 = CAN BIOL SEQ B]

BIOL 265.
General Microbiology
5 units

Grade only
Prerequisite: *BIOL 100 and 101, or equivalent; CHEM 100 or 170 or equivalent*
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours, laboratory 6 hours
Offered: Fall, Spring
Introduction to microbiology providing fundamental concepts, methods, and relevant applications concerning: microbial structure, physiology, genetics, epidemiology, ecology, agents of disease, mechanisms of pathogenesis and resistance, approaches to control and treatment of disease, immunology, and biotechnology. Laboratory experiences stress cultivation, characterization, identification, and biotechnological applications involving microbes in nature, society, industry, and clinical medicine. [D; CSU; UC; CAN-BIOL 14]

BIOL 295.
Selected Topics in Biology
1–3 units

Offered: Variable
Permits student to study relevant topics within the field of biology. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

BIOL 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of the biological sciences of particular interest to the student and not included in regular courses of the college. [D; CSU; * UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Business Administration

School of Business and Information Systems

■ Dean

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Office 215
619-482-6457

■ Faculty

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Richard Dittbenner, J.D.
Yvonne Lucas, M.B.A.
Frank Paiano, M.B.A.

■ Department Chair

Larry Christiansen, J.D.

General Description

Business administration is a broad area encompassing administration, management, marketing, finance, entrepreneurship, supervision, banking, small business, merchandising, international trade, accounting, and information systems. Study in this area explores the theories, history, principles, skills, practices, laws, ethics, technologies, techniques, policies, procedures, and processes governing the increasingly global business environment.

Career Options

The following list is a sample of the many career options available for the business or business related major. Most require an associate degree, some require a baccalaureate degree, and a few require a graduate-level degree: administrator, manager, salesperson, banker, financial planner, high school or college instructor, lawyer, small business owner/operator, supervisor, economist, city manager, consumer analyst, purchaser, personnel officer, product developer, research auditor, controller, financier and insurance agent. Many entry-level employment opportunities are available in retail or wholesale sales, business offices, banks, savings and loans, hospitals, schools, colleges, and government.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Business Administration	*01100*
International Business Emphasis	*01101*
Finance	*01120*
Management	*01150*
Marketing	*01160*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Arts Degree
Business Administration

Transfer Preparation * (Major Code: 01100)

A student with the objective of transferring to a college or university in business administration may fulfill the lower-division requirements at Southwestern College.

Students transferring to San Diego State University should achieve a "B" grade average or better in all preparatory courses with no grade lower than a "C" in any one course. ACCT 101 and 102 must both be completed to be accepted for credit at San Diego State University.

The Common Core courses listed below for San Diego State University will meet the lower-division requirements of most colleges and universities offering a curriculum leading to a bachelor's degree with a major in business administration.

ACCT 101	*Principles of Accounting I*	*4*
ACCT 102	*Principles of Accounting II—Managerial*	*4*
BUS 140	*Business Law*	*3*
BUS 212	*Business Communication*	*3*
CIS 101	*Introduction to Computers and Information Processing*	*4*
ECON 101	*Principles of Economics I*	*3*
ECON 102	*Principles of Economics II*	*3*
MATH 119	*Elementary Statistics*	*4*
MATH 120	*Calculus for Business Analysis*	*3*
	Total units	***31***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

International Business Emphasis

Transfer Preparation * (Major Code: 01101)

The associate in arts degree in business administration: international business emphasis is designed to prepare students for work in multinational companies. It provides a practical approach to the study of international trade topics relevant in today's global economy.

ACCT 101	*Principles of Accounting I*	*4*
ACCT 102	*Principles of Accounting II—Managerial*	*4*
BUS 140	*Business Law*	*3*
CIS 101	*Introduction to Computers and Information Processing*	*4*
ECON 101	*Principles of Economics I*	*3*
ECON 102	*Principles of Economics II*	*3*
MATH 119	*Elementary Statistics*	*4*
	Foreign Language	*6–10*
	Total units	***31–35***

Recommended Electives: *HIST 104, 105.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 43 for further information.**

Finance

Transfer Preparation * (Major Code: 01120)

The associate in arts degree in finance prepares students for employment in industrial and service-oriented firms, financial institutions (banks, savings and loans, investment bankers and brokers), government agencies, and nonprofit enterprises. The major also prepares a student to start his/her own business.

A Finance major usually follows the two-year undergraduate core curriculum in Business Administration.

ACCT 101	*Principles of Accounting I*	*4*
ACCT 102	*Principles of Accounting II—Managerial*	*4*
BUS 140	*Business Law*	*3*
BUS 212	*Business Communication*	*3*
CIS 101	*Introduction to Computers and Information Processing*	*4*
ECON 101	*Principles of Economics I*	*3*
ECON 102	*Principles of Economics II*	*3*
MATH 119	*Elementary Statistics*	*4*
MATH 120	*Calculus for Business Analysis*	*3*
	Total units	***31***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Management

Transfer Preparation * (Major Code: 01150)

The associate in arts degree in management prepares a student for managerial positions which emphasize one or more of the following management perspectives: personnel and industrial relations, production and operations, organizational behavior, statistics and management science, and business environment and policy.

A Management major usually follows the two-year undergraduate core curriculum in Business Administration.

ACCT 101	*Principles of Accounting I*	*4*
ACCT 102	*Principles of Accounting II-Managerial*	*4*
BUS 140	*Business Law*	*3*
BUS 212	*Business Communication*	*3*
CIS 101	*Introduction to Computers and Information Processing*	*4*
ECON 101	*Principles of Economics I*	*3*
ECON 102	*Principles of Economics II*	*3*
MATH 119	*Elementary Statistics*	*4*
MATH 120	*Calculus for Business Analysis*	*3*
	Total units	***31***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Marketing

Transfer Preparation * (Major Code: 01160)

Prepares a student for career opportunities in any of the marketing functions of sales, advertising and promotion, marketing research, product development and research, consumer research, physical distribution, pricing, and purchasing.

A Marketing major usually follows the two-year undergraduate core curriculum in Business Administration.

ACCT 101	*Principles of Accounting I*	*4*
ACCT 102	*Principles of Accounting II—Managerial*	*4*
BUS 140	*Business Law*	*3*
BUS 212	*Business Communication*	*3*
CIS 101	*Introduction to Computers and Information Processing*	*4*
ECON 101	*Principles of Economics I*	*3*
ECON 102	*Principles of Economics II*	*3*
MATH 119	*Elementary Statistics*	*4*
MATH 120	*Calculus for Business Analysis*	*3*
	Total units	***31***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Business Management

School of Business and Information Systems

■ Dean

Irma Alvarez, M.A.
Office 215
619-482-6457

■ Faculty

Larry Christiansen, J.D.
Richard Dittbenner, J.D.
Yvonne Lucas, M.B.A.
Frank Paiano, M.B.A.

■ Department Chair

Larry Christiansen, J.D.

General Description

Business management is a broad area encompassing administration, management, marketing, finance, entrepreneurship, supervision, banking, small business, merchandising, international trade, accounting, and information systems. Study in this area explores the theories, history, principles, skills, practices, laws, ethics, technologies, techniques, policies, procedures, and processes governing the increasingly global business environment.

Career Options

The following list is a sample of the many career options available for the business or business related major. Most require an associate degree, some require a baccalaureate degree, and a few require a graduate-level degree: administrator, manager, salesperson, banker, financial planner, high school or college instructor, lawyer, small business owner/operator, supervisor, economist, city manager, consumer analyst, purchaser, personnel officer, product developer, research auditor, controller, financier and insurance agent. Many entry-level employment opportunities are available in retail or wholesale sales, business offices, banks, loan agencies, hospitals, schools, colleges, and government.

Degree/Certificate Options

	Major Code
Associate in Science Degree: Career/Technical	
Areas of Emphasis	
* *eBusiness*	*02443*
* *Entrepreneurship and Small Business*	*02441*
* *Financial Services*	*02026*
* *International Business*	*02036*
* *Maquiladora Management*	*02015*
* *Marketing*	*02111*
* *Supervision and Management*	*02171*
Certificates of Achievement	
Areas of Emphasis	
* *eBusiness—Basic*	*02444*
* *eBusiness—Advanced*	*02445*
* *Entrepreneurship and Small Business*	*02442*
* *Financial Services*	*02027*
* *International Business*	*02037*
* *Maquiladora Management*	*02015*
* *Marketing*	*02113*
* *Supervision and Management*	*02173*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Science Degree
Business Management

Career/Technical

COMMON CORE

ACCT 7	*Basic Business Bookkeeping (3)**	
	or	*3–4*
ACCT 101	*Principles of Accounting I (4)**	
BUS 120	*Introduction to Business **	*3*
BUS 121	*Financial Planning and Money Management*	*3*
BUS 140	*Business Law **	*3*
BUS 142	*Business Ethics: Corporate and Personal **	*1*
BUS 139	*Consumer Retailing and Merchandising*	
	or	*1*
BUS 144	*Advertising and Promotional Strategy*	
	or	
BUS 147	*Successful Selling Techniques*	
BUS 150	*Management*	*3*
BUS 152	*Human Relations in Organizations*	*3*
BUS 211	*Communication in Business and Industry**	
	or	*3*
BUS 212	*Business Communication**	
CIS 101	*Introduction to Computers and Information Processing*	*4*
	Total units	***27–28***

Plus at least one emphasis below (9–15 units)

Recommended Elective: *COMM 103.*

eBusiness Emphasis

Career/Technical (Major Code: 02443)

Designed to prepare the student with the knowledge and innovative strategies within the electronic commerce discipline. The new business model of electronic commerce has changed traditional management practices thus uncovering new career opportunities. The student will gain an understanding of this new and exciting phenomenon, the impacts on business conduct, improvements of information flow and business processes, and utilization of technology to provide new business solutions. The Student will be prepared for the implementation process of electronic commerce.

BUS 134	*eBusiness I: Principles of Electronic Commerce*	*3*
BUS 135	*eBusiness II: Creating an Effective Web Presence*	*3*
BUS 137	*eCommerce VI: Interactive Web Development (Team Project)*	*4*
BUS 143	*Strategic Business Plan*	*2*
CIS 103A	*eCommerce IIIa—Miva Merchant Online Stores*	*3*
Plus Common Core courses required for the Business Management		*27–28*
	Total units	***42–43***

Recommended Electives: *BUS 148, 149.*

To earn an associate degree, additional General education and Graduation Requirements must be completed. See page 36.

Entrepreneurship and Small Business Emphasis

Career/Technical (Major Code: 02441)

Designed for both the prospective and the current owner/manager of a small business. Students will learn the basic concepts of bookkeeping, law, managing small business operations, and the advertising and selling of a product or service.

BUS 134	*Business I: Principles of Electronic Commerce*	*3*
BUS 143	*eStrategic Business Planning*	*2*
BUS 148	*Developing and Starting a New Business*	*3*
BUS 149	*Operating and Managing a Small Business*	*3*
SELECT 3 UNITS FROM THE COURSES LISTED BELOW:		**3**
BUS 139	*Consumer Retailing and Merchandising (1)*	
BUS 144	*Advertising and Promotional Strategy (1)*	
BUS 145	*Financial Management for Small Business (1)*	
BUS 147	*Successful Selling Techniques (1)*	
Plus Common Core courses required for the Business Management		*27–28*
	Total units	***41–42***

To earn an associate degree, additional General education and Graduation Requirements must be completed. See page 36.

Financial Services Emphasis

Career/Technical (Major Code: 02026)

Designed to provide a broad background for those who wish to enter or are already in the fields of financial planning, banking, real estate, insurance, and other areas of investing. California licensure is required before entry into most jobs in the financial service field.

ACCT 109	*Federal Income Tax*	*3*
BUS 123	*Investments and Securities*	*3*
ACCT 101	*Principles of Accounting I (4)*	
	or	*3–4*
RE 104	*Real Estate Finance (3)*	
Plus Common Core courses required for the Business Management		*27–28*
	Total units	***36–38***

To earn an associate degree, additional General education and Graduation Requirements must be completed. See page 36.

International Business Emphasis

Career/Technical (Major Code: 02036)

Designed to prepare students for work in multinational companies. It provides a practical approach to the study of international trade topics relevant in today's global economy and emphasizes a small business approach to training.

BUS 108	*Legal Aspects of International Trade for Small Business*	*1*
BUS 110	*Advanced Importing*	*1*
BUS 112	*Fundamentals of Exporting*	*2*
BUS 113	*Fundamentals of Importing*	*1*
BUS 115	*U.S. Customs Regulations*	*2*
BUS 119	*Establishing a Maquiladora*	*3*
BUS 177	*Principles of International Business*	*3*
Plus Common Core courses required for the Business Management		*27–28*
	Total units	***40–41***

Recommended Electives: *Three to five units in a foreign language.*

To earn an associate degree, additional General education and Graduation Requirements must be completed. See page 36.

Maquiladora Management Emphasis

Career/Technical (Major Code: 02015)

The maquiladora management program prepares students for managerial positions in the maquiladora industry.

SELECT 12 UNITS FROM THE FOLLOWING COURSES:		**12**
BUS 110	*Advanced Importing (1)*	
BUS 112	*Fundamentals of Exporting (2)*	
BUS 113	*Fundamentals of Importing (1)*	
BUS 115	*U.S. Customs Regulations (2)*	
BUS 116	*Mexican Business Law and Practices (3)*	
BUS 119	*Establishing a Maquiladora (3)*	
BUS 177	*Principles of International Business (3)*	
Plus Common Core courses required for the Business Management		*27–28*
	Total units	***39–40***

Recommended Electives: *3–5 units in a foreign language.*

To earn an associate degree, additional General education and Graduation Requirements must be completed. See page 36.

Marketing Emphasis

Career/Technical(Major Code: 02111)

Provides occupational training in marketing-related occupations. The student studies professional selling, marketing, advertising, retailing as well as related business courses. Prepares students for careers in retailing, ownership of business, sales, management, and other types of distributive occupations.

BUS 139	*Consumer Retailing and Merchandising*	*1*
BUS 144	*Advertising and Promotional Strategy*	*1*
BUS 147	*Successful Selling Techniques*	*1*
BUS 174	*Principles of Marketing*	*3*
BUS 177	*Principles of International Business*	*3*
Plus Common Core courses required for the Business Management		*27–28*
	Total units	***36–37***

To earn an associate degree, additional General education and Graduation Requirements must be completed. See page 36.

Supervision and Management Emphasis

Career/Technical (Major Code: 02171)

Designed to prepare men and women for supervisory positions in commercial, governmental, and industrial organizations and is highly practical and skills oriented. It is designed for employees aspiring to become supervisors as well as for supervisors wishing to further develop their potential.

SELECT 9 UNITS FROM THE FOLLOWING COURSES:		**9**
BUS 153	*Women in Management (1)*	
BUS 158	*From Employee to Team Leader (1)*	
BUS 159	*Performance Appraisals and Evaluations (1)*	
BUS 160	*Equal Employment Opportunity (1)*	
BUS 161	*Leader and Personnel Functions (1)*	
BUS 162	*Labor Relations for Team Leaders (1)*	
BUS 164	*Stress Management (1)*	
BUS 165	*Time Management (1)*	
BUS 166	*Employee Development (1)*	
BUS 167	*Tech. in Leadership and Employee Motivation (1)*	
Plus Common Core courses required for the Business Management		*27–28*
	Total units	***36–37***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Certificates of Achievement

eBusiness Emphasis—Basic

Career/Technical (Major Code: 02444)

BUS 134	*eBusiness I: Principles of Electronic Commerce*	*3*
BUS 135	*eBusiness II: Creating an Effective Web Presence*	*3*
BUS 143	*eStrategic Business Plan*	*2*
CIS 103A	*eCommerce IIIa-Miva Merchant Online Stores*	*3*
	Total units	***11***

Recommended Electives: *BUS 148, 149.*

eBusiness Emphasis—Advanced

Career/Technical (Major Code: 02445)

BUS 134	*eBusiness I: Principles of Electronic Commerce*	*3*
BUS 135	*eBusiness II: Creating an Effective Web Presence*	*3*
BUS 137	*eCommerce VI: Interactive Web Development (Team Project)*	*4*
	eStrategic Business Plan	*2*
CIS 103A	*eCommerce IIIa—Miva Merchant Online Stores*	*3*
*Plus the * Mini Core courses required for the Business Management*		*13–14*
	Total units	***28–29***

*** Mini Core Courses: ACCT 7 or 101; BUS 120, 140, 142, 211 or 212.**

Recommended Electives: *BUS 148, 149.*

Entrepreneurship and Small Business Emphasis

Career/Technical (Major Code: 02442)

BUS 134	*eBusiness I: Principles of Electronic Commerce*	*3*
BUS 143	*eStrategic Business Planning*	*2*
BUS 148	*Developing and Starting a New Business*	*3*
BUS 149	*Operating and Managing a Small Business*	*3*
SELECT 3 UNITS FROM THE COURSES LISTED BELOW:		**3**
BUS 139	*Consumer Retailing and Merchandising (1)*	
BUS 144	*Advertising and Promotional Strategy (1)*	
BUS 145	*Financial Management for Small Business (1)*	
BUS 147	*Successful Selling Techniques (1)*	
*Plus the * Mini Core courses required for the Business Management*		*13–14*
	Total units	***27–28***

*** Mini Core Courses: ACCT 7 or 101; BUS 120, 140, 142, 211 or 212.**

Financial Services Emphasis

Career/Technical (Major Code: 02027)

ACCT 109	*Federal Income Tax*	*3*
BUS 123	*Investments and Securities*	*3*
ACCT 101	*Principles of Accounting I (4)*	
	or	*3–4*
RE 104	*Real Estate Finance (3)*	
BUS 121	*Financial Planning and Money Management*	*3*
*Plus the * Mini Core courses required for the Business Management*		*13–14*
	Total units	***25–27***

*** Mini Core Courses: ACCT 7 or 101; BUS 120, 140, 142, 211 or 212.**

International Business Emphasis

Career/Technical (Major Code: 02037)

BUS 108	*Legal Aspects of International Trade for Small Business*	*1*
BUS 110	*Advanced Importing*	*1*
BUS 112	*Fundamentals of Exporting*	*2*
BUS 113	*Fundamentals of Importing*	*1*
BUS 115	*U.S. Customs Regulations*	*2*
BUS 177	*Principles of International Business*	*3*
*Plus the * Mini Core courses required for the Business Management*		*13–14*
	Total units	***23–24***

*** Mini Core Courses: ACCT 7 or 101; BUS 120, 140, 142, 211 or 212.**

Recommended Electives: *3–5 units in a foreign language.*

Maquiladora Management Emphasis

Career/Technical (Major Code: 02015)

BUS 110	*Advanced Importing*	*1*
BUS 112	*Fundamentals of Exporting*	*2*
BUS 113	*Fundamentals of Importing*	*1*
BUS 115	*U.S. Customs Regulations*	*2*
BUS 116	*Mexican Business Law and Practices*	*3*
BUS 119	*Establishing a Maquiladora*	*3*
BUS 177	*Principles of International Business*	*3*
*Plus the * Mini Core courses required for the Business Management*		*13–14*
	Total units	***28–29***

*** Mini Core Courses: ACCT 7 or 101; BUS 120, 140, 142, 211 or 212.**

Recommended Electives: *3–5 units in a foreign language.*

Marketing Emphasis

Career/Technical (Major Code: 02113)

BUS 139	*Consumer Retailing and Merchandising*	*1*
BUS 144	*Advertising and Promotional Strategy*	*1*
BUS 147	*Successful Selling Techniques*	*1*
BUS 174	*Principles of Marketing*	*3*
BUS 177	*Principles of International Business*	*3*
*Plus the * Mini Core courses required for the Business Management*		*13–14*
	Total units	***22–23***

*** Mini Core Courses: ACCT 7 or 101; BUS 120, 140, 142, 211 or 212.**

Supervision and Management Emphasis

Career/Technical (Major Code: 02173)

SELECT 6 UNITS FROM THE FOLLOWING COURSES:		**6**
BUS 153	*Women in Management (1)*	
BUS 158	*From Employee to Team Leader (1)*	
BUS 159	*Performance Appraisals and Evaluations (1)*	
BUS 160	*Equal Employment Opportunity (1)*	
BUS 161	*Leader and Personnel Functions (1)*	
BUS 162	*Labor Relations for Team Leaders (1)*	
BUS 164	*Stress Management (1)*	
BUS 165	*Time Management (1)*	
BUS 166	*Employee Development (1)*	
BUS 167	*Tech. in Leadership and Employee Motivation (1)*	
BUS 150	*Management*	*3*
BUS 152	*Human Relations in Organizations*	*3*
*Plus the * Mini Core courses required for the Business Management*		*13–14*
	Total units	***25–26***

*** Mini Core Courses: ACCT 7 or 101; BUS 120, 140, 142, 211 or 212.**

BUS 35.
Administrative Office Assistant—Bilingual
12 units

Lecture 9.5 hours, laboratory 7 hours
Offered: Variable
Fee: $3. Upon program completion, the student can gain an entry-level position in a bilingual (English/Spanish) office. Includes business English, employment testing and interviewing, keyboarding speed and accuracy, Microsoft Office software applications, microcomputer spreadsheet, bilingual telephone techniques, transcription, filing, human relations, and time management. A one-unit internship must also be completed to earn the certificate. [D]

BUS 36.
Legal Office Assistant—Bilingual (English/Spanish)
12 units

Lecture 9.5 hours, laboratory 7 hours
Offered: Variable
Fee: $5. Students will learn to work in a legal office using word processing equipment and Microsoft Office software applications. Students will transcribe legal documents, correspondence, and forms. Legal office procedures, legal terminology, and interpretation between client and attorney will also be emphasized. A one-unit internship must also be completed to earn the certificate. This course will be taught in both English and Spanish. Covers content of classes including BUS 223, 226, 229, and CIS 121B. [D]

BUS 45.
Import and Export Documentation Clerk
2 units

Lecture 2 hours, laboratory 1 hour
Offered: Variable
Prepares students to work in international trade as import and export documentation clerks, preparing forms and documents required by the federal government and private industry for importing and exporting various products, merchandise, and materials. Emphasizes preparation of forms, intercultural communications, computer data entry, import and export vocabulary, and federal forms and procedures. (ROP option) [ND]

BUS 70.
Keyboarding I
1 unit

Credit/No Credit only
Lecture 1 hour, laboratory .5 hour
Offered: Fall, Spring
Fee: $1. For students with no keyboarding experience. Students will learn to keyboard using touch control of letter keys, develop correct typing techniques, and build speed and control on one-minute and two-minute timed writings. Computer and keyboard software will be used. [ND]

BUS 71.
Keyboarding II
1 unit

Credit/No Credit only
Recommended Preparation: *BUS 70 or equivalent*
Lecture 1 hour, laboratory .5 hour
Offered: Fall, Spring
Fee: $1. A continuation of BUS 70. For students who keyboard 20 wpm. Numeric and symbol keys, formatting of business letters, and one-page reports. Build speed and control on one-minute and three-minute writings. Computers and keyboarding software will be used. [ND]

BUS 73.
Keyboarding Speed and Accuracy I
1 unit

Credit/No Credit only
Recommended Preparation: *BUS 71 or equivalent*
Lecture 1 hour, laboratory .5 hour
Offered: Fall, Spring
Fee: $1. Designed to increase keyboarding speed and improve accuracy. [D]

BUS 74.
Keyboarding Speed and Accuracy II
1 unit

Credit/No Credit only
Prerequisite: *BUS 73 or equivalent*
Lecture 1 hour, laboratory .5 hour
Offered: Fall, Spring
Fee: $1. Designed to increase keyboarding speed and improve accuracy. [D]

BUS 75.
Keyboarding Speed and Accuracy III
1 unit

Credit/No Credit only
Prerequisite: *BUS 74 or equivalent*
Lecture 1 hour, laboratory .5 hour
Offered: Fall, Spring
Fee: $1. Designed to increase keyboarding speed and improve accuracy. [D]

BUS 78.
Electronic Calculator
1 unit

Lecture 1 hour, laboratory .5 hour
Offered: Fall, Spring
Fee: $1. Proper keyboarding techniques on the 10-key printing calculator. Students will develop speed and accuracy using the 10-key touch method on an electronic calculator and learn to solve efficiently and skillfully various types of business mathematical problems. [D]

"Southwestern College has offered me outstanding training and education as well as a great enviroment for my intellectual growth."

—ALEJANDRA DOMINGUEZ,
International Business

BUS 81.
English as a Second Language Keyboarding
3 units

Lecture 2 hours, laboratory 3 hours
Offered: Variable
Fee: $1. Integrates keyboarding and English as a Second Language for the purpose of providing a reinforcement of English instruction with an emphasis on business vocabulary. [ND]

BUS 88.
Introduction to Medical Records
3 units

Credit/No Credit only
Recommended Preparation: *BUS 31 or 40 or equivalent*
Lecture 2 hours, laboratory 3 hours
Offered: Variable
Designed to prepare students for work as medical record Clerks and technicians. Instruction includes: historical development of the healthcare field; organizational structures of health institutions; medical records science; health record assembly and analysis; patient index, numbering and filing systems; retention and storage; computer applications; and applicable laws and regulations. [D]

BUS 108.
Legal Aspects of International Trade for Small Business
1 unit

Grade only
Lecture 1 hour
Offered: Variable
Overview of the legal aspects of international trade including the nature of trade agreements, tariffs, and import-export regulations. Specific legal requirements for conducting business in Pacific Rim nations will be explored as will the protection of intellectual property in international trade. Enforcement of legal claims in federal and foreign courts will be reviewed. [D; CSU]

BUS 110.
Advanced Importing
1 unit

Recommended Preparation: *BUS 113 or equivalent*
Lecture 1 hour
Offered: Variable
Advanced importing issues focusing on import-logistic, procedures for customs clearance, and related documentation. Emphasis on practical application. [D; CSU]

BUS 112.
Fundamentals of Exporting
2 units

Lecture 2 hours
Offered: Variable
Introduction to exporting covering regulations, documentation, financial instruments of trade, marketing, terms of access and organization, with emphasis on practical application. [D; CSU]

BUS 113.
Fundamentals of Importing
1 unit

Lecture 1 hour
Offered: Variable
Introduction to importing, from start to finish, covering regulations, documentation, financial instruments of trade, U.S. Customs procedures for importing, customs brokers duties and responsibilities; emphasis on practical application. [D; CSU]

BUS 115.
U.S. Customs Regulations
2 units

Lecture 2 hours
Offered: Variable
History and organization of the U.S. Customs Service. Procedures used in classification and valuation of duties, protest, and denial. Procedures for maquiladora and FTZ users and an overview of Mexican Customs and SECOFI requirements applicable to maquiladora and FTZ users. Special emphasis on practical application. [D; CSU]

BUS 116.
Mexican Business Law and Practices
3 units

Lecture 3 hours
Offered: Variable
Comparative review of the Mexican legal system as it applies to business operations; relevant Mexican business laws, their application, their influence on Mexican business practices. [D; CSU]

BUS 119.
Establishing a Maquiladora
3 units

Lecture 3 hours
Offered: Variable
Introduction to the Mexican maquiladora industry located on the U.S.-Mexico border. Covers international trade practices, regulatory compliance and U.S. and Mexican government requirements, with emphasis on practical application. [D; CSU]

BUS 120.
Introduction to Business
3 units

Lecture 3 hours
Offered: Variable
Examination of the various types of business organizations, financing, personnel, marketing, management, and business-government relations. Designed to develop an understanding of the general concepts of business for business and non-business majors. [D; CSU; UC]

BUS 121.
Financial Planning and Money Management
3 units

Grade only
Lecture 3 hours
Offered: Variable
Introduction to financial planning in our changing economic environment. Topics include budgeting and resource allocation, risk management, tax planning, economics of buying and borrowing, and introduction to the selection of stocks, bonds, and mutual funds. [D; CSU]

BUS 123.
Introduction to Investments and Securities
3 units

Lecture 3 hours
Offered: Variable
Introduction to basic investment principles, including markets, stocks, bonds, investment funds, insurance, interpretation of financial statements, and the relationship of economic and political conditions to investing. [D; CSU]

BUS 129.
Multimedia Presentations (PowerPoint)
1 unit

Lecture 1 hour, laboratory .5 hour
Offered: Variable
Fee: $3. Using PowerPoint software, lecture, and hands-on study of multimedia features of new software on the IBM PC. Includes instruction in software, presentation concepts, advanced text and graphic processing techniques and use of multimedia peripherals (including scanners, microphone, and digital cameras). These principles are applied to the production of business applications and Web pages. (Same as CIS 129.) [D; CSU]

BUS 134.
eBusiness I: Principles of Electronic Commerce
3 units

Lecture 3 hours, laboratory 1 hour
Offered: Variable
Fee: $1. Provides an overview of electronic commerce and examines basic principles. Provides students with the understanding and knowledge of important factors involved in the overall process of electronic commerce. Includes the infrastructure, software availability, buyer behavior patterns, security issues, and future trends. [D; CSU]

BUS 135.
eBusiness II: Creating an Effective Web Presence
3 units

Lecture 2 hours, laboratory 3 hours
Offered: Variable
Fee: $1. Provides an overview of how to create an effective Web presence while utilizing an electronic commerce site. Interactive marketing techniques go beyond the traditional approach and embrace the current trends of technology. Web marketing focuses on the ever-changing business environment and targets specific strategies to develop a profitable Web site. [D; CSU]

BUS 137.
eCommerce VI: Interactive Web Development (Team Project)
4 units

Recommended Preparation: *BUS 134 and 135, or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Variable
Fee: $3. Learn how businesses and other organizations use electronic commerce. How to work with interdisciplinary team effort in justifying, designing, implementing, maintaining, enhancing, and evaluating electronic commerce initiates.
(Same as CIS 136.) [D; CSU]

BUS 139.
Consumer Retailing and Merchandising
1 unit

Grade only
Lecture 1 hour
Offered: Variable
Types of retail outlets, store organizations, store locations, selling, and retail advertising. [D; CSU]

BUS 140.
Business Law
3 units

Grade only
Lecture 3 hours
Offered: Variable
Business legal systems, sources of law, social and ethical influences, judicial and administrative systems, contracts, torts, bankruptcy, agency, business organizations, security regulations, regulation of property, and protection of intellectual property interests. [D; CSU; UC; CAN-BUS 8]

BUS 142.
Business Ethics: Corporate and Personal
1 unit

Lecture 1 hour
Offered: Variable
Introduces the student to the study of business and personal ethics and provides a framework to identify, analyze, and understand how business people make ethical decisions and deal with ethical issues. [D; CSU]

BUS 143.
eStrategic Business Planning
2 units

Grade only
Lecture 2 hours, laboratory 1 hour
Offered: Variable
Fee: $2. Focuses on providing the entrepreneur or business owner with the skills necessary to develop and implement a business plan. Emphasis on completing a small business plan for marketing, management, and financial purposes. In addition, the strategic business plan will encompass current trends in the marketplace, such as electronic commerce and Internet strategies. [D; CSU]

BUS 144.
Advertising and Promotional Strategy
1 unit

Grade only
Lecture 1 hour
Offered: Variable
Designed for small business owners or entrepreneurs who wish to explore the role of advertising and public relations in their business. Emphasis on creating an effective advertising strategy to increase sales. [D; CSU]

BUS 145.
Financial Management for Small Business
1 unit

Grade only
Lecture 1 hour
Offered: Variable
Introduction to the various factors to be considered as a small business owner encounters the financial aspects of operating a business. Students will review the areas of finance, banking, and cash management. [D; CSU]

BUS 146.
Leadership and Motivation in Small Business
1 unit

Grade only
Lecture 1 hour
Offered: Variable
Introduction to the special considerations of employees in a small business. Motivation, supervision techniques, managing communication skills, stress management, staffing, training, and promoting are among the topics discussed. [D; CSU]

BUS 147.
Successful Selling Techniques
1 unit

Grade only
Lecture 1 hour
Offered: Variable
Provides an overview of sales skills for small business owners. Topics include buyer's behavior, psychology of selling, prospecting for leads, handling objections, and closing the sale. [D; CSU]

BUS 148.
Developing and Starting a New Business
3 units

Grade only
Lecture 3 hours
Offered: Variable
Aimed at creating knowledge, skills, awareness, and involvement in the process and the critical aspects of creating a new venture and then making it grow. Students discover the attitudes, resources, and networks that are sufficient to pursue entrepreneurial opportunities. [D; CSU]

BUS 149.
Operating and Managing a Small Business
3 units

Lecture 3 hours
Offered: Variable
Study of the basic problems of managing and operating a small business, of developing the necessary physical and paper systems, and of initially conducting the business, including record keeping, sales, and other operation necessities. [D; CSU]

BUS 150.
Management
3 units

Grade only
Lecture 3 hours
Offered: Variable
Study of management principles, with primary emphasis on basic management functions: communicating, planning, organizing, actuating, and controlling. Analysis of decision making, human relations, and the role of the manager as leader. [D; CSU]

BUS 152.
Human Relations in Organizations
3 units

Lecture 3 hours
Offered: Variable
Designed to help students develop and promote skills to achieve good relations with coworkers, supervisors, subordinates, customers, and other business associates. Among the topics to be covered are: understanding self and others, communications, motivation, and leadership. [D; CSU]

BUS 153.
Women in Management
1 unit

Lecture 1 hour
Offered: Variable
Exploration of management and supervision positions, the effect of sex role stereotypes, legislation affecting women's employment, goal setting, job preparation, interviews, networks, and mentors. [D; CSU]

BUS 158.
From Employee to Team Leader
1 unit

Lecture 1 hour
Offered: Variable
Designed to provide key steps and procedures for surviving the transition from employee to team leader. Topics will include stereotyped management roles, job focus and priorities, relating to others, and leadership and effectiveness tools for managers. [D; CSU]

BUS 159.
Performance Appraisals and Evaluations
1 unit

Lecture 1 hour
Offered: Variable
Designed to help first-line team leaders (supervisors) develop skills in appraising the performance of employees. The following are among the topics covered: history and purposes of performance appraisals, legal considerations, methods and procedures, and the appraisal interview. [D; CSU]

BUS 160.
Equal Employment Opportunity
1 unit

Lecture 1 hour
Offered: Variable
Designed to provide team leaders (supervisors) with a brief historical overview of the legal and social issues that led to the development of the EEOC. Topics include equal opportunity and fair employment legislation, affirmative action, discrimination, and the affirmative action plan. [D; CSU]

BUS 161.
Team Leader and Personnel Functions
1 unit

Lecture 1 hour
Offered: Variable
Designed to provide personnel concepts and techniques needed by team leaders (supervisors). Topics include selection, placement, development, internal mobility, termination, orientation and induction, training and other issues. [D; CSU]

BUS 162.
Labor Relations for Team Leaders
1 unit

Lecture 1 hour
Offered: Variable
Designed to provide basic labor relations concepts and terms needed by team leaders (supervisors). Includes history, development, and labor legislation, role of unions in society, nature of supervisors under the contract, the grievance process, and private and public sector labor relations. [D; CSU]

BUS 164.
Stress Management
1 unit

Lecture 1 hour
Offered: Variable
Designed to help the team leader (supervisor) develop skills and techniques for dealing with on-the-job stress. Among the topics to be discussed are causes and costs of stress, personal ways to cope with stress, positive aspects of stress, and factors that cause excessive stress. [D; CSU]

BUS 165.
Time Management
1 unit

Lecture 1 hour
Offered: Variable
Designed to help team leaders (supervisors) manage their time. Among the topics to be discussed are myths and realities of time, time wasters and thieves, stating objectives, schedules, planning, and analysis of workflow problems. [D; CSU]

BUS 166.
Employee Development
1 unit

Lecture 1 hour
Offered: Variable
Designed to explore a variety of training models to enhance total employee development so that team leaders (supervisors) can more effectively match employees to appropriate jobs. Includes a unit on assessing training needs, evaluating and delivering training programs, and career planning. [D; CSU]

BUS 167.
Techniques in Leadership and Employees Motivation
1 unit

Lecture 1 hour
Offered: Variable
Designed to help students develop team leadership (supervisory) skills in leadership and motivation. Students will examine the basic assumptions of the four theories of leadership and theories of motivation and will develop models for their own personal use. [D; CSU]

BUS 168.
Managing Change: Workplace Strategies
1 unit

Lecture 1 hour
Offered: Variable
Provides an overview and builds awareness of the dynamics of change, identifies resistance factors, and increases one's ability to adapt to increasing demands in our fast-paced society. Provides students with practical tools and strategies to assist in workplace change through case studies, scenarios, and workplace examples brought by students. [D; CSU]

BUS 174.
Principles of Marketing
3 units

Grade only
Lecture 3 hours
Offered: Variable
Marketing methods, institutions, and practices. Problems of retailing and wholesaling, channels of distribution, cooperative marketing, market analysis and costs as defined from the standpoint of the consumer, the middle man, and the manufacturer. [D; CSU]

BUS 177.
Principles of International Business
3 units

Grade only
Lecture 3 hours
Offered: Variable
Surveys the nature and dimension of international business, environmental frameworks, international trade policies, international alliances, international financial markets, various forms of foreign involvement in international trade and discussion of the role of the multi-national corporation in world trade. [D; CSU]

BUS 181.
Spanish Computer Skills for Interpretation and Translation
3 units

Prerequisite: BUS 70 or equivalent
Recommended Preparation: *SPAN 215 or 220 or equivalent*
Lecture 3 hours, laboratory 1 hour
Offered: Variable
Fee: $1. Reviews Spanish keyboard and keying techniques. Develops speed and accuracy, as well as, basic word processing skills using Microsoft Word or WordPerfect. The accent mark and punctuation will be emphasized. Includes primarily Spanish dictation and transcription of letters, memos, and short reports used in an international business and legal context. Introduction to the process of computer translation via both the internet and computer translation software. [D; CSU]

BUS 182.
Keyboarding for Office Professionals
2 units

Recommended Preparation: *BUS 71 or equivalent*
Lecture 2 hours, laboratory 1 hour
Offered: Fall, Spring
Fee: $1. For the student who has had at least one semester of keyboarding or equivalent. Entry-level skills including letter placement, tabulation, manuscripts, and review of keyboarding techniques. [D; CSU]

BUS 183.
Business Mathematics
3 units

Grade only
Lecture 3 hours
Offered: Fall, Spring
Developing proficiency in solving business mathematics problems for consumer and entry-level business workers. Course meets the math proficiency requirement. [D; CSU]

BUS 200A.
Microsoft Word: Beginning Certification Preparation
2.5 units

Grade only
Recommended Preparation: *BUS 71 or equivalent*
Lecture 2 hours, laboratory 2 hour
Offered: Variable
Fee: $1. Designed to prepare students for entry-level positions in the area of word processing, as well as, to prepare students for the introductory level of Microsoft Office Specialist certification. [D; CSU]

BUS 200B.
Microsoft Word: Advanced Certification Preparation
2.5 units

Grade only
Recommended Preparation: *BUS 200A or equivalent*
Lecture 2 hours, laboratory 2 hours
Offered: Variable
Fee: $1. Advanced applications of microcomputer word processing. Designed to prepare students for the Microsoft Office Specialist (MOS) EXPERT certificate exam. Includes worksheets, tables, mail merge, macros, and collaborating with work groups. [D; CSU]

BUS 206.
Filing and Records Management
2.5 units

Lecture 2 hours, laboratory 2 hours
Offered: Fall, Spring
Introduction to the profession of records and information management. Covers alphabetic, numeric, geographic, and subject filing systems. Focuses on American Records Management Association (ARMA) International standards. Emphasis on both manual and electronic application of indexing rules and methodology. Records control, retention, retrieval, and creation and management of electronic and image records. [D; CSU]

BUS 210.
Business English
3 units

Lecture 3 hours
Offered: Fall, Spring
Develops English language skills used in a modern business context. Includes a review of vocabulary, grammar, punctuation and spelling, and an introduction to basic business letter writing. [D; CSU]

BUS 211.
Communication in Business and Industry
3 units

Grade only
Recommended Preparation: *BUS 210 or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Students will learn how to write basic business letters, memos, effective email messages, and short reports. Emphasis on preparation of employment letters, a resume, and an introduction to oral presentations in a business context. BUS 211 fulfills the writing requirement for a certificate program or associate degree. Assignments must be keyboarded. [D; CSU]

BUS 212.
Business Communication
3 units

Grade only
Prerequisite: *BUS 210, 211, or ENGL 114, or the equivalent skill level as determined by the Southwestern College English Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
The principles of written communication applied to business, industry, and government including business letters, memos, and reports. All papers will be typewritten/keyboarded. A complete report is required. [D; CSU]

BUS 218.
Procedures for Office Professionals
4 units

Recommended Preparation: *BUS 71 or equivalent*
Lecture 4 hours, laboratory 2 hours
Offered: Spring
Fee: $2. Development of modern office procedures and a professional attitude within a multicultural office setting. Focus on intercultural communication, office ethics, ergonomics, spelling, grammar and punctuation, time and stress management, telephone techniques, receptionist duties, supervisory skills, mail handling, alphabetic filing, introduction to machine transcription and electronic work-station, leadership skills, working as part of a team, and job search techniques. Includes a job practicum that is designed to provide students with the actual experience of interaction and workflow in an office environment. [D; CSU]

BUS 223.
Legal Office Procedures
2.5 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent; ability to keyboard by touch at a minimum of 25 wpm*
Lecture 2 hours, laboratory 2 hours
Offered: Fall
Fee: $3. An introductory course designed for persons wishing to pursue a career as legal office professionals or persons currently working in a law office who wish to improve their skills and gain a better understanding of the state and federal courts, legal terminology, preparation of court documents, and the concepts of civil procedures in various areas of the law operative in California. Three projects using Microsoft Word or WordPerfect will be completed, giving students hands-on experience in organizing litigation and filing out legal documents on computer. [D; CSU]

BUS 225.
Interpretation and Translation: General Business
3 units

Recommended Preparation: *BUS 210 and SPAN 220, or equivalent*
Lecture 3 hours
Offered: Variable
Designed to introduce students to the skills and techniques of interpretation and translation (English/Spanish) in the field of business. Students will interpret and translate correspondence and documents used in a business context, interpret a variety of offices and business-related dialogues, review writing mechanics, translate correspondence and general business documents. Business ethics and cultural sensitivity also emphasized. [D; CSU]

BUS 226.
Interpretation and Translation: Legal
3 units

Recommended Preparation: *SPAN 215 or 220 or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Introduce students to the skills and techniques of interpretation and translation (English/Spanish) in the legal field including written translation and simultaneous, consecutive, and summary interpreting and sight translation with discussion of cultural sensitivity and ethics as related to the legal interpreter/ translator. [D; CSU]

BUS 227.
Interpretation and Translation: Medical
3 units

Recommended Preparation: *BUS 210, SPAN 215, and 220, or equivalent*
Lecture 3 hours
Offered: Variable
Designed to introduce students to the skills and techniques of interpretation and translation (English/Spanish) in the medical field including translation of written documents and simultaneous and consecutive interpretation for healthcare providers and patients during all phases of contact, with discussion of cultural sensitivity and ethics as related to the medical translator/ interpreter. [D; CSU]

BUS 228.
Legal Terminology
2 units

Lecture 2 hours
Offered: Fall, Spring
Designed to prepare students who desire to work as a legal clerk/secretary/transcriptionist. The student will learn terminology commonly used in civil, probate, family, criminal law pleadings, and documentation. [D; CSU]

BUS 229.
Legal Terminology—Bilingual (English/Spanish)
1 unit

Recommended Preparation: *SPAN 215 or 230 or equivalent; BUS 223, 228, or LEGL 255, or equivalent*
Lecture 1 hour
Offered: Fall, Spring
Designed to prepare bilingual (English/Spanish) students who desire to work in a legal setting particularly as a bilingual legal assistant. The student will learn terminology commonly used in civil, probate, family and criminal law pleadings and documents in both English and Spanish. [D; CSU]

BUS 233.
Interpretation and Translation: Immigration
3 units

Recommended Preparation: *SPAN 221 or 230 or equivalent*
Lecture 3 hours
Offered: Variable
Designed to introduce students to the skills and techniques of interpretation and translation (English/Spanish) with emphasis in immigration including written translation and simultaneous, consecutive, and summary interpreting and sight translation. Discussion of cultural sensitivity and ethics as related to the immigration interpreter/translator. [D; CSU]

BUS 234.
Advanced Interpretation and Translation: Legal
3 units

Prerequisite: *BUS 226 or equivalent*
Recommended Preparation: *SPAN 221 or 230 or equivalent*
Lecture 3 hours
Offered: Variable
Continuing course designed to expand students' knowledge of legal terminology and to further develop techniques of simultaneous and consecutive interpretation, sight translation, and written translation of basic legal documents (English/Spanish) with emphasis on the areas of criminal, family, and immigration law. Cultural sensitivity, ethics, and courtroom procedure as related to the role of the legal interpreter are included as areas of discussion. Required as part of the Legal Interpretation and Translation certificate of achievement program or can be taken as an elective after taking the prerequisite course BUS 226. [D; CSU]

BUS 240.
Microsoft Outlook
2.5 units

Lecture 2 hours, laboratory 2 hour
Offered: Fall, Spring
Fee: $2. Introduction to the concepts of office automation in today's modern office as it relates to communication, computers, and networks. Includes email with various attachments, online calendar, messaging, faxing, and contacts. Prepares students for the Microsoft Office Specialist Proficiency certificate in Microsoft Outlook. [D; CSU]

BUS 246.
Desktop Publishing
1 unit

Recommended Preparation: *BUS 70 or equivalent*
Lecture 1 hour, laboratory 1 hour
Offered: Fall, Spring
Fee: $2. Lecture and hands-on application using Microsoft Publisher XP. Introduction to the techniques of graphic design as applied to layout, visual composition, and editing. Covers the production of flyers, stationery, business cards using clip art, photos, scanners, forms, and templates on the computer.
(Same as CIS 246.) [D; CSU]

BUS 247.
Advanced Desktop Publishing
1 unit

Lecture 1 hour, laboratory .5 hour
Offered: Fall, Spring
Lecture and hands-on application using desktop publishing software on the personal computer. Instruction in the more advanced techniques of the production and color printing process, graphic design principles, and advanced software features. Production of longer documents such as brochures, booklets, newsletters, advertisements, Web pages, or business reports. Includes scanning and digital photography. (Same as CIS 247.) [D; CSU]

BUS 249.
Legal Transcription
2.5 units

Recommended Preparation: *BUS 71 and 223, or equivalent*
Lecture 2 hours, laboratory 2 hours
Offered: Variable
Fee: $2. Transcription of legal documents in a variety of areas including personal injury, family law, criminal law, business law, wills, trusts, and estates. Legal terms for each area are reviewed, as well as punctuation and grammar in the context of transcribed documents and correspondence. Continued development of keyboarding and basic computer skills. [D; CSU]

BUS 290–293.
Work Experience in Business I–IV
2–4 units

Grade only
Limitation on Enrollment: *Declared business major. Student must complete no less than seven units, including work experience, during each semester in order to receive credit*
Lecture 1 hour, laboratory 5–15 hours
Offered: Variable
Application of the principles and skills learned in the various businesses occupational majors to on-the-job work assignments. One unit of credit is granted for each 75 hours of successful on-the-job activity. The student is required to attend a one-hour coordinating class weekly. The student's field performance will be evaluated by his employer and by the teacher and coordinator. [D; CSU]

BUS 295.
Selected Topics in Business
1–3 units

Offered: Variable
Permits students to study relevant subjects within the field of business. The specific objectives, methods of instruction and units of credit to be determined individually for projects proposed under this course description. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

BUS 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of business of particular interest to the student and not included in regular courses of the college. [D; CSU]

Chemistry

School of Mathematics, Science, and Engineering

■ Dean

Kathy Tyner, M.S.
Office 345
619-482-6459

■ Faculty

David R. Brown, Ph.D.
Treasure Sucheck, Ph.D.
Jacquelyn Thomas, M.S.
Kathy Tyner, M.S.

■ Department Chair

Grant J. Miller, M.S.

General Description

Chemistry is a physical science that focuses on the composition, structural properties, reaction of substances, and the means by which matter is converted from one form to another. This discipline explores the fundamentals of organic and inorganic matter, chemical structure and reactivity, qualitative and quantitative analyses, laboratory procedures that include strong emphasis on modern instrumental methods, research methodologies, and quantum mechanics.

Career Options

The following list is a sample of the many career options available to the chemistry major. A few require an associate degree, some require a baccalaureate degree, and most require a graduate-level degree: high school or college teacher, analytical chemist, biochemist, polymer chemist, medical doctor, dentist, laboratory technician, and technical sales representative. Entry-level career opportunities are available in biotechnology, biomedical instrumentation, diagnostics, immunochemistry, pharmaceuticals, basic research, and environmental control agencies.

Degree/Certificate Options

	Major Code
Associate in Science Degree: Transfer Preparation	
Chemistry	*01530*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

WEB SITES FOR CHEMISTRY MAJORS:

SDSU ***http://www.chemistry.sdsu.edu***
UCSD ***http://www.chemistry.ucsd.edu***
CSU, San Marcos ***http://www.csusm.edu/chemistry***
Articulation: ***http://www.assist.org***

Associate in Science Degree

Chemistry

Transfer Preparation * (Major Code: 01530)

Chemistry is the study of the composition of matter, its structure, and the means by which it is converted from one form to another. Related to chemistry is molecular biology. Students interested in matter as it applies to life should also take courses in the life sciences.

Most courses require mathematics prerequisites. Placement is determined by the Mathematics Assessment Process, which should be taken before registration. It is essential that students start with mathematics during the first semester.

Chemistry majors are advised not to try to complete their general education requirements before transfer. Priority must be given to lower-division requirements for the major as they are prerequisites for most upper division courses. Only as many general education courses should be taken as can be included in the 70-unit transfer limitation and these must be chosen with care to insure that they fit into the general education pattern at the transfer institution.

FIRST SEMESTER **		
CHEM 200	*General chemistry I*	*5*
MATH 250	*Analytic Geometry and Calculus I*	*5*
SECOND SEMESTER		
CHEM 210	*General Chemistry II*	*5*
MATH 251	*Analytic Geometry and Calculus II*	*4*
PHYS 270	*Principles of Physics I*	*3*
PHYS 271	*Principles of Physics Laboratory I*	*1*
THIRD SEMESTER		
CHEM 240	*Organic Chemistry I*	*5*
MATH 252	*Analytic Geometry and Calculus III*	*4*
PHYS 272	*Principles of Physics II*	*4*
FOURTH SEMESTER		
CHEM 250	*Analytical Chemistry*	
	or	*5*
CHEM 242	*Organic Chemistry II*	
	Total units	***41***

Students who plan to major in Biochemistry at a four-year college or university should also enroll in BIOL 210 and 212.

** If you do not have the prerequisites for CHEM 200 and MATH 250, take CHEM 170 and MATH 101 in your first semester. This will add one semester to your program of studies.

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

"Mahatma Ghandi once said 'Live as if you were to die tomorrow. Learn as if you were to live forever.' Make the most of your life, your future; take advantage of your learning opportunities here at Southwestern College."

—SHELLY HESS,
Director, Instructional Services

Chemistry Courses

CHEM 100.
Introduction to General Chemistry
4 units

Grade only
Prerequisite: *MATH 45 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Fall, Spring, Summer
Fundamentals of inorganic chemistry, including bonding, nomenclature, stoichiometry, gas laws, acids and bases, equilibrium, solutions, and basic types of reactions. Introduction to nuclear, organic and environmental chemistry.
[D; CSU; UC; CAN-CHEM 6;
CHEM 100 + CHEM 110 = CAN CHEM SEQ B]

CHEM 110.
Elementary Organic and Biological Chemistry
4 units

Grade only
Prerequisite: *CHEM 100, 170, or 200, or equivalent*
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Fall, Spring
Introduction to organic and biological chemistry. Designed to fulfill the chemistry requirements for majors in nursing, home economics, consumer science, and hazardous materials. [D; CSU; UC; CAN-CHEM 8;
CHEM 100 + CHEM 110 = CAN CHEM SEQ B]

CHEM 150.
Introduction to Chemical Technology
2 units

Grade only
Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 2 hours
Offered: Variable
Survey course about career and educational aspects of chemical technology. Topics include, but not limited to, employment opportunities, job functions, case studies of workplace activities, hazardous materials and chemical safety, literature search, drug development, government regulations, and designations of Good Laboratory Practice (GLP) and Good Manufacturing Practice (GMP). [D; CSU]

CHEM 160.
Introductory Biochemistry
3 units

Grade only
Prerequisite: *CHEM 110 or 240 or equivalent*
Lecture 3 hours
Offered: Variable
Introduction to the fundamental principles of modern biological chemistry. Includes the structure, chemistry and metabolism of proteins, lipids, carbohydrates, and other biomolecules.
[D; CSU; UC]

CHEM 161.
Biochemical Techniques
2 units

Grade only
Prerequisite: *CHEM 110 or 240*
Lecture 1 hour, laboratory 3 hours
Offered: Variable
Laboratory activities designed to provide experience in techniques commonly employed in protein chemistry. Includes the purification and characterization of enzymes, electrophoresis, and chromatography. [D; CSU; UC]

CHEM 170.
Preparation for General Chemistry
4 units

Grade only
Prerequisite: *MATH 65 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Fall, Spring, Summer
Beginning course in general chemistry serves to establish a framework of vocabulary, principles, concepts, laboratory techniques, and problem solving skills to prepare the student to complete successfully the more intensive general chemistry sequence. [D; CSU; UC]

CHEM 180.
Computational Methods in Chemistry
2 units

Grade only
Prerequisite: *CHEM 170 or equivalent*
Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 2 hours
Offered: Variable
Students will employ a variety of computational methods to solve problems in chemistry. Computer techniques include spreadsheet applications, database management, and molecular structure drawing software, molecular visualization tools, introductory statistical, combinatorial, and informatic applications, presentation software, and Internet usage.
[D; CSU]

CHEM 190.
Chemical Health and Safety
2 units

Grade only
Prerequisite: *CHEM 170 or equivalent*
Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 2 hours
Offered: Variable
Provides students with knowledge and skills necessary to work safely in a workplace where chemical and biological hazards exist. Topics include evaluating laboratory risks, safety equipment, Material Safety Data Sheets (MSDS), government regulatory agencies, chemical toxicology, and safe chemical disposal practices.
[D; CSU]

CHEM 200.
General Chemistry I
5 units

Grade only
Prerequisite: *CHEM 170 or equivalent; MATH 65 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Recommended Preparation: *MATH 101 or 121 or equivalent; ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours, laboratory 6 hours
Offered: Fall, Spring
Methods of chemistry, formulas and equations, chemical calculations, states of matter, periodic law, atomic structure and chemical bonding, gases, thermochemistry, equilibrium, and acids and bases. Laboratory stresses quantitative methods, including gravimetric analysis and titrimetry, use of instrumentation, including spectrophotometers, pH meters, multimeters, and error analysis. [D; CSU; UC; CAN-CHEM 2;
CHEM 200 + CHEM 210 = CAN CHEM SEQ A]

CHEM 210.
General Chemistry II
5 units

Grade only
Prerequisite: *CHEM 200 or equivalent; MATH 101 or 121 or equivalent*
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours, laboratory 6 hours
Offered: Fall, Spring
Review of equilibrium and acid-base reaction; liquids, solids, kinetics, electrochemistry, thermodynamics, coordination chemistry, nuclear chemistry, the elements and their properties; introduction to organic and biochemistry; laboratory stresses quantitative and qualitative analysis, use of instrumentation including multimeters, spectrophotometers, Atomic Absorption Spectrometer (AA), and Fourier Transform Infrared Spectrometer (FTIR), laboratory reports, and discussion of error. [D: CSU; UC; CAN-CHEM 4; CHEM 200 + CHEM 210 = CAN CHEM SEQ A]

CHEM 240.
Organic Chemistry I
5 units

Grade only
Prerequisite: *CHEM 210 or equivalent*
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours, laboratory 6 hours
Offered: Spring
Introduction to modern organic chemistry. Stereochemistry, Infrared Spectroscopy (IR), and Nuclear Magnetic Resonance Spectroscopy (NMR) will be introduced and used to augment the study of organic compounds and their reactions. [D; CSU; UC]

CHEM 242.
Organic Chemistry II
5 units

Grade only
Prerequisite: *CHEM 240 or equivalent*
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours, laboratory 6 hours
Offered: Spring
A continuation of Organic Chemistry I (CHEM 240). Properties of aromatic compounds, carbonyl compounds, amines, and alcohols will be studied. Also includes extensive consideration of biological molecules such as carbohydrates, lipids, and proteins. [D; CSU; UC]

CHEM 244.
Organic Analysis and Spectroscopy
2 units

Grade only
Corequisite: *CHEM 242*
Laboratory 6 hours
Offered: Variable
Laboratory activities designed to provide experience in methods for separation and identification of organic compounds. Includes isolation and identification of organic compounds by means of chromatographic techniques, derivations, and spectroscopic methods including nuclear magnetic resonance, infrared, and mass spectrometry. [D; CSU; UC]

CHEM 250.
Analytical Chemistry
5 units

Grade only
Prerequisite: *CHEM 210 or equivalent; MATH 101 or 121 or equivalent*
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours, laboratory 6 hours
Offered: Variable
Emphasis on the classical methods and theory of gravimetric and volumetric analyses, with an introduction to instrumental analysis. Introduction to instrumental techniques, such as ultra violet-visible spectroscopy (UV-Vis), Fourier Transform Infrared Spectrometer (FTIR), gas chromatography-mass spectrometer (GC-MS), high performance liquid chromatography (HPLC), atomic absorption and selected electrical methods. [D; CSU; UC; CAN-CHEM 12]

CHEM 295.
Selected Topics in Chemistry
1–3 units

Offered: Variable
Permits students to study relevant topics within the field of chemistry. Specific objectives, methods of instruction, and evaluation to be determined by the students and the instructor throughout the semester. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

CHEM 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of chemistry of particular interest to the student and not included in regular courses of the college. [D; CSU; *UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Child Development

School of Technology and Human Services

■ Dean

Patricia Axsom, M.S.
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■ Faculty

Leslynn Gallo, Ph.D.
Mary Holmes, M.A.,
Virginia Watson, M.A.

■ Department Chair

Mary Holmes, M.A.

General Description

Child Development is the study of the physical, socio-emotional, cognitive, and psychomotor growth and development of the child from conception to adolescence. This department explores human anatomy, health, psychology, sociology, education, nutrition, home and day care environments, community resources, curriculum, childrearing, and language acquisition as they pertain to the child in contemporary society.

Career Options

The following list is a sample of the many career options available for the child development major. Most require a certificate or associate degree, some require a baccalaureate degree, and a few require a graduate degree: infant-toddler teacher, preschool teacher, director or owner, parent education instructor, elementary school teacher, child and family counselor, pediatric psychologist, college instructor, social worker, adoption counselor, education technician, tutor, social service agent, pediatric nurse or doctor, and public health administrator.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Child Development	*01750*
Associate in Arts Degree: Career/Technical	
Child Development Teacher	*A2721*
Anti-Bias Master Teacher Specialty	*02734*
Early intervention Master Teacher Specialty	*02733*
Infant-Toddler Master Teacher Specialty	*02731*
Reggio-Inspired Master Teacher Specialty	*02736*
Certificates of Achievement	
Child Development Teacher	*A2722*
Infant-Toddler Master Teacher Specialty	*02732*
Family Day Care Provider	*02725*
Family Support Specialist—Basic	*A2726*
Family Support Specialist—Advanced	*A2728*
Spanish-to-English Associate Teacher Certificate	*02723*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal

Associate in Arts Degree
Child Development

Transfer Preparation * (Major Code: 01750)

Prepares students to work as preschool teachers or preschool directors or to transfer to other colleges and universities offering a bachelors degree in child development for more advanced careers with children.

Students will acquire the ability to understand the cognitive development of the child from pre-birth through adolescence, as well as his/her emotional, social, physical and educational needs, and to develop skills to work with the young child.

BIOL 100	*Principles of Biology*	*3*
BIOL 101	*Principles of Biology Laboratory*	*1*
CD 135	*Principles of Family Development*	*3*
CD 170	*Principles of Child Development*	*3*
CD 180	*Observation and Guidance for Child Development*	*3*
CD 181	*Curriculum Planning for Child Development I*	*3*
PSYC 101	*General Psychology*	*3*
SOC 101	*Introduction to Sociology*	*3*
SOC 270	*Statistical Methods of Sociology*	
	or	*3*
PSYC 270	*Statistical Methods of Psychology*	
	Total units	***25***

Recommended Elective: *ES/T 200.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Child Development Teacher

(Nursery School, Daycare, Head Start, and Children's Centers)

Career/Technical (Major Code: A2721)

Designed to prepare students to qualify as teachers of young children. Additional objectives are to increase professional skills of teachers already in the field of childcare, to fulfill educational requirements for licensing by the California State Department of Social Welfare, to provide courses for parents interested in becoming more effective with their children, and to prepare students interested in establishing family day care centers for young children.

FIRST SEMESTER

CD 170	*Principles of Child Development*	*3*
CD 176	*Music and Movement for Young Children (3)*	
	or	*3*
CD 130	*Math for Young Children (1)*	
CD 131	*Science for Young Children (1)*	
CD 132	*Technology for Young Children (1)*	
CD 180	*Observation and Guidance for Child Development*	*3*

SECOND SEMESTER

CD 181	*Curriculum Planning for Child Development I*	*3*
CD 184	*Observation and Documentation*	*3*
CD 284	*Child, Family, and Community*	*3*

THIRD SEMESTER

CD 177	*Alternatives to Violence*	*3*
CD 182	*Curriculum Planning for Child Development II*	*3*
CD 275	*Art for Children*	*3*

FOURTH SEMESTER

CD 175	*Nutrition, Health, and Safety for Children**	*3*
CD 282	*Child Development Field Practicum*	*3*
CD 283	*Language Development*	*3*
	Total units	***36***

Recommended Electives: *ART 104; CD 80–88, 92, 150, 172, 278, 286, 289.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

NOTE: *Directors of children's programs are required by state licensing agencies to have three units of CD 286, Administration and Supervision of Children's Programs.*

* Students who successfully complete CD 175, Nutrition, Health, and Safety for Children, will receive certification in Infant and children, First Aid and CPR.

Anti-Bias Master Teacher Specialty

Career/Technical (Major Code: 02734)

Designed to instruct students regarding issues of diversity in education and their implications for classroom management and planning curriculum.

CD 277	*Diversity in Education*	*3*
CD 278	*Working with Children and Families With Special Needs*	*3*
CD 288	*Mentorship and Adult Supervision*	*3*
Plus courses required for the Child Development Teacher program		*36*
	Total units	***45***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Early Intervention Master Teacher Specialty

Career/Technical (Major Code: 02733)

Designed to instruct students regarding the typical development of the child ages 0–3, developmental and emotional characteristics that constitute a special needs child, and intervention and supportive strategies for the successful inclusion of this child into an early childhood education setting.

CD 173	*Development of Infants and Toddlers*	*3*
CD 278	*Working with Children and Families with Special Needs*	*3*
CD 288	*Mentorship and Adult Supervision*	*3*
Plus courses required for the Child Development Teacher program		*36*
	Total units	***45***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Infant-Toddler Master Teacher Specialty

Career/Technical (Major Code: 02731)

Designed to prepare students to accommodate for the special needs of infants and toddlers, and provide an environment that fosters growth and learning.

CD 172	*Curriculum for Infants and Toddlers*	*3*
CD 173	*Development of Infants and Toddlers*	*3*
CD 288	*Mentorship and Adult Supervision*	*3*
Plus courses required for the Child Development Teacher program		*36*
	Total units	***45***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Reggio-Inspired Master Teacher Specialty

Career/Technical (Major Code: 02736)

Designed to instruct students in methods to adopt the principles of the Reggio Emilia Approach to an early childhood education setting.

CD 184	*Observation and Documentation*	*3*
CD 260	*Introduction to the Reggio Emilia Approach*	*3*
CD 288	*Mentorship and Adult Supervision*	*3*
Plus courses required for Child the Development teacher Program		*36*
	Total unit	***45***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Certificates of Achievement

Child Development Teacher

(Nursery School, Daycare, Head Start, and Children's Centers)

Career/Technical (Major Code: A2722)

FIRST SEMESTER

CD 170	*Principles of Child Development*	*3*
CD 176	*Music and Movement for Young Children*	
	or	*3*
CD 130	*Math for Young Children (1)*	
CD 131	*Science for Young Children (1)*	
CD 132	*Technology for Young Children (1)*	
CD 180	*Observation and Guidance for Child Development*	*3*

SECOND SEMESTER

CD 181	*Curriculum Planning for Child Development I*	*3*
CD 184	*Observation and Documentation*	*3*
CD 284	*Child, Family, and Community*	*3*

THIRD SEMESTER

CD 177	*Alternatives to Violence*	*3*
CD 182	*Curriculum Planning for Child Development II*	*3*
CD 275	*Art for Children*	*3*

FOURTH SEMESTER

CD 175	*Nutrition, Health, and Safety for Children*	*3*
CD 282	*Child Development Field Practicum*	*3*
CD 283	*Language Development*	*3*
	Total units	***36***

Recommended Electives: *ART 104; CD 80–88, 92, 150, 172, 278, 286, 289.*

Infant-Toddler Master Teacher Specialty

Career/Technical (Major Code: 02732)

CD 172	*Curriculum for Infants and Toddlers*	*3*
CD 173	*Development of Infants and Toddlers*	*3*
CD 288	*Mentorship and Adult Supervision*	*3*
Plus courses required for the Child Development Teacher program		*36*
	Total units	***45***

Recommended Electives: *ART 104; CD 80-88, 92, 150, 172, 278, 286, 289.*

Family Day Care Provider

Career/Technical (Major Code: 02725)

Family daycare providers are licensed to care for 6 to 12 children in a home environment. They are responsible not only for providing developmentally appropriate care for a multi-age group of children, but also for preparing and serving nutritious meals and snacks; establishing a cooperative relationship with parents; purchasing all supplies, goods and equipment; and running a small business.

Designed to meet the need for professional preparation, growth, and training for both the prospective and the experienced childcare provider.

FIRST SEMESTER

CD 170	*Principles of Child Development*	*3*
CD 172	*Curriculum for Infants and Toddlers*	*3*

SECOND SEMESTER

CD 86	*Family Day Care Guidance and Discipline*	*1*
CD 87	*Family Day Care Home as a Learning Environment*	*1*
CD 88	*Family Day Care Child Development Overview*	*1*

THIRD SEMESTER

CD 83	*Nutrition for Childcare Workers*	*1*
CD 84	*Health and Safety in Family Day Care*	*1*
CD 85	*Family Day Care—Resources*	*1*

FOURTH SEMESTER

CD 80	*Business of Family Day Care*	*1*
CD 81	*Helping Children Cope with Crisis and Change*	*1*
CD 82	*Day Care Environment*	*1*
	Total units	***15***

Recommended Electives: *ACCT 7; CD 150, 180, 181, 182, 198, 283, 284, 286, 287; PSYC 101.*

Family Support Specialist—Basic

Career/Technical (Major Code: A2726)

The family support specialist is a paraprofessional who may be employed in health care settings, schools, and social service agencies. Under the supervision of a professional, they provide an array of support services to families and children in crisis and transition. Following the completion of the four core courses, students may be employed in their field with a basic certificate of achievement. The advanced certificate of achievement includes additional coursework to assist students with career advancement in the field.

CD 151	*Introduction to Home Visitation*	*3*
CD 152	*Violence and Substance Abuse in the Troubled Families*	*3*
CD 170	*Principles of Child Development*	*3*
CD 198	*Paraprofessional Home Visitor Field Practicum*	*3*
	Total units	***12***

Family Support Specialist—Advanced

Career/Technical (Major Code: A2728)

The family support specialist is a paraprofessional who may be employed in healthcare settings, schools, and social service agencies. Under the supervision of a professional, they provide an array of support services to families and children in crisis and transition. Following the completion of the four core courses, students may be employed in their field with a basic certificate of achievement. The advanced certificate of achievement includes additional coursework to assist students with career advancement in the field.

CD 151	*Introduction to Home Visitation*	*3*
CD 152	*Violence and Substance Abuse in the Troubled Families*	*3*
CD 170	*Principles of Child Development*	*3*
CD 198	*Paraprofessional Home Visitor Field Practicum*	*3*
CD 199	*Home Visitor Advanced Practicum*	*1–2*
CD 284	*Child, Family, and Community*	*3*
	Total units	***16–17***

Spanish-to-English Associate Teacher Certificate

Career/Technical (Major Code: 02723)

The Spanish-to-English teacher certificate meets the academic requirements for the associate teacher permit through the State Department of Education and Child Development Division. This certificate is comprised of four-core classes in child development, which are linked to four English as a Second Language courses. The program is designed for students to learn child development concepts while acquiring English language skills. The child development courses will begin with predominantly Spanish instruction. As students progress through the courses, English instruction will increase as student's English proficiency increases. This is a sequential program in which students form a community of learners starting and ending the program together. Upon completion of this certificate, students may either choose to seek employment or complete the child development teacher certificate offered in English.

CD 170S	*Principles of Child Development (Spanish)* *(Must be concurrently enrolled in ESL 27A.)*	*3*
CD 180S	*Observation and Guidance for Child Development (Spanish)* *(Must be concurrently enrolled in ESL 27B.)*	*3*
CD 181S	*Curriculum Planning for Child Development I (Spanish)* *(Must be concurrently enrolled in ESL 27C.)*	*3*
CD 284S	*Child, Family, and Community (Spanish)* *(Must be concurrently enrolled in ESL 27D.)*	*3*
	Total units	***12***

Child Development Courses

NOTE: CD 80–88 ARE CLASSES DESIGNED FOR FAMILY DAYCARE CENTERS

CD 80.
The Business of Family Daycare
1 unit

Credit/No Credit only
Recommended Preparation: *CD 170 or equivalent*
Lecture 1 hour
Offered: Spring
Analysis and implementation of appropriate record keeping and business practices necessary to effectively run a daycare business and to meet IRS requirements. Emphasis on enrollment of children, parent-caregiver relationships, contracts and legal considerations, collection of fees, budgets, and reimbursement of food costs. [D]

CD 81.
Helping Children Cope With Crisis and Change
1 unit

Credit/No Credit only
Recommended Preparation: *CD 170 or equivalent*
Lecture 1 hour
Offered: Spring
Develops coping skills in young children and provides information and practice in helping children to express feelings and to adjust positively to crisis and change. Topics include separation and loss, death, divorce, and blended families. [D]

CD 82.
Daycare Environment
1 unit

Credit/No Credit only
Recommended Preparation: *CD 170 or equivalent*
Lecture 1 hour
Offered: Spring
Designed to help family daycare providers analyze the human and physical environment they provide for children. Creative ways to make optimum use of the space available without spending excessive time and money. [D]

CD 83.
Nutrition for Childcare Workers
1 unit

Credit/No Credit only
Lecture 1 hour
Offered: Fall
Planning low-cost, nutritious menus with emphasis on the nutritional requirements of children in a daycare setting; helping children to develop habits of good nutrition through nutrition education and hands-on experiences; qualification and reimbursement procedures through the childcare food program; the role of diet in child behavior. [D]

CD 84.
Health and Safety in Family Daycare
1 unit

Credit/No Credit only
Recommended Preparation: *CD 170 or equivalent*
Lecture 1 hour
Offered: Fall
Focus on key aspects of children's health and safety needs. Understanding ways to encourage and promote good health in children, identifying the caregiver's responsibilities in dealing with illness and medication, creating a safe environment for children, and utilizing emergency resources. [D]

CD 85.
Family Daycare—Resources
1 unit

Credit/No Credit only
Recommended Preparation: *CD 170 or equivalent*
Lecture 1 hour
Offered: Fall
Referral techniques; county referral resources to family daycare providers; recycling items as low-cost learning equipment. [D]

CD 86.
Family Daycare—Guidance and Discipline
1 unit

Credit/No Credit only
Recommended Preparation: *CD 170 or equivalent*
Lecture 1 hour
Offered: Spring
Analysis of major theoretical positions on discipline; practice in choosing appropriate guidance skills; demonstration and simulations of P.E.T., behavior modification and eclectic intervention techniques to resolve aggression among children; role of diet in child behavior. [D]

CD 87.
Family Daycare—Home as a Learning Environment
1 unit

Credit/No Credit only
Recommended Preparation: *CD 170 or equivalent*
Lecture 1 hour
Offered: Spring
Home as a teaching and learning environment. Includes analysis and implementation of professional daycare provider standards, television controversies, and play as a mode of learning. [D]

CD 88.
Family Daycare—Child Development Overview
1 unit

Credit/No Credit only.
Recommended Preparation: *CD 170 or equivalent*
Lecture 1 hour
Offered: Spring
Theoretical overview of child development with emphasis on appropriate role of the family daycare provider in the developmental process. [D]

CD 90.
Classroom Environment and Management for School-Age Children
1 unit

Credit/No Credit only
Lecture 1 hour
Offered: Spring
Focus on setting up traditional and nontraditional classroom environments for school-age childcare; promoting conflict resolution; helping students cope with crisis and change. [D]

CD 91.
Effective Communication Resource Strategies for School-Age Childcare
1 unit

Credit/No Credit only
Lecture 1 hour
Offered: Spring
Focus on communication and cooperation between school-age childcare programs, parents, community, and school districts. Utilization of community resources. [D]

CD 92.
Teaching in Extended Daycare
3 units

Recommended Preparation: *CD 170 or equivalent*
Lecture 3 hour
Offered: Variable
Covers child development, lesson plans, classroom environment and management, the summer program, snacks, homework, and parental needs and concerns. Assignments applied to the field include observation and volunteer work. Designed for those seeking a Children's Center Permit and/or those working in school-age childcare. [D]

CD 110.
School-Age Childcare Program Planning
3 units

Grade only
Recommended Preparation: *CD 170 or equivalent*
Lecture 3 hours
Offered: Variable
Planning environments to promote optimal development for school-age children in childcare program. Emphasis on curriculum planning, guidance techniques, scheduling, and resources to meet developmental needs of children 6–12 years old. [D; CSU]

CD 130.
Math for Young Children
1 unit

Lecture 1 hour
Offered: Variable
Principles and practices for presenting activities in a developmental sequence to support young children's basic understanding of mathematics. Emphasis on the three types of learning: naturalistic, informal, and structured. [D; CSU]

CD 131.
Science for Young Children
1 unit

Lecture 1 hour
Offered: Variable
Exploration of developmentally appropriate science activities for young children. Students will create science experiences, select appropriate materials, learn scientific techniques for working with young children, and learn how to integrate science across the curriculum. [D; CSU]

CD 132.
Technology for Young Children
1 unit

Lecture 1 hour
Offered: Variable
Designed to introduce students to technology utilized in child development settings including computer applications and introduced to software that will enhance instruction in early childhood. Software programs for behavior management, developmental assessment, multicultural, language development, creativity, math and science, problem solving, and thematic focus. [D; CSU]

CD 135.
Principles of Family Development
3 units

Recommended Preparation: *ENGL 54 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Discussion of historical and modern family lifestyles, functions, values that influence behavior, and patterns which result from male-female interaction. Male, female, and family images in literature and the mass media will be analyzed. [D; CSU ; UC; CAN-FCS 12]

CD 150.
Parenting and Teacher Education
3 units

Lecture 3 hours
Offered: Variable
Comprehensive coverage of the tasks and issues of childrearing. Theories and philosophie of raising children. Contemporary strategies for successful parenting, with emphasis on communication skills and problem solving techniques. [D; CSU]

CD 151.
Introduction to Home Visitation
3 units

Recommended Preparation: *ENGL 54 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Introduces the field of home visitation as a means to help families achieve effective life skills. Topics include home visiting procedures, introduction to family dynamics, especially as it relates to at-risk families, community resources, child development, and the role of the home visitor as an employee. [D; CSU]

CD 152.
Violence and Substance Abuse in the Troubled Family
3 units

Prerequisite: *CD 151 or equivalent*
Recommended Preparation: *ENGL 54 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Primary focus is to prepare paraprofessionals to work effectively with families where child abuse, family violence, and/or, substance abuse issues are significant factors in family dysfunction. Emphasis on prevention, treatment, and resources as critical elements in understanding and developing intervention strategies. [D; CSU]

CD 170.
Principles of Child Development
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Focuses on theories of physical, psychosocial, and cognitive development of children from conception through adolescence. Use of observation skills to understand the development of children, and how parents and teachers can best help meet their needs to become healthy individuals. Child studies are in the context of families, society, and culture. [D; CSU; UC; CAN-FCS 14]

CD 170S.
Principles of Child Development (Spanish)
3 units

Limitation on Enrollment: *Enrollment is limited to students enrolled in the Spanish-to-English Associate Teacher certificate program.*
Lecture 3 hours
Offered: Variable
Focuses on theories of physical, psychosocial, and cognitive development of children from conception through adolescence. Use of observation skills to understand the development of children, and how parents and teachers can best help meet their needs to become healthy individuals. Child studies are in the context of families, society, and culture. [D]

CD 172.
Curriculum for Infants and Toddlers
3 units

Prerequisite: *CD 170 or equivalent*
Lecture 3 hours
Offered: Variable
Developing a safe environment and curriculum for infants and toddlers based on theories of child development. Practical ideas to promote social, cognitive, and physical development. Focus on turning routines into developmentally enhancing moments. Observations of infants and toddlers in their typical environments will be required. [D; CSU]

CD 173.
Development of Infants and Toddlers
3 units

Prerequisite: *CD 170 or equivalent*
Lecture 3 hours
Offered: Variable
Fundamentals of development of children under three years of age. Biological factors and environmental factors shaping the early cognitive, social, and physical development. Observation of infants and toddlers in different settings. Emphasis on the influence of family, culture, and community on the lives of infants and toddlers. [D; CSU]

CD 175.
Nutrition, Health, and Safety for Children
3 units

Grade only
Lecture 3 hours
Offered: Fall
Fee: $25. Focuses on children's health, safety, and nutritional needs. Includes encouraging and promoting good health in children, dealing with illness, child abuse, planning nutritious menus, diet and child behavior, and available childcare food programs will be examined. First Aid and Cardiopulmonary Resuscitation (CPR) certification will be integrated into the program. (Same as HLTH 175.) [D; CSU]

CD 176.
Music and Movement for Young Children
3 units

Recommended Preparation: *ENGL 52 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Designed to increase the understanding of children's rhythmic movement capabilities and the interaction of play in the development of the cognitive, affective, and psychomotor domains. Emphasis on how teachers can effectively utilize the psychomotor domain as a way of learning for young children. [D; CSU]

CD 177.
Alternatives to Violence
3 units

Lecture 3 hours
Offered: Variable
Exploration of violence in America and its impact on the physical and psychological well-being of children, their families, and early childhood teachers. Emphasis on the relationship of self-awareness and multicultural awareness as critical factors in understanding appropriate early childhood violence prevention and intervention strategies. [D; CSU]

CD 180.
Observation and Guidance for Child Development
3 units

Recommended Preparation: *CD 170 or equivalent*
Lecture 3 hours
Offered: Variable
Supports understanding of children's behavior based upon observation and direct experience with young children. Development of effective guidance techniques to promote the child's self-control, self-esteem, and competence. [D; CSU]

CD 180S.
Observation and Guidance for Child Development (Spanish)
3 units

Limitation on Enrollment: *Enrollment is limited to students enrolled in the Spanish-to-English Associate Teacher certificate program*
Lecture 3 hours
Offered: Variable
Supports understanding of children's behavior based upon observation and direct experience with young children, and the ability to develop effective guidance techniques to promote the child's self-control, self- esteem, and competence. [D]

CD 181.
Curriculum Planning for Child Development I
3 units

Recommended Preparation: *CD 170 or equivalent*
Lecture 3 hours
Offered: Variable
Methods and materials for planning and implementing an integrated program for young children. Emphasis on designing an environment for learning related to curriculum goals. [D; CSU]

CD 181S.
Curriculum Planning for Child Development I (Spanish)
3 units

Limitation on Enrollment: *Enrollment is limited to students enrolled in the Spanish-to-English Associate Teacher certificate program*
Lecture 3 hours
Offered: Variable
Methods and materials for planning and implementing an integrated program for young children. Emphasis on designing an environment for learning related to curriculum goals. [D]

CD 182.
Curriculum Planning for Child Development II
3 units

Prerequisite: *CD 181 or equivalent*
Lecture 3 hours
Offered: Variable
Fee: $7. Students design, implement, and evaluate learning experiences for young children using a process-oriented organization of curriculum rather than one of subject matter orientation. [D; CSU]

CD 184.
Observation and Documentation
3 units

Recommended Preparation: *CD 170 and 180, or equivalent*
Lecture 2 hours, laboratory 3 hours
Offered: Variable
Trains students in the skills of observation and documentation to understand children's behavior and construction of knowledge. Instruction will focus on the use of multimedia to support the narrative interpreting children's experience. Emphasis placed on the teacher, child, and parent collaboration in recording and communicating the process of observation and documentation. [D; CSU]

CD 198.
Paraprofessional Home Visitor Field Practicum
1–3 units

Credit/No Credit only
Prerequisite: *CD 152 or equivalent*
Limitation on Enrollment: *Declared major in Family Support Specialist program (Basic or Advanced)*
Laboratory 3–9 hours
Offered: Variable
Application of the principles and skills learned in paraprofessional family support services courses to practical work assignments. The student is required to attend a weekly one-hour conference. The supervisor and the instructor will evaluate the student's field performance. [D; CSU]

CD 199.
Home Visitor Advanced Practicum
1–2 units

Credit/No Credit only
Prerequisite: *CD 170 and 198, or equivalent*
Limitation on Enrollment: *Declared major in Family Support Specialist program (Basic or Advanced)*
Laboratory 3–6 hours
Offered: Variable
Application of the principles and skills learned in family support specialist courses to practical work assignments. The supervisor and the instructor will evaluate the student's field performance. [D; CSU]

CD 204.
Fundamentals of Nutrition
3 units

Grade only
Recommended Preparation: *BIOL 100, CHEM 100, and 110, or equivalent*
Lecture 3 hours
Offered: Variable
Nutrition as applied to the stages of the normal life cycle. Basic principles of nutrition including knowledge of daily nutritional requirements. (Same as HLTH 204.) [D; CSU; UC; CAN-FCS 2]

CD 260.
Introduction to the Reggio Emilia Approach
3 units

Grade only
Recommended Preparation: *CD 170 or equivalent*
Lecture 3 hours
Offered: Variable
Introduction to the comprehensive philosophy underlying the Reggio Emilia approach to early childhood education. Focus on social constructivism, ecological systems, meaning-making, and multiple diverse understandings in a global context. It explores Malaguzzi's "Hundred Languages of Children" and the project approach as a collaborative learning and reflective practice. [D; CSU]

CD 275.
Art for Children
3 units

Grade only
Lecture 3 hours
Offered: Variable
Fee: $15. Provides students with knowledge concerning theories of artistic development, developmental stages of artistic expression, and provides hands-on experience in planning curriculum for children. Curriculum will reflect diverse cultural expression. Students will develop skills in a variety of artistic mediums, supporting the process of creative expression. [D; CSU]

CD 277.
Diversity in Education
3 units

Grade only
Lecture 3 hours
Offered: Variable
Understanding systemic approaches to supporting and integrating diversity of culture, ethnicity, social class, gender, etc., inside and outside the classroom. Provides sensitive guidance in working with the global diversity of children, families, and communities; and developing and assessing different programs, methods, and materials. [D; CSU]

CD 278.
Working with Children and Families With Special Needs
3 units

Grade only
Prerequisite: *CD 170, 180, and 181, or equivalent*
Lecture 3 hours
Offered: Variable
Presents effective strategies for adapting curriculum and/or the environments for childcare providers caring for children with special needs. Emphasis on identifying what is developmentally appropriate for children with special needs, how and when to modify activities or equipment, how to manage challenging behaviors, and how to support families in meeting the needs of these children. [D; CSU]

CD 282.
Child Development Field Practicum
3 units

Grade only
Prerequisite: *CD 170, 180, 181, 182, and 184, or equivalent*
Lecture 1 hour, laboratory 6 hours
Offered: Fall, Spring
Provides close supervision at approved, quality early childhood education sites. Students will apply child development curriculum and guidance knowledge while implementing and evaluating learning experiences in all areas of learning. Conducting group times, handling routines of the classroom, and responding to the group and individual needs. [D; CSU]

CD 283.
Language Development
3 units

Recommended Preparation: *CD 170 or equivalent; ENGL 52 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Relationship between language development and cognitive growth is explored in several directions: analysis of diverse cultures with respect to language, both verbal and nonverbal; reading, including Piaget and Montessori; observation of children in the Child Development Center; study of language acquisition theories; and construction of learning environments facilitating language development. [D; CSU]

CD 284.
Child, Family, and Community
3 units

Recommended Preparation: *CD 170 or equivalent*
Lecture 3 hours
Offered: Variable
Examines patterns of family systems in contemporary society as they are influenced by heritage, diverse cultures, abilities, and languages. Explores the value of communication, the development of child advocacy skills, and the ability to use community resources to empower families and children. [D; CSU]

CD 284S.
Child, Family, and Community (Spanish)
3 units

Limitation on Enrollment: *Enrollment is limited to students enrolled in the Spanish-to-English Associate Teacher certificate program*
Lecture 3 hours
Offered: Variable
Examines patterns of family systems, in contemporary society as they are influenced by heritage, diverse cultures, abilities, and languages. Explores the value of communication, the development of child advocacy skills, and the ability to use community resources to empower families and children. [D]

CD 286.
Administration and Supervision of Children's Programs
3 units

Lecture 3 hours
Offered: Variable
Principles and practices of nursery school administration and supervision. Areas covered include types of nursery schools, maintenance and operation of the physical plant, regulatory agencies and legal requirements, personnel policies and practices, records, accounting, communication procedures, and meeting nutritional needs. [D; CSU]

CD 287.
Advanced Supervision and Administration of Children's Programs
3 units

Lecture 3 hours
Offered: Variable
Expands the knowledge and practice of supervision and management skills required for a variety of childcare programs. Studying basic principles for fiscal and personnel management in small business, analyzing government regulations and compliance for public funding, examining ways of working with board of directors, translating the program to the community, and networking with other agencies for support. [D; CSU]

CD 288.
Mentorship and Adult Supervision
3 units

Grade only
Recommended Preparation: *12 units of child development coursework to include: CD 170, 284; program curriculum courses (6 units); and currently working in a preschool or childcare setting in the role of lead teacher, head teacher, or other supervisory capacity*
Lecture 3 hours
Offered: Variable
Theoretical and practical techniques for facilitating the professional development of adults in an early childhood education setting, communication, problem solving and conflict resolution with adults, cultural issues, delegating responsibilities, and evaluating an early childhood setting. [D; CSU]

CD 289.
Nurturing Brain Development in Young Children
3 units

Prerequisite: *CD 170 or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Explores recent findings from neuroscience regarding brain development in infants and children. Emphasis on understanding the complex interplay between genes and experience, as well as the effects of this interplay on the child's developing brain, intellect, and personality. The many practical applications of these findings will also be discussed. [D; CSU]

CD 295.
Selected Topics in Child Development
1–3 units

Offered: Variable
Permits students to study relevant subjects within the field of child development. The specific objectives, methods of instruction and units of credit to be determined individually for projects proposed under this course description. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

CD 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of child development of particular interest to the student and not included in regular courses of the college. [D; CSU]

Chinese

School of Languages and Humanities

■ Dean

Renee M. Kilmer, Ph.D.
Office 430J
619-482-6461

■ Department Chair

Esther Alonso, M.A.

Chinese Courses

■ **CHIN 120.**
Mandarin Chinese I
5 units

Lecture 5 hours
Offered: Variable
Basic conversational Mandarin Chinese using the phonetic system pinyin. Basic structure and sentence patterns of Chinese and introduction to writing Chinese characters. Aspects of the culture will be introduced. Equivalent to two years high school Chinese. [D; CSU; UC]

■ **CHIN 130.**
Mandarin Chinese II
5 units

Prerequisite: CHIN 120 or equivalent
Lecture 5 hours
Offered: Variable
More advanced language skills in Mandarin. Continuation of new practical dialogues and construction of more creative dialogues. Increased emphasis on listening comprehension skills, reading (characters), and student compositions. Equivalent to three years high school Chinese. [D; CSU; UC]

■ **CHIN 295.**
Selected Topics in Chinese
1–3 units

Offered: Variable
Permits students to study relevant subjects within the field of Chinese. The specific objectives, methods of instruction, and units of credit to be determined individually for projects proposed under this course description. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

■ **CHIN 299.**
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of Chinese of particular interest to the student and not included in regular courses of the college. [D; CSU * UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Communication

School of Arts and Communication

■ Interim Dean

Donna Arnold
Office 702B
619-482-6372

■ Faculty

Linda Hensley, M.A.,
Alana-Patris Loyer, M.A.
Jordan Mills, M.A.
Candice Taffolla-Schreber, M.A.
Rebecca Wolniewicz, Ph.D.

■ Department Chair

Linda Hensley, M.A.

General Description

In the broadest sense, communication is the study of all forms of human communication with a focus upon verbal behavior. This department explores the nature and method of verbalization including the development and use of language and symbolic process and theories of rhetoric and communicative behavior. In all forms of communication, individuals talk to influence the behavior of others. A competent communicator is skilled in the critical analysis of an evaluation of messages and can manage essential factors within a verbal situation, such as idea selection, language use, and vocal or physical presentation.

Career Options

The following list is a sample of the many career options available for the communication major. A few of these require an associate degree, most require a baccalaureate degree, and some require a graduate-level degree: high school or college instructor, public relations officer, television or radio broadcaster, consultant, lawyer, public administrator, politician, speech writer, minister, sales representative, business manager, television or radio critic, and film critic. With additional coursework, the communication major can seek positions related to speech pathology, and audiology, which is a field concerned with disorders of speech, language, and hearing.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Communication	*A1470*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Arts Degree
Communication

Transfer Preparation * (Major Code: A1470)

Designed to provide students who desire a broad cultural education in the liberal arts and for the major who wishes to transfer to a four-year college or university. Coursework focuses on both theoretical principles of oral communication and practical application in public speaking in formal and informal debates. In addition, the curriculum encourages effective personal growth, citizenship, and social relations.

COMM 103	*Oral Communication*	*3*
SELECT 18 UNITS FROM THE FOLLOWING ELECTIVES:		**18**
COMM 104	*Public Speaking (3)*	
COMM 111	*Oral Interpretation (3)*	
COMM 142	*Oral History (3)*	
COMM 160	*Argumentation and Debate (3)*	
COMM 180	*Introduction to Electronic Media (3)*	
COMM 185	*Cinema as a Form of Expression and Communication (3)*	
COMM 200	*Introduction to Mass Communication and Society (3)*	
COMM 262	*Forensics Workshop I (.5–2)*	
COMM 263	*Forensics Workshop II (.5–2)*	
COMM 264	*Forensics Workshop III (.5–2)*	
COMM 265	*Forensics Workshop IV (.5–2)*	
	Total units	***21***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Communication Courses

COMM 103.
Oral Communication
3 units

Grade only
Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Training in concepts of communication, with emphasis on public speaking; methods of researching and outlining speeches; group discussion techniques; theories of interpersonal, nonverbal, and listening techniques; and issues of language use and perception. [D; CSU; UC]

COMM 104.
Public Speaking
3 units

Grade only
Lecture 3 hours
Offered: Fall, Spring
Designed to aid students in improving their communicative skills and to prepare students for careers in teaching, business, law, and sales through experience in researching, organizing, and delivering public speeches. [D; CSU; UC; CAN-SPCH 4]

COMM 111.
Oral Interpretation
3 units

Grade only
Lecture 3 hours
Offered: Spring
Introduction to the study of literature through performance, methods of researching, analyzing, and delivering oral presentations of prose, poetry, and drama. [D; CSU; UC]

COMM 142.
Oral History
3 units

Grade only
Lecture 3 hours
Offered: Variable
Introduction to the history of oral traditions; analysis of types of stories; their cultural influences and contextual application. Recommended for majors in education, cultural studies, English, and anthropology. [D; CSU]

COMM 160.
Argumentation and Debate
3 units

Grade only
Lecture 3 hours
Offered: Spring
Acquisition and organization of evidence and the construction and use of the debate brief; study and discussion of current issues, the presentation of informal and formal debates. [D; CSU; UC; CAN-SPCH 6]

COMM 174.
Interpersonal Communication
3 units

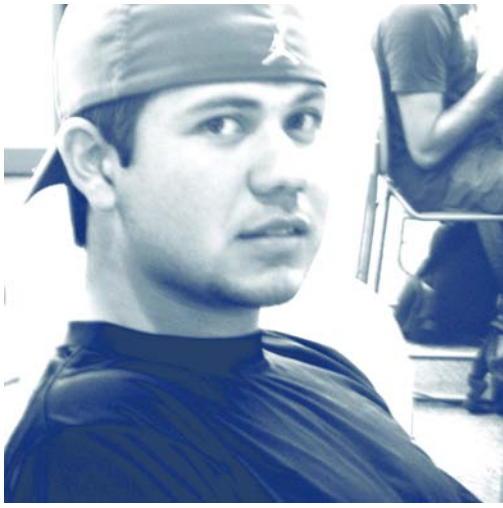
Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Theories, models, and principles of interpersonal communication. Emphasizes elements of intra/interpersonal communication fundamental to effective relationships: family, friendship, romantic, workplace, and intercultural. Focuses on communication and self; perception and communication; communication climates and roadblocks; verbal and nonverbal communication; listening, feedback, and disclosure skills; conflict styles; resolution strategies; ethical issues; and mediated communication. [D; CSU]

COMM 176.
Intercultural Communication
3 units

Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Introduction to intercultural communication principles and processes; provides for development of a more global communication perspective and greater appreciation of other cultures through increased awareness of and sensitivity to different cultural viewpoints influenced by variables including language, verbal/nonverbal communication, cultural values, perception, inferences, expectations and media impact. [D; CSU; UC]

COMM 177.
Organizational Communication
3 units

Lecture 3 hours
Offered: Variable
Introduction to organizational communication. Instruction in group communication, subordinate-superior communication, leadership, technology and the workplace, managing diversity, and conflict resolution. [D; CSU]



"I chose to enroll at Southwestern College because it's conveniently located close to home and is preparing me for transfer to a four-year university where I will major in Kineseology.."

—MARIO FIGUEROA,
General Studies

COMM 180.
Introduction to Electronic Media
3 units

Lecture 3 hours
Offered: Fall, Spring
Survey of the world of broadcasting including basic concepts of the nature of radio energy, broadcast channels, storage, distribution and delivery systems; a survey of the origins, growth, business practices, social control, and effects of broadcasting in the United States; and an introduction to noncommercial and nonbroadcast systems. (Same as TELE 180.) [D; CSU]

COMM 185.
Cinema as a Form of Expression and Communication
3 units

Lecture 3 hours
Offered: Fall, Spring
Introduction to the appreciation of film as a medium of expression and communication. Selected domestic and foreign films (screen, video, television) will be viewed and analyzed for methods, techniques, and objectives creating the films' messages to increase cinematic literacy and understanding of this uniquely powerful, communication medium. (Same as TELE 114.) [D; CSU; UC]

COMM 200.
Introduction to Mass Communication and Society
3 units

Lecture 3 hours
Offered: Variable
Surveys the mass media institutions, functions, interrelationships and effects on society. Intended as a building block in the general education of the non-major student and the introduction to the discipline of study for the communication major. (Same as JOUR 101.) [D; CSU; UC]

COMM 201.
Fundamentals of Competitive Speaking
3 units

Grade only
Prerequisite: *COMM 103 or 111 or equivalent*
Lecture 3 hours
Offered: Variable
Introduction to intercollegiate speaking events. Specific speaking categories: informative, persuasion, entertainment, oral interpretation, speech analysis, impromptu, extemporaneous, debate, and reader's theatre. [D; CSU]

COMM 262.
Forensics Workshop I
.5–2 units

Laboratory 2–6 hours
Offered: Fall, Spring
Designed as a laboratory for speech competition. Students will compete on the college forensics team and will make presentations before community groups. [D; CSU]

COMM 263.
Forensics Workshop II
.5–2 units

Laboratory 2–6 hours
Offered: Fall, Spring
Designed as a laboratory for speech competition. Students will compete on the college forensics team and will make presentations before community groups. [D; CSU]

COMM 264.
Forensics Workshop III
.5–2 units

Laboratory 2–6 hours
Offered: Fall, Spring
Designed as a laboratory for speech competition. Students will compete on the college forensics team and will make presentations before community groups. [D; CSU]

COMM 265.
Forensics Workshop IV
.5–2 units

Laboratory 2–6 hours
Offered: Fall, Spring
Designed as a laboratory for speech competition. Students will compete on the college forensics team and will make presentations before community groups. [D; CSU]

COMM 295.
Selected Topics in Communication
1–3 units

Offered: Variable
Permits students of speech-communication to study relevant topics within the field. Specific course objectives and methods of instruction and evaluation will be determined by each individual course. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

COMM 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of speech communication of particular interest to the student and not included in the regular courses. [D; CSU; * UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Computer Aided Design and Drafting

School of Business and Information Systems

■ Dean

Irma Alvarez, M.A.
Office Room 215
619-482-6457

■ Faculty

Walter John Smith, B.A.

■ Department Chair

Joan Stroh, B.A.

General Description

Designed to provide students with the skills and technical knowledge requested by employers using Computer Aided Design and Drafting (CADD) in a variety of departments. This program focuses on the development of CADD skills and problem-solving strategies in the development of two-dimensional models. Additional engineering options allow students to acquire advanced CADd skills in areas of special interest.

The CADD technology A.S. degree prepares the student for various job opportunities in a wide variety of departments. There is an increasing demand for competent engineering technicians knowledgeable in the use and application of CADD software. Students planning to enroll in a four-year college engineering program will benefit greatly by developing CADD skills used in most engineering departments.

Career Options

CADD skills provide the student with potential employment in a wide variety of departments that include mechanical, aeronautical, structural, and civil engineering. New areas of use can be found in animation, simulation, and theatrical departments. While drafting boards are still in use, a large number of companies have integrated drafting boards with monitors and computers, requiring that today's engineers, designers, and draftsmen possess both essential drafting and CADD competencies.

Degree/Certificate Options

	Major Code
Associate in Science Degree: Career/Technical	
Computer Aided Design and Drafting	*A2571*
Design Technology	*A2572*
Certificates of Achievement	
Computer Aided Design and Drafting—Basic	*02569*
Computer Aided Design and Drafting—Advanced	*A2576*
Design Technology	*A2577*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate of Science Computer Aided Design and Drafting

Career/Technical (Major Code: A2571)

Designed to provide students with the skills and technical knowledge requested by employers using CADD in a variety of departments. The program focuses on the development of CADD skills and problem solving strategies in the development of two- and three-dimensional models. Additional engineering options allow students to acquire advanced CADD skills in areas of special interest.

FIRST SEMESTER		
CAD 220	*Introduction to CAD/CAM Systems*	*3*
CAD 222	*CAD Mechanical Design I*	*3*
ENGR 110	*Engineering Graphics*	*3*
SECOND SEMESTER		
ELEC 111	*DC Circuit Principles*	*2*
CAD 223	*CAD Detailing and Dimensioning*	*3*
CAD 224	*CAD Mechanical Design II*	*3*
THIRD SEMESTER		
ELEC 116	*AC Circuit Principles*	*2*
MATH 104	*Trigonometry*	*3*
FOURTH SEMESTER		
ELEC 118	*AC Circuit Analysis and Computer Simulation*	*2*
PHYS 110	*General Physics I*	*4*
	Total units	***28***

Recommended Electives: *CAD 240, 272, 276.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Design Technology

Career/Technical (Major Code: A2572)

Designed to provide the student with a sound background in CADD and design elements related to the field of mechanical engineering. The program trains the student in use of CADD software and stresses the fundamentals of design and related topics. Design and presentation software are available to enrolled students. Additional engineering options allow students to acquire, develop, and enhance skills in areas of special interest.

FIRST SEMESTER

ENGR 101	*Introduction to Engineering and Science Careers*	*1*
ENGR 110	*Engineering Graphics*	*3*
ARCH 200	*Introduction Computer Aided Design*	
	or	*3*
CAD 220	*Introduction to CAD/CAM Systems*	
MATH 104	*Trigonometry*	*3*

SECOND SEMESTER

ARCH 205	*Advanced Architectural CAD*	
	or	*3*
CAD 222	*CAD Mechanical Design I*	
ELEC 111	*DC Circuit Principles*	*2*

THIRD SEMESTER

ELEC 116	*AC Circuit Principles*	*2*
PHYS 110	*General Physics I*	*4*

FOURTH SEMESTER

ELEC 118	*AC Circuit Analysis and Computer Simulation*	*2*
Select 6 units from electives		*6*
	Total units	***29***

Electives: CAD 223, 224, 240, 270, 272, 276.

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Certificates of Achievement

Computer Aided Design and Drafting—Basic

Career/Technical (Major Code: 02569)

CAD 220	*Introduction to CAD/CAM Systems*	*3*
CAD 222	*CAD Mechanical Design I*	*3*
CAD 223	*CAD Detailing and Dimensioning*	*3*
CAD 224	*CAD Mechanical Design II*	*3*
ENGR 110	*Engineering Graphics*	*3*
	Total units	***15***

Computer Aided Design and Drafting—Advanced

Career/Technical (Major Code: A2576)

FIRST SEMESTER

CAD 220	*Introduction to CAD/CAM Systems*	*3*
CAD 222	*CAD Mechanical Design I*	*3*
ENGR 110	*Engineering Graphics*	*3*

SECOND SEMESTER

ELEC 111	*DC Circuit Principles*	*2*
CAD 223	*CAD Detailing and Dimensioning*	*3*
CAD 224	*CAD Mechanical Design II*	*3*

THIRD SEMESTER

ELEC 116	*AC Circuit Principles*	*2*
MATH 104	*Trigonometry*	*3*

FOURTH SEMESTER

ELEC 118	*AC Circuit Analysis and Computer Simulation*	*2*
PHYS 110	*General Physics I*	*4*
	Total units	***28***

Design Technology

Career/Technical (Major Code: A2577)

SEMESTER

ENGR 101	*Introduction to Engineering and Science Careers*	*1*
ENGR 110	*Engineering Graphics*	*3*
ARCH 200	*Introduction Computer Aided Design*	
	or	*3*
CAD 220	*Introduction to CAD/CAM Systems*	
MATH 104	*Trigonometry*	*3*

SECOND SEMESTER

ARCH 205	*Advanced Architectural CAD*	
	or	*3*
CAD 222	*CAD Mechanical Design I*	
ELEC 111	*DC Circuit Principles*	*2*

THIRD SEMESTER

ELEC 116	*AC Circuit Principles*	*2*
PHYS 110	*General Physics I*	*4*

FOURTH SEMESTER

ELEC 118	*AC Circuit Analysis and Computer Simulation*	*2*
Select 6 units from electives		*6*
	Total units	***29***

Electives: *CAD 223, 224, 240, 270, 272,276.*

Computer Aided Design and Drafting Courses

CAD 220.
Introduction to CADD/CAM Systems
3 units

Recommended Preparation: *ENGR 110 or equivalent*
Lecture 2 hours, laboratory 2 hours
Offered: Variable
Fee: $5. Introduction to the field of Computer Aided Design and Drafting (CADD). Provides an overview of the use of personal computers in the development of drawings for engineering-related fields. [D; CSU; UC]

CAD 222.
CAD Mechanical Design I
3 units

Prerequisite: *CAD 220 or equivalent*
Lecture 2 hours, laboratory 2 hours
Offered: Variable
Fee: $5. Designed as a continuation of CAD 220, Introduction to CAD/CAM. Emphasis on advanced CAD functions, including Three-dimensional modeling, surfacing, and rendering. [D; CSU]

CAD 223.
CAD Detailing and Dimensioning
3 units

Prerequisite: *CAD 222 or equivalent*
Lecture 2 hours, laboratory 2 hours
Offered: Variable
Fee: $5. Development of completed working drawings. Use of advanced dimensioning functions, geometrical dimensioning and tolerancing (ANSI Y 14.5) and view development from three-dimensional models. [D; CSU]

CAD 224.
CAD Mechanical Design II
3 units

Prerequisite: *CAD 223 or equivalent*
Lecture 2 hours, laboratory 2 hours
Offered: Variable
Fee: $8. Introduction to system and part design with an emphasis on organization and development of design projects. [D; CSU]

CAD 228.
CAD Advanced Surface Design
3 units

Prerequisite: *CAD 224 or equivalent*
Lecture 2 hours, laboratory 2 hours
Offered: Fall
Fee: $5. Introduction to advanced surface application and texture mapping in the development of three-dimensional geometrical models. [D; CSU]

CAD 240.
CAM Numerical Control I
3 units

Prerequisite: *CAD 222 or equivalent*
Lecture 2 hours, laboratory 2 hours
Offered: Spring
Fee: $8. Learn to develop machine control data for two, two and one-half, and three-axis numerically-controlled machines. Included is the use of the tool path editor and post processors. Also, utilize the nesting capabilities for sheet metal of flame-cut parts. [D; CSU]

CAD 272.
Solid Modeling II
3 units

Grade only
Prerequisite: *CAD 228 or equivalent*
Lecture 2 hours, laboratory 2 hours
Offered: Variable
Fee: $5. Provides an opportunity to more thoroughly explore the power of a parametric solid modeling program. Focuses on the use of previous skills and introduces new functions and techniques used in the development of more advanced geometry. [D; CSU]

CAD 276.
Technical Computer Imaging and Animation I
3 units

Grade only
Recommended Preparation: *CL 120 or ART 100 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Fee: $6. Introduction to the development and use of two- and three-dimensional models for engineering and multimedia. Students will create texture map and animate provided models as well as develop models and animation of their own. [D; CSU]

CAD 277.
Technical Computer Imaging and Animation II
3 units

Grade only
Prerequisite: *CAD 276 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Fee: $5. Introduction to advanced 3D studio functions and integration of media using video capture and authoring software. [D; CSU]

CAD 278.
Technical Computer Imaging and Animation III
3 units

Grade only
Prerequisite: *CAD 277 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Fee: $5. Opportunity to work with specific character animation software and to work as a team member in developing a demonstration tape and/or CD. Allows students to apply, develop new, or enhance existing digital animation skills. [D; CSU]

CAD 295.
Selected Topics in CAD
1–3 units

Offered: Variable
Permits students to study relevant topics within the field of computer aided design. (May be taken for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

CAD 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of computer aided design of particular interest to the student and not included in regular courses of the college. [D; CSU]

Computer Information Systems

School of Business and Information Systems

Dean

Irma Alvarez, M.A.
Office 215
619-482-6457

Faculty

Kathleen Canney-López, B.A.
John J. Davis, B.A.
Julie Grimes, M.S.
Gregory Hazlett, A.B.
Janet Koontz, B.A.
Robert Lingvall, M.S.,
Thomas Luibel, B.S.
Timothy Mathis, M.A.
Gregory Mohler, M.A.
Frank Paiano, M.B.A.
Brian Sterck, B.S.
Joan Stroh, B.A.

Department Chair

Joan Stroh, B.A.

General Description

Computer information systems is the study of the history, theories, principles, processes, procedures, structures, designs, applications, programs, languages, and management of modern operating systems. This department explores computer skills, data entry operations, information manipulation, control and data structures, software capabilities, program development, database management, design processes, operating systems, and system analysis.

Career Options

The following list is a sample of the many career options available for computer information systems majors. Most require an associate degree, some require a baccalaureate degree, and a few require a graduate-level degree: computer operator, data technician, systems analyst, computer maintenance technician, programmer, systems test engineer, software technician, documentation specialist, LAN administrator, PC specialist, and positions available in allied professions of computer science, business, and industry.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Information Systems	*01130*
Associate in Science Degree: Career/Technical	
AREAS OF EMPHASIS	
Computer Information Systems:	
* *Application Programming*	*02085*
* *eCommerce Emphasis*	*02071*
* *Internet*	*02083*
* *Internet Web Design*	*02086*
* *Internetwork Technician*	*02088*
* *Microcomputer Applications*	*02335*
* *Network Administration*	*02103*
* *Operations/PC Support Specialist*	*02079*
* *Systems Programming*	*02090*
Certificates of Achievement	
AREAS OF EMPHASIS	
Computer Information Systems:	
* *Applications Programming*	*02096*
* *eCommerce—Basic*	*02072*
* *eCommerce—Advanced*	*02073*
* *Internet—Basic*	*02074*
* *Internet—Advanced*	*02093*
* *Internet Web Design—Basic*	*02092*
* *Internet Web Design—Advanced*	*02094*
* *Internetwork Technician—Basic*	*02089*
* *Internetwork Technician—Advanced*	*02097*
* *Microcomputer Applications—Basic*	*02337*
* *Microcomputer Applications—Advanced*	*02338*
* *Network Administration*	*02104*
* *Operations/PC Support Specialist—Basic*	*02082*
* *Operations/PC Support Specialist—Advanced*	*02098*
* *Systems Programming*	*02099*
Other Certificates of Achievement	
* *Multimedia Developer Using Director*	*02106*
* *Network Associate Specialist—Intensive Training—Basic*	*02101*
* *Network Associate Specialist—Intensive Training—Advanced*	*02102*
* *Web Database Programmer/Administrator—Lamp (Linux, Apache, MySQL, PHP)*	*02107*
* *Web Designer*	*02108*
* *Web Flash Designer*	*02109*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Arts Degree
Information Systems

Transfer Preparation * (Major Code: 01130)

Prepares students for many job opportunities needing skills in computer programming, systems analysis, end user application development, and administrative management. There is a demand for computer information system knowledge and skills for positions in finance, accounting and auditing, manufacturing, and marketing.

ACCT 101	*Principles of Accounting I*	*4*
ACCT 102	*Principles of Accounting II—Managerial*	*4*
BUS 140	*Business Law*	*3*
BUS 212	*Business Communication*	*3*
CIS 101	*Introduction to Computers and Information Processing*	*4*
ECON 101	*Principles of Economics I*	*3*
ECON 102	*Principles of Economics II*	*3*
MATH 119	*Elementary Statistics*	*4*
MATH 120	*Calculus for Business Analysis*	*3*
	Total units	***31***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Associate in Science Degree
Computer Information Systems

Career/Technical

COMMON CORE:

BUS 211	*Communication in Business and Industry*	
	or	*3*
BUS 212	*Business Communication*	
CIS 10A	*Microcomputer Repair and Service*	*2*
CIS 101	*Introduction to Computers and Information Processing*	*4*
CIS 130	*Microcomputer Disk Operating System*	*1*
CIS 139	*Windowing Environments*	*1*
CIS 150	*Introduction to Telecommunications and the Internet*	*1*
CIS 226	*Operating Systems and Command Languages*	*3*
	Total units	***15***

Plus at least one emphasis below (14–27)

CIS—Applications Programming Emphasis

Career/Technical (Major Code: 02085)

Provides training in the theory and practice of computer programming emphasizing business and computer information systems applications.

Prepares students for employment as entry-level programmer trainees able to utilize micro, mini and mainframe computers with a variety of programming languages, application development tools, structured techniques, and software packages.

ACCT 7	*Basic Business Bookkeeping*	*3*
CIS 106	*Programming Logic and Design*	*3*
CIS 122A	*Spreadsheet Software—Lotus*	
	or	*1*
CIS 122B	*Spreadsheet Software—Excel*	
CIS 133	*Adv. Microcomputer Spreadsheets Software*	*1*
CIS 134	*Microcomputer Database Software—Access*	*1*
CIS 135	*Adv. Microcomputer Database Software—Access*	*1*
SELECT 12 UNITS FROM THE FOLLOWING:		**12**
CIS 111	*Structured Programming Using BASIC (4)*	
CIS 115	*Introduction to Programming Using C++ (4)*	
CIS 117	*Windows Programming Using Visual Basic (4)*	
CIS 118	*Windows Programming Using Delphi (4)*	
CIS 146	*Introduction to Structured Query Language (SQL) (2)*	
CIS 153	*Internet Programming Using Java/++ (4)*	
Plus Common Core courses for Computer the Information Systems Program		*15*
	Total units	***37***

Recommended Elective: *BUS 150.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

CIS—eCommerce Emphasis

Career/Technical (Major Code: 02071)

The objective of the eCommerce curriculum is to prepare students for entry-level employment in the eCommerce industry. The curriculum is designed to provide students with basic and advanced eCommerce knowledge, along with the skills necessary to design, maintain, and administer a Web-based eCommerce site.

Students will understand the complexities of the marketplace for eCommerce and will become familiar with the legal and regulatory issues that affect eCommerce. Students will gain an understanding of the issues surrounding privacy, security, and the protection of intellectual property.

BUS 134	*eCommerce I—Principles of Electronic Commerce*	*3*
CIS 146	*Introduction to Structured Query Language (SQL)*	*2*
CIS 252	*Advanced Multimedia for the Internet*	*4*
CIS 103A	*eCommerce IIIa—Miva Merchant Online Stores Using Fireworks (4)*	
	or	*3–4*
CIS 104	*eCommerce IV—Beginning ColdFusion (3)*	
CIS 103B	*eCommerce IVa—Miva Script XML Based Programming Language*	
	or	*3*
CIS 107	*eCommerce V: Advanced ColdFusion*	
CIS 103C	*eCommerce Va-Dreamweaver MX Web Database Development*	*4*
CIS 136	*eCommerce VI: Interactive Web Development (Team Project)*	
	or	*4*
BUS 137	*eCommerce VI: Interactive Web Development (Team Project)*	
Plus Common Core courses for the Computer Information Systems		*15*
	Total units	***38–39***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

CIS—Internet Emphasis

Career/Technical (Major Code: 02083)

Designed to provide students with a fundamental understanding of web pages for the Internet.

The objective of the curriculum is to prepare students for employment as Internet specialists, by learning how Internet technology can be used to reengineer business processes. Students will gain programming, art, and telemedia skills using applications that are geared for designing World Wide Web pages. The Internet specialist designs a plan that specifies how a Web site integrates with a company's existing infrastructure, and is also well versed in developing and managing sophisticated Web projects.

ART 192	*Introduction to Digital Imaging*	*3*
CIS 151	*Research Using the Internet*	*1*
CIS 152	*Using HTML to Create World Wide Web Pages on the Internet*	*1*
CIS 154	*Frame Programming Using HTML*	*1*
CIS 155	*Interactive Web Pages with Perl*	*1*
CIS 157A	*Web Authoring: Introduction to Macromedia Dreamweaver*	*1*
CIS 158	*Imaging for the World Wide Web (Photoshop)*	*1*
CIS 250	*Web Page Scripting*	*1*
CIS 252	*Advanced Multimedia for the Internet*	*4*
TELE 131	*Introduction to Video and Film Production*	*3*
TELE 163	*Video Computer Graphics*	*3*
Plus Common Core courses for Computer the Information Systems		*15*
	Total units	***35***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

CIS—Internet Web Design Emphasis

Career/Technical (Major Code: 02086)

Designed to provide students with a fundamental understanding of building next generation Web sites for private, corporate, and entertainment industry.

The objective of the curriculum is to prepare students for employment as entry-level Internet Web designers. An Internet Web designer brings a Web site to life providing an intuitive interface through effective information design. The student will gain knowledge of how to provide the navigational structure for Web sites and determine the appropriate level of interactivity for the content and audience. The student will also learn how to handle preproduction technical considerations to integrate multiple media types, such as graphics, audio, and video into Web sites.

ART 137	*Web Site Development for Artists and Graphic Designers*	*4*
ART 192	*Introduction to Digital Imaging*	*3*
CIS 141A	*Networking Systems-Windows*	*2*
CIS 155	*Interactive Web Pages With Perl*	*1*
CIS 159A	*Multimedia Development (Director)*	*4*
CIS 250	*Web Page Scripting*	*1*
CIS 252	*Advanced Multimedia for the Internet*	*4*
CAD 276	*Technical Computer Imaging and Animation I*	*3*
Plus Common Core courses for Computer the Information Systems		*15*
	Total units	***37***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

CIS—Internetwork Technician Emphasis

Career/Technical (Major Code: 02088)

Provides intensive training in the theory and practice of the operation and maintenance of internetworking with special emphasis on switches, routers, and other specialized equipment.

The objectives of the curriculum are to prepare students for employment as certified level technicians in the Internetworking industry.

CIS 142	*Networking Academy Fundamentals (Cisco Certification Preparation)*	*3*
CIS 144A	*Routers and Internetwork Fundamentals (Cisco Certification Preparation)*	*3*
CIS 144B	*Advanced Routers and LAN Networking*	*3*
CIS 144C	*Wide Area Networks Implementation and Support*	*3*
CIS 147	*Internetworking Security*	*3*
CIS 275	*UNIX Operating System: Core Fundamentals*	*4*
ELEC 15	*Data, Voice, and Video Cable Installation*	*2*
ELEC 260	*Microcomputer Systems and A+ Certification*	*4*
ELEC 266	*Network Management for Technicians*	*4*
Plus Common Core courses for the Computer Information Systems		*15*
	Total units	***44***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

CIS—Microcomputer Applications Emphasis

Career/Technical (Major Code: 02335)

Designed for those students with no prior computer experience who want to learn how to use the computer as a business and personal tool. Some vocational opportunities are accounting clerk, data entry clerk, bookkeeper, administrative assistant, general office clerk, and small office data processor.

Students will gain computer skills such as using appropriate office applications software, programming, and familiarity with information systems concepts in a microcomputer environment. Students should have typing skills or should complete BUS 70 Keyboarding I as their first course of the program.

BUS 120	*Introduction to Business*	*3*
CIS 10B	*Microcomputer Hardware and Software Upgrade*	*2*
CIS 121A	*Word Processing—Word Perfect*	
	or	*1*
CIS 121B	*Word Processing—Microsoft Word*	
CIS 122A	*Spreadsheet Software—Lotus*	
	or	*1*
CIS 122B	*Spreadsheet Software—Excel*	
CIS 133	*Advanced Microcomputer Spreadsheets Software*	*1*
CIS 134	*Microcomputer Database Software—Access*	*1*
CIS 135	*Advanced Microcomputer Database Software—Access*	*1*
CIS 137	*Advanced Word Processing Software*	*1*
CIS 146	*Introduction to Structured Query Language (SQL)*	*2*
CIS 246	*Desktop Publishing*	*1*
Plus Common Core courses for the Computer Information Systems		*15*
	Total units	***29***

Recommended Electives: *ACCT 12, 101; * BUS 70; CIS 115, 117.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

CIS—Network Administration Emphasis

Career Technical (Major Code: 02103)

Designed to prepare students for employment as certified network technicians in the internetworking industry. Provides advanced training in the design, operation, and maintenance of internetworking with an emphasis on Cisco routers and switches. Provides students with the suggested preparation for the Cisco industry certification. Cisco Certified Networking Professional (CCNP).

CIS 244A	*Building Cisco Scalable Networks*	*4*
CIS 244B	*Building Cisco Remote Access Networks*	*3*
CIS 244C	*Building Cisco Multilayer Switched Networks*	*3*
CIS 244D	*Cisco Internetwork Troubleshooting*	*3*
CIS 245	*Implementing, Configuring, and Monitoring Network Firewalls*	*3*
CIS 276	*UNIX Operating System: High Level Integration*	*4*
CIS 290–293	*Work Experience CIS Applications I–IV (2–4)*	*3*
Plus Common Core courses for the Computer Information Systems		*15*
	Total units	***38***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

NOTE: *Advanced program for students with experience in the field or who have completed the Internetworking Technician Emphasis*

CIS—Operations/PC Support Specialist Emphasis

Career/Technical (Major Code: 02079)

Designed for strong background in micro and supermini computer operations and support.

Students will learn hardware and software installation, the maintenance and repair of PCs and peripherals, and local area networking.

Vocational opportunities include, but are not limited to, entry-level PC support specialist, computer operations, and network operations.

CIS/ELEC 10B	*Microcomputer Hardware and Software Upgrade*	*2*
CIS 14/ELEC 14	*Office Automation Equipment Repair*	*2*
CIS 141A	*Networking Systems—Windows NT*	*2*
ELEC 15	*Data, Voice, and Video Cable Installation*	*2*
ELEC 131	*Digital Electronics Principles*	*2*
ELEC 260	*Microcomputer Systems and A+ Certification*	*4*
Plus Common Core courses for the Computer Information Systems		*15*
	Total units	***29***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

CIS—Systems Programming Emphasis

Career/Technical (Major Code: 02090)

Provides training in the theory and practice of computer programming emphasizing industrial, business, and scientific applications.

The objective of the computer information systems programming curriculum is to prepare students for employment as entry-level programmers, system level software integrators (minimicro environments), or software error recovery test and acceptance personnel using a variety of system software resources and associated techniques.

CIS 106	*Programming Logic and Design*	*3*
CIS 115	*Introduction to Programming Using C++*	*4*
CIS 209	*Assembly Language Programming*	*4*
CIS 272	*Introduction to the 'C' Programming Language*	*4*
CIS 275	*UNIX Operating System: Core Fundamentals*	*4*
CIS 276	*UNIX Operating System: High Level Integration*	*4*
SELECT 8 UNITS FROM THE FOLLOWING:		**8**
CIS 111	*Structured Programming Using BASIC (4)*	
CIS 117	*Windows Programming Using Visual BASIC (4)*	
CIS 118	*Windows Programming Using Delphi (4)*	
CIS 153	*Internet Programming Using Java/J++ (4)*	
Plus Common Core courses for the Computer Information Systems		*15*
	Total units	***46***

Recommended Electives: *CIS 133, 137; ELEC 132; MATH 140.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Certificates of Achievement

CIS—Applications Programming Emphasis

Career/Technical (Major Code: 02096)

CIS 106	*Programming Logic and Design*	*3*
CIS 122A	*Spreadsheet Software—Lotus*	
	or	*1*
CIS 122B	*Spreadsheet Software—Excel*	
CIS 133	*Adv. Microcomputer Spreadsheets Software*	*1*
CIS 134	*Microcomputer Database Software—Access*	*1*
CIS 135	*Adv. Microcomputer Database Software—Access*	*1*
SELECT 12 UNITS FROM THE FOLLOWING:		**12**
CIS 111	*Structured Programming Using BASIC (4)*	
CIS 115	*Introduction to Programming Using C++ (4)*	
CIS 117	*Windows Programming Using Visual Basic (4)*	
CIS 118	*Windows Programming Using Delphi (4)*	
CIS 146	*Introduction to Structured Query Language (SQL) (2)*	
CIS 153	*Internet Programming Using Java/++ (4)*	
Plus Common Core courses for the Computer Information Systems (Except Acct 107)		*12*
	Total units	***31***

CIS—eCommerce Emphasis—Basic

Career/Technical (Major Code: 02072)

BUS 134	*eCommerce I—Principles of Electronic Commerce*	*3*
CIS 146	*Introduction to Structured Query Language (SQL)*	*2*
CIS 252	*Advanced Multimedia for the Internet*	*4*
CIS 103A	*eCommerce IIIa—Miva Merchant Online Stores Using Fireworks (4)*	
	or	*3–4*
CIS 104	*eCommerce IV—Beginning ColdFusion (3)*	
CIS 103B	*eCommerce IVa—Miva Script XML Based Programming Language*	
	or	*3*
CIS 107	*eCommerce V—Advanced ColdFusion*	
	Total units	***15–16***

CIS—eCommerce Emphasis—Advanced

Career/Technical (Major Code: 02073)

BUS 134	*eCommerce I—Principles of Electronic Commerce*	*3*
CIS 146	*Introduction to Structured Query Language (SQL)*	*2*
CIS 252	*Advanced Multimedia for the Internet*	*4*
CIS 103A	*eCommerce IIIa—Miva Merchant Online Stores Using Fireworks (4)*	
	or	*3–4*
CIS 104	*eCommerce IV—Beginning ColdFusion (3)*	
CIS 103B	*eCommerce IVa—Miva Script XML Based Programming Language*	
	or	*3*
CIS 107	*eCommerce V: Advanced ColdFusion*	
CIS 103C	*eCommerce Va—Dreamweaver MX Web Database Development*	*4*
CIS 136/ BUS 137	*eCommerce VI—Interactive Web Development (Team Project)*	*4*
Plus Common Core courses for the Computer Information Systems		*15*
	Total units	***38–39***

CIS—Internet Emphasis—Basic

Career/Technical (Major Code: 02074)

CIS 151	*Research Using the Internet*	*1*
CIS 152	*Using HTML to Create World Wide Web Pages on the Internet*	*1*
CIS 154	*Frame Programming Using HTML*	*1*
CIS 155	*Interactive Web Pages with Perl*	*1*
CIS 157A	*Internet Publishing*	*1*
CIS 158	*Imaging for the World Wide Web (Photoshop)*	*1*
CIS 250	*Web Page Scripting*	*1*
CIS 252	*Advanced Multimedia for the Internet*	*4*
	Total units	***11***

CIS—Internet Emphasis—Advanced

Career/Technical (Major Code: 02093)

ART 192	*Introduction to Digital Imaging*	*3*
CIS 151	*Research Using the Internet*	*1*
CIS 152	*Using HTML to Create World Wide Web Pages on the Internet*	*1*
CIS 154	*Frame Programming Using HTML*	*1*
CIS 155	*Interactive Web Pages with Perl*	*1*
CIS 157A	*Internet Publishing*	*1*
CIS 158	*Imaging for the World Wide Web (Photoshop)*	*1*
CIS 250	*Web Page Scripting*	*1*
CIS 252	*Advanced Multimedia for the Internet*	*4*
TELE 131	*Introduction to Video and Film Production*	*3*
TELE 163	*Video Computer Graphics*	*3*
Plus courses required for the Computer Information System		*15*
	Total units	***35***

CIS—Internet Web Design Emphasis Basic

Career/Technical (Major Code: 02092)

ART 137	*Web Site Development for Artists and Graphic Designers*	*4*
ART 192	*Introduction to Digital Imaging*	*3*
CIS 141A	*Networking Systems-Windows*	*2*
CIS 155	*Interactive Web Pages With Perl*	*1*
CIS 159A	*Multimedia Development (Director)*	*4*
CIS 250	*Web Page Scripting*	*1*
CIS 252	*Advanced Multimedia for the Internet*	*4*
CAD 276	*Technical Computer Imaging and Animation I*	*3*
	Total units	***22***

CIS—Internet Web Design—Emphasis Advanced

Career/Technical (Major Code: 02094)

ART 137	*Web Site Development for Artists and Graphic Designers*	*4*
ART 192	*Introduction to Digital Imaging*	*3*
CIS 141A	*Networking Systems-Windows*	*2*
CIS 155	*Interactive Web Pages With Perl*	*1*
CIS 159A	*Multimedia Development (Director)*	*4*
CIS 250	*Web Page Scripting*	*1*
CIS 252	*Advanced Multimedia for the Internet*	*4*
CAD 276	*Technical Computer Imaging and Animation I*	*3*
Plus courses required for the Computer Information Systems		*15*
	Total units	***37***

CIS—Internetwork Technician Emphasis—Basic

Career/Technical (Major Code: 02089)

CIS 142	*Networking Academy Fundamentals (Cisco Certification Preparation)*	*3*
CIS 144A	*Routers and Internetwork Fundamentals (Cisco Certification Preparation)*	*3*
CIS 144B	*Advanced Routers and LAN Networking*	*3*
CIS 144C	*Wide Area Networks Implementation and Support*	*3*
	Total units	***12***

CIS—Internetwork Technician Emphasis—Advanced

Career/Technical (Major Code: 02097)

CIS 142	*Networking Academy Fundamentals (Cisco Certification Preparation)*	*3*
CIS 144A	*Routers and Internetwork Fundamentals (Cisco Certification Preparation)*	*3*
CIS 144B	*Advanced Routers and LAN Networking*	*3*
CIS 144C	*Wide Area Networks Implementation and Support*	*3*
CIS 147	*Network Security*	*3*
CIS 275	*UNIX Operating System: Core Fundamentals*	*4*
ELEC 15	*Data, Voice and Video Cable Installation*	*2*
ELEC 260	*Microcomputer Systems and A+ Certification*	*4*
ELEC 266	*Network Management for Technicians*	*4*
Plus Common Core courses for the Computer Information Systems		*15*
	Total units	***44***

CIS—Microcomputer Applications Emphasis—Basic

Career/Technical (Major Code: 02337)

CL 120	*Computer Literacy*	*1*
BUS 70	*Keyboarding I **	*1*
BUS 120	*Introduction to Business*	*3*
CIS 10A	*Microcomputer Repair and Service*	*2*
CIS 121A	*Word Processing—Word Perfect*	
	or	*1*
CIS 121B	*Word Processing—Microsoft Word*	
CIS 122A	*Spreadsheet Software—Lotus*	
	or	*1*
CIS 122B	*Spreadsheet Software—Excel*	
CIS 133	*Advanced Microcomputer Spreadsheets Software*	*1*
CIS 134	*Microcomputer Database Software—Access*	*1*
CIS 137	*Advanced Word Processing Software*	*1*
CIS 139	*Windowing Environments*	*1*
CIS 150	*Introduction to Telecommunications and the Internet*	*1*
	Total units	***14***

* Students who know touch-typing do not need to take BUS 70.

CIS—Microcomputer Applications Emphasis—Advanced

Career/Technical (Major Code: 02338)

BUS 120	*Introduction to Business*	*3*
CIS 10B	*Microcomputer Hardware and Software Upgrade*	*2*
CIS 121A	*Word Processing—Word Perfect*	
	or	*1*
CIS 121B	*Word Processing—Microsoft Word*	
CIS 122A	*Spreadsheet Software—Lotus*	
	or	*1*
CIS 122B	*Spreadsheet Software—Excel*	
CIS 133	*Advanced Microcomputer Spreadsheets Software*	*1*
CIS 134	*Microcomputer Database Software-Access*	*1*
CIS 135	*Advanced Microcomputer Database Software—Access*	*1*
CIS 137	*Advanced Word Processing Software*	*1*
CIS 146	*Introduction to Structured Query Language (SQL)*	*2*
CIS 246	*Desktop Publishing*	*1*
Plus Common Core courses required for the Computer Information Systems		*15*
	Total units	***29***

CIS—Network Administration Emphasis

Career Technical (Major Code: 02104)

CIS 244A	*Building Cisco Scalable Networks*	*4*
CIS 244B	*Building Cisco Remote Access Networks*	*3*
CIS 244C	*Building Cisco Multilayer Switched Networks*	*3*
CIS 244D	*Cisco Internetwork Troubleshooting*	*3*
CIS 245	*Implementing, Configuring, and Monitoring Network Firewalls*	*3*
CIS 276	*UNIX Operating System: High Level Integration*	*4*
CIS 290-293	*Work Experience CIS Applications I–II (2–4)*	*3*
Plus Common Core courses for the Computer Information Systems		*15*
	Total units	***38***

CIS—Operations/PC Support Specialist Emphasis—Basic

Career/Technical (Major Code: 02082)

CIS/ELEC 10A	*Microcomputer Repair and Service*	*2*
CIS/ELEC 10B	*Microcomputer Hardware and Software Upgrade*	*2*
CIS/ELEC 14	*Office Automation Equipment Repair*	*2*
CIS 139	*Windowing Environments*	*1*
CIS 141A	*Networking Systems—Windows NT*	*2*
CL 120	*Computer Literacy*	*1*
ELEC 15	*Data, Voice, and Video Cable Installation*	*2*
ELEC 260	*Microcomputer Systems and A+ Certification*	*4*
	Total units	***16***

CIS—Operations/PC Support Specialist Emphasis—Advanced

Career/Technical (Major Code: 02098)

CIS/ELEC 10B	*Microcomputer Hardware and Software Upgrade*	*2*
CIS/ELEC 14	*Office Automation Equipment Repair*	*2*
CIS 141A	*Networking Systems—Windows NT*	*2*
ELEC 15	*Data, Voice, and Video Cable Installation*	*2*
ELEC 131	*Digital Electronics Principles*	*2*
ELEC 260	*Microcomputer Systems and A+ Certification*	*4*
Plus Common Core courses required for the Computer Information Systems		*15*
	Total units	***29***

CIS—Systems Programming Emphasis

Career/Technical (Major Code: 02099)

CIS 106	*Programming Logic and Design*	*3*
CIS 115	*Introduction to Programming Using C++*	*4*
CIS 209	*Assembly Language Programming*	*4*
CIS 272	*Introduction to the 'C' Programming Language*	*4*
CIS 275	*UNIX Operating Systems: Core Fundamentals*	*4*
CIS 276	*UNIX Operating Systems: High Level Integration*	*4*
SELECT 8 UNITS FROM THE FOLLOWING:		**8**
CIS 111	*Structured Programming Using BASIC (4)*	
CIS 117	*Windows Programming Using Visual BASIC (4)*	
CIS 118	*Windows Programming Using Delphi (4)*	
CIS 153	*Internet Programming Using Java/J++ (4)*	
Plus Common Core courses for the Computer Information Systems		*15*
	Total units	***46***

Recommended Electives: *CIS 133, 137; ELEC 132; MATH 140.*

Other Certificates of Achievement

CIS—Network Associate Specialist—Intensive Training—Basic

Career/Technical (Major Code: 02101)

Introduces students to key concepts, technologies, components, and protocols inherent in local and wide area networking. Introduction to technologies used to move voice and data across long distances and to the underlying applications and troubleshooting methodologies of TCP/IP services and primary enablers of the Internet. Covers content of classes including CIS 60A, 60B, 60C, and 60D.

CIS 61	*Network Associate Specialist—Intensive Training—Basic (8)*	
	or	*8*
CIS 60A	*Introduction to Network (2)*	
CIS 60B	*Introduction to Local Area Networks (2)*	
CIS 60C	*Introduction to Wide Area Networks (2)*	
CIS 60D	*Introduction to Transmission Control Protocol and Internet Protocol (2)*	
	Total units	***8***

CIS—Network Associate Specialist—Intensive Training—Advanced

Career/Technical (Major Code: 02102)

Covers Internet technologies and investigating methods of accessing the Internet and managing Local Area Network and Wide Area Network. The program allows student to take the Senior Network Specialist Certification Exam (NSNS) sponsored by NACSE. A one-unit work experience internship must also be completed to earn the certificate. Covers content of classes CIS 60E, 60F, 60G, and 60H.

CIS 61	*Network Associate Specialist—Intensive Training—Basic (8)*	
	or	*8*
CIS 60A	*Introduction to Networking (2)*	
CIS 60B	*Introduction to Local Area Networks (2)*	
CIS 60C	*Introduction to Wide Area Networks (2)*	
CIS 60D	*Introduction to Transmission Control Protocol and Internet Protocol (2)*	
CIS 62	*Network Associate Specialist—Intensive Training—Advanced (8)*	
	or	*8*
CIS 60E	*Introduction to Internet Technologies (2)*	
CIS 60F	*Internetworking Devices (2)*	
CIS 60G	*Introduction to Processes and Protocols (2)*	
CIS 60H	*Introduction to Network Analysis and Design (2)*	
	Total units	***16***

CIS— Web Multimedia Developer Using Director

Career/Technical (Major Code: 02106)

Designed to prepare students to work in an Internet design studio or to work independently as a freelance project consultant.

CIS 159A	*Multimedia Development (Director)*	*4*
CIS 159B	*Advanced Multimedia Development (Director)*	*4*
CIS 162	*Web Design and Usability*	*2*
	Total units	***10***

CIS— Web Database Programmer/ Administrator— LAMP (Linux, Apache, MySQL, PHP)

Career/Technical (Major Code: 02107)

Designed to prepare students to work as a first level Database/Web Administrator support specialists installing and implementing the Linux, Apache, MySQL, PHP (LAMP) open source software platform.

CIS 108	*PHP and MySQL*	*6*
CIS 109	*Linux Operating System and Apache Web Server*	*6*
CIS 162	*Web Design and Usability*	*2*
	Total units	***14***

CIS— Web Designer

Career/Technical (Major Code: 02108)

Designed to prepare students to work in an Internet Web design studio or to work independently as a freelance project consultant. Students receive training in creating, designing, testing, uploading, and maintaining multimedia Web sites.

CIS 123	*Web Publishing with Dreamweaver*	*6*
CIS 124	*Web Imaging with Fireworks*	*6*
CIS 162	*Web Design and Usability*	*2*
	Total units	***14***

CIS— Web Flash Designer

Career/Technical (Major Code: 02109)

Designed to prepare students to work in computer-animation studios, Web design firms, or to work independently as freelance project consultants. Students will learn to create basic vector and raster images for the Web.

CIS 125	*Flash Motion Graphics*	*6*
CIS 126	*Advanced Flash ActionScripting*	*6*
CIS 162	*Web Design and Usability*	*2*
	Total units	***14***

Computer Information Systems Courses

CIS 10A.
Microcomputer Repair and Service
2 units

Lecture 1.5 hours, laboratory 1.5 hours
Offered: Variable
Fee: $2. Entry-level training in microcomputer maintenance and service. Includes customer relations, computer assembly, and software setup. Covers testing and replacing system boards, monitors, floppy and hard drives, keyboards, and power supplies. DOS for technicians and software diagnostics. (Same as ELEC 10A.) (ROP option) [D]

CIS 10B.
Microcomputer Hardware and Software Upgrade
2 units

Recommended Preparation: *CIS/ELEC 10A or equivalent*
Lecture 1.5 hours, laboratory 1.5 hours
Offered: Variable
Fee: $2. Covers microcomputer hardware and software upgrades and expansions. Students will learn how to install and upgrade monitors, hard disk, internal and external tape backup, printers, memory, CD-ROMs and sound cards. Installing and setting up new versions of DOS and Windows will be covered. (Same as ELEC 10B.) (ROP option) [D]

CIS 14.
Office Automation Equipment Repair
2 units

Recommended Preparation: *CIS/ELEC 10A or equivalent*
Lecture 1.5 hours, laboratory 1.5 hours
Offered: Variable
Fee: $2. Maintenance and service of office automation equipment such as scanners, facsimile, laser printers, modems and networked computers. Theory, operation, and troubleshooting. (Same as ELEC 14.) (ROP option) [D]

CIS 60A.
Introduction to Networking
2 units

Recommended Preparation: *Basic knowledge of DOS and Windows*
Lecture 1.5 hours, laboratory 2 hours
Offered: Variable
Introduction to the key concepts of data communications, telecommunications, and networking. It provides a solid introduction to networking fundamentals including key acronyms, protocols, and components that are essential to understanding how networks operate today. Students will master the OSI model, which is a theoretical model designed to facilitate an understanding of what happens in a network. [D]

CIS 60B.
Introduction to Local Area Networks
2 units

Recommended Preparation: *CIS 60A or equivalent*
Lecture 1.5 hours, laboratory 2 hours
Offered: Variable
Learn the concepts, technologies, components, and protocols inherent in local area networking environments. Analyze how computers are connected together to form peer-to-peer and server-based networks, and understand the functionality and uses of a router, bridge, switch, hub, and repeater. Introduction to Microsoft's NT and Novell's NetWare; VLANs and the various forms of Ethernet technology such as Fast Ethernet are also explained. [D]

CIS 60C.
Introduction to Wide Area Networks
2 units

Recommended Preparation: *CIS 60B or equivalent*
Lecture 1.5 hours, laboratory 2 hours
Offered: Variable
Learn the technologies used to move voice and data across long distances. Define new technologies such as ATM that integrate voice, data, and video communications. Analyze how information is transported over a wide area network (WAN), from physical layer to application layer, and how these technologies work. [D]

CIS 60D.
Introduction to Transmission Control Protocol and Internet Protocol
2 units

Recommended Preparation: *CIS 60C or equivalent; basic knowledge of personal computers and networking fundamentals and concepts*
Lecture 1.5 hours, laboratory 2 hours
Offered: Variable
Participants in this course learn the fundamentals and the underlying applications, components and protocols of TCP/IP as primary enabler of the Internet, and how to identify TCP/IP layers, components, and functions. Review navigation tools, TCP/IP services, and troubleshooting methodologies. [D]

CIS 60E.
Introduction to Internet Technologies
2 units

Recommended Preparation: *CIS 60D or equivalent; basic knowledge of personal computers and networking fundamentals and concepts*
Lecture 1.5 hours, laboratory 2 hours
Offered: Variable
Participants in this course learn Internet technologies and concepts including an overview of the Internet, its history, organization, and structure. Once the general structure is understood, different methods of accessing the Internet are investigated, for both individual and group users. Web clients and servers and the underlying protocols used by both are also covered as well as the requirements for building a Web server. The final portion of this course reviews the many applications that are used for retrieving information or providing information across this global network of networks. [D]

CIS 60F.
Internetworking Devices
2 units

Recommended Preparation: *CIS 60E or equivalent; basic knowledge of personal computers and networking fundamentals and concepts*
Lecture 1.5 hours, laboratory 2 hours
Offered: Variable
Learn technical concepts of data communications and networking, and a detailed understanding of internetworking devices. Focuses on the issues encountered with network growth and the internetworking components that offer solutions to these problems. The components covered in this class include repeater, hubs, bridges, switches, routers, and gateways. Discusses network management and the Simple Network Management Protocol (SNMP). [D]

CIS 60G.
Introduction to Processes and Protocols
2 units

Recommended Preparation: *CIS 60F or equivalent; basic knowledge of personal computers and networking fundamentals and concepts*
Lecture 1.5 hours, laboratory 2 hours
Offered: Variable
Participants in this technically challenging course will learn detailed concepts of data communications and networking, and develop a detailed understanding of the processes and protocols used in today's networks. Network architectures will be discussed from an OSI model perspective of the networking protocol stack, and a detailed analysis of the protocol will ensue using traces taken with protocol analyzers. [D]

CIS 60H.
Introduction to Network Analysis and Design
2 units

Recommended Preparation: *CIS 60G or equivalent; basic knowledge of personal computers and networking fundamentals and concepts*
Lecture 1.5 hours, laboratory 2 hours
Offered: Variable
Participants in this comprehensive course will be presented with course material leading to a detailed understanding of network design and analysis. Presents methods for analyzing, designing, and managing computer networks. Includes a review of the general concepts of data communications and networking. [D]

CIS 61.
Network Associate Specialist—Intensive Training—Basic
8 units

Lecture 5 hours, laboratory 9 hours
Offered: Variable
Fee: $5. Program introduces students to key concepts of data communications, telecommunications, and computer networking as well as concepts, technologies, components, and protocols inherent in local and wide area networking. Students are introduced to technologies used to move voice and data across long distances and the underlying applications and troubleshooting methodologies of Transport Control Protocol/Internet Protocol (TCP/IP) services as a primary enabler of the Internet. Students will be provided with an opportunity to test for the Network Associate Specialist Certification Exam (NASCE). [D]

CIS 62.
Network Associate Specialist—Intensive Training—Advanced
8 units

Prerequisite: *CIS 61 or equivalent*
Lecture 5 hours, laboratory 9 hours
Offered: Variable
Fee: $5. Trains Internet technologies and investigates methods of accessing the Internet. Covers requirements for building a Web server and students gain a detailed understanding of internetworking and components such as repeater, hubs, bridges, switches, routers, and gateways. Discusses network architectures, design, analysis, and management. Provides an opportunity to test for the Senior Network Specialist Certification Exam (NSNS) sponsored by National Association of Certified Systems Engineers (NACSE). [D]

CIS 85.
Adapted Computer Skills—Application Packages
3 units

Credit/No Credit only
Lecture 2 hours, laboratory 2 hours
Offered: Fall, Spring
Practical introduction to microcomputer application packages utilizing adapted computer technology for individuals with disabilities. Includes keyboarding and word processing. [ND]

CIS 92.
Software Technologies for the Workplace
3 units

Lecture 2 hours, laboratory 3 hours
Offered: Variable
Instruction in developing the basic keyboarding skills to key alphabetic, numeric, and special symbol keys, as well as instruction in basic microcomputer applications using Microsoft Office Professional for Windows. The following microcomputer applications are introduced in the course: Microsoft Word, Excel, and Access. (ROP option) [D]

CIS 101.
Introduction to Computers and Information Processing
4 units

Grade only
Recommended Preparation: *ENGL 54 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Fall, Spring
Fee: $5. Applications of computerized systems in business organizations. Basic concepts of computer organization, data processing systems, decision support systems and systems analysis. The software emphasis is on solving business problems through use of spreadsheet software but also includes hands-on introduction to operating system, Internet browser, word processing, database management, presentation graphics, desktop information management, and BASIC programming software. [D; CSU; UC; CAN-BUS 6]

CIS 102.
Introduction to Hardware Installation and Application Development
4 units

Grade only
Recommended Preparation: *CIS 101 or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Fall, Spring
Hands-on introductory overview of the various functions performed by today's information systems professional in support of end-user computing within organizations. Computer hardware, software, networks, end-user computing needs, and application development using third and fourth generation computer programming languages. [D; CSU]

CIS 103.
eCommerce III: Macromedia Drumbeat
3 units

Lecture 2 hours, laboratory 3 hours
Offered: Variable
Builds dynamic Web applications for eCommerce and online stores at a fraction of the typical development time and expense. Learn to use drag and drop interfaces and sophisticated wizards to quickly build Web sites that access and update data in real time and work across all major browsers, all without manual coding. [D; CSU]

CIS 103A.
eCommerce IIIa—Miva Merchant Online Stores Using Fireworks
4 units

Lecture 3 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Builds dynamic Web applications for eCommerce and online stores, at a fraction of the typical development time and expense. Uses Miva Merchant and Macromedia Fireworks to build fully customized eBusiness catalog storefront with simple point, click, and fill in the blanks technology. Uses a browser based management tool to control all aspects of the storefront, from product maintenance to category management to order and credit card processing. [D; CSU]

CIS 103B.
eCommerce IVa—Miva Script XML Based Programming Language
3 units

Recommended Preparation: *CIS 103A or equivalent*
Lecture 2 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Uses Miva Script to build XML-based dynamic Web applications for eCommerce and online stores. Miva script is the core technology behind Miva's eCommerce solution. Developers can enhance the functionality of Miva merchant by writing additional modules in Miva script. Learn to add functions to facilitate advanced Web features such as form interpretation, cookies, http-header manipulation, automatic headers and footers, dynamic page generation, and more! [D; CSU]

CIS 103C.
eCommerce Va—Dreamweaver MX Web Database Development
4 units

Recommended Preparation: *CIS 157A and 252, or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Builds dynamic Web applications for database driven Web sites along with eCommerce and online stores, at a fraction of the typical development time and expense using Macromedia Dreamweaver MX UltraDev capabilities. Uses Dreamweaver MX to design database-driven Web applications, such as eCommerce, personalization, and dynamically built pages. Learn to combine Dreamweaver with Macromedia Fireworks and Flash to fully integrate a visual and dynamic Web site. [D; CSU]

CIS 104.
eCommerce IV—Beginning ColdFusion
3 units

Lecture 2 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Provides students with the technical skills required to implement a database solution for building dynamic eCommerce Web applications. Learn ColdFusion Markup Language (CFML), ColdFusion Application Server, ColdFusion Studio, and SQL skills needed to build database-driven Web sites. [D; CSU]

CIS 106.
Programming Logic and Design
3 units

Lecture 2 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Analysis of the logical processes used to develop algorithms. These processes are derived from the schools of empiricism, rationalism, formal logic, set theory, and information processing theory. Algorithm development will encompass problem specification, structured design, and object oriented design. [D; CSU; UC]

CIS 107.
eCommerce V—Advanced ColdFusion
3 units

Lecture 2 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Learn the fastest way to build and deliver advanced scalable
eCommerce applications that generate browser, server, and database technologies. Learn how to enable users to search, add, edit records, configure ODBC data source, create ColdFusion application pages, publish data to the Web, and build a search and data maintenance interface. [D; CSU]

CIS 108.
PHP (Personal Home Page) and MySQL
6 units

Grade only
Lecture 5 hours, laboratory 5 hours
Offered: Variable
Fee: $2. Covers two key components of Open Source Software (OSS), Personal Home page (PHP) and My Structured Query Language (MySQL) for personal, academic, and the business environment. Focuses on PHP scripting language in conjunction with MySQL to deploy applications for the Web. Provides a structured learning environment with hands-on experience, implementing one of the most popular and cost-effective solutions for developing database driven Web pages. Covers core objectives for industry certification and is one of the primary courses in the Southwestern College Linux, Apache, MySQL, PHP (LAMP) certificate. [D; CSU]

CIS 109.
Linux Operating System and Apache Web Server
6 units

Grade only
Recommended Preparation: *CIS 108 or equivalent*
Lecture 5 hours, laboratory 5 hours
Offered: Variable
Fee: $2. Covers two key components of Open Source Software (OSS), Linux and Apache Web Server for the personal, academic, and the business environment. Emphasis on the installation, configuration, administration, maintenance, and security aspects of the Linux Operating System in conjunction with Apache Web Server. Provides a structured learning environment with hands-on experience, implementing one of the most popular and cost-effective Web integration solutions. Part of the Southwestern College Linux, Apache, MySQL, PHP (LAMP) certificate. This course covers core objectives for industry certification. [D; CSU]

CIS 110.
Computer Programming Structured COBOL
4 units

Grade only
Recommended Preparation: *CIS 101 or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Fall, Spring
Fee: $5. Designed to provide fundamental training in COBOL programming methods using structured design. The theory and technology of data manipulation, control structures, table handling procedures, and modular program development. [D; CSU; UC; CAN-CSCI 8]

CIS 111.
Structured Programming Using BASIC
4 units

Grade only
Recommended Preparation: *CIS 101 and 106, or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Fall, Spring
Fee: $2. BASIC programming methodology and structured design. The theory and technology of control and data structures, data file manipulation, and sub-program development. The software package is Quick BASIC. [D; CSU; UC]

CIS 115.
Introduction to Programming Using C++
4 units

Recommended Preparation: *CIS 101 and 106, or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Introduction to C++ programming methods using structured and object-oriented methodology. The theory and technology of control, data and object structures using the Turbo C++ software package. [D; CSU; UC]

CIS 117.
Windows Programming Using Visual BASIC
4 units

Recommended Preparation: *CIS 106 or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Windows visual applications development using the Visual BASIC programming system. Hands-on use and manipulation of Windows events, forms, controls, components, and structured programming techniques. [D; CSU]

CIS 118.
Windows Programming Using Delphi
4 units

Recommended Preparation: *CIS 106 or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Windows visual applications development uses the Delphi Programming system. Hands-on use and manipulation of Windows events, forms, controls, components, structured, and object-oriented programming techniques. [D; CSU]

CIS 121A.
Word Processing—Word Perfect
1 unit

Recommended Preparation: *CL 120 or equivalent; ENGL 54 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 1 hour, laboratory .5 hour
Offered: Variable
Lecture and hands-on introduction to applications of microcomputer word processing including basic text editing and document formatting in simple business documents. Software package is WordPerfect 6.1 for Windows for IBM PCs and compatible personal computers. [D; CSU]

CIS 121B.
Word Processing-Microsoft Word
1 unit

Recommended Preparation: *CL 120 or equivalent; ENGL 54 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 1 hour, laboratory .5 hour
Offered: Variable
Fee: $2. Lecture and hands-on introduction to applications of micro-computer word processing including basic text editing and document formatting in simple business documents. Software package is Microsoft Word for Windows 6.0 for IBM PCs and compatible personal computers. [D; CSU]

CIS 122A.
Spreadsheet Software—Lotus
1 unit

Recommended Preparation: *CL 120 or equivalent*
Lecture 1 hour, laboratory .5 hour
Offered: Variable
Introduction to electronic spreadsheets and their applications using Lotus software. Design, creation and manipulation of spreadsheets. The software package is Lotus 1-2-3. [D; CSU]

CIS 122B.
Spreadsheet Software—Excel
1 unit

Recommended Preparation: *CL 120 or equivalent*
Lecture 1 hour, laboratory .5 hour
Offered: Variable
Fee: $2. Introduction to electronic spreadsheets and their applications using Microsoft Excel software. Includes design, creation, and manipulation of spreadsheets. [D; CSU]

CIS 123.
Web Publishing With Dreamweaver
6 units

Lecture 5 hours, laboratory 5 hours
Offered: Variable
Fee: $2. Emphasis on creating and uploading professional quality Web sites. Place images, text, tables, sounds, animations, image maps, styles, and frames into the site. Advanced techniques include rollovers, behaviors, cascading style sheets, and automating repetitive tasks. Tips on how to market the site, check it for compliance, and use of a browser targeting and JavaScript debugger. Covers core objectives for industry certification. [D; CSU]

CIS 124.
Web Imaging With Fireworks
6 units

Lecture 5 hours, laboratory 5 hours
Offered: Variable
Fee: $2. Covers beginning to advanced Fireworks Web imaging skills. Emphasizes the latest software to create and edit Web images and pages, create vector drawings, edit photos, use special effects, make graphics Web-ready, prepare rollovers and slices, and export to Hypertext Markup Language. Make pop-up menus, behaviors, and animations. [D; CSU]

CIS 125.
Flash Motion Graphics
6 units

Lecture 5 hours, laboratory 5 hours
Offered: Variable
Fee: $2. Provides students with strong Web motion graphic skills in just one semester. Emphasis on creating and exporting professional quality animations, making computer animations with drawings, photos and text, synchronizing, importing, and editing animation with sound. Create symbols, instances, and movie clips; and put playback control, remote rollovers, and preloaders in movies. Covers core objectives for industry certification. [D; CSU]

CIS 126.
Advanced Flash ActionScript
6 units

Recommended Preparation: *CIS 125 or equivalent*
Lecture 5 hours, laboratory 5 hours
Offered: Variable
Fee: $2. Advanced course will create an interactive video game and Web site. Duplicate and hide movie clips, test movie objects for collision effects, create interactivity, and control the movie flow. Create reusable code with nested symbols, create variables, initialize and increment their values, and add movie clip scripts to customize instances. Write conditional statements and enable the user to drag several movie clips on the stage by writing one script that applies to multiple nested movie clips. Covers core objectives for industry certification. [D; CSU]

CIS 129.
Multimedia Presentations (PowerPoint)
1 unit

Lecture 1 hour, laboratory .5 hour
Offered: Variable
Fee: $2. Using PowerPoint software, lecture and hands-on study of multimedia features of new software on the IBM PC. Includes instruction in software, presentation concepts, advanced text and graphic processing techniques and use of multimedia peripherals (including scanners, microphone, and digital cameras). These principles are applied to the production of business applications and Web pages. (Same as BUS 129.) [D; CSU]

CIS 130.
Microcomputer Disk Operating System
1 unit

Recommended Preparation: *CL 120 or equivalent*
Lecture .5 hour, laboratory 1 hour
Offered: Fall, Spring
Fee: $2. Introduction to the concepts used with DOS (Disk Operating System) on a microcomputer. DOS directories, subdirectories, and DOS supplemental programs. [D; CSU]

CIS 133.
Advanced Microcomputer Spreadsheets Software
1 unit

Recommended Preparation: *CIS 122A or 122B or equivalent*
Lecture .5 hour, laboratory 1 hour
Offered: Fall, Spring
Fee: $2. Intermediate and advanced spreadsheet software concepts and techniques. Advanced capabilities of the spreadsheet software learned in CIS 122A or CIS 122B, Microcomputer Spreadsheet Software. The software package is Excel. [D; CSU]

CIS 134.
Microcomputer Database Software—Access
1 unit

Recommended Preparation: *CL 120 or equivalent; ENGL 52 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture .5 hour, laboratory 1 hour
Offered: Fall, Spring
Fee: $2. Introduction to microcomputer database management systems and their applications. Design, creation, maintenance, and report generation of simple databases. Software package is Microsoft Access. [D; CSU]

CIS 135.
Advanced Microcomputer Database Software—Access
1 unit

Recommended Preparation: *CIS 134 or equivalent; ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture .5 hour, laboratory 1 hour
Offered: Fall, Spring
Fee: $2. Advanced training on microcomputer database management systems. Multiple database operations, screen generation, and other extended capabilities. Software package is Microsoft Access. [D; CSU]

CIS 136.
eCommerce VI: Interactive Web Development (Team Project)
4 units

Recommended Preparation: *CIS 103, 104, and 107, or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Learn how businesses and other organizations use electronic commerce; how to work with interdisciplinary team effort in justifying, designing, implementing, maintaining, enhancing, and evaluating electronic initiates. (Same as BUS 137.) [D; CSU]

CIS 137.
Advanced Word Processing Software
1 unit

Recommended Preparation: *CIS 121A or 121B or equivalent*
Lecture .5 hour, laboratory 1 hour
Offered: Fall, Spring
Fee: $2. Further applications of microcomputer word processing including advanced block operations, macros, footnotes and endnotes, text columns, merge, sort and boiler plating printing, math, line drawing, tables, lists and outlines, as well as reviewing the speller and thesaurus via the computer. Software package is WordPerfect. [D; CSU]

CIS 139.
Windowing Environments
1 unit

Recommended Preparation: *CIS 130 or equivalent*
Lecture 1 hour, laboratory .5 hour
Offered: Variable
Fee: $2. Introduction to the Microsoft Windows environment. Students will learn how to use the Graphical User Interface (GUI) to work with files and application software. [D; CSU]

CIS 140.
Microcomputer Networking Software
1 unit

Recommended Preparation: *CIS 101 or CL 120 or equivalent*
Lecture .5 hour, laboratory 1 hour
Offered: Fall, Spring
Fee: $2. Introduction to microcomputer networking software, local-area network hardware, and their applications. Hands-on use and maintenance of an industry standard network. Software package is Novell NetWare. [D; CSU]

CIS 141A.
Networking Systems—Windows
2 units

Recommended Preparation: *CIS 101 or equivalent*
Lecture 2 hours, laboratory 1 hour
Offered: Variable
Fee: $2. Planning setup and maintenance of industry-standard networking systems for local-area networks and Internet-based servers. The software package is Windows NT Server. [D; CSU]

CIS 142.
Networking Academy Fundamentals (Cisco Certification Preparation)
3 units

Recommended Preparation: *Basic knowledge of DOS and Windows*
Lecture 2 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Fundamentals of computer internetworking. Includes network topology, cabling, electrical considerations, the OSI model, Internet protocol addressing, bridges, switches, hubs, and routers. First in a four-course sequence. Other courses in the sequence cover LAN and WAN design and router programming. Upon completion of the four-course sequence, students are eligible to take the Cisco CCNA certification test. (Same as ELEC 142.) [D; CSU]

CIS 144A.
Routers and Internetwork Fundamentals (Cisco Certification Preparation)
3 units

Grade only
Prerequisite: *CIS/ELEC 142 or equivalent*
Lecture 2 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Covers wide area internetworking fundamentals. Includes router fundamentals, router setup and configuration, network management, routing and routed protocols, and network trouble-shooting. Second course in a four-course sequence that qualifies the student to take the Cisco CCNA Certification test. [D; CSU]

CIS 144B.
Advanced Routers and LAN Networking
3 units

Grade only
Prerequisite: *CIS 144A or equivalent*
Lecture 2 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Students learn how to configure routers for various industry standard protocols. Segmentation of LANs using bridges, routers and switches. Virtual LANs, Fast Ethernet, cut through and store, and forward LAN switching. Third course in a four-course CCNA preparation sequence. [D; CSU]

CIS 144C.
Wide Area Networks Implementation and Support
3 units

Grade only
Prerequisite: *CIS 144B or equivalent*
Lecture 2 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Students learn how to configure Wide Area Network services. Covers frame relays technique, features, and terms. Includes Frame Relay Router Configuration and Monitoring, ISDN, and Point to Point Protocol. Students will complete networking case study. [D; CSU]

CIS 146.
Introduction to Structured Query Language (SQL)
2 units

Recommended Preparation: *CIS 106 or equivalent*
Lecture 2 hours, laboratory 1 hour
Offered: Variable
Fee: $2. Introduction to Structured Query Language (SQL) and industry strength database systems. Hands-on planning, modeling, creation, and maintenance of SQL database systems using both command line and graphical-user interface tools. The software package is MS SQL Server. [D; CSU]

CIS 147.
Network Security
3 units

Grade only
Limitation on Enrollment: *Students who have successfully completed CIS 144C or have valid CCNA certification*
Lecture 2 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Students learn how to understand network security threats and how to mitigate those threats. Upon successful completion of this course, students will have the ability to install, configure, monitor, and verify network security products and features. This course assumes the completion of a Cisco Certified Network Associate (CCNA) certification. [D; CSU]

CIS 150.
Intro. to Telecommunications and the Internet
1 unit

Lecture .5 hour, laboratory 1 hour
Offered: Variable
Fee: $2. Hands-on introduction to the uses and applications of telecommunications systems and services. Emphasis on the Internet, the major information resource and tool in today's world. Provides a thorough, working knowledge of the Internet, its protocols and services. Students will access the Internet using the most widely used software packages. [D; CSU]

CIS 151.
Research Using the Internet
1 unit

Recommended Preparation: *CIS 150 or equivalent*
Lecture .5 hour, laboratory 1 hour
Offered: Variable
Focuses on the Internet as a research tool. Topics include: finding, evaluating, downloading, citing Web resources, Web browsers, search engines, directories, databases, and Web pacs. Emphasis on developing search strategies and evaluating sources and information. (Same as LIB 151.) [D; CSU]

CIS 152.
Using HTML to Create World Wide Web Pages on the Internet
1 unit

Lecture .5 hour, laboratory 1 hour
Offered: Variable
Fee: $2. Hands-on introduction to the HyperText Markup Language (HTML) system used to create World Wide Web sites on the Internet. Builds their own home pages that can be accessed by anyone around the world. [D; CSU]

CIS 153.
Internet Programming Using Java/J++
4 units

Recommended Preparation: *CIS 115 and 106, or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Internet visual applications development using the Java or the J++ programming systems. Hands-on use and manipulation of Java/J++ applet and language class libraries and Internet events, forms, components, and multimedia capabilities. [D; CSU; UC]

CIS 154.
Frame Programming Using HTML
1 unit

Recommended Preparation: *CIS 115 or equivalent*
Lecture 1 hour, laboratory .5 hour
Offered: Variable
Fee: $2. Design Internet visual applications with Frames and HyperText Markup Language. Hands-on use and manipulation of Framesets and HTML programming concepts. Develop Internet World Wide Web pages using Frameset technology. [D; CSU]

CIS 155.
Interactive Web Pages With Perl
1 unit

Recommended Preparation: *CIS 115 or equivalent*
Lecture 1 hour, laboratory .5 hour
Offered: Variable
Fee: $2. Design Internet visual applications with Common Gateway Interface using Perl programming language. Hands-on use and manipulation of CGI scripts and Perl programming components. Develop Internet events, forms, components and database capabilities. [D; CSU]

CIS 157A.
Web Authoring: Introduction to Macromedia Dreamweaver
4 units

Lecture 3 hour, laboratory 3 hour
Offered: Variable
Fee: $2. Hands-on introduction to creating dynamic Web pages with interactive behaviors. State-of-the-art Web technology, images, animation, backgrounds, borders, anchors, and hot spots. Basic Web layout and design, typography, accessibility, and site management concepts. Latest plugins, DHTML, templates, libraries, cascading style sheets, and automation techniques. Upload, test, and get site reports on Web sites. [D; CSU]

CIS 158.
Imaging for the World Wide Web (Photoshop 5)
1 unit

Lecture 1 hour, laboratory .5 hour
Offered: Variable
Fee: $2. Introductory course on techn iques for digital image processing for Web site development; creating and adapting images for use on the World Wide Web; focusing on specific file formats; modification utilities for transparent and animated gif. Introduction to image sampling, quantization, image enhancement, 2D and 3D transforms, compression, restoration, and reconstruction. [D; CSU]

CIS 159A.
Multimedia Development (Director)
4 units

Lecture 3 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Hands-on use and manipulation of Director to develop computer-based multimedia authoring systems to plan and produce multimedia-based application composed of integrated text, audio, graphics, and digital video. (Formerly CIS 159.) (Same as ART 136.) [D; CSU]

CIS 159B.
Advanced Web Design Using Director
4 units

Prerequisite: *CIS 159A/ART 136 or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Variable
Hands-on creation of multimedia "movies" that incorporate text, animation, graphics, audio, and digital video. Provides in-depth knowledge of the structured language used by Micromedia Director, Lingo. [D; CSU]

CIS 162.
Web Design and Usability
2 units

Lecture 2 hours, laboratory 1 hour
Offered: Variable
Fee: $2. Emphasizes key Web design principles, as well as pitfalls and how to avoid them. Focus on design tips and guidelines to ensure the Web site project works. Includes making the site accessibility compliant, cascading style sheets, using color and mages effectively, and publicizing the site. [D; CSU]

CIS 209.
Assembly Language Programming
4 units

Grade only
Prerequisite: *CIS 106 or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Fall
Fee: $2. Hands-on programming course in assembly language programming for students with knowledge of at least one high- level programming language. Covers low level programming in the microcomputer environment. Includes computer architecture, operating system and BIOS interfaces, input/output programming, asynchronous applications, program development strategies, and debugging techniques. (Not open to students with credit MATH 230.) [D; CSU; UC]

CIS 226.
Operating Systems and Command Languages
3 units

Grade only
Recommended Preparation: *CIS 101 and 106, or equivalent*
Lecture 2 hours, laboratory 3 hours
Offered: Fall, Spring
Fee: $2. Survey of structure and functions of modern operating systems; use of job control, commands, command language, and associated command language directives utilized to accomplish certain prespecified tasks. The Operating System (OS) vehicle of demonstration will be UNIX System V. [D; CSU; UC]

CIS 244A.
Building Cisco Scalable Networks
4 units

Limitation on enrollment: *Students with valid CCNA certification*
Recommended Preparation: *CIS 142, 144A, 144B, and 144C, or equivalent*
Lecture 3 hours, laboratory 3 hours
Fee: $2. Addresses tasks that network managers and administrators need to perform when managing, accessing, and controlling overhead traffic in growing, routed, networks once basic connectivity has been established. Discusses router capabilities used to control traffic over LANs and WANs, as well as connecting corporate networks to an Internet Service Provider (ISP). [D; CSU]

CIS 244B.
Building Cisco Remote Access Networks
3 units

Grade only
Prerequisite: *CIS 244A or equivalent*
Recommended Preparation: *CIS 144C or equivalent*
Lecture 2 hours, laboratory 3 hours
Fee: $2. Learn to build, configure, and troubleshoot a remote access network to interconnect central sites to branch offices and home offices, control access to the central site, and maximize bandwith utilization over the remote links. [D; CSU]

CIS 244C.
Building Cisco Multilayer Switched Networks
3 units

Grade only
Prerequisite: *CIS 244A or equivalent*
Recommended Preparation: *CIS 144B or equivalent*
Lecture 2 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Focuses on the techniques and technologies required to build campus networks using Ethernet LAN switching. Includes both routing and switching concepts, LAN design, VLANs, VLAN Trucking, Spanning Tree, Inter-VLAN routing, Multilayer Switching, HSRP, Multicasting, and Restricting Network Access. [D; CSU]

CIS 244D.
Cisco Internetwork Troubleshooting
3 units

Grade only
Prerequisite: *CIS 244B or 244C or equivalent*
Lecture 2 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Introduction to baseline and troubleshooting techniques useful in an environment using Cisco routers and switches for multiprotocol client hosts and servers connected with Ethernet and Fast Ethernet Local Area Networks (LANs), Serial, Frame Relay, and Integrated Services Digital Network Basic Rate Interface Wide Area Networks (ISDN BRI WANs). Provides students with methodical practice using specific Cisco Internet Operating Systems (IOS) software and Catalyst software tools to diagnose and correct problems on widely installed Cisco products. [D; CSU]

CIS 245.
Implementing, Configuring, and Monitoring Network Firewalls
3 units

Grade only
Prerequisite: *CIS 147 or successful passing of the Cisco Certified Network Associate exam*
Lecture 2 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Learn how to describe, configure, manage, and troubleshoot the Cisco Public Internet Exchange (PIX) Firewall product family and the Cisco Internet Operating System (IOS) Firewall feature set. Prepares students to take the Cisco Secure PIX Firewall Advanced (CSPFA) exam, which is one in a series of four exams that lead to the Cisco Security Specialist Certification. [D; CSU]

CIS 246.
Desktop Publishing
1 unit

Recommended Preparation: *BUS 70 or equivalent*
Lecture 1 hour, laboratory 1 hour
Offered: Fall, Spring
Fee: $2. Lecture and hands-on application using Microsoft Publisher XP. Introduction to the techniques of graphic design as applied to layout, visual composition, and editing. Covers the production of flyers, stationery, business cards using clip art, photos, scanners, forms, and templates on the computer.
(Same as BUS 246.) [D; CSU]

CIS 247.
Advanced Desktop Publishing
1 unit

Lecture 1 hour, laboratory .5 hour
Offered: Variable
Lecture and hands-on application using desktop publishing software on the personal computer. Instruction in the more advanced techniques of the production and color printing process, graphic design principles, and advanced software features. Production of longer documents such as brochures, booklets, newsletters, advertisements, Web pages, or business reports. Includes scanning and digital photography. (Same as BUS 247.) [D; CSU]

CIS 250.
Web Page Scripting
1 unit

Lecture 1 hour, laboratory .5 hour
Offered: Variable
Fee: $2. Hands-on introduction to HyperText Markup Language (HTML) scripting languages such as JavaScript and VBScript which are used to create and enhance World Wide Web sites on the Internet. Students will build their own home pages that can be accessed by anyone around the world. [D; CSU]

CIS 252.
Advanced Multimedia for the Internet
4 units

Lecture 3 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Process and techniques for building advanced Web sites. Hands-on design using powerful Web development tools and applications. Bitmap images will be optimized to incorporate JavaScript and Common Gateway Interface programs into their Web page, add life by creating compact dramatic multimedia that downloads instantly, and bring it together with pristine Hypertext Markup Language (HTML).
[D; CSU]

CIS 253.
Animation for the Web Using Flash
4 units

Prerequisite: *CL 120 or equivalent*
Recommended Preparation: *CL 120 or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Hands-on Flash starts with the basics of creating Web Vector graphics and transforming graphics into animations. Create complex animations with tweening and multiple scenes. Add behaviors, ActionScript, and sounds to make completely synchronized interactive movies. Optimize and publish movies, and put dynamic Flash movies onto the Web. [D; CSU]

CIS 254.
Online Store Front—Building an Advanced Flash Web Site
4 units

Grade only
Prerequisite: *CIS 253 or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Variable
Create an advanced Flash Web Site, complete with eCommerce capabilities, product and services catalogs, a viewer survey, and a threaded message board. Design a state-of-the-art home page and a site identity using multimedia Flash animation, multimedia movies, and a preloader; create an online store and shopping cart. [D; CSU]

CIS 262.
Graphical User Interface (GUI) Programming Using C++
4 units

Prerequisite: *CIS 115, 117, 118, or 153, or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Theory and practice of Graphical User Interface (GUI) Programming using C++. Industry standard object-oriented GUI libraries will be used to design, develop, and implement programs containing sophisticated data and object structures. [D; CSU]

CIS 272.
Introduction to the "C" Programming Language
4 units

Grade only
Prerequisite: *CIS 111 or equivalent*
Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hour, laboratory 3 hours
Offered: Fall, Spring
Fee: $2. Survey course on the fundamental syntax of the "C" programming language. Primary emphasis on program flow of control implementing the basic control structures endemic to the language, utilizing the intrinsic functions available, user-defined functions, formatted and record oriented I/O, and memory management tools available. [D; CSU; UC]

CIS 275.
UNIX Operating System: Core Fundamentals
4 units

Lecture 3 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Survey and practical demonstration course emphasizing the UNIX philosophy, command syntax/usage, file system, process and memory management rationale, and end user text file utility utilization within a GUI (if applicable) and/or command line environment. [D; CSU; UC]

CIS 276.
UNIX Operating System: High Level Integration
4 units

Prerequisite: *CIS 275 or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Survey and practical demonstration course focusing on the programming aspects of the Bourne, Bash, or Korn shells. Emphasis on the utilization of control structures in the manipulation of various UNIX utilities within the three primary execution topographies (subroutine, overlay, and sub-process) to perform rudimentary high-level integration tasks. [D; CSU; UC]

CIS 290–291.
Work Experience CIS Applications I–II
2–4 units

Limitation on Enrollment: *Declared Computer Information System major. Student must complete no less than seven units, including work experience, during each semester in order to receive credit.*
Recommended Preparation: *Completion of two CIS courses*
Lecture 1 hour, laboratory 5–15 hours
Offered: Fall, Spring
Application of principles and skills learned in various CIS application courses to on-the-job work assignments. [D; CSU]

CIS 295.
Selected Topics in CIS
1–3 units

Offered: Variable
Permits students to study relevant topics within the field of computer information systems. (May be taken for additional credit with new content.) [D; * CSU]

** Please refer to the class schedule for specific course description and transferability information.*

CIS 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of computer information systems of particular interest to the student and not included in regular courses of the college. [D; CSU; * UC]

** UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

CL 120.
Computer Literacy
1 unit

Recommended Preparation: *ENGL 52 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 1 hour, laboratory .5 hour
Offered: Fall, Spring
Fee: $2. Introduction to microcomputers: uses and types of computers, overview of the computer system, input and output devices, the central processing unit, primary and secondary storage, software languages and programming. Hands-on experience with a microcomputer operating system, spreadsheet, word processing, and Internet software. (Not open to students with credit in CIS 101 or MATH 130 with a grade of 'C' or better.) [D; CSU]

"The courses offered here at Southwestern College are based on incomparable educational programs that have given me the opportunity to learn from brilliant professors."

—**ROSALINDA HERNANDEZ,**
Business Administration Major

Computer Science

School of Mathematics, Science, and Engineering

Dean

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Andrew Medin, M.A.
Mei-Lan Shaw, M.S.
Diane Short, M.A.
Patrick Staley, M.S.
Romina Tehrani, M.A.

Department Chair

Janet Mazzarella

General Description

Computer Science is the youngest of the sciences and focuses on the study of computer software, architecture, theory, and applications. This discipline explores computing theory and symbolic computation, the nature of computer architecture and operating systems, data communications, graphics, software engineering, mathematical applications, robotics, artificial intelligence, and system software.

There are many curriculum choices open to students interested in the science of computers. Students interested in the hardware aspect of computers should look at the vocational and transfer courses offered in engineering and electronics programs. Students interested in the operations aspect of computers should review the programs offered in computer information systems and computer literacy courses.

The Computer Science program at SWC focuses on the programming or software aspect of computer science and offers three academic pathways from which to choose:

* *transfer preparation associate degree for students who plan to transfer and major in computer science*
* *Career/Technical associate degree for students seeking employment at the technician level in science or mathematics fields*
* *Career/Technical certificate*

Career Options

The following list is a sample of the many career options available for the computer science major. A few of these require an associate degree, most require a baccalaureate degree, and some require a graduate-level degree: computer scientist, systems analyst, computer service coordinator, software engineer, computer graphic specialist, high school or college teacher, data base administrator, researcher, program analyst, teleprocessing coordinator, knowledge engineer, technical control specialist, systems manager, data processing application programmer, information specialist and positions available in allied professions of business, industry, and scientific technology.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Computer Science	*01180*
Associate in Science Degree: Career/Technical	
Computer Science	*02190*
Certificate of Achievement	
Computer Science	*02191*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Arts Degree
Computer Science

Transfer Preparation * (Major Code: 01180)

Most careers in computer science require a baccalaureate degree, and some require a graduate-level degree. The coursework for this associate degree prepares students who plan to transfer and major computer science with the lower- division computer programming and mathematics coursework required by most colleges and universities

The program of study listed below is for students interested in the programming or software aspect of computer science. It is designed to provide a strong foundation in mathematics, programming methodology and skills, and computer organization.

FIRST SEMESTER

MATH 130	*Introduction to Computer Programming*	*4*
MATH 250	*Analytic Geometry and Calculus I*	*5*

SECOND SEMESTER

MATH 140	*Intermediate Computer Programming*	*3*
MATH 251	*Analytic Geometry and Calculus II*	*4*

THIRD SEMESTER

MATH 252	*Analytic Geometry and Calculus III*	*4*

FOURTH SEMESTER

MATH 254	*Introduction to Linear Algebra*	*3*
MATH 260	*Discrete Mathematics*	*3*
	Total units	***26***

Recommended Electives: *MATH 253; PHYS 270, 272 and 274 or CHEM 200 and 210 or BIOL 210, 211 and 212.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Associate in Science Degree
Computer Science

Career/Technical (Major Code: 02190)

The program of study listed below is designed for students who seek employment at the technician level in the science or mathematics fields. Completion of this program of study does not satisfy the lower-division requirements for transfer to colleges or universities. Students who plan to transfer should complete the courses listed under the Computer Science Associate in Arts degree program. Page 143.

FIRST SEMESTER

MATH 119	*Elementary Statistics*	*4*
MATH 130	*Computer Programming*	*4*

SECOND SEMESTER

MATH 140	*Intermediate Computer Programming*	*3*
MATH 250	*Analytic Geometry and Calculus I*	*5*

THIRD SEMESTER

MATH 230	*Assembly Language Programming*	*4*
	Total units	***20***

Recommended Electives: *MATH 251, 252, 253, 254, 260.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Certificate of Achievement
Computer Science

Career/Technical (Major Code: 02191)

FIRST SEMESTER

MATH 119	*Elementary Statistics*	*4*
MATH 130	*Computer Programming*	*4*

SECOND SEMESTER

MATH 140	*Intermediate Computer Programming*	*3*
MATH 250	*Analytic Geometry and Calculus I*	*5*

THIRD SEMESTER

MATH 230	*Assembly Language Programming*	*4*
	Total units	***20***

Construction Inspection

School of Technology and Human Services

■ Dean

Patricia Axsom, M.S.
Office 570B
619-482-6460

■ Department Chair

Corey Breininger, M.A.Ed.

General Description

Construction technology is the study of the design, fabrication, codes, inspection processes, and licensure governing the construction of structures, both domestic and commercial. This program explores blueprint reading, site plans, cost estimation, construction materials, soil engineering, mechanical construction, inspection procedure, building codes, quality control management, and license laws for contractors.

Career Options

The following list is a sample of the many options for the construction major. Most require a certificate or associate degree, some require a baccalaureate degree, and a few of these may require a graduate-level degree: construction inspector, estimator, apprentice as a carpenter, electrician, plumber, mason, cement finisher, roofer, painter, licensed contractor, soil engineer, architect, project engineer, quality control manager, vocational teacher, and positions available in all professions of manufacturing, retail and wholesale, business, industry, and the military or government.

Degree/Certificate Options

	Major Code
Associate in Science Degree: Career/Technical	
Construction Inspection	*02880*
Construction Management	*02881*
Certificates of Achievement	
Construction Inspection	*02882*
Construction Management	*02883*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Science Degree
Construction Inspection

Career/Technical (Major Code: 02880)

Provides entry-level training to prepare students to become construction inspectors. Construction inspectors verify that contractors and subcontractors comply with the architect's plans and the various uniform building codes. Construction inspection is recognized as a major career opportunity area by agencies of both industry and government.

FIRST SEMESTER		
CI 10	*Spec. and Blueprint Reading and Construction*	*3*
CI 60	*Building Codes I*	*3*
SECOND SEMESTER		
CI 50	*Legal Factors of Construction Inspection*	*3*
CI 65	*Building Codes II*	*3*
THIRD SEMESTER		
CI 20	*Inspection of Mech. Construction*	*3*
CI 80	*Soils Engineering*	*3*
FOURTH SEMESTER		
CI 40	*Electrical Inspection*	*3*
CI 70	*Architectural Details and Structural Inspection*	*3*
	Total units	***24***

Recommended Elective: *CI 90.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Construction Management

Career/Technical (Major Code: 02881)

Designed to provide the student with the necessary skills and knowledge for employment within the construction industry. The construction manager is an integral member of the building team and requires a broad range of professional knowledge in the areas of construction methods and materials, building codes, cost analysis and control, construction scheduling, and consulting with the design professions during initial planning stages of a building program. Areas in which graduates of this program might work include general contracting, project management for developers, facilities management, and design-and-build architecture firms.

FIRST SEMESTER

ACCT 101	*Principles of Accounting I*	*4*
ARCH 115	*Architectural Graphics*	*3*
CI 90	*Construction Quality Control Management*	*3*

SECOND SEMESTER

ARCH 165	*Architectural Practice I*	*2*
ARCH 200	*Introduction to CAD*	*3*
CI 60	*Building Codes I*	*3*

THIRD SEMESTER

ARCH 235	*Structures*	*3*
ARCH 265	*Architectural Practice II*	*2*
CI 80	*Soils Engineering*	*3*

FOURTH SEMESTER

ARCH 266	*Architectural Practice III*	*2*
BUS 140	*Business Law*	*3*
CI 65	*Building Codes II*	*3*
	Total units	***34***

Recommended Electives: *ARCH 205, 222, 290–293; CI 70.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Certificate of Achievement
Construction Inspection

Career/Technical (Major Code: 02882)

FIRST SEMESTER

CI 10	*Spec. and Blueprint Reading and Construction*	*3*
CI 60	*Building Codes I*	*3*

SECOND SEMESTER

CI 50	*Legal Factors of Construction Inspection*	*3*
CI 65	*Building Codes II*	*3*

THIRD SEMESTER

CI 20	*Inspection of Mech. Construction*	*3*
CI 80	*Soils Engineering*	*3*

FOURTH SEMESTER

CI 40	*Electrical Inspection*	*3*
CI 70	*Architectural Details and Structural Inspection*	*3*
	Total units	***24***

Construction Management

Career/Technical (Major Code: 02883)

FIRST SEMESTER

ACCT 101	*Principles of Accounting I*	*4*
ARCH 115	*Architectural Graphics*	*3*
CI 90	*Construction Quality Control Management*	*3*

SECOND SEMESTER

ARCH 165	*Architectural Practice I*	*2*
ARCH 200	*Introduction to CAD*	*3*
CI 60	*Building Codes I*	*3*

THIRD SEMESTER

ARCH 235	*Structures*	*3*
ARCH 265	*Architectural Practice II*	*2*
CI 80	*Soils Engineering*	*3*

FOURTH SEMESTER

ARCH 209	*Construction Surveying*	*3*
ARCH 266	*Architectural Practice III*	*2*
BUS 140	*Business Law*	*3*
CI 65	*Building Codes II*	*3*
	Total units	***37***

Construction Inspection Courses

CI 10.
Specifications and Blueprint Reading for Construction
3 units

Grade only
Lecture 3 hours
Offered: Variable
Fee: $5. Reading and interpretation of blueprints used in building construction; reviewing site-layout plans; architectural, mechanical, and electrical drawings. [D]

CI 20.
Inspection of Mechanical Construction
3 units

Grade only
Lecture 3 hours
Offered: Variable
Fee: $5. All aspects of mechanical construction. Underground and above ground plumbing, water, gas, and air pipes and finishing of plumbing systems. Basic principles of heat and ventilation systems. [D]

CI 40.
Electrical Inspection
3 units

Grade only
Lecture 3 hours
Offered: Variable
Fee: $5. Plan reading and inspection procedures, wiring methods, codes, regulations, systems and components. Electrical theory, symbols and terminology, conduit installation, raceways, transformer services, control circuits, grounding and bonding. Fixtures and installation trim out, fire alarm systems, related communications and hardware equipment. [D]

CI 50.
Legal Factors of Construction Inspection
3 units

Grade only
Lecture 3 hours
Offered: Spring
Review of major elements of Federal labor laws; mechanics' liens, liability of governmental employees and entities; insurance; contractors' license law; workmen's compensation; Social Security; state disability; unemployment insurance; building code enforcement and appeals; prefabricated housing law. [D]

CI 60.
Building Codes I
3 units

Grade only
Lecture 3 hours
Offered: Fall
Detailed study of the Uniform Building Code. Emphasis on the proper interpretation of the Code. (Students may repeat this course no more than twice in a six-year period.) [D]

CI 65.
Building Codes II
3 units

Grade only
Lecture 3 hours
Offered: Spring
Continuation of CI 60. (Students may repeat this course no more than twice in a six-year period.) [D]

CI 70.
Inspection of Architectural Details and Structural Inspection
3 units

Grade only
Lecture 3 hours
Offered: Variable
Fee: $5. Properties of architectural materials, lumber, roofing, wall finishes, flooring and covering, glass and glazing finishes. Engineering principles pertaining to heat, acoustics, humidity, roof construction, interior and exterior materials, finish carpentry, hardware and trim, final inspection procedures. Structural plan reading, site layout, principles of engineering, site grading, foundation, concrete construction, prestressed concrete, and gunite. [D]

CI 80.
Soils Engineering
3 units

Grade only
Lecture 3 hours
Offered: Fall
Origin, formation, structure, and composition of soils as related to the inspection of soils for composition and support of structures. [D]

CI 90.
Construction Quality Control Management
3 units

Grade only
Recommended Preparation: *Completion of one or more construction inspection college courses*
Lecture 3 hours
Offered: Variable
Designed for construction inspection managers, military construction quality control representatives, projects engineers/architects, and newcomers to the construction inspection community seeking employment careers in construction quality control management. [D]

CI 295.
Selected Topics in Construction Inspection
1–3 units

Offered: Variable
Permits students to study relevant topics within the field of construction inspection. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

CI 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of construction inspection of particular interest to the student and not included in regular courses of the college. [D; CSU]

Dance

School of Arts and Communication

■ Interim Dean

Donna Arnold
Office 702B
619-482-6372

■ Faculty

Mary Jo Horvath, M.F.A.

■ Department Chair

Teresa Russell, D.M.A.

General Description

Dance as an academic department encompasses the elements of dance as a performing art as well as the science of dance as movement. Dance is one of the oldest art forms and probably the most communicative and expressive of artistic mediums. This department explores dance history, criticism, movement techniques, body conditioning notation, choreography, theory, improvisation, terminology, music, dance in world cultures, dance production, performance skills, and dance forms—traditional to modern.

Career Options

The following list is a sample of the many career options for the dance major. A few of these require an associate degree, most require a baccalaureate degree, and some require a graduate-level degree: professional dancer, choreographer, teacher in community or recreation programs, high school or college instructor, dance therapist, critic, physical therapist for dancers, company director, promoter, and dance production technician. Dance is frequently integrated into theater, performance art, and video and film productions.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Dance	*A1350*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Arts Degree

Dance

Transfer Preparation * (Major Code: A1350)

Dance is a rigorous, specialized area of the performing arts that communicates and expresses meaning, emotion, and cultural values. The field demands a high level of physical preparation as well as a thorough understanding of aesthetics. Designed to help students develop the technical skills and professional preparation for careers related to dance. Students develop their skills in ballet, jazz, and modern dance, concentrating on rhythm, musicality, coordination, and memory building techniques. It also offers the option to explore tap, ethnic, and social dance forms while offering opportunities for individual creativity.

ANTH 102	*Social Anthropology*	*3*
BIOL 260	*Human Anatomy*	*5*
DANC 109	*Modern Dance I*	*.5–1*
DANC 110	*Modern Dance II*	*.5–1*
DANC 113	*Ballet I*	*.5–1*
DANC 114	*Ballet II*	*.5–1*
DANC 115	*Ballet III*	*.5–1*
DANC 117	*Jazz Dance I*	*.5–1*
DANC 118	*Jazz Dance II*	*1*
DANC 200	*Dance History and Appreciation*	*3*
PSYC 101	*General Psychology*	*3*
	Total units	***18–21***

Recommended Electives: *BIOL 100, 101; DANC 111, 112, 125, 126.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

DANC 109.
Modern Dance I
.5–1 unit

Grade only
Laboratory 2–3 hours
Offered: Variable
Introduction to modern dance as performance art. Basic dance technique, fundamental rhythms applicable to dance and elements of dance design for the beginner. [D; CSU; UC]

DANC 110.
Modern Dance II
.5–1 unit

Grade only
Prerequisite: *DANC 109 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Progressive continuation from beginning to intermediate level in dance techniques and dance studies. [D; CSU; UC]

DANC 111.
Modern Dance III
.5–1 unit

Grade only
Prerequisite: *DANC 110 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Advanced modern dance technique for the performance-oriented student. [D; CSU; UC]

DANC 112.
Modern Dance IV
.5–1 unit

Grade only
Prerequisite: *DANC 111 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Progressive continuation of advanced modern dance techniques for the performance-oriented student. [D; CSU; UC]

DANC 113.
Ballet I
.5–1 unit

Grade only
Laboratory 2–3 hours
Offered: Variable
For the student who has never had a ballet class. Introduction to basic barre, across the floor and classical style for center work, and moving to classical music in 3/4 and 4/4 rhythms. [D; CSU; UC]

DANC 114.
Ballet II
.5–1 unit

Grade only
Prerequisite: *DANC 113 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Progression from DANC 113 focusing on beginning techniques including terminology, barre, center work, and across-the-floor combinations. [D; CSU; UC]

DANC 115.
Ballet III
.5–1 unit

Grade only
Prerequisite: *DANC 114 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Progression of ballet technique from beginning to intermediate with increased emphasis on turns, elevations, and controlled balances. [D; CSU; UC]

DANC 116.
Ballet IV
.5–1 unit

Grade only
Prerequisite: *DANC 115 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Ballet techniques from intermediate to advanced levels. Emphasis on turn techniques, allegro combinations, and across-the-floor leap combinations. [D; CSU; UC]

DANC 117.
Jazz Dance I
.5–1 unit

Grade only
Laboratory 2–3 hours
Offered: Variable
Beginning jazz dance techniques. Center, across the floor, and jazz dance combinations set to contemporary jazz music. [D; CSU; UC]

DANC 118.
Jazz Dance II
.5–1 unit

Grade only
Prerequisite: *DANC 117 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Progressive continuation from beginning- to intermediate-level skills in jazz techniques in center, across-the-floor, combinations and routine for the performance-oriented student. [D; CSU; UC]

DANC 119.
Jazz Dance III
.5–1 unit

Grade only
Prerequisite: *DANC 118 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Progressive continuation from intermediate- to advanced-level skills in jazz dance technique for the performance-oriented student, advanced skills in turns, elevations and dance falls, dance routine in contemporary and blues styles. [D; CSU; UC]

DANC 120.
Jazz Dance IV
.5–1 unit

Grade only
Prerequisite: *DANC 119 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Continuation of advanced skills in jazz dance technique for the performance-oriented dance student and for the perfection of skills in turns, elevations, and dance falls. [D; CSU; UC]

DANC 121.
Dance Choreography I
2 units

Grade only
Prerequisite: *DANC 110, DANC 115, or DANC 118, or equivalent*
Lecture 1 hour, laboratory 2–3 hours
Offered: Variable
For the performance-oriented dancer. Introduction to the elements of choreography through creating and participating in short dance studies. A performance of student choreography at end of semester is required. [D; CSU; UC]

DANC 122.
Dance Choreography II
2 units

Grade only
Prerequisite: *DANC 121 or equivalent*
Lecture 1 hour, laboratory 2–3 hours
Offered: Variable
Continuation of DANC 121 with emphasis on more complex choreography structure and creating in two dances forms. Class will involve short studies and complete choreographies. [D; CSU; UC]

DANC 123.
Dance Choreography III
2 units

Grade only
Prerequisite: *DANC 122 or equivalent*
Lecture 1 hour, laboratory 2–3 hours
Offered: Variable
Continuation of DANC 122. Designed to encourage a more in-depth survey and analysis of dance movement potential and creative development of the choreographic dance process culminating in a performance. [D; CSU; UC]

DANC 124.
Dance Choreography IV
2 units

Grade only
Prerequisite: *DANC 123 or equivalent*
Lecture 1 hour, laboratory 2–3 hours
Offered: Variable
Continuation of DANC 123. Designed to encourage a more in-depth survey and analysis of dance movement potential and academic development of the choreographic dance program and culminating in a performance dance. [D; CSU; UC]

DANC 125.
Dance Production I
2 units

Grade only
Prerequisite: *DANC 109, 114, or 117, or equivalent*
Lecture 1 hour, laboratory 3 hours
Offered: Variable
For the performance-oriented student. Laboratory activity consisting of basic dance technique, choreography, rehearsal and performance. Lecture hour will cover organization and administration of other aspects of dance production. [D; CSU; UC]

DANC 126.
Dance Production II
2 units

Grade only
Prerequisite: *DANC 125 or equivalent*
Lecture 1 hour, laboratory 3 hours
Offered: Variable
Continuing dance production course for the performance-oriented student. Laboratory activity consisting of basic dance technique, choreography, rehearsal, and performance. Lecture hour will cover organization and administration other aspects of dance production. [D; CSU; UC]

DANC 127.
Dance Production III
2 units

Grade only
Prerequisite: *DANC 126 or equivalent*
Lecture 1 hour, laboratory 3 hours
Offered: Variable
For the performance-oriented dance student. Laboratory activity will consist of dance technique, choreography, and performance. Lecture will cover how to organize and administer various aspects of a dance production. [D; CSU; UC]

DANC 128.
Dance Production IV
2 units

Grade only
Prerequisite: *DANC 127 or equivalent*
Lecture 1 hour, laboratory 2–3 hours
Offered: Variable
For the performance-oriented dance student. Laboratory activity will consist of dance technique, choreography, and performance. Lecture will cover how to organize and administer various aspects of dance production participation. [D; CSU; UC]

DANC 129.
Dance Rehearsal Workshop I
.5–1 unit

Grade only
Prerequisite: *One of the following: DANC 109, 110, 111, 112, 114, 115, 116, 117, 118, or 119, or equivalent*
Laboratory 2–3 hours
Offered: Variable
Short-term dance rehearsal workshop in which students choreograph or learn and rehearse dances selected for performance in annual dance production. Attendance of scheduled rehearsals is required. [D; CSU; UC]

DANC 130.
Dance Rehearsal Workshop II
.5–1 unit

Grade only
Prerequisite: *DANC 129 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Short-term dance rehearsal workshop for the continuing dance student to provide progressive development in choreography and skills in dance performance. [D; CSU; UC]

DANC 131.
Dance Rehearsal Workshop III
.5–1 unit

Grade only
Prerequisite: *DANC 130 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Short-term dance rehearsal workshop for the continuing dance student to improve dance performance skills and gain additional experience in more advanced choreographic techniques. [D; CSU; UC]

DANC 132.
Dance Rehearsal Workshop IV
.5–1 unit

Grade only
Prerequisite: *DANC 131 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Short-term dance rehearsal workshop for the continuing dance student to improve dance performance skills and become more skilled in advanced choreographic skills. [D; CSU; UC]

DANC 133.
Dance Performance Workshop I
.5–1 unit

Prerequisite: *DANC 126 or 132 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Requires the student to be involved in a production of dances for a full-length dance program. Fundamentals of staging dance and dance performance. Attendance at rehearsals and the performance required. [D; CSU; UC]

DANC 134.
Dance Performance Workshop II
.5–1 unit

Prerequisite: *DANC 133 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Designed for the continuing dance student who strives for more experience and progressive improvement in dance performance. Student will be involved in both creating and performing dance. Attendance at rehearsals and the performance required. [D; CSU; UC]

DANC 135.
Dance Performance Workshop III
.5–1 unit

Prerequisite: *DANC 134 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Designed for the continuing dance student who strives for more advanced experience and progressive improvement in dance performance. Student will be involved in assisting in the stage production and performance in the dance program. [D; CSU; UC]

DANC 136.
Dance Performance Workshop IV
.5–1 unit

Prerequisite: *DANC 135 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Designed for the continuing dance student who strives for more experience in dance performance and production. Student will be expected to direct and manage one of the main parts of the performance as well as to perform. [D; CSU; UC]

DANC 137.
American Ballroom and Social Dance I
.5–1 unit

Grade only
Laboratory 2–3 hours
Offered: Variable
Beginning dance class in which the basic steps of fox trot, waltz, current Latin dances, and swing dances will be introduced. [D; CSU; UC]

DANC 138.
American Ballroom and Social Dance II
.5–1 unit

Grade only
Prerequisite: *DANC 137 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Continuation and progression of basic ballroom dance forms presenting more advanced steps for fox trot, waltz, current Latin dances, and swing dances. [D; CSU; UC]

DANC 141.
Latin American Dance I
.5–1 unit

Grade only
Laboratory 2–3 hours
Offered: Variable
Covers the fundamental dance skills and traditional dance steps for Latin-American cultural dances. Selected dances will be chosen representing various Latin countries. Includes the background and significant meaning of the dances. [D; CSU; UC]

DANC 142.
Latin American Dance II
.5–1 unit

Grade only
Prerequisite: *DANC 141 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Progression of intermediate dance skills, providing a continuation to more advanced dances and steps of Latin-American cultural dances. Selected dances will be chosen representing various countries. Includes the background and significant meaning of these dances. [D; CSU; UC]

DANC 143.
Latin American Dance III
.5–1 unit

Grade only
Prerequisite: *DANC 142 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Progression from intermediate to more advanced dance skills and steps of Latin-American cultural dances. Selected dances will be chosen representing various countries. Includes the background and significant meaning of these dances. [D; CSU; UC]

DANC 144.
Latin American Dance IV
.5–1 unit

Grade only
Prerequisite: *DANC 143 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Advanced dance steps of Latin-American dances for show-quality performances. Selected dances will be chosen representing various countries. Includes the background and significant meaning of these dances. [D; CSU; UC]

DANC 145.
African Dance I
.5–1 unit

Grade only
Laboratory 2–3 hours
Offered: Variable
Introduction to the fundamental dance skills and traditional dance steps for African cultural dances. Selected dances will be chosen representing various African cultures. Includes the background and significant meaning of the dances. [D; CSU; UC]

DANC 146.
African Dance II
.5–1 unit

Grade only
Prerequisite: *DANC 145 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Progression of intermediate dance skills providing a continuation to advanced dances and steps of African cultural dances.
[D; CSU; UC]

DANC 147.
African Dance III
.5–1 unit

Grade only
Prerequisite: *DANC 146 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Continuation to more advanced dances and steps of African cultural dances. [D; CSU; UC]

DANC 148.
African Dance IV
.5–1 unit

Grade only
Prerequisite: *DANC 147 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Continuation of more advanced dances and steps of African cultural dances. [D; CSU; UC]

DANC 150.
Novice Tap
.5–1 unit

Laboratory 2–3 hours
Offered: Variable
Beginning tap class for the novice dancer introducing such basic skills as tap barre, center across the floor, and dance combinations. All these dance steps and combinations will be set to many styles of music (1940s to contemporary). [D; CSU; UC]

DANC 151.
Beginning Tap I
.5–1 unit

Grade only
Recommended Preparation: *DANC 150 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Beginning tap class designed for students wishing to perfect basic tap dance skills. Beginning tap dance techniques presented and expanded upon along with tap dance combinations and original tap dance routines.
[D; CSU; UC]

DANC 152.
Tap Dance II
.5–1 unit

Grade only
Prerequisite: *DANC 151 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Review and continuation of basic skills of tap dancing with emphasis on improving the techniques covered in DANC 151. Intermediate level steps and combinations will be introduced.
[D; CSU; UC]

DANC 153.
Tap Dance III
.5–1 unit

Grade only
Prerequisite: *DANC 152 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Review and continuation of intermediate skills of tap dancing with emphasis on improving individual techniques. More advanced steps and dance combinations. [D; CSU; UC]

DANC 154.
Country Western Line Dancing I
.5–1 unit

Grade only
Laboratory 2–3 hours
Offered: Variable
Beginning dance course providing the opportunity to experience country and western style dance steps and techniques. Emphasis online dances. No partner required. [D; CSU; UC]

DANC 155.
Country Western Line Dancing II
.5–1 unit

Grade only
Prerequisite: *DANC 154 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Intermediate dance course providing the opportunity to enlarge and expand upon country western style dance steps and techniques introduced in DANC 154. Emphasis online dances. No partner required. [D; CSU; UC]

DANC 156.
Country Western Line Dancing III
.5–1 unit

Grade only
Prerequisite: *DANC 155 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Intermediate dance course which provides the opportunity to enlarge and expand upon country-western style dance steps and techniques introduced in DANC 154 and 155. Emphasis online dances and their optional moves. No partner required. [D; CSU; UC]

DANC 157.
Country Western Line Dancing IV
.5–1 unit

Grade only
Prerequisite: *DANC 156 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Advanced dance course, which provides the opportunity to perfect and expand upon country western style dance steps and techniques introduced in DANC 154, 155, and 156. Emphasis online dances and their optional components. No partner required. [D; CSU; UC]

DANC 200.
Dance History and Appreciation
3 units

Grade only
Lecture 3 hours
Offered: Variable
Provides for an understanding and appreciation of various art forms of dance: ballet, modern, jazz, and tap. Covers dance history and criticism including an overview of the different career options in dance. [D; CSU; UC]

DANC 295.
Selected Topics in Dance
1–3 units

Offered: Variable
Permits students to study relevant subjects within the field of dance. The specific objectives, methods of instruction, and units of credit to be determined individually for projects proposed under this course description.
(May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

DANC 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study.* *See page 26.*
Offered: Variable
Individual research or study in some facet of dance of interest to the student and not included in the regular courses offered by the college. [D; CSU; * UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Dental Hygiene

Higher Education Center at National City

Deans

Trish Axsom, M.S.
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Higher Education Center at National City
619-477-9683 ext. 3006

Faculty

Kesa Hopkins, M.S.
Teresa Poulos, M.Ed.

Department Chair

Catherine McJannet, B.S.N.

Director

Christine Perri, M.A.

General Description

A dental hygienist is a licensed, preventive oral health professional who provides educational, clinical, and therapeutic services to the public in a variety of settings. As the preventive specialist of the dental healthcare team, the hygienist promotes and maintains oral wellness through such services as oral health assessments, x-rays, dental health education, removal of deposits and stains from teeth, and application of sealants and fluorides.

The program prepares students for a career in dental hygiene through the study of humanities, social and natural sciences, and the field of dental hygiene. Emphasis on clinical practice in the context of dental care. Graduates are eligible to apply to take both state and national examinations for licensure.

Career Options

Although the dental hygienist primarily provides preventive and therapeutic services in a private dental office or clinic, he/she may provide services in public health settings, schools, skilled nursing facilities, and mobile clinics. Clinical practice generally requires an associate degree education. The hygienist may also serve as an administrator/manager for community dental health programs or dental product companies, an educator in dental hygiene and dental school programs, or a researcher in a university or corporate setting. Many of these roles may require a baccalaureate or graduate-level degree.

Program Goals

Upon completion of the dental hygiene program the graduate will:

* *Possess the competencies necessary to pass the National and State Board Examinations.*
* *Secure entry-level employment as a dental hygienist.*
* *Be aware of the total needs of the client.*
* *Be able to plan, implement, and evaluate treatment for the variety of clinical clients/patients, based on total client/patient needs.*
* *Value the need to practice dental hygiene within the ethical and legal framework of the profession and the community.*
* *Exhibit professional behavior consistent with current academic and professional standards.*
* *Assume a leadership role in promoting prevention practices and dental health ideals to meet the changing health needs of the community.*
* *Meet all clinical didactic dental hygiene course requirements with a 75 percent minimum proficiency.*
* *Be able to perform all necessary duties in a safe environment utilizing all the latest techniques in infection control, sterilization, and the elimination of cross-contamination.*
* *Have the necessary knowledge and respect needed to safely deal with hazardous materials.*
* *Be able to pursue lifelong professional growth and development through participation in professional organizations and continuing education.*

Degree/Certificate Options

	Major Code
Associate in Science Degree: Career/Technical	
Dental Hygiene	*02380*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Science Degree
Dental Hygiene

Career/Technical (Major Code: 02380)

Prepares students for a career in dental hygiene through the study of humanities, social and natural sciences, and the field of dental hygiene. Emphasis on clinical practice in the context of dental care. Graduates are eligible to apply to take both state and national examinations for licensure.

PREREQUISITES:

BIOL 260	*Human Anatomy*	*5*
BIOL 261	*Principles of Human Physiology*	*4*
BIOL 265	*General Microbiology*	*5*
CHEM 100	*Introduction to Chemistry*	*4*
CHEM 110	*Elementary Organic and Biochemistry*	*4*
CD 204	*Fundamentals of Nutrition*	*3*
COMM 103	*Oral Communication*	
	or	*3*
COMM 174	*Interpersonal Communication*	
	or	
COMM 176	*Intercultural Communication*	
ENGL 115	*Reading and Composition: Exposition and Argumentation*	*3*
PSYC 101	*General Psychology*	*3*
SOC 101	*Introduction to Sociology*	
	or	*3*
SOC 110	*Contemporary Social Problems*	
	Total units	***37***

DEPARTMENT ACCEPTANCE INTO THE DENTAL HYGIENE PROGRAM

FIRST SEMESTER

DH 101	*Introduction to Clinical Concepts*	*2*
DH 102	*Introduction to Clinic*	*2*
DH 105	*Infection Control*	*1*
DH 111A	*Dental Radiography*	*1*
DH 111B	*Dental Radiography Laboratory*	*1*
DH 114	*Head and Neck Anatomy*	*2*
DH 117	*Medical and Dental Emergencies*	*1*
DH 123	*Oral Embryology and Histology*	*2*
DH 124	*Oral Anatomy and Physiology*	*1*

SECOND SEMESTER

DH 103	*Patient Education*	*2*
DH 112	*Clinic I*	*4*
DH 113	*Advanced Clinical Concepts*	*2*
DH 115	*Periodontics*	*2*
DH 116	*Dental Materials*	*2*
DH 121	*Pain Control*	*2*

THIRD SEMESTER

DH 122	*Clinic II*	*4*
DH 200A	*Community Dental Health I*	*2*
DH 203	*Pathology*	*2*
DH 204	*Preventive Dentistry*	*1*
DH 205	*Advanced Periodontics*	*2*
DH 206	*Dental Pharmacology*	*2*

FOURTH SEMESTER

DH 106	*Special Need Patient Care*	*2*
DH 111C	*Radiographic Interpretation*	*1*
DH 200B	*Community Dental Health II*	*1*
DH 202	*Clinic III*	*4*
DH 211	*Ethics and Jurisprudence*	*2*
DH 214	*Seminar*	*2*
	Total units	***52***

NOTE: *A grade of 75% ("C") or better is required in all dental hygiene courses for progression in the Dental Hygiene program and to graduate.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Dental Hygiene Courses

DH 25.
Introduction to Dental Hygiene
1 unit

Grade only
Lecture .5 hour, laboratory 1.5 hours
Offered: Variable
Overview of dental hygiene career. Opportunity to assess personal qualifications and interest in pursuing the dental hygiene profession. [D]

DH 26.
Dental Hygiene Clinical Licensing Exam Preparation
2 units

Credit/No Credit only
Limitation on Enrollment: *Graduation from an accredited dental hygiene program*
Lecture .5 hour, laboratory 5 hours
Offered: Variable
Prepares students for state clinical board examination. Utilize a mock board format to select an appropriate patient and complete forms required during the examination. Practice and enhance clinical dental hygiene skills. [ND]

DH 101.
Introduction to Clinical Concepts
2 units

Grade only
Corequisite: *DH 102*
Lecture 2 hours
Offered: Variable
Introduction to skills and clinical procedures required for dental hygiene patient procedures. [D; CSU]

DH 102.
Introduction to Clinic
2 units

Grade only
Corequisite: *DH 101*
Laboratory 6 hours
Offered: Variable
Laboratory experience in the skills and clinical procedures required for dental hygiene patient care. [D; CSU]

DH 103.
Patient Education
2 units

Grade only
Recommended Preparation: *CD/HLTH 204 or equivalent*
Lecture 2 hours
Offered: Variable
Principles and practice of preventing and controlling dental disease with emphasis on plaque control, motivation, and chairside education. [D; CSU]

DH 105.
Infection Control
1 unit

Grade only
Lecture 1 hours
Offered: Variable
Legal and ethical aspects of infectious disease transmission and its prevention. Includes information to meet the OSHA and CDC guidelines for education on infection control and hazardous materials management. [D; CSU]

DH 106.
Special Need Patient Care
2 units

Grade only
Lecture 2 hours
Offered: Variable
Integrates methodologies needed for the treatment of patients throughout their lifespan from infancy through adulthood with special emphasis on geriatric patients and those patients with special needs. Complications from pharmaceuticals, nutrition, movements, and dexterity will be evaluated. Variations in oral hygiene techniques will be reviewed. [D; CSU]

DH 111A.
Dental Radiography
1 unit

Grade only
Corequisite: *DH 111B*
Lecture 1 hour
Offered: Variable
Principles of dental radiology and clinical application of procedures involved in exposing, processing, interpreting, and evaluating radiographs. [D; CSU]

DH 111B.
Dental Radiography Laboratory
1 unit

Grade only
Corequisite: *DH 111A*
Laboratory 3 hours
Offered: Variable
Laboratory and clinical applications of procedures involved in exposing, processing, interpreting, and evaluating radiographs. [D; CSU]

DH 111C.
Radiographic Interpretation
1 unit

Grade only
Prerequisite: *DH 111B or equivalent*
Limitation on Enrollment: *Enrollment limited to those students in the Dental Hygiene program*
Lecture 1 hour
Offered: Variable
Development of the radiographic interpretation skills necessary for the graduating dental hygiene student. Particular emphasis on oral pathology to include: caries, periodontal disease, inflammatory diseases, cysts, tumors, dental anomalies, diseases of the jaws, and disorders of the temporomandibular joint. [D; CSU]

DH 112.
Clinic I
4 units

Grade only
Prerequisite: *DH 101 or equivalent*
Corequisite: *DH 113*
Laboratory 12 hours
Offered: Variable
Clinical practice of dental hygiene treatment procedures, including oral prophylaxis and patient education. Incorporates laboratory practice and patient care on children over five years of age and adults. [D; CSU]

DH 113.
Advanced Clinical Concepts
2 units

Grade only
Prerequisite: *DH 101 or equivalent*
Corequisite: *DH 112*
Lecture 2 hours
Offered: Variable
Introduction to dental hygiene treatment planning and more advanced dental hygiene treatment procedures necessary for patient care of children over five years of age and adults. [D; CSU]

DH 114.
Head and Neck Anatomy
2 units

Grade only
Lecture 2 hours, laboratory 1 hour
Offered: Variable
An anatomical, histological and morphological study of the structures of the head and neck including muscles, nerves, blood vessels, and lymphatics with hands-on practice in a laboratory setting. [D; CSU]

DH 115.
Periodontics
2 units

Grade only
Lecture 2 hours
Offered: Variable
Introduction to periodontics including identification of the normal periodontium and recognition of deviations from normal, etiology, pathogenesis, and classifications of periodontal disease; and examination, diagnostic, treatment, and maintenance procedures. [D; CSU]

DH 116.
Dental Materials
2 units

Grade only
Lecture 1 hour, laboratory 3 hours
Offered: Variable
Survey of dental materials and techniques of using them. [D; CSU]

DH 117.
Medical and Dental Emergencies
1 unit

Grade only
Lecture 1 hour
Offered: Variable
Evaluates the patient and client medical history. Recognizes medical and dental emergencies and the prescribed treatment of each type of emergency. [D; CSU]

DH 121.
Pain Control
2 units

Grade only
Lecture 1 hour, laboratory 3 hours
Offered: Variable
Instruction in the methods of pain control utilized in dental hygiene and in dentistry, including the administration of local anesthesia and the administration of nitrous oxide analgesia. [D; CSU]

DH 122.
Clinic II
4 units

Grade only
Prerequisite: *DH 112 or equivalent*
Laboratory 12 hours
Offered: Variable
Continued clinical experience in performing oral prophylaxis with a wider variety of clinical cases, as well as cases with use of oral roentgenograms. Students will begin applying skills in patient screening and occlusal sealants. [D; CSU]

DH 123.
Oral Anatomy and Physiology
1 unit

Grade only
Limitation on Enrollment: *Enrollment is limited to those students in the Dental Hygiene program*
Lecture 1 hour, laboratory 1 hour
Offered: Variable
Study of the orofacial region and morphologic aspects of the primary and secondary dentitions and their supporting structure. Particular emphasis on the root structures of each permanent tooth. [D; CSU]

DH 124.
Oral Embryology and Histology
2 units

Grade only
Limitation on Enrollment: *Enrollment is limited to those students in the Dental Hygiene program*
Lecture 2 hours
Offered: Variable
Study of the embryologic development of the face, neck, and orofacial structures; developmental disturbances; tooth development and eruption. Particular emphasis on the histology of the oral mucosa, gingival, dentogingival junctional tissues, enamel, and supporting structure. [D; CSU]

DH 200A.
Community Dental Health I
2 units

Grade only
Lecture 2 hours
Offered: Variable
Study of the philosophy and background of community dental health. Emphasis on program planning, implementation, and evaluation. Includes practical experience implementing programs in various community settings. [D; CSU]

DH 200B.
Community Dental Health II
1 unit

Grade only
Prerequisite: *DH 200A or equivalent*
Lecture 1 hour
Offered: Variable
Continued study of the philosophy and background of community dental health. Emphasis on program planning, implementation, and evaluation. Includes practical experience implementing programs in various community settings. [D; CSU]

DH 202.
Clinic III
4 units

Grade only
Prerequisite: *DH 122 or equivalent*
Laboratory 12 hours
Offered: Variable
Continued clinical experience in performing oral prophylaxis with a wider variety of clinical cases, as well as cases with use of oral roentgenograms, dietary analysis, and other supplemental procedures. Subgingival ultrasonics will be introduced. Includes clinical x-ray and orthopantomographs while in off-campus assignments. [D; CSU]

DH 203.
Pathology
2 units

Grade only
Lecture 2 hours
Offered: Variable
Introduction to general pathology with an emphasis on oral pathology. [D; CSU]

DH 204.
Preventive Dentistry
1 unit

Grade only
Prerequisite: *DH 112 or equivalent*
Lecture 1 hour, laboratory 1 hour
Offered: Variable
Principles related to development of a comprehensive preventive dentistry program. Study of the development and prevention of dental caries. Incorporates theory and lab application of dietary assessment and counseling, fluorides, and pit and fissure sealants. [D; CSU]

DH 205.
Advanced Periodontics
2 units

Grade only
Prerequisite: *DH 115 or equivalent*
Lecture 2 hours
Offered: Variable
Development of data collection, diagnostic, treatment planning, and clinical skills applicable to the treatment of patients with advanced periodontal disease. Includes instruction in the expanded function skill of soft tissue curettage and utilization of pain control techniques. [D; CSU]

DH 206.
Dental Pharmacology
2 units

Grade only
Prerequisite: *DH 114 or equivalent*
Lecture 2 hours
Offered: Variable
Classification and study of drugs according to origin, physical and chemical properties, therapeutic effects, and values. [D; CSU]

DH 211.
Ethics and Jurisprudence
2 units

Grade only
Prerequisite: *DH 202 or equivalent*
Lecture 2 hours
Offered: Variable
Study of the fundamental factors necessary to be employed and practice within the ethical and legal framework of the state dental practice act and the code of ethics of the American Dental Hygienists' Association. [D; CSU]

DH 214.
Seminar
2 units

Grade only
Lecture 2 hours
Offered: Variable
Independent study or seminar study and special interest cases encountered in clinical experience. Advanced instruction in dental caries detection and other pathology. Presentations will be given pertaining to the National Board Examination and the California Licensure Examination. [D; CSU]

DH 295.
Selected Topics in Dental Hygiene
1–3 units

Offered: Variable
Permits students to study relevant topics within the field of dental hygiene. (May be repeated for additional credit with new content.) [D; * CSU]

** Please refer to the class schedule for specific course description and transferability information.*

DH 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in dental hygiene of particular interest to the student. [D: CSU; * UC]

** UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Disability Support Services

Dean

Virginia Hansen, Ph.D., Dean
Office 429
619-482-6582

CE 290–293.
Occupational Cooperative Ed. I–IV
2–4 units

Grade only
Limitation on Enrollment: *Declared vocational education major. Student must complete no less than seven units, including cooperative education during each semester in order to receive credit. Open to students with majors not having a cooperative work experience class*
Lecture 1 hour, laboratory 5–15 hours
Offered: Variable
On-the-job application of the theory learned in the student's major. [D]

Economics

School of Social Sciences and International Studies

■ Dean

Viara Giraffe, Ph.D.
Office 470K
619-482-6582

■ Faculty

Peggy Crane, M.S.
Alexandria Davidson, M.A.

■ Department Chair

Robin Franck, Cand. Ph.D.

General Description

Economics is a social science that examines the functions of various markets, the determination of prices, the distribution of income, the rates of unemployment, income, and inflation. The study of economics deals with social problems and issues such as racism, sexism, war, and poverty. The focus of learning is on principles of economic analysis, fiscal and monetary policy, macro and micro theories, consumer protection, international trade, American economic history, monetary systems, and governmental regulations.

Career Options

The following list is a sample of the many career options available for the economics major. A few of these require an associate degree, most require a baccalaureate degree, and some require a graduate-level degree: economist, general manager, budget analyst, industrial relations specialist, high school or college instructor, research technician, market analyst, labor relations arbitrator, business conditions forecaster, investment analyst, economic commentator, manpower economist, natural resource economist, commodity economist, energy economist, international economist, and commodity price forecaster.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Economics	*01190*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Arts Degree
Economics

Transfer Preparation * (Major Code: 01190)

Economics is the social science that studies the production, distribution, and consumption of goods and services. Many beginning positions in business and government are available to students with a bachelor's degree in economics.

ECON 101	*Principles of Economics I*	*3*
ECON 102	*Principles of Economics II*	*3*
MATH 119	*Elementary Statistics*	*4*
MATH 120	*Calculus for Business Analysis*	*3*
Foreign Language		*10–15*
	Total units	***23–28***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Economics Courses

ECON 100.
Contemporary Economic Problems
3 units

Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Nontechnical introduction to the basic concepts of economics. Investigates economic basis of such real-world problems as inflation, unemployment, economic power, and international trade deficits. This course will not fulfill the lower-division economics requirements for business or economics majors transferring to four-year institutions. [D; CSU; UC]

ECON 101.
Principles of Economics I
3 units

Grade only
Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent; MATH 45 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Introduction to basic economic principles and theory relating to structure of our institutions, economic problems analysis, and formation of public policy. Emphasis placed on macro analysis including GDP analysis, money and banking, economic stability and growth, business cycles, and monetary and fiscal policy. [D; CSU; UC; CAN-ECON 2]

ECON 102.
Principles of Economics II
3 units

Grade only
Recommended Preparation: *ECON 101 or equivalent; ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent; MATH 45 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Study of principles and applications regarding specific economic sectors (microanalysis). Analysis of various competitive models in a market economy, studied in detail with respect to the theory of the firm, the role of prices, and market failures. Study of the logic of rational decision-making and international economics. [D; CSU; UC; CAN-ECON 4]

ECON 295.
Selected Topics in Economics
1–3 units

Offered: Variable
Permits students to study relevant topics within the field of economics. The specific objectives, methods of instruction and evaluation will be determined according to the topic. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

ECON 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study of research in some area of economics of particular interest to the student and not included in regular economics courses. [D; CSU; * UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Education

School of Languages and Humanities

■ Dean

Renee M. Kilmer, Ph.D.
Office 430J
619-482-6461

■ Department Chair

Anna Ingalls, M.A.

"After moving here from Texas, I chose to attend Southwestern College because of the great reputation it holds. As a current student, I have now enrolled in online courses and find them to be both convenient and time saving. "

—KATIE LELIEVRE,
Journalism Major

Education Courses

■ **ED 200.**
Teaching as a Profession
3 units

Recommended Preparation: *ENGL 115 or equivalent*
Lecture 3 hours
Offered: Variable
Designed for students considering teaching as a profession. Includes career exploration, foundations of education, critical issues in teaching, and stories about teaching by individual educators. Looks at standards for the teaching profession and conditions for effective learning. Requires pre-internships in public school classrooms. (Same as ENGL 200.)
[D; CSU; UC]

■ **ED 201.**
Introduction to Literacy
3 units

Prerequisite: *ENGL 115 or equivalent*
Lecture 3 hours
Offered: Variable
Designed for students considering teaching as a profession and for those students enrolled in the Liberal Studies Blended Teacher Education program. Presents theories of literacy acquisition and focuses on the process of literacy and the inclusion of effective instructional strategies that build reading for fluency, with special attention given to beginning and emerging readers in a learning environment that reflects the diverse, global nature of the multicultural California classroom. Requires field work as reading tutor. (Same as ENGL 201.)
[D; CSU]

■ **ED 295.**
Selected Topics in Education
1–3 units

Offered: Variable
Permits students to study relevant topics within the field of education. The specific objectives, methods of instruction and evaluation will be determined according to the topic. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

■ **ED 299.**
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study of research in some area of Education of particular interest to the student and not included in regular economics courses.
[D; CSU; * UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Electronics

School of Business and Information Systems

■ Dean

Irma Alvarez, M.A.
Office 215
619-482-6457

■ Faculty

Timothy Mathis, M.A.
William Snell, M.S.

■ Department Chair

Joan Stroh, B.A.

General Description

Electronics is a technological giant among America's businesses and industries. The electronics technician acts as a liaison between the electronics engineer and the skilled worker. The technician possesses fundamental knowledge of the engineer and the craftsperson. Study in this department consists of building and testing prototype circuits and equipment, modifying electronic apparatus, and interpreting schematic drawings and sketchings. Southwestern College is a member of the International Electronics Technicians Articulation Committee (IETAC).

Career Options

The following list is a sample of the many career options available for the electronics major. Most of these require an associate degree, some require a baccalaureate degree, and a few require a graduate-level degree: electronics mechanic, automated systems technician, sales representative, service technician, manufacturing specialist, microcomputer technician, engineering assistant, engineer and telecommunications technician. Entry-level career opportunities are available in electric utilities, industrial plants, engineering firms, electrical manufacturing, telecommunications, biomedical electronics, and radio and television stations.

Degree/Certificate Options

	Major Code
Associate in Science Degree: Career/Technical	
AREAS OF EMPHASIS	
Electronics:	
* *Computer Technician*	*02907*
* *Electronics Technician*	*02915*
* *Internetwork Technician*	*02911*
* *Network Administrator*	*02913*
Certificates of Achievement	
AREAS OF EMPHASIS	
Electronics:	
* *Computer Technician—Basic*	*02908*
* *Computer Technician—Advanced*	*02916*
* *Electronics Technician*	*02917*
* *Internetwork Technician—Basic*	*02912*
* *Internetwork Technician—Advanced*	*02918*
* *Network Administrator—Basic*	*02914*
* *Network Administrator—Advanced*	*02919*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Science Degree
Electronics

Career/Technical

COMMON CORE

ELEC/CIS 10A	*Microcomputer Repair and Service*	*2*
ELEC 100	*Introduction to Electronics*	*3*
ELEC 111	*DC Circuit Principles*	*2*
ELEC 113	*DC Circuit Analysis and Computer Simulation*	*2*
ELEC 131	*Digital Electronics Principles*	*2*
ELEC 162	*Electronics Fabrication*	*1*
	Total units	***12***

Plus at least one emphasis below (14–22)

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

NOTE: *Member Colleges of the International Electronics Technician Articulation Committee have agreed to accept for credit specific classes offered by other member colleges in Canada, Australia, and the United States. IETAC Core Requirements are met with the Common Core courses plus the classes listed under the Electronic Technician Emphasis.*

▪ Electronics—Computer Technician Emphasis

Career/Technical (Major Code: 02907)

Provides intensive training in the theory and practice of the operation and maintenance of computers, computer peripherals, and computer networks.

Prepares students for employment as certified, entry-level technicians in the computer industry.

CAD 220	*Introduction to CAD/CAM Systems*	*3*
CIS 130	*Microcomputer Disk Operating System*	*1*
CIS 139	*Windowing Environments*	*1*
ELEC/CIS 10B	*Microcomputer Hardware and Software Upgrade*	*2*
ELEC/CIS 14	*Office Automation Equipment Repair*	*2*
ELEC 15	*Data, Voice, and Video Cable Installation*	*2*
ELEC 260	*Microcomputer Systems & A+ Certification*	*4*
ELEC 266	*Network Management for Technicians*	*4*
Plus Common Core courses required for Electronics		*12*
	Total units	***31***

INDEPENDENT NATIONAL CERTIFICATION OBJECTIVES

Designed to prepare the students to take certification exams in A+ Computer Technician.

▪ Electronics—Electronics Technician Emphasis

Career/Technical (Major Code: 02915)

Provides training in the theory and practice of the operation and maintenance of industrial, commercial, and consumer electronics equipment.

Prepares students for employment as certified, entry-level technicians in the electronics industry.

ELEC 116	*AC Circuit Principles*	*2*
ELEC 118	*AC Circuit Analysis and Computer Simulation*	*2*
ELEC 122	*Solid State Principles*	*2*
ELEC 138	*Digital Circuit and IC Families*	*2*
ELEC 152	*Microprocessors and Controllers*	*2*
ELEC 226	*Diode and Transistor Circuitry Theory and Troubleshooting*	*2*
ELEC 228	*Linear Integrated Circuits*	*2*
Plus Common Core courses required for Electronics		*12*
	Total units	***26***

INDEPENDENT NATIONAL CERTIFICATE OBJECTIVES

Prepares students to take certification exams in certified electronics technician.

▪ Electronics—Internetwork Technician Emphasis

Career/Technical (Major Code: 02911)

Provides intensive training in the theory and practice of the operation and maintenance of internetworking with special emphasis on switches, routers, and other specialized equipment.

Prepares students for employment as certified, entry-level technicians in the internetworking industry.

CIS 144A	*Routers and Internetwork Fundamentals (Cisco Certification Preparation)*	*3*
CIS 144B	*Advanced Routers and LAN Networking*	*3*
CIS 144C	*Wide Area Networks Implementation and Support*	*3*
ELEC 15	*Data, Voice, and Video Cable Installation*	*2*
ELEC 142	*Networking Academy Fundamentals (Cisco Certification Preparation)*	*3*
ELEC 260	*Microcomputer Systems and A+ Certification*	*4*
ELEC 266	*Network Management for Technicians*	*4*
Plus Common Core courses required for Electronics		*12*
	Total units	***34***

INDEPENDENT NATIONAL CERTIFICATION OBJECTIVES

Designed to prepare the students to take certification exams in the following areas:

*** Cisco Certified Network Associate**
*** A+ Computer Technician**

Electronics—Network Administrator Emphasis

Career/Technical (Major Code: 02913)

Provides intensive training in the theory and practice of the operation and maintenance of computers, computer peripherals, and computer networks.

Prepares students for employment as certified entry-level technicians in the computer industry and as entry-level network administrators.

ELEC/CIS 10B	*Microcomputer Hardware and Software Upgrade*	*2*
ELEC 260	*Microcomputer Systems and A+ Certification*	*4*
ELEC 265	*Computer Networking for N+ Certification*	*4*
ELEC 266	*Network Management for Technicians*	*4*
CIS 140	*Computer Networking Software*	*1*
CIS 141A	*Computer Networking Systems—Windows*	*2*
Plus Common Core courses required for Electronics		*12*
	Total units	***29***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

INDEPENDENT NATIONAL CERTIFICATION OBJECTIVES

Designed to prepare the students to take certification exams in the following areas:

*** A+ Computer Technician**
*** N+ Network Technician**

Certificates of Achievement

Electronics—Computer Technician Emphasis—Basic

Career/Technical (Major Code: 02908)

ELEC/CIS 10A	*Microcomputer Repair and Service*	*2*
ELEC/CIS 10B	*Microcomputer Hardware and Software Upgrade*	*2*
ELEC/CIS 14	*Office Automation Equipment Repair*	*2*
ELEC 15	*Data, Voice, and Video Cable Installation*	*2*
ELEC 260	*Microcomputer Systems & A+ Certification*	*4*
ELEC 266	*Network Management for Technicians*	*4*
CIS 139	*Windowing Environments*	*1*
	Total units	***17***

Electronics—Computer Technician Emphasis—Advanced

Career/Technical (Major Code: 02916)

CAD 220	*Introduction to CAD/CAM Systems*	*3*
CIS 130	*Microcomputer Disk Operating System*	*1*
CIS 139	*Windowing Environments*	*1*
ELEC/CIS 10B	*Microcomputer Hardware and Software Upgrade*	*2*
ELEC/CIS 14	*Office Automation Equipment Repair*	*2*
ELEC 15	*Data, Voice, and Video Cable Installation*	*2*
ELEC 260	*Microcomputer Systems & A+ Certification*	*4*
ELEC 266	*Network Management for Technicians*	*4*
Plus Common Core courses required for Electronics		*12*
	Total units	***31***

Electronics-Electronics Technician Emphasis

Career/Technical (Major Code: 02917)

ELEC 116	*AC Circuit Principles*	*2*
ELEC 118	*AC Circuit Analysis and Computer Simulation*	*2*
ELEC 122	*Solid State Principles*	*2*
ELEC 138	*Digital Circuit and IC Families*	*2*
ELEC 152	*Microprocessors and Controllers*	*2*
ELEC 226	*Diode and Transistor Circuitry Theory and Troubleshooting*	*2*
ELEC 228	*Linear Integrated Circuits*	*2*
Plus Common Core courses required for Electronics		*12*
	Total units	***26***

Electronics—Internetwork Technician Emphasis—Basic

(Major Code: 02912)

CIS 142	*Networking Academy Fundamentals (Cisco Certification Preparation)*	*3*
CIS 144A	*Routers and Internetwork Fundamentals (Cisco Certification Preparation)*	*3*
CIS 144B	*Advanced Routers and LAN Networking*	*3*
CIS 144C	*Wide Area Networks Implementation and Support*	*3*
Elec 15	*Data, Voice, and Video Cable Installation*	*2*
		14

Electronics—Internetwork Technician Emphasis—Advanced

Career/Technical (Major Code: 02918)

CIS 144A	*Routers and Internetwork Fundamentals (Cisco Certification Preparation)*	*3*
CIS 144B	*Advanced Routers and LAN Networking*	*3*
CIS 144C	*Wide Area Networks Implementation and Support*	*3*
ELEC 15	*Data, Voice, and Video Cable Installation*	*2*
ELEC 142	*Networking Academy Fundamentals (Cisco Certification Preparation)*	*3*
ELEC 260	*Microcomputer Systems and A+ Certification*	*4*
ELEC 266	*Network Management for Technicians*	*4*
Plus Common Core courses required for Electronics		*12*
	Total units	***34***

Electronics-Network Administrator Emphasis-Basic

Career/Technical (Major Code: 02914)

ELEC/CIS 10A	*Microcomputer Repair and Service*	*2*
ELEC/CIS 10B	*Microcomputer Hardware and Software Upgrade*	*2*
ELEC 260	*Microcomputer Systems and A+ Certification*	*4*
ELEC 265	*Computer Networking for N+ Certification*	
	or	*4*
ELEC 266	*Network Management for Technicians*	
CIS 140	*Computer Networking Software*	*1*
CIS 141A	*Computer Networking Systems—Windows*	*2*
	Total units	***15***

Electronics—Network Administrator Emphasis—Advanced

Career/Technical (Major Code: 02919)

ELEC 10B	*Microcomputer Hardware and Software Upgrade*	*2*
ELEC 260	*Microcomputer Systems and A+ Certification*	*4*
ELEC 265	*Computer Networking for N+ Certification*	*4*
ELEC 266	*Network Management for Technicians*	*4*
CIS 140	*Computer Networking Software*	*1*
CIS 141A	*Computer Networking Systems—Windows*	*2*
Plus Common Core courses required for Electronics		*12*
	Total units	***29***

Electronics Courses

ELEC 10A.
Microcomputer Repair and Service
2 units

Lecture 1.5 hours, laboratory 1.5 hours
Offered: Fall; Spring
Fee: $2. Entry-level training in microcomputer maintenance and service. Includes customer relations, computer assembly, and software setup. Covers testing and replacing system boards, monitors, floppies and hard drives, keyboards, and power supplies, DOS for technicians and software diagnostics. (Same as CIS 10A.) (ROP option) [D]

"Southwestern College has provided me with an exceptional education to reach my goals and get one step further to a successful career."

—ETHEL PANGILINAN,
Liberal Studies Major

ELEC 10B.
Microcomputer Hardware and Software Upgrade
2 units

Recommended Preparation: *ELEC/CIS 10A or equivalent*
Lecture 1.5 hours, laboratory 1.5 hours
Offered: Fall; Spring
Fee: $2. Covers microcomputer hardware and software upgrades and expansions. Install and upgrade monitors, hard disk, internal and external tape back up, printers, memory, CD-ROMs, and Sound cards. Covers installation and setting up new versions of DOS and Windows. (Same as CIS 10B.) (ROP option) [D]

ELEC 14.
Office Automation Equipment Repair
2 units

Recommended Preparation: *ELEC/CIS 10A or equivalent*
Lecture 1.5 hours, laboratory 1.5 hours
Offered: Fall; Spring
Fee: $2. Covers the maintenance and service of office automation equipment such as scanners, facsimile, laser printers, copiers, CD-ROMs, and modems. Theory, operation, and trouble shooting are discussed. (Same as CIS 14.) (ROP option) [D]

ELEC 15.
Data, Voice, and Video Cable Installation
2 units

Grade only
Lecture 1.5 hours, laboratory 1.5 hours
Offered: Variable
Fee: $2. Provides entry-level training in data, voice, and video cable installation. Covers media preparation, installation and testing; industry tools; ISO and OSI standards; estimating; blueprints; codes and safety dealing with simple to complex data, voice, and video communication. (ROP option) [D]

ELEC 100.
Introduction to Electronics
3 units

Grade only
Lecture 3 hours
Offered: Variable
Survey course covering the basic electrical and electronic concepts and the modern electronic systems in daily use. Includes DC circuits, magnetics, AC circuits, audio and radio, digital electronics and computers, small appliances, and introduction to automotive electronics. Designed to supply essential knowledge in this area in a basic mathematical manner and can be taken by both electronics and non-electronics majors. [D; CSU]

ELEC 111.
DC Circuit Principles
2 units

Grade only
Lecture 1.5 hours, laboratory 1.5 hours
Offered: Fall
Fee: $2. Introduction to DC components and basic circuit configurations. Includes current, voltage, power, resistors, fuses, switches, batteries, thermistors, photo resistors, series and parallel circuits, multimeters, and power supplies. Students with high school tech prep credit should not take this course. [D; CSU]

ELEC 113.
DC Circuit Analysis and Computer Simulation
2 units

Grade only
Recommended Preparation: *ELEC 111 or equivalent*
Lecture 1.5 hours, laboratory 1.5 hours
Offered: Fall
Fee: $2. Continuation of DC Circuits through complex series/parallel circuits using computer software to simulate circuits. Troubleshooting techniques for open and short circuits. Practical applications of whetstone bridges, voltage dividers, current dividers, thermistors and photo resistor circuits. Laboratory experiences include both hands-on circuit construction and computer simulation. [D; CSU]

ELEC 116.
AC Circuit Principles
2 units

Grade only
Lecture 1.5 hours, laboratory 1.5 hours
Offered: Fall, Spring
Fee: $2. Introduction to AC circuits and components. Principles of resistors, capacitors, coils, transformers, relays, speakers, and motors in AC circuits. Operation of signal generators, digital meters, frequency counters and oscilloscopes for AC measurements. [D; CSU]

ELEC 118.
AC Circuit Analysis and Computer Simulation
2 units

Grade only
Recommended Preparation: *ELEC 116 or equivalent*
Lecture 1.5 hours, laboratory 1.5 hours
Offered: Variable
Fee: $2. Emphasis on practical circuit applications and concepts such as AC power sources, transformers, filters, resonance, power factors, time constants and decibel applications. Circuit operation and testing will be simulated using computer software such as Electronics Workbench, Micro-Cap/SPICE. Covers Series/Parallel circuits using resistors, capacitors and coils. [D; CSU]

ELEC 122.
Solid State Principles
2 units

Grade only
Recommended Preparation: *ELEC 113 or 118 or equivalent*
Lecture 1.5 hours, laboratory 1.5 hours
Offered: Fall
Fee: $2. Introduction to basic solid state components and their operating principles. Typical circuits to include semiconductor principles, rectifiers, zener regulators, transistor switches, and transistor amplifiers. [D; CSU]

ELEC 131.
Digital Electronics Principles
2 units

Grade only
Lecture 1.5 hours, laboratory 1.5 hours
Offered: Variable
Fee: $2. Digital fundamentals, basic gates, integrated circuits, test equipment, and Boolean logic will be covered. Students will construct and test circuits using digital trainers, logic probes, logic pulsers and oscilloscopes. [D; CSU]

ELEC 138.
Digital Circuits and IC Families
2 units

Grade only
Recommended Preparation: *ELEC 131 or equivalent*
Lecture 1.5 hours, laboratory 1.5 hours
Offered: Spring
Fee: $2. Medium to large-scale integrated circuits used in digital and microcomputer systems. Includes counters, shift registers, memories, A to D converters and D to A converters. Labs include hands-on breadboarding and computer circuit simulation. [D; CSU]

ELEC 142.
Networking Academy Fundamentals (Cisco Certification Preparation)
3 units

Recommended Preparation: *Basic knowledge of DOS and Windows*
Lecture 2 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Covers fundamentals of computer internetworking. Topics covered include network topology, cabling, electrical considerations, the OSI model, Internet protocol addressing, bridges, switches, hubs, and routers. This course is the first in a four-course sequence. Other courses in the sequence cover LAN and WAN design and router programming. Upon completion of the four-course sequence, students are eligible to take the Cisco CCNA Certification test. (Same as CIS 142.) [D; CSU]

ELEC 152.
Microprocessors and Controllers
2 units

Grade only
Recommended Preparation: *ELEC 138 or equivalent*
Lecture 1.5 hours, laboratory 1.5 hours
Offered: Spring
Fee: $2. Principles of microprocessor hardware and instruction sets. Laboratory experiments using Hewlett Packard microprocessor trainers and IBM compatible microcomputers. Using test equipment to perform diagnostic tests and measurements on memory, clocks, power supplies, roms, and I/O circuits. [D; CSU]

ELEC 162.
Electronics Fabrication
1 unit

Grade only
Laboratory 3 hours
Offered: Spring
Fee: $2. Proper practices and methods used in electronics construction, assembly, and repair. Covers use of hand tools, proper methods of making electrical connections to terminals, pins, printed circuit boards, plugs and components. Hands-on the course will prepare students to work on current electronic components and assemblies in a safe and effective manner. [D; CSU]

ELEC 226.
Diode and Transistor Circuitry Theory and Troubleshooting
2 units

Grade only
Recommended Preparation: *ELEC 113 or 118 or equivalent*
Lecture 1.5 hours, laboratory 1.5 hours
Offered: Spring
Fee: $2. Theory of operation and testing of common circuits found in consumer, industrial, and communications products. Use of computer software to simulate rectifiers, amplifiers, oscillators, and control circuits. [D; CSU]

ELEC 228.
Linear Integrated Circuits
2 units

Grade only
Recommended Preparation: *ELEC 113 or 118 or equivalent*
Lecture 1.5 hours, laboratory 1.5 hours
Offered: Variable
Fee: $2. Covers linear integrated circuits used in industrial and consumer electronic products; operational amplifiers used as active filters, comparators, oscillators, regulators, adders, and subtracters. Laboratory exercises include hands-on breadboarding and testing, as well as computer circuit simulation. [D; CSU]

ELEC 260.
Microcomputer Systems and A+ Certification
4 units

Grade only
Recommended Preparation: *ELEC 10A and 10B, or equivalent; or ELEC 138 or equivalent; ELEC 152 or equivalent*
Lecture 4 hours, laboratory 2 hours
Offered: Variable
Fee: $2. Covers the main hardware and software (operating system) aspects of IBM comparable personal computers to prepare students for occupations in this field and to pass the National A+ Certification Examination of Proficiency. [D; CSU]

ELEC 265.
Computer Networking for N+ Certification
4 units

Grade only
Recommended Preparation: *ELEC 10A, 10B, and 141A, or equivalent; or ELEC 260 or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Includes the main hardware and software aspects of setting up and maintaining a computer network to prepare students for occupations in this field and to pass the National Network Certification Examination of Proficiency. [D; CSU]

ELEC 266.
Network Management for Technicians
4 units

Grade only
Recommended Preparation: ELEC 260 and 265, or equivalent
Lecture 3 hours, laboratory 3 hours
Offered: Variable
Fee: $2. Includes the advanced hardware and software aspects of setting up and managing a computer network to prepare students for higher-level positions in companies using and maintaining such computer networks. [D; CSU]

ELEC 271.
Introduction to Electronics Communications
2 units

Grade only
Recommended Preparation: *ELEC 113, 118, and 226, or equivalent*
Lecture 1.5 hours, laboratory 1.5 hours
Offered: Spring
Electronics communication principles and methods. Types of modulation, concepts of radio and TV systems, propagation and antennas, satellite repeaters, dishes, and frequency allocations. [D; CSU]

ELEC 272.
Communications Equipment Theory, Operation, and Maintenance
2 units

Grade only
Recommended Preparation: *ELEC 271 or equivalent*
Lecture 1.5 hours, laboratory 1.5 hours
Offered: Spring
Covers communications circuits and equipment. Installing and operating transmitters and receivers, setting up and using oscilloscopes, spectrum analyzer, power meters, and frequency counters. [D; CSU]

ELEC 290–293.
Electronics Cooperative Work Experience I–IV
2–4 units

Grade only
Limitation on Enrollment: *Declared Electronics major. Student must complete no less than seven units, including work experience, during each semester in order to receive credit*
Lecture 1 hour, 5–15 hours work experience
Offered: Variable
Work experience in electronics occupations coordinated with classroom discussion. Designed to assist students in successfully completing the entrance requirements for full-time employment in the electronics industry. [D; CSU]

ELEC 295.
Selected Topics in Electronics
1–3 units

Offered: Variable
Permits students to study relevant topics within the field of electronics. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

ELEC 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of electronics of particular interest to the student and not included in regular courses of the college. (May be taken twice for credit.) [D; CSU]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

"Southwestern College has offered me and excellent learning environment and a great opportunity to further my education while preparing to transfer. "

—BENJAMIN YOUNG,
Criminal Justice Major

Emergency Medical Technology and Paramedic

School of Technology and Human Services

■ Dean

Patricia Axsom, M.S.
Office 570B
619-482-6460

■ Faculty

Joanne Stonecipher, M.S.
Ronald Ungar, M.A.

■ Department Chair

Edward Selby, A.S.

General Description

Emergency medical technology and paramedic is the study of emergency medical care and the evaluation and treatment of injuries. These programs focus on both technical and practical knowledge while providing requisite skills to evaluate and treat a wide variety of medical and trauma emergencies in the prehospital setting. Students learn to administer medication, start intravenous lines, interpret EKG rhythm strips, and defibrillate patients in cardiac arrest, as well as to administer many other advanced life support procedures.

Career Options

The following list is a sample of the many career options available for the emergency medical or paramedic major. Most require an associate degree, some require a baccalaureate degree, and a few of these require a graduate-level degree: emergency medical technician, paramedic, vocational teacher, college instructor, search and rescue responder, hospital technician, and emergency room technician.

Degree/Certificate Options

	Major Code
Associate in Science Degree: Career/Technical	
Emergency Medical Technology and Paramedic	*02340*
Certificate of Achievement: Career/Technical	
Emergency Medical Technology and Paramedic	*02341*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Science Degree Emergency Medical Technology and Paramedic

Career/Technical (Major Code: 02340)

Prepares students to give prehospital emergency care with most training taking place in hospitals and in first-response vehicles in the field. Upon program completion, the students are eligible to take the exam for state certification. Students desiring to earn the associate in science degree should consult a counselor.

DEPARTMENT ACCEPTANCE REQUIRED FOR THIS PROGRAM.

PREREQUISITES:

BIOL 190	*Human Anatomy and Physiology*	*4*
EMT 111	*Emergency Medical Technician I, Basic*	*6*

FIRST SEMESTER

EMTP 212	*Fundamentals of Advanced Prehospital Life Support*	*5*
EMTP 212L	*Fundamentals of Advanced Prehospital Life Support Laboratory*	*2*
EMTP 213	*Advanced Medical and Cardiac Prehospital Life Support*	*5*
EMTP 213L	*Advanced Medical and Cardiac Prehospital Life Support Lab*	*2*

SUMMER SESSION

EMTP 214	*Advanced Prehospital Life Support*	*5*
EMTP 214L	*Advanced Prehospital Life Support Laboratory*	*2*

SECOND SEMESTER

EMTP 220	*Clinical Practicum—Paramedics*	*3*
EMTP 230	*Field Training for Paramedics*	*10*
	Total units	***44***

REQUIRED COURSES FOR AN ASSOCIATE IN SCIENCE DEGREE

COMM 174	*Interpersonal Communication*	*3*
ENGL 115	*Reading and Composition: Exposition and Argumentation*	
	or	*3*
ENGL 116	*Critical Thinking and Composition*	
PSYC 101	*General Psychology*	*3*
	Total units	***9***

Recommended Elective: *SOC 135.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

EMTP CREDIT

Licensed paramedics may be granted college units toward an associate in arts degree if they are currently licensed in the State of California. The student may receive a maximum of 6 units for previous EMT-1 training. The student may receive a maximum of 30.5 units for previous EMTP training.

NOTE: *Grade of "C" is required for each course for progression and completion.*

Certificate of Achievement
Emergency Medical Technology and Paramedic

Career/Technical (Major Code: 02341)

DEPARTMENT ACCEPTANCE REQUIRED FOR THIS PROGRAM.

PREREQUISITES:

BIOL 190	*Human Anatomy and Physiology*	*4*
EMT 111	*Emergency Medical Technician I, Basic*	*6*

FIRST SEMESTER

EMTP 212	*Fundamentals of Advanced Prehospital Life Support*	*5*
EMTP 212L	*Fundamentals of Advanced Prehospital Life Support Laboratory*	*2*
EMTP 213	*Advanced Medical and Cardiac Prehospital Life Support*	*5*
EMTP 213L	*Advanced Medical and Cardiac Prehospital Life Support Lab*	*2*

SUMMER SESSION

EMTP 214	*Advanced Prehospital Life Support*	*5*
EMTP 214L	*Advanced Prehospital Life Support Laboratory*	*2*

SECOND SEMESTER

EMTP 220	*Clinical Practicum—Paramedics*	*3*
EMTP 230	*Field Training for Paramedics*	*10*
	Total units	***44***

Emergency Medical Technology Courses

EMT 10.
EMT Refresher
1 unit

Credit/No Credit only
Limitation on Enrollment: *Holds a current EMT certificate or has held certificate within last 48 months*
Lecture 1 hour, laboratory .5 hour
Offered: Variable
Meets or exceeds county and state requirements for biennial EMT-I refresher training. (May be repeated every two years.) [ND]

EMT 100.
First Responder
2–3 units

Grade only
Lecture 2–3 hours
Offered: Variable
Fee: $13. Fundamentals of first aid with emphasis on emergencies requiring knowledge and skills in artificial respiration, cardiopulmonary resuscitation, automated external defibrillation, oxygen therapy, care for fractures, bleeding, poisoning, and burns. Additional material covers problems of exposure, drugs, emergency rescues, childbirth, and Body Substance Isolation procedures (BSI). (Same as HLTH 110.) [D; CSU]

EMT 111.
Emergency Medical Technician I, Basic
6 units

Prerequisite: *EMT 100/HLTH 110 or equivalent*
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 4 hours, laboratory 4 hours
Offered: Variable
Fee: $13. Techniques of emergency care, as outlined by the San Diego County EMS Agency, State EMS statutes, and the National DOT curriculum. Specific cognitive and manipulative skills. Eight-hour hospital emergency department observation, eight-hour ambulance ride-along, and two eight-hour Saturday skills labs included. [D; CSU]

EMT 125.
Wilderness First Responder
4 units

Grade only
Lecture 4 hours, laboratory 1.5 hours
Offered: Variable
For people who are not emergency medical technicians but are interested in outdoor recreational activities and/or search and rescue. National Association of Search and Rescue (NASAR) First Responder curriculum with the wilderness and remote emphasis teaches medical care of sick and injured in situations of delayed or prolonged transport. Includes three, eight-hour Saturday and/or Sunday classes. [D; CSU]

EMT 295.
Selected Topics in Emergency Medical Technology
1–3 units

Offered: Variable
Permits students to study relevant subjects within the field of emergency medical technology. The specific objectives, methods of instruction and units of credit to be determined individually for projects proposed under this course description. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

EMT 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of emergency medical technology of particular interest to the student and not included in regular courses of the college. [D; CSU]

Emergency Medical Technology Paramedic Courses

EMTP 115.
Paramedic Preparation
2 units

Recommended Preparation: *Current EMT basic certificate, BIOL 190, eligibility for paramedic program*
Lecture 1.5 hours, laboratory 2 hours
Offered: Variable
Prepares the basic EMT to begin paramedic training. Covers review of EMT knowledge, human anatomy and physiology, math calculation, and EKG interpretation. Designed to prepare students to pass paramedic entrance exams and to improve their chances of success in paramedic school. [D; CSU]

EMTP 212.
Fundamentals of Advanced Prehospital Life Support
5 units

Grade only
Limitation on Enrollment: *Acceptance into paramedic program*
Corequisite: *EMTP 212L*
Lecture 5 hours
Offered: Variable
Theory portion of National Standard Paramedic Curriculum: Modules I–III, Preparatory, Airway Management, and Patient Assessment. Introduction to advanced life support, prehospital care including paramedic roles and responsibilities, EMS Systems, pharmacology, medication administration, pathophysiology, advanced airway management, communication, patient history taking, and physical examination. [D; CSU]

EMTP 212L.
Fundamentals of Advanced Prehospital Life Support Laboratory
2 units

Credit/No Credit only
Corequisite: *EMTP 212*
Laboratory 6 hours
Offered: Variable
Fee: $24. Skills portion of National Standard Paramedic Curriculum: Modules I–III, Preparatory, Airway Management, and Patient Assessment. Practical skills include medication administration, intravenous access, advanced airway management, radio communication, patient history taking, and physical examination. [D; CSU]

EMTP 213.
Advanced Medical and Cardiac Prehospital Life Support
5 units

Grade only
Prerequisite: *EMTP 212 or equivalent*
Corequisite: *EMTP 213L*
Lecture 5 hours
Offered: Variable
Theory portion of National Standard Paramedic Curriculum: Module V, Medical Emergencies. Advanced preshospital care of the patient with a medical condition including American Heart Association's Advanced Cardiac Life Support (ACLS). [D; CSU]

EMTP 213L.
Advanced Medical and Cardiac Prehospital Life Support Laboratory
2 units

Credit/No Credit only
Corequisite: *EMTP 213*
Laboratory 6 hours
Offered: Variable
Fee: $20. Skills portion of National Standard Paramedic Curriculum: Module V, Medical Emergencies. Advanced prehospital care of patients with medical conditions including American Heart Association's Advanced Cardiac Life Support (ACLS). Practical skills include cardio version, defibrillation, "mega code" cardiac arrest management, and complicated childbirth. [D; CSU]

EMTP 214.
Advanced Prehospital Life Support
5 units

Grade only
Prerequisite: *EMTP 213 or equivalent*
Corequisite: *EMTP 214L*
Lecture 5 hours
Offered: Variable
Theory portion of National Standard Paramedic Curriculum: Modules IV–VIII. Care of the trauma patient including the National EMT Association of EMTs Prehospital Trauma Life Support (PHTLS) curriculum, patients with special needs (pediatric, geriatric, victims of assault and abuse, and acute problems in the chronic care patient) and ambulance operations. [D; CSU]

EMTP 214L.
Advanced Prehospital Life Support Laboratory
2 units

Credit/No Credit only
Corequisite: *EMTP 214*
Laboratory 6 hours
Offered: Variable
Skills portion of National Standard Paramedic Curriculum: Modules IV–VIII. Care of the trauma patient including National Association of EMTs Prehospital Trauma Life Support (PHTLS) curriculum, patients with special needs (pediatric, geriatric, victims of assault and abuse, and acute problems in the chronic care patient) and ambulance operations. [D; CSU]

EMTP 220.
Clinical Practicum for Paramedics
3 units

Credit/No Credit only
Prerequisite: *EMTP 214 or equivalent*
Laboratory 9 hours
Offered: Variable
Fee: $90. Practice to enhance student's knowledge of administration of emergency care in a clinical setting; opportunity to assist and observe in emergency rooms, as well as, other areas of the facility under direct supervision of hospital staff. Takes place in 22, eight-hour shifts. [D; CSU]

EMTP 230.
Field Training for Paramedics
10 units

Credit/No Credit only
Prerequisite: *EMTP 220 or equivalent*
Laboratory 32 hours
Offered: Variable
Practicum experience for paramedic students to assist and observe emergency medical intervention in traumatic medical and surgical emergencies and diseases working with a preceptor in a field mobile intensive care unit. Requires completion of 22, twenty-four hour shifts. [D; CSU]

EMTP 231.
Field Training for Paramedics
2–4 units

Credit/No Credit only
Prerequisite: *EMTP 220 or equivalent per California Title 22*
Laboratory 6–12 hours
Offered: Variable
Assigned to a preceptor in an ambulance. Assists with prehospital care in emergencies of all types. Completion of 480 clock hours satisfies field internship requirements (California) for registered nurses seeking paramedic licensure. (May be repeated up to three times to meet objectives and competencies.) [D; CSU]

EMTP 250.
Paramedic NREMT Refresher
2 units

Limitation on Enrollment: *Previous EMT or paramedic course completion or certification*
Lecture 1.5 hours, laboratory 2 hours
Offered: Variable
Provides all continuing education hours required for biannual paramedic recertification. Follows California EMS Authority (CAEMSA) requirements for content directly or indirectly related to ALS patient care. Follows National Registry of Emergency Medical Technician Paramedic (NREMTP) requirements for content in patient assessment, pharmacology, airway management, cardiology, medical and behavioral emergencies, trauma, obstetrics and pediatrics, and EMS operations. Students will receive certifications in Prehospital Trauma Life Support (PHTLS) and Pediatric Education for Prehospital Professionals (PEPP). [D; CSU]

Engineering

School of Mathematics, Science, and Engineering

■ Dean

Kathy Tyner, M.S.
Office 345
619-482-6459

■ Faculty

Lauren Zinola, M.A.

■ Department Chair

Grant J. Miller, M.S.

General Description

Engineering focuses on the application of scientific principles and knowledge of mathematics to create solutions for problems involving human, biological, and mechanical systems. Engineering is a broad discipline of related areas of study including civil, mechanical, electrical, computer, and industrial.

Career Options

The following list is a sample of the many career options available for the engineering major. A few of these require an associate degree, most require a baccalaureate degree, and some require a graduate-level degree: technician, engineer's assistant, civil engineer, urban planner, biomedical engineer, electronics engineer, computer engineer, software designer, telecommunications specialist, computer architect, test engineer, environmental engineer, soil engineer, aerospace engineer, CADD specialist, product engineer, estimator, technical sales representative, construction manager, and general contractor.

Degree/Certificate Options

	Major Code
Associate in Science Degree: Transfer Preparation	
Engineering	*01565*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Science Degree

Engineering

Transfer Preparation * (Major Code: 01565)

Provides a student the opportunity to complete all of the lower-division courses required for transfer to a university to pursue a degree in engineering. Designed to prepare a student for a professional career in industry, business, or government. The core courses provide the technical knowledge and skills for students who are interested in aerospace, chemical, mechanical, or nuclear engineering.

Students entering the engineering program as freshmen will be building upon their high school mathematics and physical science background. High school preparation should include algebra, geometry and trigonometry, chemistry, physics, and a course in technical drafting.

FIRST SEMESTER

CHEM 200	*General Chemistry I*	*5*
ENGR 110	*Engineering Graphics*	*3*
ENGR 140	*Engineering Statistics*	*2*
MATH 250	*Analytic Geometry and Calculus I*	*5*

SECOND SEMESTER

ENGR 120C	*Engineering Problem Analysis—C/C++ Language*	
	or	*3*
ENGR 120F	*Engineering Problem Analysis—FORTRAN*	
MATH 251	*Analytic Geometry and Calculus II*	*4*
PHYS 270	*Principles of Physics I*	*3*

THIRD SEMESTER

ENGR 250	*Engineering Statics*	*3*
ENGR 260	*Engineering Materials*	*3*
MATH 252	*Analytic Geometry and Calculus III*	*4*
PHYS 272	*Principles of Physics II*	*4*

FOURTH SEMESTER

ENGR 120C	*Engineering Dynamics for Electrical Engineers*	
	or	*3*
ENGR 120F	*Engineering Dynamics*	
ENGR 270	*Electrical Circuits*	*3*
PHYS 274	*Principles of Physics III*	*4*
	Total units	***49***

Recommended Elective: *ENGR 101.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 43 for further information.**

The program outlined fulfills the requirements for San Diego State University and the California State University system.

ENGR 101.
Introduction to Engineering Careers
1 unit

Lecture 1 hour
Offered: Fall
Orientation to the various careers and future employment in engineering and related technical fields. Investigation into education requirements and university programs. Orientation to the student resources available on campus. [D; CSU; UC]

ENGR 110.
Engineering Design and Graphics
3 units

Grade only
Lecture 1 hour, laboratory 5 hours
Offered: Fall, Spring
Fundamentals of engineering graphics and the design process. Development of skills and techniques of mechanical drawing and computer aided drafting and design for engineers. Elementary orthographic and pictorial drawing theory. Introduction to basic theorems of descriptive geometry. Theories of size description. [D; CSU; UC]

ENGR 120C.
Engineering Problem Analysis—C/C++ Language
3 units

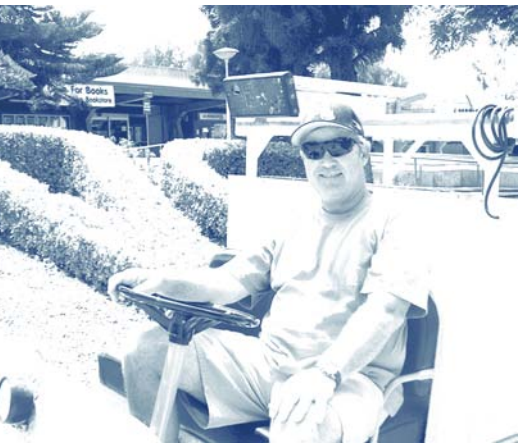
Grade only
Prerequisite: *MATH 104 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Lecture 2 hours, laboratory 3 hours
Offered: Fall
Fundamentals of computer programming using C/C++ and principles of program design and development with an emphasis on engineering problem solving. Laboratory assignments will include engineering problem solving in statics, dynamics, circuits, and modeling. [D; CSU; UC]

ENGR 120F.
Engineering Problem Analysis—FORTRAN
3 units

Grade only
Prerequisite: *MATH 104 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Lecture 2 hours, laboratory 3 hours
Offered: Spring
Fundamentals of computer programming using FORTRAN 90 and principles of program design and development with an emphasis on engineering problem solving. Laboratory assignments will include engineering problem solving in statics, dynamics, circuits, and modeling. [D; CSU; UC]

ENGR 140.
Engineering Statistics
2 units

Grade only
Prerequisite: *MATH 65 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Lecture 2 hours
Offered: Fall
Methods of statistical presentation, analysis, and treatment of engineering data. Design of statistical experiments. Correlation and regression analysis. Practical applications of statistics and probability. Computer analysis of data, correlation and regression, and hypotheses testing. (Not open to students with credit for or current enrollment in MATH 119.) [D; CSU; UC]



"At Southwestern College, we're continuously upgrading our facility for your educational enlightenment. "

—JERRY CONRAD,
Carpenter/Lead Trades Person

ENGR 202.
Engineering Statics for Electrical Engineers
1.5 units

Grade only
Prerequisite: *MATH 121 or 250 or equivalent*
Lecture 1.5 hours
Offered: Fall
Covers the principles of engineering statics for rigid bodies. For the electrical engineering student. (Not open to students with credit in ENGR 250.) [D; CSU; UC]

ENGR 204.
Engineering Dynamics for Electrical Engineers
1.5 units

Grade only
Prerequisite: *ENGR 202 or 250 or equivalent*
Lecture 1.5 hours
Offered: Spring
Covers kinematics and kinetics of particles and rigid bodies; application to engineering problems. (Not open to students with credit in ENGR 251.) [D; CSU; UC]

ENGR 250.
Engineering Statics
3 units

Grade only
Prerequisite: *MATH 121 or 250 or equivalent; PHYS 270 or equivalent*
Lecture 3 hours
Offered: Fall
Analysis of forces on engineering structures in equilibrium. Properties of forces, moments, couples, vector mathematics, friction, distributed forces, centroids, moments of inertia, shear and bending diagrams, virtual work. Introduction to mathematical models and computer simulations. Students will design and construct a model of a space truss.
[D; CSU; UC; CAN-ENGR 8]

ENGR 251.
Engineering Dynamics
3 units

Grade only
Prerequisite: *ENGR 250 or equivalent*
Lecture 3 hours
Offered: Spring
Kinetics, systems of particles, central force motion, moments and products of inertia. Euler's equations of motion. Vibration and time response. Applications to engineering problems. Vector notation used. [D; CSU; UC]

ENGR 260.
Engineering Material
3 units

Grade only
Prerequisite: *CHEM 200 or equivalent*
Lecture 3 hours
Offered: Fall
Atomic and molecular structure of materials utilized in engineering. Analysis of the relationships between structure of materials and their mechanical, thermal, electrical, corrosion, and radiation properties and application to engineering problems. [D; CSU; UC; CAN-ENGR 4]

ENGR 270.
Electrical Circuits
3 units

Grade only
Prerequisite: *PHYS 272 and MATH 251, or equivalent*
Lecture 3 hours
Offered: Spring
Circuit analysis by reduction method, source transformations, mesh and nodal analysis, reduction of circuit to Norton or Thevenins equivalent. Analysis of operational amplifiers, mutual inductance, natural and step response of RC, RI, RCL circuits, alternating current circuits, phasors, impedance and balanced three phase power networks. Computer programming using Spice and application software for circuit analysis. [D; CSU; UC; CAN-ENGR 12]

ENGR 295.
Selected Topics in Engineering
1–3 units

Offered: Variable
Permits students to study relevant topics within the field of engineering. The specific objectives, methods of instruction and evaluation to be determined by the students and instructor throughout the semester. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

ENGR 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of engineering of particular interest to the student and not included in regular courses of the college. [D; CSU; * UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

English

School of Languages and Humanities

Dean

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Glenda McGee, M.A.
Meredith Morton, M.A.
Cheryl Norton, M.A.
Kathy Parrish, M.A.
Lynn Pollock, M.A.
Andrew Rempt, M.A.
Tracy Schaelen, M.A.
Robert Unger, J.D.
Claire Villalpando-Utgaard, M.A.
Leslie Yoder, M.A.
Eileen Zamora, M.A.

Department Chair

Anna M. Ingalls, M.A.

General Description

The English majors focus on the study of the language and literature of English. Majors explore the grammar and prose of the English language including expository, argumentative, and creative writing, critical and analytical reading, and literary genres (fiction, nonfiction, poetry, drama) and modes (comedy, tragedy, satire, and romance).

Career Options

The following list is a sample of the many career options available for the English major. A few of these require an associate degree, most require a baccalaureate degree, and some require a graduate-level degree: writer, poet, journalist, literary or film critic, high school or college instructor, film or television scriptwriter, lawyer, public relations person, technical writer, tutor, interpreter, writing consultant, methods analyst, program developer, grant writer, legislative assistant, civil servant, columnist, business administrator and advertising agent.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
English	*01405*
Literature	*A1400*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Arts Degree English

Transfer Preparation * (Major Code: 01405)

Designed to develop language skills for reading and writing. The study and analysis of literature provide contact with exemplary works of various cultures, genres, and historical periods. Composition courses develop the skills for effective communication, mental discipline, organization, coherence, and proper form. The student who is not prepared to enter courses numbered 115 and above should consult a counselor to plan a program designed to improve his/her English skills.

These courses parallel the CSU lower-division requirements for the bachelor's degree in English. It is strongly recommended that students who are planning to transfer into the CSU system as English majors follow this plan.

ENGL 115	*Reading and Composition: Exposition and Argumentation*	*3*
ENGL 116	*Critical Thinking and Composition*	*3*
ENGL 240	*English Literature*	*3*
ENGL 241	*English Literature II*	*3*
Select 6 units from electives		*6*
	Total units	***18***

ELECTIVES: TAKE 3 UNITS FROM EACH GROUP.

GROUP 1:
ENGL 220, 230, 231, 270.

GROUP 2:
ENGL 117A, 170A, 172A, 250, 251.

NOTE: *Additional electives are required if any of the program courses are used to complete General Education requirements.*

SDSU also requires three consecutive courses in a single foreign language as part of the requirement for the B.A. degree. Foreign language competency may also be demonstrated by successfully completing four years of one foreign language in high school or by successfully completing a challenge examination. See a counselor for additional information.

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 43 for further information.**

Literature

Transfer Preparation * (Major Code: A1400)

Designed to develop reading and writing skills. The required composition courses focus on techniques for effective communication and creative expression. The literature offerings include the traditional survey courses as well as specialized courses focusing on various topics, styles, and genres.

ENGL 115	*Reading and Composition: Exposition and Argumentation*	*3*
ENGL 116	*Critical Thinking and Composition*	*3*
ENGL 220	*Introduction to Literature*	*3*
Select 9 units from electives		*9*
	Total units	***18***

ELECTIVES: TAKE 3–6 UNITS FROM EACH GROUP.

GROUP 1:
ENGL 230, 231, 240, 241, 250, 251.

GROUP 2:
ENGL 117A, 170A, 172A, 175A, 225, 255, 260, 265, 270, 271, 272, 273, 280.

NOTE: *Additional electives required if ENGL 115 and/or ENGL 116 are needed to complete General Education requirements and if any of the program courses are used to complete General Education requirements.*

SDSU also requires three consecutive courses in a single foreign language as part of the requirement for the B.A. degree. Foreign language competency may also be demonstrated by successfully completing four years of one foreign language in high school or by successfully completing a challenge examination. See a counselor for additional information.

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 43 for further information.**

There are three types of English courses:

- **Reading**
- **Written Communication**
- **Literature**

English courses—Reading

Reading Skill Labs I–XII

Stand-alone reading laboratory courses with prescriptive individualized reading assignments for continuing students who need to meet a competency requirement from a core reading class. Corequisite laboratories for core. Lecture classes are as follows:

LECTURE	LABORATORY
ESL 50	*ENGL 2*
ENGL 52	*ENGL 4*
ENGL 54	*ENGL 6*
ENGL 56	*ENGL 9*
ENGL 158	*No Corequisite*

ENGL 1–12.
Reading Skills I–XII
1 unit

Credit/No Credit only
Prerequisite: *Initial placement in sequence based on Southwestern College Reading Assessment*
Laboratory 3 hours
Offered: Fall, Spring
Prescriptive individualized reading assignments for continuing students who need to meet a competency requirement from ENGL 2, 4, 6, or 9, reading laboratories. [ENGL 1–9 ND]

ENGL 2.
Reading Skills Lab II
1 unit

Corequisite: *ESL 50*
Laboratory 3 hours
Offered: Fall, Spring
This course uses a laboratory setting with prescriptive, individualized assignments to raise a student's reading level. Students will work with effective strategies for reading in a second language: vocabulary development, reading comprehension, basic critical thinking skills, and writing about reading selections. [ND]

ENGL 4.
Basic Reading Laboratory
1 unit

Credit/No Credit only
Corequisite: *ENGL 52 or ESL 52*
Recommended Preparation: *ESL 51 or equivalent*
Laboratory 3 hours
Offered: Fall, Spring
Fee: $3. Uses a laboratory setting with prescriptive, individualized assignments to raise a student's reading level. Students to work with effective strategies for reading in a second language: vocabulary development; reading comprehension; basic critical thinking skills; writing about reading selections. [ND]

ENGL 6.
Developmental Reading Laboratory
1 unit

Credit/No Credit only
Prerequisite: *ENGL 4 or eligibility for ENGL 54 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Corequisite: *ENGL 54*
Laboratory 3 hours
Offered: Fall, Spring
Fee: $3. Uses a laboratory setting with prescriptive, individualized assignments to raise a student's reading level. Students to work with effective strategies for building reading skills: vocabulary development; reading comprehension; basic critical thinking; and writing about reading selections. [ND]

ENGL 9.
Introduction to College Reading Laboratory
1 unit

Credit/No Credit only
Prerequisite: *ENGL 6 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Corequisite: ENGL 56
Laboratory 3 hours
Offered: Fall, Spring
Fee: $3. Uses a laboratory setting with prescriptive, individualized assignments to raise a student's reading level. Students to work with effective strategies for building reading skills: vocabulary development, reading comprehension, critical thinking, and writing about reading selections. [ND]

ENGL 12.
College Reading Laboratory
1 unit

Credit/No Credit only
Prerequisite: *ENGL 9 or eligibility for ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Laboratory 3 hours
Offered: Fall, Spring
Uses a laboratory setting with prescriptive, individualized assignments to raise a student's reading level. Students to work with effective strategies for building reading skills: vocabulary development; reading comprehension; critical thinking; and writing about reading selections. [D]

ENGL 52.
Basic Reading
2 units

Corequisite: *ENGL 4*
Recommended Preparation: *ESL 51 or equivalent*
Lecture 2 hours
Offered: Fall, Spring
Beginning developmental course designed for all students needing to improve basic reading skills. Emphasis placed on the specialized needs of the ESL student. Classroom instruction and group exercises focus on effective strategies for reading in a second language: vocabulary development, reading comprehension, basic critical thinking skills, writing about reading selections. (Same as ESL 52.) [ND]

ENGL 54.
Developmental Reading
2 units

Prerequisite: *ENGL 4 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Corequisite: *ENGL 6*
Lecture 2 hours
Offered: Fall, Spring
Designed for student needing to improve basic reading skills. Classroom instruction and group exercises to focus on the expansion of effective reading strategies: vocabulary development; identification of main ideas, supporting details, and patterns of organization of writing; critical thinking skills; writing about reading selections; application of study strategies. [ND]

ENGL 56.
Introduction to College Reading
2 units

Prerequisite: *ENGL 6 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Corequisite: *ENGL 9*
Lecture 2 hours
Offered: Fall, Spring
Stresses comprehension of intermediate level reading selections. Emphasis on vocabulary development, identification of main ideas, supporting details, inferences, fact and opinion, patterns of organization, critical thinking skills, writing about reading selections, and application of study skills. [ND]

ENGL 158.
College Reading
3 units

Prerequisite: *ENGL 9 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Advanced reading class that focuses on critical thinking and the analytical interpretation of college reading selections: narrative (fiction and nonfiction), argumentation, persuasion, exposition and poetry. Structured to integrate the reading of college-level material with writing and critical thinking assignments. [D; CSU]

English courses—Written Communication

ENGL 71.
Basic Writing and Editing
5 units

Recommended Preparation: *ESL 40 and 104, or the equivalent skill level as determined by the Southwestern College English Assessment or ESL Assessment, or equivalent*
Lecture 5 hours
Offered: Fall, Spring
Basic writing course focusing on paragraphs and short essays. Emphasis on the writing process. Includes paragraph structure, sentence structure, editing for grammar usage and punctuation errors. [ND]

ENGL 92.
Fundamentals of Persuasive Writing
3 units

Credit/No Credit only
Limitation on Enrollment: *Enrollment in the dual admissions program at San Diego State University*
Lecture 3 hours
Offered: Variable
Develops methods of reading and writing necessary for success in Rhetoric and Writing Studies 100 at CSU or comparable university level writing courses. Students read persuasive texts and integrate the ideas of multiple authors and their own into argumentative essays. Stresses paragraph and essay development, and reviews mechanics and grammar. [ND]

ENGL 105.
Practical English
4 units

Prerequisite: *ENGL 71 or the equivalent skill level as determined by the Southwestern College English Assessment or equivalent*
Lecture 4 hours
Offered: Fall, Spring
Fee: $5. Designed for students who need to fulfill the writing requirement for a certificate program or an associates degree, but who are not necessarily planning to transfer. Emphasis on writing at work. Writing products include a memo, autobiography, letter, report, short research paper, and a speech. Some opportunity for oral reporting. [D; CSU]

ENGL 114.
Introduction to Composition
4 units

Prerequisite: *ENGL 71 or the equivalent skill level as determined by the Southwestern College English Assessment or equivalent*
Lecture 4 hours
Offered: Fall, Spring
Emphasis on a thorough step-by-step approach to writing finished compositions, the longest being 750 words. Readings used as part of some assignments. [D; CSU]

ENGL 115.
Reading and Composition: Exposition and Argumentation
3 units

Prerequisite: *ENGL 105 or 114 or the equivalent skill level as determined by the Southwestern College English Assessment, or equivalent*
Lecture 3 hours, laboratory 1 hour
Offered: Fall, Spring
Fee: $5. Provides instruction and practice in reading and writing expository and argumentative essays. Emphasizes principles of organization, logical reasoning, essay development, and library and Internet research techniques. Includes drafting, revising, and editing written work. Will provide reading selections for discussion, topics for writing assignments, and examples of effective writing. [D; CSU; UC; CAN-ENGL 2]

ENGL 116.
Critical Thinking and Composition
3 units

Prerequisite: *ENGL 115 or equivalent*
Recommended Preparation: *ENGL 220 or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Continued instruction and practice in drafting, revising, and editing expository and argumentative essays, including a research essay. Emphasizes writing about literature using principles of critical thinking, logical analysis, and inductive and deductive reasoning. Examines common logical errors of language and thought. [D; CSU; UC; CAN-ENGL 4]

ENGL 117A.
Creative Writing I
3 units

Prerequisite: *ENGL 115 or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Introduction to the theory of writing in the major genres with emphasis on basic concepts and techniques. Includes fiction, plays, poetry, and magazine articles. [D; CSU; UC; CAN-ENGL 6]

ENGL 117B.
Creative Writing II
3 units

Prerequisite: *ENGL 117A or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Intermediate training in theory and practice of writing major creative genres with emphasis on intermediate concepts and techniques. Includes fiction, plays, poetry, and creative nonfiction. [D; CSU; UC]

ENGL 117C.
Creative Writing III
3 units

Prerequisite: *ENGL 117B or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Advanced training in theory and practice of writing major creative genres with emphasis on highly accomplished creative writing in fiction, plays, poetry, and creative nonfiction. [D; CSU]

ENGL 118.
Research Writing
2 units

Prerequisite: *ENGL 115 or equivalent*
Lecture 2 hours
Offered: Variable
Supplemental writing clinic for students engaged in research writing projects for other courses in any department. Additional exposure and practice with research writing techniques beyond ENGL 115 level. Introduction to professional/academic publication. [D; CSU]

ENGL 119.
Introduction to Language
3 units

Lecture 3 hours
Offered: Variable
This course will survey linguistic principles, especially as applied to the teaching of language. It is designed to heighten students' awareness of the structure and functions of language through exposure to basic linguistic concepts, language variables, tools of analysis, and current issues in the field. [D; CSU]

ENGL 170A.
Advanced Creative Writing: Fiction I
3 units

Recommended Preparation: *ENGL 117A or equivalent*
Lecture 3 hours
Offered: Variable
Continuation of the theory and practice of writing with a concentration in one of the major genres. Emphasis on basic concepts and techniques through a more in-depth examination of the craft. Focus on the individual interests of the student from prewriting to submission for publication. [D; CSU]

ENGL 170B.
Advanced Creative Writing: Fiction II
3 units

Prerequisite: *ENGL 170A or equivalent*
Lecture 3 hours
Offered: Variable
Continuation of the theory and practice of writing fiction with concentration on more advanced work in the skills of creating successful short stories through a more in-depth examination of plot, character, and theme. Covers from prewriting to rewriting and the format for submission for publication. [D; CSU]

ENGL 170C.
Advanced Creative Writing: Fiction III
3 units

Prerequisite: *ENGL 170B or equivalent*
Lecture 3 hours
Offered: Variable
Advanced workshop in the theory and practice of writing fiction. Concentration on advanced techniques demanding a high level of skill in the creation of successful short stories through a more rigorous examination of the elements of plot, character, scene, and theme. Focus on the individual interests of the student with an emphasis on well-crafted stories and well-written paragraphs including prewriting extensive rewriting and the format for submission for publication. [D; CSU]

ENGL 172A.
Advanced Creative Writing: Poetry I
3 units

Recommended Preparation: *ENGL 117A or equivalent*
Lecture 3 hours
Offered: Variable
Continuation of the theory and practice of writing with a concentration on poetry. Emphasis on the use of both traditional and modern techniques. Focus on the writing of a wide range of forms covering topics from metrics and craft problems to publication. [D; CSU]

ENGL 172B.
Advanced Creative Writing: Poetry II
3 units

Prerequisite: *ENGL 172A or equivalent*
Lecture 3 hours
Offered: Variable
Intermediate workshop in the theory and practice of writing poetry. Emphasis on the use of numerous techniques of prosody and metrical skill in a number of poetic forms and modes. [D; CSU]

ENGL 172C.
Advanced Creative Writing: Poetry III
3 units

Prerequisite: *ENGL 172B or equivalent*
Lecture 3 hours
Offered: Variable
Advanced workshop in the theory and practice of writing poetry. Emphasis on the use of highly sophisticated techniques of prosody and advanced metrical skill in a number of poetic forms and modes. [D; CSU]

ENGL 174.
Advanced Creative Writing: Screenplay
3 units

Recommended Preparation: *ENGL 115, 116, or 117A, or equivalent*
Lecture 3 hours
Offered: Variable
Continuation of the theory and practice of writing with a concentration on screenwriting. Emphasis on the process of decision making and creative exploration within the well-defined structure of the genre. Focus on providing screenwriting tools to balance quality and productivity. [D; CSU]

ENGL 175A.
Advanced Creative Writing: Writing About Your Life I
3 units

Recommended Preparation: *ENGL 116 or 117A or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Practice in writing out of one's own experience: memoirs, autobiography, journaling, personal accounts, and informal articles. Students to read minimum of three books of autobiography, memoir, personal essays, and/or other creative nonfiction. [D; CSU]

ENGL 175B.
Advanced Creative Writing: Writing About Your Life II
3 units

Prerequisite: *ENGL 175A or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Continuation of the theory and practice of writing out of one's own experience: memoirs, autobiography, journaling, personal accounts, and informal essays. Students to read minimum of three books of autobiography, memoir, personal essays, and/or other creative nonfiction. [D; CSU]

ENGL 175C.
Advanced Creative Writing: Writing About Your Life III
3 units

Prerequisite: *ENGL 175B or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Continuation of the theory and practice of writing out of one's own experience: memoirs, autobiography, journaling, personal accounts, and informal essays. Students to read minimum of three books of autobiography, memoir, personal essays, and/or other creative nonfiction. [D; CSU]

ENGL 200.
Teaching as a Profession
3 units

Recommended Preparation: *ENGL 115 or equivalent*
Lecture 3 hours
Offered: Variable
Designed for students considering teaching as a profession. Includes career exploration, foundations of education, critical issues in teaching, and stories about teaching by individual educators. Looks at standards for the teaching profession and conditions for effective learning. Requires pre-internships in public school classrooms. (Same as ED 200.) [D; CSU; UC]

ENGL 201.
Introduction to Literacy
3 units

Prerequisite: *ENGL 115 or equivalent*
Lecture 3 hours
Offered: Variable
Designed for students considering teaching as a profession and for those students enrolled in the Liberal Studies Blended Teacher Education program. Presents theories of literacy acquisition and focuses on the process of literacy and the inclusion of effective instructional strategies that build reading for fluency, with special attention given to beginning and emerging readers in a learning environment that reflects the diverse, global nature of the multicultural California classroom. Requires field work as reading tutor. (Same as ED 201.) [D; CSU]

English courses—Literature

ENGL 220.
Introduction to Literature
3 units

Recommended Preparation: *ENGL 115 or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Introductory study of imaginative literature designed for the beginning literature student. Emphasis on reading and discussion of fiction, drama, and poetry. Recommended as preparation for English 116 and specialized literature classes. [D; CSU; UC]

ENGL 225.
Introduction to Children's Literature
3 units

Recommended Preparation: *ENGL 220 and 115, or equivalent; or ENGL 116 or equivalent*
Lecture 3 hours
Offered: Variable
Overview of the historical development and current trends in children's literature—focusing on picture books, fairy tales, short stories, novels, and poetry—and to the implications of children's literature on individuals and society. Emphasis on the use of literary terminology and analysis to differentiate the qualities between "good" and "poor" children's books.
[D; CSU; UC]

ENGL 230.
World Literature I
3 units

Recommended Preparation: *ENGL 220 and 115, or equivalent; or ENGL 116 or equivalent*
Lecture 3 hours
Offered: Variable
Exploration of world literature from the earliest texts through the 1600's, with an emphasis on development of literary expression, major works from literary traditions around the world, and cross-cultural connections. Representative authors include Homer, T'ang poets, Dante, Murasaki, and Cervantes. [D; CSU; UC]

ENGL 231.
World Literature II
3 units

Recommended Preparation: *ENGL 220 and 115, or equivalent; or ENGL 116 or equivalent*
Lecture 3 hours
Offered: Variable
Exploration of world literature from the eighteenth century to the present, with an emphasis on major works from literary traditions around the world and the emergence of a global literature. Representative authors include Moliere, Goethe, Chekhov, Lu Xun, Borges, Achebe, Walcott, and Silko. [D; CSU; UC]

ENGL 237.
Education and Literacy
3 units

Lecture 3 hours
Offered: Variable
An introductory level course designed for students who are considering a career in education. Focuses on a critical analysis of four themes: current issues in education, opposing theories of teaching and learning, understanding literacy and literacy acquisition, and stories about teaching by individual educators. [D; CSU]

ENGL 240.
English Literature I
3 units

Recommended Preparation: *ENGL 220 and 115, or equivalent; or ENGL 116 or equivalent*
Lecture 3 hours
Offered: Variable
Overview of English literature from the earliest texts through the eighteenth century, with emphasis on major works in the literary tradition. [D; CSU; UC; CAN-ENGL 8;
ENGL 240 + ENGL 241 = CAN ENGL SEQ B]

ENGL 241.
English Literature II
3 units

Recommended Preparation: *ENGL 220 and 115, or equivalent; or ENGL 116 or equivalent*
Lecture 3 hours
Offered: Variable
Survey on English literature from the eighteenth century to the present, with emphasis on major works in the literary tradition.
[D; CSU; UC; CAN-ENGL 10;
ENGL 240 + ENGL 241 = CAN ENGL SEQ B]

ENGL 250.
American Literature I
3 units

Recommended Preparation: *ENGL 220 and 115, or equivalent; or ENGL 116 or equivalent*
Lecture 3 hours
Offered: Variable
Survey of American literature from 1630 to the end of the 1800s covering the major philosophical movements of Puritanism, Transcendentalism, and Romanticism. Major authors may include Franklin, Poe, Hawthorne, Emerson, Thoreau, Melville, Whitman, and Dickinson. [D; CSU; UC; CAN-ENGL 14; ENGL 250 + ENGL 251 = CAN ENGL SEQ C]

ENGL 251.
American Literature II
3 units

Recommended Preparation: *ENGL 220 and 115, or equivalent; or ENGL 116 or equivalent*
Lecture 3 hours
Offered: Variable
Survey of American literature from the end of the 1800's to the present covering major literary movements of Realism, Naturalism, etc. Major writers may include Dickinson, Whitman, Frost, Cummings, Twain, Faulkner, Hemingway, Bellow, Williams, and O'Neill. [D; CSU; UC; CAN-ENGL 16; ENGL 250 + ENGL 251 CAN ENGL SEQ C]

ENGL 255.
Twentieth Century Literature
3 units

Recommended Preparation: *ENGL 220 and 115, or equivalent; or ENGL 116 or equivalent*
Lecture 3 hours
Offered: Variable
Survey of twentieth century literature including significant movements and seminal authors. A major focus will be the relationship between literary movements, influential writers, and the cultural climate of the era. [D; CSU; UC]

ENGL 256.
Introduction to Shakespeare
3 units

Recommended Preparation: *ENGL 220 and 115, or equivalent; or ENGL 116 or equivalent*
Lecture 3 hours
Offered: Variable
Introductory survey of representative Shakespearean drama and poetry, with emphasis on Shakespeare's literary techniques and linguistic art. Viewing of plays, films, and/or special television broadcasts of Shakespearean plays and sonnets will complement close reading of the texts themselves. [D; CSU; UC]

ENGL 260.
Mythology in Literature
3 units

Recommended Preparation: *ENGL 220 and 115 or equivalent; or ENGL 116 or equivalent*
Lecture 3 hours
Offered: Variable
Exploration of classical Greek and Roman myths and their impact on contemporary literature, comparison of archetypal themes and motifs from myths of ancient cultures from around the world, and analysis of the significance of myth in describing the human condition and in shaping cultural values. [D; CSU; UC]

ENGL 265.
Literature and Film
3 units

Recommended Preparation: *ENGL 220 and 115, or equivalent; or ENGL 116 or equivalent*
Lecture 3 hours
Offered: Variable
Analysis of the literary elements of visual narratives, focusing on character development, point of view, setting, plot, metaphor, and theme. Examines theoretical and practical issues surrounding the adaptation of a novel, play, or historical event into a film. Explores the use of "cinematic" techniques in contemporary prose fiction. [D; CSU; UC]

ENGL 270.
Multicultural Literature
3 units

Recommended Preparation: *ENGL 220 and 115, or equivalent; or ENGL 116 or equivalent*
Lecture 3 hours
Offered: Variable
Survey of classical and contemporary literature from a variety of cultures. Includes works from Central and South America, the Pacific Rim, Africa. A major focus will be the examination of cultural diversity as expressed in literature. [D; CSU; UC]

ENGL 271.
Latin American Literature
3 units

Recommended Preparation: *ENGL 220 and 115, or equivalent; or ENGL 116 or equivalent*
Lecture 3 hours
Offered: Variable
Survey of colonial and contemporary literature from a variety of Latin American countries. Major focus on the Latino cultural and historical perspective reflected in the literature. Examines diversity and similarity in style and theme of diverse national authors. [D; CSU; UC]

ENGL 272.
Chicano Literature
3 units

Recommended Preparation: *ENGL 220 and 115, or equivalent; or ENGL, 116 or equivalent*
Lecture 3 hours
Offered: Variable
Overview of the historical development and current trends in Chicano Literature focusing on historical, cultural, and social developments since the 1960s. Examines different ways writers have used evocations of land, language, history, and culture to define a distinctive Chicano/a identity through poetry, short stories, novels, drama, and essays. [D; CSU; UC]

ENGL 273.
African-American Literature
3 units

Recommended Preparation: *ENGL 220 and 115, or equivalent; or ENGL 116 or equivalent*
Lecture 3 hours
Offered: Variable
Survey of African-American literature in all genres from the mid-eighteenth century to the present. Emphasizes the cultural, historical, and social contexts of African-American oral and literary expression. Among the writers studied are Phillis Wheatley, Zora Neale Hurston, Langston Hughes, Richard Wright, Ralph Ellison, Alice Walker, and Toni Morrison. [D; CSU; UC]

ENGL 274.
Literature of the Border and Baja California
3 units

Lecture 3 hours
Offered: Variable
Survey of colonial and contemporary literature from Baja, México. Major focus on linking the historical changes in the state of Baja to the literary achievements of the region. Covers a diverse representation of authors examining both theme and style. [D; CSU; UC]

ENGL 280.
Literature by Women
3 units

Recommended Preparation: *ENGL 220 and 115, or equivalent; or ENGL 116 or equivalent*
Lecture 3 hours
Offered: Variable
Culturally diverse survey of literature by women. Includes writers such as Virginia Woolfe, Toni Morrison, Alice Walker, Gabriela Mistral, Sylvia Plath, Adrienne Rich, Charlotte Bronte, and Isabel Allende. Major focus will be on how the literature reflects women's changing role in society and the metaphoric and literal importance of storytelling. [D; CSU; UC]

ENGL 281.
Horror, Madness, and the Macabre
3 units

Recommended Preparation: *ENGL 220 and 115, or equivalent; or ENGL 116 or equivalent*
Lecture 3 hours
Offered: Variable
Survey of classical and contemporary horror literature including significant works by major authors of the genre, which may include Poe Mary, Shelley, Stevenson, Stoker, and Anne Rice. Emphasis on the cultural, historic, and social contexts in which the literature is created and applies modern critical theory as a means to explore these concerns. [D; CSU; UC]

ENGL 295.
Selected Topics in English
1–3 units

Offered: Variable
Permits students to study relevant topics within the field of English. (May be taken for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

ENGL 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of English of particular interest to the student not included in regular courses of the college. [D; CSU; * UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

English as a Second Language

School of Languages and Humanities

■ Dean

Renee M. Kilmer, Ph.D.
Office 430J
619-482-6461

■ Faculty

Esther Alonso, M.A.
Patricia Kelly, M.A.
Alison MacArthur, M.A.
Robin McCubbin, Cand., M.A.
Andrew MacNeill, M.A.
Daniel Moody, M.A..
Jorge Pérez, M.A..
Eliana Santana, M.A.
Angelina Stuart, M.A.

■ Department Chair

Esther, Alonso, M.A.

General Description

English as a Second Language is a very specialized area of the study of the English language. This department explores the fundamentals of oral and written communication both in principle and application. The acquisition of a second language entails knowledge of the vocabulary, pronunciation, spelling, syntax, grammar, punctuation, and cultural aspects affecting communication. This program integrates listening, reading, writing, speaking, and comprehension skills, techniques and concepts.

Career Options

Many career choices are suitable for people who can communicate effectively in more than one language. Today the world is a global community where employment opportunities for educated individuals can span more than one continent, several countries, and many different cultures. Career options are available at the entry-level through more advanced positions in business, industry, education, religion, and government.

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

English as a Second Language

Course of Study

The English as a Second Language courses are designed for students whose native language is other than English. The program goal is to prepare students for entry into college academic or vocational programs.

Placement in the courses is determined by the ESL Assessment Process. Students may enter at the beginning, intermediate, or advanced levels.

FIRST SEMESTER

ESL 20	*ESL—Grammar I*	*5*
ESL 21	*ESL—Listening and Speaking I*	*3*
ESL 25	*ESL—Writing I*	*4*
Select 3 units from electives		*3*

SECOND SEMESTER

ESL 30	*ESL—Grammar II*	*5*
ESL 31	*ESL—Listening and Speaking II*	*3*
ESL 50	*ESL—Reading*	*3*
ESL 103	*ESL—Writing II*	*4*

THIRD SEMESTER

ESL 40	*ESL—Grammar III*	*5*
ESL 41	*ESL—Listening and Speaking III*	*3*
ESL 52	*ESL—Basic Reading*	*3*
ESL 104	*ESL—Writing III*	*4*
	Total units	***45***

Recommended Electives: *ESL 15 (may be taken after ESL 21); 17 (may be taken at any level); ESL 16 (may be taken at ESL 30 or 40 level.)*

Recommended Bridge Courses: *It is recommended that students enroll in ENGL 71 in the fourth semester to mainstream into the college English program.*

NOTE: *The Core program consists of three levels (beginning, intermediate and advanced) of coordinated courses in grammar, listening and speaking, and writing. Special skill classes may also be taken (ESL 15, 16, 17, 115). An ESL Practicum program is offered only in summer.*

Inglés Como Segunda Lengua

Programa de Estudios

Los cursos de Inglés Como Segunda Lengua han sido estructurados especialmente para estudiantes cuya lengua nativa no es el inglés. El objetivo del programa es preparar al alumno para que pueda entrar a los programas académicos o vocacionales.

La colocación apropiada del alumno se hace de acuerdo con las pruebas de evaluación ESL. El alumno puede inscribirse a nivel principiante, intermedio o avanzado.

PRIMER SEMESTRE

ESL 20	*ESL—Gramática I*	*5*
ESL 21	*ESL—Hablar y Escuchar I*	*3*
ESL 25	*ESL—Escritura I*	*4*
Seleccione 3 unidades de las electivas		*3*

SEGUNDO SEMESTRE

ESL 30	*ESL—Gramática II*	*5*
ESL 31	*ESL—Hablar y Escuchar II*	*3*
ESL 50	*ESL—Lectura*	*3*
ESL 103	*ESL—Escritura II*	*4*

TERCER SEMESTRE

ESL 40	*ESL—Gramática III*	*5*
ESL 41	*ESL—Hablar y Escuchar III*	*3*
ESL 52	*ESL—Lectura Básica*	*3*
ESL 104	*ESL—Escritura III*	*4*
	Total de Unidades	***45***

Materias Electivas: *ESL 15 (puede tomarse después de ESL 21); 17 (puede tomarse a cualquier nivel); ESL 16 (puede tomarse a nivel ESL 30 ó 40.)*

Cursos de Transición: *En el cuarto semestre, se recomienda la inscripción en inglés 71, lo cual permitirá al alumno integrarse al programa regular de inglés.*

NOTA: *El programa regular de ESL comprende tres niveles (principiante, intermedio y avanzado) de cursos coordinados en gramática, hablar y escuchar, y composición. Además, se pueden tomar otros cursos especializados para desarrollar aptitudes específicas (ESL 15, 16, 17, 115). El programa de prácticas de ESL se ofrece únicamente en verano.*

Hable con un consejero para desarrollar un plan de estudios (Student Education Plan), mismo que alista los cursos necesarios para realizar sus metas académicas.

English as a Second Language Courses

ESL 12.
English as a Second Language: Practicum I
1 unit

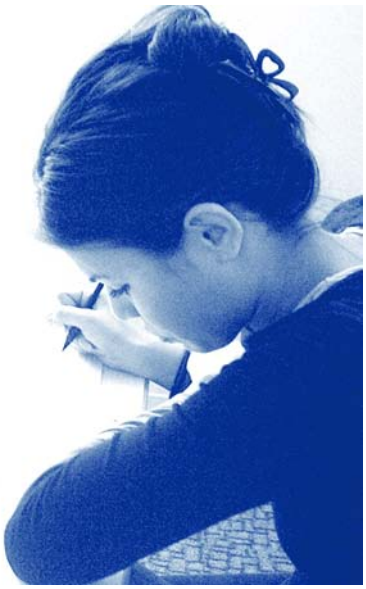
Credit/No Credit only
Laboratory 3 hours
Offered: Summer
Provides development, maintenance, and reinforcement of English language skills in reading, writing, listening, and speaking to beginning-level students. [ND]

ESL 13.
English as a Second Language: Practicum II
1 unit

Credit/No Credit only
Recommended Preparation: *ESL 20 or the equivalent skill level as determined by the Southwestern College ESL Assessment or equivalent*
Laboratory 3 hours
Offered: Summer
Provides development, maintenance, and reinforcement of English language skills in reading, writing, listening, and speaking to intermediate-level students. [ND]

ESL 14.
English as a Second Language: Practicum III
1 unit

Credit/No Credit only
Recommended Preparation: *ESL 30 or the equivalent skill level as determined by the Southwestern College ESL Assessment or equivalent*
Laboratory 3 hours
Offered: Summer
Provides development, maintenance, and reinforcement of English language skills in reading, writing, listening, and speaking to advanced-level students. [D]



ESL 15.
Pronunciation for ESL Students
2 units

Credit/No Credit only
Recommended Preparation: *ESL 21 or equivalent*
Laboratory 5 hours
Offered: Fall
Designed for English as a Second Language students who wish to improve their intelligibility and aural comprehension in the English language. Emphasis will be given to the stress, rhythm, and intonation of English. Additional emphasis will be on the sounds of the vowels and consonants in English, and on how to use phonetic symbols to interpret those sounds. Strategies for self monitoring and individual study will also be presented. [ND]

ESL 16.
Basic Speech for the ESL Student
3 units

Credit/No Credit only
Recommended Preparation: *ESL 31 or equivalent*
Lecture 3 hours
Offered: Spring
Designed to develop oral communication skills for limited English speaking students. Emphasizes verbal and nonverbal behavior, impromptu, extemporaneous and prepared message delivery; helps prepare students for entry into vocational programs and college level classes. [ND]

ESL 17.
Comparative Grammar/Gramática Comparativa
3 units

Credit/No Credit only
Lecture 3 hours
Offered: Summer, Fall, Spring
English as a Second Language course for Spanish-speakers. Taught primarily in Spanish. Compares and contrasts different aspects of English and Spanish grammar, such as syntax, parts of speech, cognates, false cognates, prepositions, infinitives, and gerunds. Can be taken concurrently with any other English as a Second Language course. [ND]

ESL 20.
English as a Second Language: Grammar I
5 units

Recommended Concurrent Enrollment: *ESL 21 and 25*
Recommended Preparation: *Placement as determined by the Southwestern College ESL Assessment*
Lecture 5 hours
Offered: Fall, Spring
First of a series of three English as a Second Language grammar courses. Designed for students with very limited English background. Basic English grammar skills to be used in conversational and academic context. [ND]

ESL 21.
English as a Second Language: Listening and Speaking I
3 units

Recommended Concurrent Enrollment: *ESL 20 and 25*
Lecture 2 hours, laboratory 3 hours
Offered: Fall, Spring
First of a series of three listening and speaking courses for ESL students. Emphasizes listening, comprehension, and oral production. As a recommended corequisite for ESL 20 and 25, it provides coordinated grammar, syntax, and vocabulary practice with these courses. Introduction to aspects of culture. Includes laboratory activities. [ND]

ESL 25.
English as a Second Language: Writing I
4 units

Recommended Concurrent Enrollment: *ESL 20 and 21*
Recommended Preparation: *Placement as determined by the Southwestern College ESL Assessment*
Lecture 4 hours
Offered: Fall, Spring
Fee: $3. Provides beginning level ESL students with a basic knowledge of the writing process which includes pre-writing communicative activities, writing, editing, and rewriting skills. Emphasis will also be placed on vocabulary, spelling, punctuation, grammar usage, and capitalization. [ND]

ESL 27A.
English as a Second Language for Child Development: Principles of Child Development
2 units

Limitation on Enrollment: *Enrollment is limited to students enrolled in the Spanish to English Associate Teacher certificate program*
Lecture 2 hours
Offered: Variable
Learner-centered, task-based beginning ESL class that integrates the four language skills of listening, speaking, reading, and writing. Supplemental coursework supports students who wish to take CD 170S in order to receive a certificate of completion from the Child Development department. Focuses on child development milestones and theories. [ND]

ESL 27B.
English as a Second Language for Child Development: Positive Guidance of the Young Child
1 unit

Limitation on Enrollment: *Enrollment is limited to students enrolled in the Spanish to English Associate Teacher certificate program*
Lecture 1 hour
Offered: Variable
Integrates the four language skills of listening, speaking, reading, and writing with supplemental coursework. Supports students who take CD 180S to receive a certificate from the Child Development department. Focuses on the reasons for children's behavior and develops effective guidance techniques to promote children's self-control, self-esteem, and competence. [ND]

ESL 27C.
English as a Second Language for Child, Family, and Community
1 unit

Limitation on Enrollment: *Enrollment is limited to students enrolled in the Spanish to English Associate Teacher certificate program*
Lecture 1 hour
Offered: Variable
Learner-centered, task-based beginning ESL class that integrates the four language skills of listening, speaking, reading, and writing. Supplemental coursework supports students who wish to take CD 181S in order to receive a certificate of completion from the Child Development department. [ND]

ESL 27D.
English as a Second Language for Curriculum Planning
1 unit

Limitation on Enrollment: *Enrollment is limited to students enrolled in the Spanish to English Associate Teacher certificate program*
Lecture 1 hour
Offered: Variable
Learner-centered, task-based beginning ESL class that integrates the four language skills of listening, speaking, reading, and writing. Supplemental coursework supports students who wish to take CD 284S in order to receive a certificate of completion from the Child development Department. [ND]

ESL 30.
English as a Second Language: Grammar II
5 units

Recommended Concurrent Enrollment: *Satisfactory completion of ESL 31, 103, and appropriate reading course*
Recommended Preparation: *ESL 20 or the equivalent skill level as determined by the Southwestern College ESL Assessment*
Lecture 5 hours
Offered: Fall, Spring
Second of a series of three English as a Second Language grammar courses for students at the intermediate level. Continues to emphasize grammar while covering all the necessary skills needed to learn academic English. [ND]

ESL 31.
English as a Second Language: Listening and Speaking II
3 units

Recommended Concurrent Enrollment: *ESL 30 and 103*
Lecture 2 hours, laboratory 3 hours
Offered: Fall, Spring
Second of a series of three listening and speaking courses for ESL students at the intermediate level. Emphasizes listening and comprehension. As a recommended corequisite for ESL 30 and ESL 35, provides coordinated practice for grammar, syntax and vocabulary practice with these courses. Introduction to aspects of culture and practice in communicative activities. Includes laboratory activities. [ND]

ESL 37.
English as a Second Language: Integrated Skills I
3 units

Credit/No Credit only
Lecture 3 hours
Offered: Fall
Stresses the refinement and expansion of language skills introduced in other ESL courses. Emphasizes the ability to understand and speak the language with sufficient fluency and accuracy to participate effectively in most formal and informal conversations on practical, social, and professional topics. [ND]

ESL 38.
English as a Second Language: Integrated Skills II
3 units

Credit/No Credit only
Prerequisite: *ESL 37 or equivalent*
Recommended Preparation: *ESL 20 or 21 or equivalent*
Lecture 3 hours
Offered: Spring
The use of an engaging video series and accompanying materials. Stresses the refinement and expansion of language skills introduced in other ESL courses. Emphasizes the ability to understand and speak the language with sufficient fluency and accuracy to participate effectively in most formal and informal conversations, on practical, social, and professional topics. [ND]

ESL 40.
English as a Second Language: Grammar III
5 units

Recommended Concurrent Enrollment: *ESL 41 and 104*
Recommended Preparation: *ESL 30 or the equivalent skill level as determined by the Southwestern College ESL Assessment or equivalent*
Lecture 5 hours
Offered: Fall, Spring
Last in the series of English as a Second Language grammar courses for students at an advanced level. It further develops grammar skills and related language competencies in sentence and paragraph writing and more advanced vocabulary. [D]

ESL 41.
English as a Second Language: Listening and Speaking III
3 units

Recommended Concurrent Enrollment: *ESL 40 and 104*
Lecture 2 hours, laboratory 3 hours
Offered: Fall, Spring
Designed for advanced ESL students. Promotes and emphasizes independent expression and requires demonstration of greater oral language competency. As a companion course to ESL 40, it provides coordinated practice for grammar, syntax, and vocabulary which students are learning in that course. Laboratory activities are based on communicative methodologies and include culture, as well as vocational and academic material. [D]

ESL 50.
English as a Second Language: Reading
2 units

Corequisite: *ENGL 2*
Recommended Concurrent Enrollment: *ESL 30*
Lecture 2 hours
Offered: Fall, Spring
Beginning ESL reading course designed to prepare students to enter the developmental reading program. Students will work with sentence and paragraph content, critical thinking, and comprehension of instructions and explanations. [ND]

ESL 51.
English as a Second Language: Reading and Writing
6 units

Recommended Preparation: *ESL 25 or 50 or equivalent*
Lecture 6 hours
Offered: Fall, Spring
Intermediate level reading and writing course. It integrates reading and writing skills so that the student responds in writing to authentic and relevant readings. [ND]

ESL 52.
English as a Second Language: Basic Reading
2 units

Corequisite: *ENGL 4*
Recommended Preparation: *ESL 51 or equivalent*
Lecture 2 hours
Offered: Fall, Spring
Beginning developmental course designed for all students needing to improve basic reading skills. Emphasis placed on the specialized needs of the ESL student. Classroom instruction and group exercises focus on effective strategies for reading in a second language: vocabulary development, reading comprehension, basic critical thinking skills, writing about reading selections. (Same as ENGL 52.) [ND]

ESL 53.
English as a Second Language: Advanced Reading and Writing
6 units

Recommended Preparation: *ESL 51, ESL/ENGL52, or 103, or equivalent*
Lecture 6 hours
Offered: Variable
ESL course that integrates reading and writing skills to that students respond in writing to authentic and relevant readings. [ND]

ESL 103.
English as a Second Language: Writing II
4 units

Recommended Concurrent Enrollment: *ESL 30 and 31*
Recommended Preparation: *ESL 25 or the equivalent skill level as determined by the Southwestern College ESL Assessment or equivalent*
Lecture 4 hours
Offered: Fall, Spring
Fee: $3. Second writing course in a series of three. Continues to emphasize prewriting communicative activities, writing, editing, and rewriting skills. Also, emphasizes sentence combining at a compound/complex level. [D; CSU]

ESL 104.
English as a Second Language: Writing III
4 units

Recommended Concurrent Enrollment: *ESL 40 and 41*
Recommended Preparation: *ESL 103 or the equivalent skill level as determined by the Southwestern College ESL Assessment or equivalent*
Lecture 4 hours
Offered: Fall, Spring
Fee: $3. Advanced level ESL writing course—the last in a series of three. Continued emphasis on pre-writing communicative activities, writing, editing, and rewriting skills. Also emphasizes independent writing. [D; CSU]

ESL 115.
College Success for the ESL Students
2 units

Lecture 2 hours
Offered: Fall, Spring
Team-taught, activity-centered course designed to assist students in developing specific skills and knowledge to manage their personal and academic lives in order to achieve their educational goals of preparing for transfer to a university. Cooperative learning will be stressed. Class will be conducted in English and Spanish. (Same as PD 115.) [D; CSU]

ESL 295.
Selected Topics in ESL
1–3 units

Offered: Variable
Permits students to study relevant subjects within the field of ESL. The specific objectives, methods of instruction, and units of credit to be determined individually for projects proposed under this course description. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

Cursos de Inglés Como Segunda Lengua

ESL 12.
Inglés Como Segunda Lengua: Practicum I
I unidad

Crédito/No Crédito únicamente
Laboratorio 3 horas
Se Ofrece: Verano
Provee el desarrollo, mantenimiento y refuerzo del inglés en lectura, redacción, práctica auditiva y la comunicación a estudiantes de nivel principiante. [ND = Curso no aceptado para graduación o programa]

ESL 13.
Inglés Como Segunda Lengua: Practicum II
I unidad

Crédito/No Crédito únicamente
Se Recomienda: *Haber terminado satisfactoriamente ESL 20 ó la aptitud equivalente, conforme a la evaluación ESL de Southwestern College*
Laboratorio 3 horas
Se Ofrece: Verano
Provee el desarrollo, mantenimiento y refuerzo del inglés en lectura, redacción, práctica auditiva y la comunicación a estudiantes de nivel intermedio. [ND = Curso no aceptado para graduación o programa.]

ESL 14.
Inglés Como Segunda Lengua: Practicum III
I unidad

Crédito/No Crédito únicamente
Se Recomienda: *Haber terminado satisfactoriamente ESL 30 ó la aptitud equivalente, conforme a la evaluación ESL de Southwestern College*
Laboratorio 3 horas
Se Ofrece: Verano
Provee el desarrollo, mantenimiento y refuerzo del inglés en lectura, redacción, práctica auditiva y la comunicación a estudiantes de nivel avanzado. [D]

ESL 15.
Pronunciación para Estudiantes de Inglés Como Segunda Lengua
2 unidades

Crédito/No Crédito únicamente
Se Recomienda: *ESL 21*
Laboratorio 5 horas
Se Ofrece: Otoño
Diseñado para alumnos de inglés como segunda lengua que deseen mejorar su inteligibilidad y comprensión del inglés. Enfatiza el ritmo y entonación del inglés, sonidos, vocales, consonantes y como utilizar los símbolos fonéticos para interpretar dichos sonidos. Se enseñarán estrategias para la auto corrección y el estudio individual. [ND = Curso no aceptado para graduación o programa.]

ESL 16.
Oratoria Elemental para Estudiantes de Inglés Como Segunda Lengua
3 unidades

Crédito/No Crédito únicamente
Se Recomienda: *ESL 31*
Teoría 3 horas
Se Ofrece: Primavera
Diseñada para desarrollar la comunicación oral para estudiantes del inglés. Enfatiza comportamiento verbal y no verbal, presentaciones improvisadas, extemporáneas y preparadas; prepara a los alumnos para entrar a programas vocacionales y a clases a nivel universitario. [ND = Curso no aceptado para graduación o programa.]

ESL 17.
Comparative Grammar/Grámatica Comparativa
3 unidades

Crédito/No Crédito únicamente
Teoría 3 horas
Se Ofrece: Verano, Otoño e Invierno
Fundamentos de inglés como segunda lengua para alumnos de habla hispana. Se imparte en español; compara y contrasta diferentes aspectos de los dos idiomas, tales como la sintaxis, las partes de las oraciones, cognados y cognados falsos, preposiciones, infinitivos y participios presentes. Se puede tomar junto con cualquier otro curso de inglés como segunda lengua. [ND = Curso no aceptado para graduación o programa.]

ESL 20.
Inglés Como Segunda Lengua: Gramática I
5 unidades

Se Recomienda Correquisito: *ESL 21, 25 y un curso apropiado en lectura*
Se Recomienda: *Evaluación ESL de Southwestern College*
Teoría 5 horas
Se Ofrece: Otoño, Primavera
La primera de una serie de tres clases de gramática en inglés como segunda lengua. Diseñada para alumnos con poca experiencia en inglés. Destrezas básicas de gramática se utilizarán en conversación y contextos académicos. [ND = Curso no aceptado para graduación o programa.]

ESL 21.
Inglés Como Segunda Lengua: Hablar y Escuchar I
3 unidades

Se Recomienda Correquisito: *ESL 20 y 25*
Teoría 2 horas, laboratorio 3 horas
Se Ofrece: Otoño, Primavera
ESL 21 es el primero de la serie de tres cursos de hablar y escuchar para estudiantes de ESL. Enfatiza la comprensión auditiva y producción oral. Como correquisito recomendable de ESL 20 y 25, proporciona la práctica coordinada en gramática, sintaxis y vocabulario para estos cursos. Introducción a los aspectos culturales. Comprende actividades de laboratorio. [ND = Curso no aceptado para graduación o programa.]

ESL 25.
Inglés Como Segunda Lengua: Escritura I
4 unidades

Se Recomienda Correquisito: *ESL 20 y 21*
Se Recomienda: *Evaluación ESL de Southwestern College*
Teoría 4 horas
Se Ofrece: Otoño, Primavera
Proporciona al estudiante los conocimientos básicos del proceso para escribir composiciones. Comprende actividades de comunicación antes de iniciar la escritura. Redacción, corrección, y producción de composiciones sin errores. Enfatiza también el vocabulario, ortografía, puntuación, gramática y uso de las mayúsculas. [ND = Curso no aceptado para graduación o programa.]

ESL 27A.
Inglés Para Desarrollo Infantil: Teorías del Desarrollo Infantil
2 unidades

Inscripción Restringida: *Solamente los alumnos inscritos en el programa para obtener el Certificado de Educadora Español a Inglés (Spanish to English Åssociate Teacher Certificate) pueden inscribirse en esta clase*
Lectura 2 horas
Se Ofrece: Variable
El objetivo principal de este curso de nivel básico es desarrollar la lectura, la escritura, el desarrollo de la comprensión oral y la fluidez, al explorar de manera práctica y activa las bases teóricas del desarrollo infantil. El curso apoya el de CD 170S (necesario para obtener el certificado de Desarrollo Infantil (Child Development). [ND= Curso no aceptado para graduación programa.]

ESL 27B.
Inglés Para Desarrollo Infantil: Observación y Guía Positiva
1 unidad

Inscripción Restringida: *Solamente los alumnos inscritos en el programa para obtener el Certificado de Educadora Español a Inglés (Spanish to English Associate Teacher Certificate) pueden inscribirse en esta clase*
Teoría 1 hora
Se Ofrece: Variable
El objetivo principal de este curso es desarrollar la lectura, la escritura, el desarrollo de la comprensión oral y la fluidez, al explorar el comportamiento infantil y desarrollar técnicas que fomenten el auto control, el auto estima y el crecimiento del niño. El curso apoya el de CD 180S, que es necesario para obtener el certificado de Desarrollo Infantil (Child Development). [ND= Curso no aceptado para graduación programa.]

ESL 27C.
Inglés Para el Desarroyo Infantil: Planificación de Programas de Desarroyo Infantil
1 unidad

Inscripción Restringida: *Solamente los alumnos inscritos en el programa para obtener el Certificado de Educadora Español a Inglés (Spanish to English Associate Teacher Certificate) pueden inscribirse en esta clase*
Teoría 1 hora
Se Ofrece: Variable
El objetivo de este curso es desarrollar de manera práctica y activa la lectura, la escritura, el desarrollo de la comprensión oral y la fluidez. El curso apoya el de CD 181S, que es necesario para obtener el certificado de Desarrollo Infantil (Child Development). [ND= Curso no aceptado para graduación programa.]

ESL 27D.
Inglés Para Desarroyo Infantil: Familia y Comunidad
1 unidad

Inscripción Restringida: *Solamente los alumnos inscritos en el programa para obtener el Certificado de Educadora Español a Inglés (Spanish to English Associate Teacher Certificate) pueden inscribirse en esta clase*
Teoría 1 hora
Se Ofrece; Variable
El objetivo de este curso es desarrollar la lectura, la escritura, el desarrollo de la comprensión oral y la fluidez de manera práctica y aplicada con la temática del Desarrollo Infantil. El curso apoya el de CD 284S, que es necesario para obtener el certificado de Desarrollo Infantil (Child Development). [ND= Curso no aceptado para graduación programa.]

ESL 30.
Inglés Como Segunda Lengua: Gramática II
5 unidades

Se Recomienda Correquisito: *ESL 31, 103 y un curso apropiado en lectura*
Se Recomienda: *Haber terminado satisfactoriamente ESL 20 ó la aptitud equivalente, conforme a la evaluación ESL de Southwestern College*
Teoría 5 horas
Se Ofrece: Otoño, Primavera
Segunda de una serie de tres clases de gramática en inglés como segunda lengua para estudiantes de nivel intermedio. Enfatiza la gramática y cubre todas las destrezas para aprender inglés académico. [ND = Curso no aceptado para graduación o programa.]

ESL 31.
Inglés Como Segunda Lengua: Hablar y Escuchar II
3 unidades

Se Recomienda Correquisito: *ESL 30 y 103*
Teoría 2 horas, laboratorio 3 horas
Se Ofrece: Otoño, Primavera
ESL 31 es el segundo en la serie de tres cursos de hablar y escuchar para estudiantes de ESL a nivel intermedio. Enfatiza las aptitudes para escuchar y la comprensión. Se recomienda inscribirse simultáneamente en ESL 30 y 35 ya que proporciona la práctica en gramática, sintaxis y vocabulario para estos cursos. Se introducirán y practicarán algunos aspectos de cultura en actividades comunicativas. Comprende actividades de laboratorio. [ND = Curso no aceptado para graduación o programa.]

ESL 40.
Inglés Como Segunda Lengua: Gramática III
5 unidades

Se Recomienda Correquisito: *ESL 41, 104 y un curso apropiado en lectura*
Se Recomienda: *Haber terminado satisfactoriamente ESL 30 ó la aptitud equivalente, conforme a la evaluación ESL de Southwestern College*
Teoría 5 horas
Se Ofrece: Otoño, Primavera
Última en una serie de tres clases de gramática para estudiantes de nivel avanzado. Desarrolla las destrezas en gramática y competencias relacionadas con la escritura de oraciones y párrafos y vocabulario. [D]

ESL 41.
Inglés Como Segunda Lengua: Hablar y Escuchar III
3 unidades

Se Recomienda Correquisito: *ESL 40 y 104*
Teoría 2 horas, laboratorio 3 horas
Se Ofrece: Otoño, Primavera
Estructurado para estudiantes de ESL a nivel avanzado. Enfatiza y fomenta la expresión independiente y requiere la demostración de aptitudes de lenguaje oral más avanzado. Como curso complementario de ESL 40, proporciona la práctica coordinada en gramática, sintaxis y vocabulario para ese curso. Las actividades se basan en metodologías comunicativas y comprenden cultura, material vocacional y académico. [D]

ESL 50.
Inglés Como Segunda Lengua: Lectura
2 unidades

Correquisito: *ENGL 2*
Se Recomienda Correquisito: *ESL 30*
Teoría 2 horas, laboratorio 3 horas
Se Ofrece: Otoño, Primavera
Curso básico de lectura estructurado para facilitar al estudiante la entrada a los cursos de lectura subsecuentes. Se trabaja en oraciones y contenido de párrafos, desarrollo de la aptitud de discernimiento y comprensión de instrucciones y explicaciones escritas. [ND = Curso no aceptado para graduación o programa.]

ESL 51.
Inglés Como Segunda Lengua: Lectura y Escritura
6 unidades

Se Recomienda: *ESL 25 or 50*
Teoría 6 horas
Se Ofrece: Primavera, Otoño
Un curso de lectura y escritura a nivel intermedio. Integra la lectura con la escritura para que el alumno pueda responder por escrito a lecturas auténticas y relevantes. [ND]

ESL 52.
Inglés Como Segunda Lengua: Lectura Básica
2 unidades

Correquisito: *ENGL 4*
Se Recomienda: *Haber terminado satisfactoriamente ESL 50 ó la aptitud equivalente, conforme a la evaluación ESL de Southwestern College*
Teoría 2 horas
Se Ofrece: Otoño, Primavera
Segundo curso básico para desarrollar aptitudes básicas en lectura. Enfatiza especialmente las necesidades del estudiante de ESL. Se asignan trabajos individuales y en grupo en el centro de lectura (Reading Center) para mejorar las aptitudes, reconocer palabras, utilizar vocabulario, leer y escuchar y adquirir técnicas para estudiar. (Equivalente a ENGL 52.) [ND = Curso no aceptado para graduación o programa.]

ESL 53.
Inglés Como Segunda Lengua: Lectura y Escritura Avanzada
6 unidades

Se Recomienda: *ESL 103 ó ESL/ENGL 52 ó equivalente*
Lectura 6 horas
Se Ofrece: Variable
Un curso avanzado de Inglés como segundo idioma (ESL) de lectura y escritura en el cual se integran la escritura y la lectura con propósito de que se responda a lecturas auténticas y relacionadas. [ND = Curso no aceptado para graduación o programa.]

ESL 103.
Inglés Como Segunda Lengua: Escritura II
4 unidades

Se Recomienda Correquisito: *ESL 30 y 31*
Se Recomienda: *Haber completado satisfactoriamente ESL 25 ó la aptitud equivalente, conforme a la evaluación ESL de Southwestern College*
Teoría 4 horas
Se Ofrece: Otoño, Primavera
Curso intermedio de composición, segundo en la serie de tres. Continúa el énfasis en las actividades de la comunicación antes de iniciar la escritura. Desarrollo de aptitudes para la composición, corrección de errores y producción final. Enfatiza también oraciones combinadas a nivel compuesto-complejo. [D; CSU]

ESL 104.
Inglés Como Segunda Lengua: Escritura III
4 unidades

Se Recomienda Correquisito: *ESL 40 y 41*
Se Recomienda: *Haber terminado satisfactoriamente ESL 103 ó la aptitud equivalente, conforme a la evaluación ESL de Southwestern College*
Teoría 4 horas
Se Ofrece: Otoño, Primavera
Curso avanzado de composición. Ultimo en la serie de tres. Continúa el énfasis en las actividades comunicativas antes de iniciar la redacción de composiciones. Desarrollo de aptitudes para escribir, corregir y terminar composiciones sin errores. Enfatiza también la producción independiente. [D; CSU]

ESL 115.
Técnicas y Estrategias Para Tener Exito en el Colegio
2 unidades

Teoría 2 horas
Se Ofrece: Otoño, Primavera
Curso basado en actividades, diseñado para asistir al estudiante en el desarrollo de aptitudes para aprender a manejar su vida personal y académica y para que pueda lograr sus metas de continuar estudios superiores. Las clases se impartirán por un grupo de personas especializadas en los temas. La clase se imparte en inglés y español. (Equivalente a PD 115.) [D; CSU]

ESL 295.
Temas Selectos en ESL
1–3 unidades

Se Ofrece: Variable
Los objetivos específicos, métodos de instrucción y unidades de crédito se determinarán individualmente para los proyectos propuestos bajo esta descripción del curso. (Puede repetirse para obtener créditos adicionales si el contenido es diferente.

Environmental Technology

School of Technology and Human Services

■ Dean

Patricia Axsom, M.S.
Office 570B
619-482-6460

■ Faculty

Marie Vicario-Fisher M.P.H.

■ Department Chair

Corey Breininger, M.A.Ed.

General Description

The environmental technology program has two areas of emphasis that allow students to specialize in the new and growing fields of environmental management and occupational health and safety. Environmental management emphasizes the study of and the solutions for environmental pollution and its effect on the environment. Occupational health and safety emphasizes the causes of and the solutions for hazardous agents in occupational settings, unsafe work practices, and their effect on human health and welfare.

Career Options

The following list is a sample of the many career options available for the environmental major. Most of these require a certificate or an associate degree, or a baccalaureate degree, and a few require a graduate-level degree: field sampling technician, environmental scientist, hazardous materials specialist, pollution control technician, environmental investigator, water quality technician, air quality aide, recycling coordinator, environmental economist, environmental lawyer, environmental journalist, waste management specialist, vocational teacher, transportation planner, legislative researcher, emergency responder, site remediation specialist, hazardous materials manager, wastewater treatment operator, pollution prevention specialist, toxicologist, environmental regulator, environmental activist, occupational health and safety specialist, and industrial hygienist.

Degree/Certificate Options

	Major Code
Associate in Science Degree: Career/Technical	
Environmental Management	*A1971*
Occupational Health and Safety	*A1973*
Certificates of Achievement	
Environmental Management	*A1972*
Occupational Health and Safety	*A1974*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Science Degree

Environmental Management

Career/Technical (Major Code: A1971)

Emphasis on waste treatment technologies, current hazardous waste and hazardous materials regulations, sustainable development, economic and sociopolitical environmental issues, small business and large facility compliance, emergency response techniques, toxicology, pollution prevention, and the cleanup of contaminated air, water, and soil.

BIOL 140	*Environmental Biology*	*3*
CHEM 100	*Introduction to General Chemistry*	*4*
CHEM 110	*Elementary Organic and Biological Chemistry*	*4*
EHMT 100	*Introduction to Environmental Technology*	*3*
EHMT 110	*Waste Stream Generation and Reduction and Treatment*	*3*
EHMT 130	*Health Effects of Hazardous Materials*	*3*
EHMT 150	*Hazardous Waste Management Applications*	*4*
EHMT 200	*Environmental Materials Management Applications*	*4*
EHMT 202	*Water and Wastewater Management * (Cuyamaca College ENVT 210)*	*3*
EHMT 230	*Safety and Emergency Response*	*4*
EHMT 290–293	*Environmental Technology Cooperative Work Experience I–IV*	*2–4*
	Total units	***37–39***

Recommended Electives: *BIOL 265; BUS 120, 152; CIS 101; COMM 103; GEOL 100; MATH 121, 250.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

A 40-hour HAZWOPER certification that meets OSHA requirements for 29 CFR 1910.120 is given upon the successful completion of EHMT 230.

* EHMT 202—Water and Wastewater Management is only offered at Cuyamaca College, but it is fully articulated with Southwestern College. Students must enroll and register for the class at Cuyamaca College (cuyamaca.net).

Occupational Health and Safety

Career/Technical (Major Code: A1973)

Emphasis on the recognition, evaluation, and control of hazardous agents in the work environment; regulations pertaining to the California and Federal Occupational Safety and Health Administration; the toxicological effects of hazardous agents in the workplace, occupational diseases and methods of prevention; industrial safety practices; the administration and management of safety programs; and monitoring techniques for airborne contaminants, noise, heat, illumination, and radiation.

BIOL 190	*Human Anatomy and Physiology*	*4*
CHEM 100	*General Chemistry*	*4*
EHMT 100	*Introduction to Environmental Tech.*	*3*
EHMT 130	*Health Effects of Hazardous Materials*	*3*
EHMT 202	*Water/Wastewater Management* (Cuyamaca College ENVT 210)*	*3*
EHMT 260	*Occupational Safety*	*3*
EHMT 261	*Occupational Safety Management*	*3*
EHMT 230	*Safety and Emergency Response*	*4*
EHMT 290–293	*Env. Tech. Coop. Work Exp. I–IV*	*4–8*
	Total units	***31–35***

Recommended Electives: BIOL 211, 265; MATH 119

To earn an associate degree, additional General Education and Graduation requirements must be completed. See page 36.

A forty-hour HAZWOPER certification that meets OSHA requirements for 29 CFR 1910.120 is given upon the successful completion of EHMT 230.

Certificates of Achievement

Environmental Management

Career/Technical (Major Code: A1972)

FIRST SEMESTER

EHMT 100	*Introduction to Environmental Technology*	*3*
EHMT 110	*Waste Stream Generation and Reduction and Treatment*	*3*
EHMT 130	*Health Effects of Hazardous Materials*	*3*
EHMT 150	*Hazardous Waste Management Applications*	*4*
EHMT 200	*Environmental Materials Management Applications*	*4*
EHMT 202	*Water and Wastewater Management * (Cuyamaca College ENVT 210)*	*3*
EHMT 230	*Safety and Emergency Response*	*4*
	Total units	***24***

* EHMT 202—Water and Wastewater Management is only offered at Cuyamaca College, but it is fully articulated with Southwestern College. Students must enroll and register for the class at Cuyamaca College (cuyamaca.net).

Occupational Health and Safety

(Major Code: A1974)

EHMT 100	*Introduction to Environmental Tech.*	*3*
EHMT 130	*Health Effects of Hazardous Materials*	*3*
EHMT 201	*Introduction to Industrial Hygiene and Occupational Health*	*4*
EHMT 230	*Safety and Emergency Response*	*4*
EHMT 260	*Occupational Safety*	*3*
	Total units	***17***

Recommended Electives: *BIOL 211, 265; MATH 119*

A forty-hour HAZWOPER certification that meets OSHA requirements for 29 CFR 1910.120 is given upon the successful completion of EHMT 230.

Environmental Hazardous Materials Technology Courses

EHMT 100.
Introduction to Environmental Technology
3 units

Lecture 3 hours
Offered: Variable
Designed to give students a general overview of the environmental technology areas. Presents the history of pollution leading to current legislation, environmental effects of pollution, current waste treatment techniques, and overview of the regulatory framework. Discussion on career opportunities in the areas of management of hazardous substances and pollution control. Field trips provide hands-on experience to address environmental problems. [D; CSU]

EHMT 105.
EcoMundo: Environmental Technology and Issues
3 units

Lecture 3 hours
Offered: Variable
Provides a general overview of environmental issues affecting Mexico and the U.S., with emphasis on Baja California and California. Specific topics include: water and wastewater, air pollution, hazardous waste, Latin America, health effects, laws and regulations, and pollution prevention, with an emphasis on sustainable development in the border region. Field trips included. [D; CSU]

EHMT 110.
Waste Stream Generation and Reduction and Treatment
3 units

Lecture 3 hours
Offered: Variable
Industrial processes and generation of waste streams. Study various waste streams (air, water, and solids) examining the changes that occur through the industrial processes and understanding the material balance concept. Includes discussion of applicable technology. Stresses the fundamentals of waste minimization and treatment concepts. Field trips will show waste treatment technologies in action. [D; CSU]

EHMT 130.
Introduction to Toxicants
3 units

Recommended Preparation: *BIOL 190 or equivalent*
Lecture 3 hours
Offered: Variable
Acute and chronic health effects produced by exposure to chemical, physical, and biological agents associated with industrial operations, waste disposal, and remedial sites. Topics include routes of entry, risk management, permissible exposure limits, medical surveillance, control methods, understanding Material Safety Data Sheets, epidemiology, industrial hygiene, and occupational health and safety. [D; CSU]

EHMT 150.
Waste Management Applications
4 units

Recommended Preparation: *EHMT 100 and CHEM 100, or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Variable
Fee: $10. Overview of hazardous waste, air pollution, wastewater regulations for industrial facilities, and abandoned waste sites. Emphasis on generator compliance, site investigation and remediation, permitting, and waste identification. The laboratory provides hands-on application of a hazardous waste manifest, preparation, storage container management, sampling, and waste compatibility determination. [D; CSU]

EHMT 200.
Environmental Materials Management Applications
4 units

Recommended Preparation: *EHMT 100, 130, and CHEM 100, or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Variable
Fee: $10. Overview of hazardous materials regulations including emphasis on the transportation of hazardous materials, OSHA Hazard Communication, Community Right-to-Know, underground tanks, asbestos, Proposition 65, air toxics, and medical and infectious waste regulations. The laboratory will focus on shipping of hazardous materials; interpreting MSD's; and planning and reporting functions. [D; CSU]

EHMT 201.
Introduction to Industrial Hygiene and Occupational Health
4 units

Recommended Preparation: *EHMT 100 or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Variable
Anticipation, recognition, evaluation and control of biological, chemical, and physical hazards in the workplace. Introduction to development of industrial hygiene, occupational health and safety as a professional discipline. Provides student with an understanding of basic physiological processes and the effects caused by occupational exposure to hazards. Students will survey various occupational health and safety programs and government regulations. Familiarize students with industrial hygiene monitoring and sampling techniques for airborne contaminants, noise, heat, radiation, and illumination. [D; CSU]

EHMT 202.
Water and Wastewater Management
4 units

Grade only
Recommended Preparation: *EHMT 100 or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Variable
Overview of water and wastewater regulations with emphasis on federal, state, and local regulatory standards. An integrated study of principles of water movement and management. Topics include hydrology, water distribution, wastewater collection, storm water management, and safe drinking water issues. [D; CSU]

EHMT 230.
Safety and Emergency Response
4 units

Recommended Preparation: *EHMT 130 or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Spring
Fee: $10. Topics include hazard analysis, contingency planning, use and selection of PPE, site-control and evaluation, handling drums and containers, field sampling and monitoring, proper use of instruments, incident response planning, and field exercises in the use of APR and SCBA. This satisfies the requirements for generalized employee training under OSHA (1910.120). [D; CSU]

EHMT 260.
Occupational Safety
3 units

Recommended Preparation: *EHMT 100 and 130, or equivalent*
Lecture 3 hours
Offered: Variable
Covers the laws and regulations pertaining to industrial occupational safety, the history of occupational safety leading to current legislation, and the development of the Occupational Safety and Health Administration (OSHA). Students will gain a working knowledge of Worker's Compensation and benefits laws, coupled with personal factors in safety, product safety and liability, and monitoring hazards in the workplace. [D; CSU]

EHMT 261.
Occupational Safety Management
3 units

Recommended Preparation: *EHMT 100 and 130, or equivalent*
Lecture 3 hours
Offered: Variable
Stresses management's responsibility for safety, hazard, communication, machine and mechanism safety, and accident investigation. Additional topics include fire protection, radiation, electric systems, and industrial biological agents. [D; CSU]

EHMT 270.
Introduction to Industrial Hygiene I
3 units

Prerequisite: *EHMT 130 or equivalent*
Recommended Preparation: *EHMT 100, BIOL 190, CHEM 100, and 110, or equivalent*
Lecture 3 hours
Offered: Variable
Introduction to the development of industrial hygiene, also called occupational health or environmental health, as a professional discipline. Overview of certain human organs and how they are affected by occupational exposure and the recognition of hazards in the work environment. [D; CSU]

EHMT 271.
Introduction to Industrial Hygiene II
3 units

Prerequisite: *EHMT 270 or equivalent*
Lecture 3 hours
Offered: Variable
Continuation of EHMT 270. Introduction to the principles of evaluating occupational exposures to hazardous agents and the control of hazards in the work environment. Students will survey various occupational health and safety programs, and governmental regulations. [D; CSU]

EHMT 272.
Techniques in Industrial Hygiene
2 units

Prerequisite: *EHMT 270 or equivalent*
Recommended Preparation: *EHMT 271 or equivalent*
Lecture 1 hour, laboratory 3 hours
Offered: Variable
Fee: $10. Industrial hygiene monitoring techniques for airborne contaminants, noise, heat, radiation, and illumination. Students will obtain hands-on experience with industrial hygiene and ccupational/industrial health instrumentation. Complements EHMT 270 and 271. [D; CSU]

EHMT 290–293.
Environmental Technology Cooperative Work Experience I–IV
2–4 units

Grade only
Limitation on Enrollment: *Declared Environmental Hazardous Materials Technology major. Student must complete no less than seven units, including work experience, during each semester in order to receive credit*
Lecture 1 hour, laboratory 5–15 hours
Offered: Fall, Spring
Application of the principles and skills learned in the Environmental Hazardous Materials Technology program to on-the-job assignments. Students are required to attend a weekly one-hour coordinating class. The instructor and the work experience provider will evaluate on-the-job performance. [D; CSU]

EHMT 295.
Selected Topics in Environmental and Hazardous Materials
1–3 units

Offered: Variable
Permits students to study relevant topics within the field of environmental hazardous materials. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

EHMT 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26,*
Offered: Variable
Individual study or research in some area of environmental hazardous materials, which is of particular interest to the student and not included in regular courses of the college. [D; CSU]

Exercise Science

School of Health, Exercise Science, and Athletics

Dean

Bruce H. Turner, M.A.
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Faculty

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Richard C. Mason, M.A.
Dionicio Monarrez, M.Ed.
Michael Meehan, M.Ed.
Michael Pompa, M.A.
Andrew Shim, M.A.
Art Stone, M.A.

Department Chair

Melanie Durkin, M.A.

Director

Terry Davis, M.H.A.

General Description

Exercise Science is an academic area of study concerned with the art and science of physical movement. This department explores the processes through which individuals obtain optimal health, physical skills, and fitness. Learning concentrates on human movement as it affects and is affected by physiological, psychological, cultural, social, and mechanical parameters. The application of movement concepts evolves from a foundation in human anatomy, physiology, and principles of kinesiology that cover healthful living, nutrition, and emergency practices.

Career Options

The following list is a sample of the many career options available for the exercise science major. A few of these require an associate degree, most require a baccalaureate degree, and some require a graduate-level degree: athletic trainer, high school or college instructor, coach, corrective therapist, exercise test technologist, sports medicine doctor, recreation specialist, community center leader, personal trainer, rehabilitation technician, sportscaster, referee, resort sports coordinator, and sports club manager or personnel, exercise physiologist and physical therapist.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Exercise Science	*A1360*
Certificates of Achievement	
Fitness Specialist Certification—Basic	*01361*
Fitness Specialist Certification—Advanced	*01362*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Science Degree

Exercise Science

Transfer Preparation * (Major Code: A1360)

Exercise science is the study of the processes through which individuals obtain optimal health, physical skills, and fitness. The academic foundation of exercise science is the study of human movement as it affects and is affected by physiological, psychological, developmental, sociocultural, and mechanical parameters.

While this program emphasizes preparation for the teaching career, the physical educator is prepared for a wide range of career opportunities in such fields as physical therapy, athletic training, recreation, research, and private fitness and health.

FIRST SEMESTER

BIOL 100	*Principles of Biology*	*3*
BIOL 101	*Principles of Biology Laboratory*	*1*
ES/T 202	*Introduction to Physical Education*	*3*

SECOND SEMESTER

BIOL 260	*Human Anatomy*	*5*
SOC 101	*Introduction to Sociology*	*3*

THIRD SEMESTER

CHEM 100	*Introduction to General Chemistry*	*4*
COMM 103	*Oral Communication*	*3*
Select 1 unit from ES/Activity		*1*

FOURTH SEMESTER

BIOL 261	*Principles of Human Physiology*	*4*
PSYC 101	*General Psychology*	*3*
Select 1 unit from ES/Activity		*1*
	Total units	***31***

To earn an associate degree, additional General Education and Graduation requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education though consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 43 for further information.**

Certificate of Achievement

Fitness Specialist Certification—Basic

Career/Technical (Major Code: 01361)

The fitness specialist program is designed to train and qualify students to function as entry-level, intermediate, and advanced group exercise leaders and personal trainers. Students will learn the scientific principles of exercise and physical conditioning, techniques of exercise leadership with groups and individuals, assessment and establishment of healthy behaviors, nutrition and the designing of safe, effective, and personalized exercise plans for a variety of clients.

HLTH 202	*Nutrition for Athletes*	*3*
ES/T 135	*Introduction to Exercise Physiology*	*2*
ES/T 136	*Techniques of Weight Training*	*2*
ES/T 137	*Exercise for Special Populations*	*2*
ES/T 138	*Techniques of Exercise Leadership*	*2*
ES/T 139	*Fitness Specialist Internship*	*3*
PET 140	*Introduction to Applied Kinesiology*	*2*
	Total units	***16***

Fitness Specialist Certification—Advanced

Career/Technical (Major Code: 01362)

The fitness specialist program is designed to train and qualify students to function as entry-level, intermediate, and advanced group exercise leaders and personal trainers. Students will learn the scientific principles of exercise and physical conditioning, techniques of exercise leadership with groups and individuals, assessment and establishment of healthy behaviors, nutrition and the designing of safe, effective, and personalized exercise plans for a variety of clients.

HLTH 110	*First Responder*	*2–3*
HLTH 202	*Nutrition for Athletes*	*3*
ES/A 109	*Fitness Assessment and Laboratory*	*1*
ES/T 135	*Introduction to Exercise Physiology*	*2*
ES/T 136	*Techniques of Weight Training*	*2*
ES/T 137	*Exercise for Special Populations*	*2*
ES/T 138	*Techniques of Exercise Leadership*	*2*
ES/T 139	*Fitness Specialist Internship*	*3*
ES/T 140	*Introduction to Applied Kinesiology*	*2*
ES/T 250	*Prevention and Care of Athletic Injuries*	*2*
	Total units	***21–22***

Exercise Science Courses

There are four types of Exercise Science courses:

- Exercise Science/Activity
- Exercise Science/Intercollegiate
- Exercise Science/Limited
- Exercise Science/Theory

Exercise Science–Activity Courses

ES/A 101ABCD.
Body Sculpt I–IV
1 unit

Laboratory 3 hours
Offered: Variable
Body sculpt is an exercise program that utilizes light weights, resistance tubes and bars, jump ropes, and steps to improve muscle tone and definition while strengthening the body. This workout session combined with rhythmic music, focuses on duration and intensity of exercises for deep muscle contouring, strengthening, and firming a well-defined body. Course appropriate for all levels of fitness. (Repeatable three times.) (Formerly PE/A 101ABCD.) [D; CSU; UC]

ES/A 109.
Fitness Assessment and Laboratory
1 unit

Credit/No Credit only
Lecture .5 hour, laboratory 2 hours
Offered: Variable
Individual fitness assessment computerized evaluation program suited to all levels of fitness. Each student will be tested and lectured in the areas of body composition, cardiorespiratory fitness, nutritional analysis, blood chemistry, pulmonary function, flexibility, and muscular strength. Recommendations for improvement included. (Formerly PE/A 109.) [D; CSU; UC]

ES/A 111ABCD.
Running for Cardiovascular Fitness I–IV
1 unit

Laboratory 3 hours
Offered: Variable
Designed to improve the students' cardiovascular conditioning. Students will be pre- and post-tested to determine his/her conditioning levels. During the semester, students will be given the skills necessary to improve jogging or running abilities. Introduction to warm ups, cool downs, breathing techniques, injury prevention, and care will be included. Various courses and distances will be introduced to challenge and improve the students running abilities.) (Repeatable three times.)
(Formerly PE/A 111ABCD.) [D; CSU; UC]

ES/A 115.
Bicycling for Cardiovascular Fitness and Recreation
1 unit

Grade only
Laboratory 3 hours
Offered: Variable
Saturday bicycle rides of coastal and foothill areas of San Diego County. Each ride will focus on teaching the individual: how to ride the bike correctly, how to operate safely in a group, proper equipment necessary for group and individual riding, bike maintenance and on-road repair, and to use the bike for sight seeing and transportation. (Repeatable three times.)
(Formerly PE/A 115.) [D; CSU; UC]

ES/A 119ABCD.
Cardiovascular Swimming
.5–1 unit

Laboratory 1.5–3 hours
Offered: Variable
Swimming techniques and supervised workouts designed to enhance cardiovascular fitness. Pre- and post-tests of cardiovascular fitness levels. (Repeatable three times.)
(Formerly PE/A 119ABCD.) [D; CSU; UC]

ES/A 123ABCD.
Cross Training Fitness I–IV
.5–1 unit

Laboratory 2–3 hours
Offered: Variable
Introduction to the principles of fitness, health, and nutrition. Specifically designed to enhance healthful living through a variety of cardiovascular and resistance exercises. Repeatable three times.)
(Formerly PE/A 123ABCD.) [D; CSU; UC]

ES/A 127ABCD.
Cardio-Fitness I–IV
.5–1 unit

Laboratory 2–3 hours
Offered: Variable
Aerobic exercise class that offers cardiovascular benefits, as well as, improving coordination and rhythm. It is a low-impact form of exercise and is safe and effective for all fitness levels. In addition to the cardiovascular conditioning, this class offers a balanced workout that includes flexibility and dance movement. (Repeatable three times.) (Formerly PE/A 127ABCD.)
[D; CSU; UC]

ES/A 131ABCD.
Flexibility Fitness
.5–1 unit

Laboratory 1.5–3 hours
Offered: Variable
Designed to lengthen muscles and increase range of motion. Multi-skill level class with emphasis on stretching and increasing flexibility. Benefits include reducing risk of injury, increases flexibility, increased body awareness. (Repeatable three times.)
(Formerly PE/A 131ABCD.) [D; CSU; UC]

ES/A 135ABC.
Bowling I–III
1 unit

Laboratory 3 hours
Offered: Variable
Fee: $82. Designed to provide instruction and supervision in the sport of bowling. Rules, tournament play, various approaches, and ball release techniques will be introduced to the beginning bowler. Includes instruction on scoring, ball placement, and team play. (Repeatable two times.)
(Formerly PE/A 135ABC.) [D; CSU; UC]

ES/A 139ABCD.
Racquetball I–IV
1 unit

Laboratory 3 hours
Offered: Variable
Instruction and practice in the basic and advanced racquetball skills, including knowledge of rules, court position, and strategy. Playing experience in singles, doubles, and cutthroat competition. (Repeatable three times.)
(Formerly PE/A 139ABCD.) [D; CSU; UC]

ES/A 143ABCD.
Badminton I–IV
1 unit

Laboratory 3 hours
Offered: Variable
Designed to introduce students to an outstanding game of skills in footwork, hand and eye coordination, along with fundamentals in strokes, rules, and etiquette, in singles and doubles competition.) (Repeatable three times.) (Formerly PE/A 143ABCD.) [D; CSU; UC]

ES/A 147.
Golf I
.5–1 unit

Grade only
Laboratory 2–3 hours
Offered: Variable
Fee: $30. Golf fundamentals including pattern of swings, grip, and stance. Instruction includes club selection, chipping, putting, rules, etiquette, and scoring. (Formerly PE/A 147.) [D; CSU; UC]

ES/A 148.
Golf II
.5–1 unit

Grade only
Prerequisite: *ES/A 147 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Fee: $30. Advanced golf swing fundamentals and skills. Instruction includes advanced chipping techniques, pitching, sand bunker play, rules, and game management. (Formerly PE/A 148.) [D; CSU; UC]

ES/A 149.
Golf III
.5–1 unit

Grade only
Prerequisite: *ES/A 148 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Fee: $30. Intermediate golfing skills. Instruction includes refinement full swing, chipping techniques, pitching, sand bunker play, rules, scoring, and game management. Stresses swing self-analysis utilizing divot and ball direction. (Formerly PE/A 149.) [D; CSU; UC]

ES/A 150.
Golf IV
.5–1 unit

Grade only
Prerequisite: *ES/A 149 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Fee: $30. Advanced golfing skills. Instruction includes refinement of full swing, chipping techniques, pitching, sand bunker play, rules, scoring, and game management. Stresses swing self-analysis utilizing divot and ball direction. (Formerly PE/A 150.) [D; CSU; UC]

ES/A 151.
Beginning Tennis I
.5–1 unit

Grade only
Laboratory 2–3 hours
Offered: Variable
Beginning tennis fundamentals. Basic stroke technique, footwork, forehand, backhand, and introduction to serve. Rules interpretation and match play in singles and doubles. (Formerly PE/A 151.) [D; CSU; UC]

ES/A 152.
Beginning Tennis II
.5–1 unit

Grade only
Prerequisite: *ES/A 151 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Review of history, etiquette, rules, and basic strategy of tennis. Refinement of basic skills in footwork, forehand, backhand, and serve for the advanced beginner. Introduction of net play and variations of competition, scoring and forehand-backhand strokes. (Formerly PE/A 152.) [D; CSU; UC]

ES/A 153.
Intermediate Tennis
.5–1 unit

Grade only
Prerequisite: *ES/A 152 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Review and refinement of serve and net play with emphasis on pace and control of serve and variations of forehand and backhand strokes. Introduction of offensive and defensive lob and overhead smash. (Formerly PE/A 153.) [D; CSU; UC]

ES/A 154.
Advanced Tennis
.5–1 unit

Grade only
Prerequisite: *ES/A 153 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Advanced theory, strategy, and techniques including analysis of skills by instructor and student, concentrating on the elimination of errors in form and execution. Introduction of half volley and variations of serve techniques. (Formerly PE/A 154.) [D; CSU; UC]

ES/A 155.
Swimming I
.5–1 unit

Laboratory 1.5–3 hours
Offered: Variable
Introductory course teaching basic strokes and aquatic skills to novice swimmers. (Formerly PE/A 155.) [D; CSU; UC]

ES/A 156.
Swimming II
.5–1 unit

Prerequisite: *ES/A 155 or equivalent*
Laboratory 1.5–3 hours
Offered: Variable
Designed to provide the beginning swimmer with additional swimming skills and endurance, including water safety skills necessary to become comfortable in or around the water. Strokes learned will include crawl, back crawl, introduction to butterfly, elementary back, sidestroke, and breaststroke. (Formerly PE/A 156.) [D; CSU; UC]

ES/A 157.
Swimming III
.5–1 unit

Prerequisite: *ES/A 156 or equivalent*
Laboratory 1.5–3 hours
Offered: Variable
Intermediate instruction in the fundamental strokes with beginning instruction in diving. (Formerly PE/A 157.) [D; CSU; UC]

ES/A 158.
Swimming IV
.5–1 unit

Prerequisite: *ES/A 157 or equivalent*
Laboratory 1.5–3 hours
Offered: Variable
Designed to improve student swimming through increased endurance swimming and skill development including the four recognized competitive swimming strokes and the two recognized additional strokes of sidestroke and elementary backstroke. (Formerly PE/A 158.) [D; CSU; UC]

ES/A 160.
Progressive Fitness I Through Nautilus and Swimming Conditioning
.5–1 unit

Grade only
Laboratory 2–3 hours
Offered: Variable
Short introduction and continuation course in resistive exercise routines using the Nautilus equipment combined with a progressive cardiopulmonary fitness program using swimming as the primary exercise.
(Formerly PE/A 160.) [D; CSU; UC]

ES/A 161.
Progressive Fitness II Through Nautilus and Swimming Conditioning
.5–1 unit

Grade only
Prerequisite: *ES/A 160 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Continuation of short-term activity in more advanced resistive exercise routines using Nautilus equipment combined with a progressive cardiopulmonary fitness program using swimming as the primary exercise.
(Formerly PE/A 161.) [D; CSU; UC]

ES/A 162ABCD.
Basketball
1 unit

Laboratory 3 hours
Offered: Variable
Multi-level basketball class that provides opportunity for students to learn fundamentals of the game, skill development, and participation in various class competitions. (Repeatable three times.)
(Formerly PE/A 162ABCD.) [D; CSU; UC]

ES/A 166.
Volleyball I
.5–1 unit

Grade only
Laboratory 2–3 hours
Offered: Variable
Introductory course in volleyball skills and techniques for the beginning player including six-member team play experience.
(Formerly PE/A 166.) [D; CSU; UC]

ES/A 167.
Volleyball II
.5–1 unit

Grade only
Prerequisite: *ES/A 166 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Indoor volleyball skills and techniques for the intermediate players. Includes introduction of multiple offensive and defensive systems. Experience in doubles and six-member teams.
(Formerly PE/A 167.) [D; CSU; UC]

ES/A 168.
Volleyball III
.5–1 unit

Grade only
Prerequisite: *ES/A 167 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Complete study of the rules, strategy, conditioning, and techniques of advanced volleyball including instruction and play utilizing, multiple offensive and defensive systems. (Formerly PE/A 168.) [D; CSU; UC]

ES/A 169.
Volleyball IV
.5–1 unit

Grade only
Prerequisite: *ES/A 168 or equivalent*
Laboratory 2–3 hours
Offered: Variable
An in-depth analysis of power level volleyball, applying advanced offensive and defensive techniques utilized at the collegiate and international level volleyball.
(Formerly PE/A 169.) [D; CSU; UC]

ES/A 170ABCD.
Sand Volleyball
.5–1 unit

Laboratory 1.5–3 hours
Offered: Variable
Provides instruction in basic skills and strategies of sand volleyball. Emphasis is placed on both "open" and team play in two to six member sides. (Repeatable three times.)
(Formerly PE/A 170ABCD.) [D; CSU; UC]

ES/A 174.
Baseball
.5–1 unit

Laboratory 1.5–3 hours
Offered: Variable
Develops basic skills, knowledge, and understanding of baseball. (Formerly PE/A 174.) [D; CSU; UC]

ES/A 175ABC.
Advanced Baseball
.5–1 units

Recommended Preparation: *Beginning baseball skills*
Laboratory 2–3 hours
Offered: Variable
Enhance fundamental baseball skills. Individualized-instruction in batting, throwing, catching, pitching, defensive fundamentals. Intra-class competition. Development of game strategy and performance enhancement through multiple practice drills. (Repeatable two times.)
(Formerly PE/A 175ABC.) [D; CSU; UC]

ES/A 178ABCD.
Soccer I–IV
.5–1 unit

Grade only
Laboratory 2–3 hours
Offered: Variable
Designed to introduce the student to the sport of soccer. Emphasis on providing information and practice in the skills of kicking, trapping, heading, shooting, rules, and vocabulary associated with soccer. The class exposes students to game situations and game evaluations. (Repeatable three times.)
(Formerly PE/A 178ABCD.) [D; CSU; UC]

ES/A 182.
Softball I
.5–1 unit

Grade only
Laboratory 2–3 hours
Offered: Variable
Basic skills in softball including drills, hitting, pitching, fielding, infield, strategy, and rules.
(Formerly PE/A 182.) [D; CSU; UC]

ES/A 183.
Softball II
.5–1 unit

Grade only
Prerequisite: *ES/A 182 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Review of basic fundamentals of throwing, catching, fielding, batting and bunting. Conditioning and refinements taught through drills and in class competition in order to have total player development. Class geared to the advanced beginning level player.
(Formerly PE/A 183.) [D; CSU; UC]

ES/A 184.
Softball III
.5–1 unit

Grade only
Prerequisite: *ES/A 183 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Includes the softball fundamentals of throwing, catching, fielding, batting and bunting. Conditioning and refinements taught through drills and class competition in order to have total player development. Class geared to the intermediate level player. (Formerly PE/A 184.) [D; CSU; UC]

ES/A 185.
Softball IV
.5–1 unit

Grade only
Prerequisite: *ES/A 184 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Advanced fundamentals of throwing, catching, fielding, batting, and bunting taught through drills in order to have total player development. Class geared to the advanced player. (Formerly PE/A 185.) [D; CSU; UC]

ES/A 186ABCD.
Strength and Fitness Training I–IV
.5–1 unit

Laboratory 2–3 hours
Offered: Variable
Fee: $5. Covers strength and cardiovascular training. Individual training programs are available, and after orientation has been completed, the Fitness Education Center can be utilized on a flexible schedule. (Repeatable three times.) (Formerly PE/A 186ABCD.) [D; CSU; UC]

ES/A 190.
Beginning Weight Training and Physical Fitness
.5–1 unit

Grade only
Laboratory 2–3 hours
Offered: Variable
Progressive resistance training to give the student an opportunity to improve strength and overall fitness. Includes types of resistance programs, proper methods of exercising with weights, and safety. (Formerly PE/A 190.) [D; CSU; UC]

ES/A 191.
Intermediate Weight Training and Physical Fitness
.5–1 unit

Grade only
Prerequisite: *ES/A 190 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Intermediate-level course in progressive resistance training to enable the student to improve muscle strength, flexibility, and cardiovascular condition. (Formerly PE/A 191.) [D; CSU; UC]

ES/A 192.
Advanced Weight Training and Physical Fitness I
.5–1 unit

Grade only
Prerequisite: *ES/A 191 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Advanced–level course in progressive resistance training to enable the student to achieve and maintain a high level of muscular fitness, as well as improve body symmetry. (Formerly PE/A 192.) [D; CSU; UC]

ES/A 193.
Advanced Weight Training and Physical Fitness II
.5–1 unit

Grade only
Prerequisite: *ES/A 192 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Advanced-level course in resistance training designed for those students interested in special training techniques. Includes techniques of body building, aerobic weight training, and weight training for athletics. (Formerly PE/A 193.) [D; CSU; UC]

ES/A 196ABC.
Judo I–III
1 unit

Laboratory 3 hours
Offered: Variable
Designed to introduce the students to the martial art of Judo. Emphasis is on providing information and practice in falling, throwing, mats work, submission holds, vocabulary, and rules associated with the martial art. The class exposes the individual to the various uses of Judo: Rondori (competition), Kata (art form), and self-defense. (Repeatable two times.) (Formerly PE/A 196ABC.) [D; CSU; UC]

ES/A 199ABCD.
Outrigger Canoe
.5–1 unit

Lecture .25–.5 hour, laboratory .75–1.5 hours
Offered: Variable
Cultural aspects of Hawaiian outrigger, history and traditions, basic outrigger paddle strokes, helmsmanship, canoe rigging, and transport and maintenance. Also boating and personal water safety, environmental concerns, teamwork, communication, physical fitness, and competitive strategies. (Repeatable three times.) (Formerly PE/A 199.) [D; CSU; UC]

ES/A 203ABCD.
Fitness Walking I–IV
.5–1 unit

Laboratory 2–3 hours
Offered: Variable
Incorporates an-easy-to follow plan for monitoring and measuring improvements in basic fitness and cardiorespiratory conditioning while participating in a low-impact activity. Designed for people of all ages and physical conditions. (Repeatable three times.) (Formerly PE/A 203ABCD.) [D; CSU; UC]

ES/A 207ABCD.
Surfing
.5–1 unit

Prerequisite: *Demonstrated swimming proficiency*
Lecture .25–.5 hour, laboratory .75–1.5 hours
Offered: Variable
Instruction and activities in beginning, novice, intermediate and advanced surf boarding, body boarding, and body surfing. Covers selection and safe use of equipment, self-rescue, and wave selection for beginning through advanced participants. (Repeatable three times.) (Formerly PE/A 207.) [D; CSU; UC]

ES/A 208.
Scuba Diving
1–2 units

Recommended Preparation: *ES/A 158 or equivalent*
Lecture 1–2 hours, laboratory 1–3 hours
Offered: Variable
Designed to introduce the student to scuba diving skills and knowledge. Topics include equipment use, safety procedures, introduction to the dive environment, dive trip planning, health and fitness for diving, diving physics, and the dive table. Certification available through outside agency upon successful completion of the course. (Formerly PE/A 208.) [D; CSU; UC]

ES/A 209.
Advanced Scuba Diving Review
1–1.5 units

Prerequisite: *Scuba Diver Certification*
Lecture .5–1 hour, laboratory .75–1 hour
Offered: Variable
Designed to review the basic skills and knowledge for previously certified scuba divers and introduce inexperienced, recently certified divers to more advanced diving skills such as night diving, search and recovery, deep diving, underwater hunting and collecting and navigation certification (see Scuba Diving) (Formerly PE/A 209.) [D; CSU; UC]

ES/A 211.
Weight Training and Cardiovascular Activities I
.5–1 unit

Grade only
Laboratory 2–3 hours
Offered: Variable
Introduction to various aspects of progressive resistance training and cardiovascular enhancing prior fitness activities, e.g., walking, swimming, etc. (Formerly PE/A 211.) [D; CSU; UC]

ES/A 212.
Weight Training and Cardiovascular Activities II
.5–1 unit

Grade only
Prerequisite: *ES/A 211 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Continuing course that provides an opportunity to enhance the student's knowledge of and improve his muscular development and cardiovascular fitness through different fitness activities. (Formerly PE/A 212.) [D; CSU; UC]

ES/A 215ABCD.
The S.T.E.P. Aerobic Workout (Sport Training Exercise) I–IV
1 unit

Laboratory 3 hours
Offered: Variable
Aerobic exercise class that offers cardiovascular benefits as well as improving coordination and rhythm. It is a low impact form of exercise and is safe and effective for all fitness levels. In addition to the cardiovascular conditioning, this class offers a balanced workout that includes flexibility and resistance exercises. (Repeatable three times.) (Formerly PE/A 215ABCD.) [D; CSU; UC]

ES/A 219.
Yoga
1 unit

Grade only
Laboratory 3 hours
Offered: Variable
This course is based on Hatha style yoga. It is a safe, non competitive environment that will guide beginning to advanced students through the postures of yoga. Benefits include increased flexibility, release of muscular tension, prevention of injuries, and improved body awareness. (Repeatable three times.) (Formerly PE/A 219.) [D; CSU; UC]

ES/A 220ABCD.
Lifetime Fitness and Weight Management
2 units

Lecture 1 hour, laboratory 3 hours
Offered: Variable
Evaluates body composition, fundamentals of nutrition, and exercise. Maximizes individual overall health throughout the aging process. Features personalized health and fitness assessment, nautilus weight training, cardiovascular activity. Information on fundamentals of behavior modification, nutrition, and exercise. Includes body composition pre- and post-testing. (Repeatable three times.) (Formerly PE/A 220ABCD.) [D; CSU]

ES/A 222ABCD.
Active for Life
1 unit

Laboratory 3 hours
Offered: Variable
Basic individual training programs, utilizing Micro-Fit Testing-Senior Fitness Test/Nutrition Assessment. Features latest techniques in strength and cardiovascular training. (Repeatable three times.) (Formerly PE/A 222ABCD.) [D; CSU; UC]

ES/A 223ABCD.
Beginning Sailing
.5–2 units

Grade only
Prerequisite: *Demonstrated swimming proficiency*
Recommended Preparation: *ES/A 157 or equivalent*
Lecture .5–1 hour, laboratory 2–3 hours
Offered: Variable
Course for the first time sailor. Content covers safety afloat, self-rescue, man-overboard, basic rigging, boat handling, rules of the road, and sailing nomenclature. (Formerly PE/A 223.) [D; CSU; UC]

ES/A 224.
Intermediate Sailing
.5–2 units

Grade only
Prerequisite: *ES/A 223 or equivalent*
Lecture .5–1 hour, laboratory 2–3 hours
Offered: Variable
Course for the novice sailor seeking more experience. Includes swimming weather and safety skills, self-rescue, signals and boating safety and handling skills. Basic rules of the road, sportsmanship, and sailing courtesy. (Formerly PE/A 224.) [D; CSU; UC]

ES/A 225.
Advanced Sailing
.5–2 units

Grade only
Prerequisite: *ES/A 224 or equivalent*
Lecture .5–1 hour, laboratory 2–3 hours
Offered: Variable
Course for the intermediate sailor seeking experience in beginning racing, rules of the road communication, crew duties, boating safety, race rules, bay and blue water sailing. (Formerly PE/A 225.) [D; CSU; UC]

ES/A 227ABCD.
Aquatic Exercise
.5–1 unit

Recommended Preparation: *ES/A 156 or equivalent*
Laboratory 1.5–3 hours
Offered: Variable
Resistive exercise program to develop cardiovascular fitness through progressive exercise techniques in the water. Shallow and deep water activities providing a full range of movements. (Repeatable three times.) (Formerly PE/A 227ABCD.) [D; CSU; UC]

ES/A 231.
Sea Kayaking I
.5–1.5 units

Grade only
Prerequisite: *Demonstrated swimming proficiency*
Recommended Preparation: *ES/A 156 or equivalent*
Lecture .5–1 hour, laboratory 2–3 hours
Offered: Variable
Introduction to kayaking covering paddling techniques; operation of single and double boats, basic safety, self-rescue and physical training. Involves gentle tours in bay and sloughs with emphasis on conditioning with secondary purposes such as bird watching, photography, and the marine environment. (Formerly PE/A 231.) [D; CSU; UC]

ES/A 232.
Sea Kayaking II
.5–1.5 units

Grade only
Prerequisite: *ES/A 231 or demonstrated swimming proficiency*
Recommended Preparation: *Marine aquatic activities*
Lecture .5–1 hour, laboratory 2–3 hours
Offered: Variable
Explores more challenging aspects of kayaking in populated waters with currents into three knots. Reviews paddle strokes, turns, bracing, rafting, rules of the road, safety considerations in longer trips, and offshore paddling including surf entries and exits. (Formerly PE/A 232.) [D; CSU; UC]

ES/A 233ABCD
Golf Skills Practice
.5–1 unit

Recommended Preparation: *ES/A 147 or prior golf instruction or participation*
Laboratory 1.5–3 hours
Fee: $55. Maximize golf skills, using practice drills and defined practice objectives. How to structure practice sessions for optimal results. Prior golf instruction and participation are recommended. (Repeatable three times.) (Formerly PE/A 233ABCD.) [D; CSU]

ES/A 234.
Kayak Touring Adventures
1 unit

Prerequisite: *ES/A 231 or equivalent*
Laboratory 3 hours
Offered: Variable
Designed to take the students' interest in kayaking from the local aquatics center and introduce them to the various types of kayaking available throughout the western United States. The types of trips include flat water, open sea, river, lake, and whitewater, photography emphasis, oceanography emphasis, bird watching emphasis, fishing emphasis, whale watching emphasis, and snorkeling opportunities. This class will give the students safety procedures, equipment knowledge, and trip planning techniques that would allow them to enjoy their own kayak adventures. (Formerly PE/A 234.) [D; CSU]

ES/A 235.
Lifeguard Training
3 units

Grade only
Prerequisite: *Demonstrated swimming proficiency*
Lecture 2 hours, laboratory 3 hours
Offered: Variable
Designed to prepare students for employment as a lifeguard. Successful completion leads to ARC Certifications in emergency water safety, lifeguard training, responding to emergencies, CPR, and BLS. (Formerly PE/A 235.) [D; CSU; UC]

ES/A 236.
Aquatic Instructor Training
3 units

Grade only
Prerequisite: *Demonstrated swimming Proficiency*
Lecture 2 hours, laboratory 3 hours
Offered: Variable
Course for students interested in developing instructional level skills in the aquatic programs of swimming, water safety, infant and child water adjustment, aquatic exercise, spring board, diving, training and conditioning of competitive swimming and water polo. Successful completion will lead to ARC Certification in ICT, EWS, and WSI. (Formerly PE/A 236.) [D; CSU; UC]

ES/A 242.
Snowboarding
1 unit

Grade only
Laboratory 3 hours
Offered: Spring
Designed to introduce students to snowboard skiing. Resistive exercises will be used to prepare the participant for "on the mountain" skills. Emphasis on safety and etiquette on the mountain while participating in snowboarding. (Formerly PE/A 242.) [D; CSU; UC]

ES/A 245.
Alternatives to Lifetime Fitness
3 units

Grade only
Lecture 2 hours, laboratory 3 hours
Offered: Variable
Introduces students to physical activities which will enhance their vacations while maintaining or improving their fitness. Includes new activities and concepts in lifetime fitness. (Formerly PE/A 245.) [D; CSU]

ES/A 246.
Alternatives for Lifetime Fitness II
3 units

Grade only
Prerequisite: *ES/A 245 or equivalent*
Lecture 2 hours, laboratory 3 hours
Offered: Variable
Prepares students to adjust their physical activity plans to complement the geographic terrain and season climate of the area visited. (Formerly PE/A 246.) [D; CSU; UC]

ES/A 247.
Alternatives for Lifetime Fitness III
3 units

Grade only
Prerequisite: *ES/A 246 or equivalent*
Lecture 2 hours, laboratory 3 hours
Offered: Variable
Prepares students to research, plan, and implement an exercise program for individuals while on vacation. (Formerly PE/A 247.) [D; CSU UC]

ES/A 248.
Alternatives for Lifetime Fitness IV
3 units

Grade only
Prerequisite: ES/A 247 or equivalent
Lecture 2 hours, laboratory 3 hours
Offered: Variable
Prepares students to plan and lead physical activities while on a group tour. (Formerly PE/A 248.) [D; CSU; UC]

ES/A 249ABCD.
Cheerleading Conditioning I–IV
.5–1 unit

Laboratory 2–3 hours
Offered: Variable
Focuses on improving skills in meter and rhythm fundamentals. Movement includes rhythmic marching patterns and choreography geared towards cheerleading. Includes partner stunts and light acrobatics. Course appropriate for all fitness levels. (Repeatable three times.) (Formerly PE/A 249ABCD.) [D; CSU; UC]

ES/A 253.
Spinning Your Way to Fitness I
.5–1 unit

Grade only
Laboratory 2–3 hours
Offered: Variable
No impact form of exercise that allows people of all fitness levels to challenge their capacity by building cardiovascular fitness, skeletal muscular strength, and endurance. (Formerly PE/A 253.) [D; CSU; UC]

ES/A 254.
Spinning Your Way to Fitness II
.5–1 unit

Grade only
Prerequisite: *ES/A 253 or equivalent*
Laboratory 2–3 hours
Offered: Variable
No impact form of exercise that allows people of all fitness levels to challenge their capacity by building cardiovascular fitness, skeletal muscular strength, and endurance. (Formerly PE/A 254.) [D; CSU; UC]

ES/A 255.
Spinning Your Way to Fitness III
.5–1 unit

Grade only
Prerequisite: *ES/A 254 or equivalent*
Laboratory 2–3 hours
Offered: Variable
No impact form of exercise that allows people of all fitness levels to challenge their capacity by building cardiovascular fitness, skeletal muscular strength, and endurance. (Formerly PE/A 255.) [D; CSU; UC]

ES/A 256.
Spinning Your Way to Fitness IV
.5–1 unit

Grade only
Prerequisite: *ES/A 255 or equivalent*
Laboratory 2–3 hours
Offered: Variable
No impact form of exercise that allows people of all fitness levels to challenge their capacity by building cardiovascular fitness, skeletal muscular strength, and endurance. (Formerly PE/A 256.) [D; CSU; UC]

ES/A 257AB.
Taekwondo I
.5–1 unit

Laboratory 1.5–3 hours
Offered: Variable
Korean martial art providing mental and physical training through the "way of kicking and punching." Focuses on developing lifelong skills to enhance one's personal life by living in harmony. (Repeatable one time.) (Formerly PE/A 257AB.) [D; CSU; UC]

ES/A 258.
Taekwondo II
.5–1 unit

Grade only
Prerequisite: *ES/A 257AB or equivalent*
Laboratory 2–3 hours
Offered: Variable
Intermediate taekwondo enables the student to learn more technically progressive techniques. Emphasis on building more stamina, endurance, and flexibility upon training at this level. (Formerly PE/A 258.) [D; CSU; UC]

ES/A 259.
Taekwondo III
.5–1 unit

Grade only
Prerequisite: *ES/A 258 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Advanced taekwondo enables the student to begin working on the spiritual and moral side of his/her life compared to earlier physical training. A higher emphasis on building a strong character base to advance to leadership levels. (Formerly PE/A 259.) [D; CSU; UC]

ES/A 260.
Water Polo I
.5–1 unit

Laboratory 1.5–3 hours
Offered: Variable
For the novice water polo player, stressing swimming stroke technique, passing, shooting, fundamentals of water polo, and class competition. (Formerly PE/A 260.) [D; CSU; UC]

ES/A 261.
Water Polo II
.5–1 unit

Laboratory 1.5–3 hours
Offered: Variable
Emphasizing fundamental skills of ball control, ball pick up off the water, and changing directions. Introduces stop and go, pass and go, and goalkeeper skills. (Formerly PE/A 261.) [D; CSU; UC]

ES/A 262.
Water Polo III
.5–1 unit

Laboratory 1.5–3 hours
Offered: Variable
Focuses on execution of sound fundamental skills and the development of bilateral shooting, lay-out, back hand, and long pass. Experience in two-meter, switch and pick defensive skills. (Formerly PE/A 262.) [D; CSU; UC]

ES/A 263.
Water Polo IV
.5–1 unit

Laboratory 1.5–3 hours
Offered: Variable
Analysis and application to strategies, techniques, and competition. Advanced multi-offensive and defensive systems of collegiate water polo. (Formerly PE/A 263.) [D; CSU; UC]

ES/A 295.
Selected Topics in Exercise Science
1–3 units

Offered: Variable
Permits students to study relevant subjects within the field of exercise science. The specific objectives, methods of instruction, and units of credit to be determined individually for projects proposed under this course description. (May be repeated for additional credit with new content.) (Formerly PE/A 295.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

ES/A 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual research or study in some facet of exercise science of interest to the student and not included in the regular courses offered by the college. (Formerly PE/A 299.) [D; CSU; * UC]

* *UC Limitation: credit for variable topics courses in given only after a review of the scope and content of the courses by the enrolling UC campus.*

Exercise Science—Intercollegiate Courses

INTERCOLLEGIATE ATHLETICS (ES/I)
Grade only
Daily afternoon practice for a minimum of ten hours per week. Intercollegiate athletics meet the exercise science requirement at Southwestern college. [D; CSU; UC]

Baseball 101–103.	(Spring)	2 units
Basketball 104–109	(Fall/Spring)	*1 unit
Cross Country 110–112	(Fall)	*2 units
Football 113–115	(Fall)	2 units
Soccer 116–118	(Fall)	*2 units
Tennis 122–124	(Spring)	*2 units
Track and Field 125–127	(Spring)	*2 units
Volleyball 128–130	(Fall)	2 units
Softball 131–133	(Spring)	2 units
Water Polo 134–36	(Fall)	*2 units

* *Indicates both men and women.*

Exercise Science—Limited Courses

ES/L 101A.
Adapted Sport Activities I
.5–1 unit

Prerequisite: *Level of physical strength and agility sufficient to avoid injury to the student and others in course activities*
Laboratory 2–3 hours
Offered: Variable
Designed to provide instruction and supervision in one of the following sports each term: basketball, badminton, bowling, indoor softball, and indoor wheelchair soccer.
(Formerly PE/L 101A.) [D; CSU; UC]

EL/L 101B.
Adapted Sport Activities II
.5–1 unit

Prerequisite: *ES/L 101A and level of physical strength and agility sufficient to avoid injury to the student and others in course activities*
Laboratory 2–3 hours
Offered: Variable
Designed to provide instruction and supervision in one of the following sports each term: basketball, badminton, bowling, indoor softball, and indoor wheelchair soccer. Includes skills, strategy, and rules. (Formerly PE/L 101B.)
[D; CSU; UC]

ES/L 101C.
Adapted Sport Activities III
.5–1 unit

Prerequisite: *ES/L 101B and level of physical strength and agility sufficient to avoid injury to the student and others in course activities*
Laboratory 2–3 hours
Offered: Variable
Designed to provide instruction and supervision in one of the following sports each term: basketball, badminton, bowling, indoor softball, and indoor wheelchair soccer. Includes skills, strategy, and rules. (Formerly PE/L 101C.)
[D; CSU; UC]

ES/L 101D.
Adapted Sport Activities IV
.5–1 unit

Prerequisite: *ES/L 101C and level of physical strength and agility sufficient to avoid injury to the student and others in course activities*
Laboratory 2–3 hours
Offered: Variable
Designed to provide instruction and supervision in one of the following sports each term: basketball, badminton, bowling, indoor softball, and indoor wheelchair soccer. Includes skills, strategy, and rules. (Formerly PE/L 101D.)
[D; CSU; UC]

ES/L 113A.
Adapted Personalized Fitness I
1–1.5 units

Prerequisite: *Level of physical strength and agility sufficient to avoid injury to the student and others in course activities*
Laboratory 3–4 hours
Offered: Variable
Designed for students with disabilities. Exercise class designed to utilize the Nautilus and cardio equipment. General flexibility, strengthening, and muscular endurance along with body maintenance and cardiovascular conditioning. (Formerly PE/L 113A.) [D; CSU; UC]

ES/L 113B.
Adapted Personalized Fitness II
1–1.5 units

Prerequisite: *ES/L 113A and level of physical strength and agility sufficient to avoid injury to the student and others in course activities*
Laboratory 3–4 hours
Offered: Variable
Designed for students with disabilities. Exercise class designed to utilize the Nautilus and cardio equipment. General flexibility, strengthening, and muscular endurance along with body maintenance and cardiovascular conditioning. (Formerly PE/L 113B.) [D; CSU; UC]

ES/L 113C.
Adapted Personalized Fitness III
1–1.5 units

Prerequisite: *ES/L 113B and level of physical strength and agility sufficient to avoid injury to the student and others in course activities*
Laboratory 3–4 hours
Offered: Variable
Designed for students with disabilities. Exercise class designed to utilize the Nautilus and cardio equipment. General flexibility, strengthening, and muscular endurance along with body maintenance and cardiovascular conditioning. (Formerly PE/L 113C.) [D; CSU; UC]

ES/L 113D.
Adapted Personalized Fitness IV
1–1.5 units

Prerequisite: *ES/L 113C and level of physical strength and agility sufficient to avoid injury to the student and others in course activities*
Laboratory 3–4 hours
Offered: Variable
Designed for students with disabilities. Exercise class designed to utilize the Nautilus and cardio equipment. General flexibility, strengthening, and muscular endurance along with body maintenance and cardiovascular conditioning. (Formerly PE/L 113D.) [D; CSU; UC]

ES/L 121A.
Adapted Aquatic Fitness I
.5–1 unit

Prerequisite: *Level of physical strength and agility sufficient to avoid injury to the student and others in course activities*
Laboratory 2–3 hours
Offered: Variable
Provides the disabled individual with water-resistive exercises of strength and flexibility, endurance, and cardiovascular improvement utilizing total body workout in the shallow end of the pool. (Formerly PE/L 121A.)
[D; CSU; UC]

ES/L 121B.
Adapted Aquatic Fitness II
.5–1 unit

Prerequisite: *ES/L 121A and level of physical strength and ability sufficient to avoid injury to the student and others in course activities*
Laboratory 2–3 hours
Offered: Variable
Provides the disabled individual with water-resistive exercises of strength and flexibility, endurance, and cardiovascular improvement utilizing total body workout in the shallow end of the pool. (Formerly PE/L 121B.)
[D; CSU; UC]

ES/L 121C.
Adapted Aquatic Fitness III
.5–1 unit

Prerequisite: *ES/L 121B and level of physical strength and ability sufficient to avoid injury to the student and others in course activities*
Laboratory 2–3 hours
Offered: Variable
Provides the disabled individual with the opportunity to continue development of water-resistive exercises of strength and flexibility, endurance, and cardiovascular improvement utilizing total body workout in the shallow end of the pool. (Formerly PE/L 121C.)
[D; CSU; UC]

ES/L 121D.
Adapted Aquatic Fitness IV
.5–1 unit

Prerequisite: *ES/L 121C and level of physical strength and ability sufficient to avoid injury to the student and others in course activities*
Laboratory 2–3 hours
Offered: Variable
Provides the disabled individual with continued opportunity to exercise with water-resistive exercises of strength and flexibility, endurance, and cardiovascular improvement utilizing total body workout in the shallow end of the pool. (Formerly PE/L 121D.) [D; CSU; UC]

Exercise Science—Theory Courses

ES/L 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual research or study in some facet of exercise science of interest to the student and not included in the regular courses offered by the college. (Formerly PE/L 299.) [D; CSU; * UC]

** UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

ES/T 108.
Theory and Application of Conditioning: Basketball I
.5–1 unit

Grade only
Laboratory 2–3 hours
Offered: Variable
Conditioning for athletics with stress on weight lifting, running, skill development games, and individual development for sports.
(Formerly PE/T 108.) [D; CSU; UC]

ES/T 109.
Theory and Application of Conditioning: Basketball II
.5–1 unit

Grade only
Prerequisite: *ES/T 108 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Develops the physical and mental skills needed to participate in competitive sports activities.
(Formerly PE/T 109.) [D; CSU; UC]

ES/T 110.
Theory and Application of Conditioning: Basketball III
.5–1 unit

Grade only
Prerequisite: *ES/T 109 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Application of knowledge and understanding of the biomechanics of human motion through the use of film and video analysis for the improvement of advanced sports skills.
(Formerly PE/T 110.) [D; CSU; UC]

ES/T 111.
Theory and Application of Conditioning: Baseball
.5–1 unit

Grade only
Laboratory 2–3 hours
Offered: Variable
Conditioning for athletics with stress on weight lifting, running, skill development games, and individual development for sports.
(Formerly PE/T 111.) [D; CSU; UC]

ES/T 112.
Theory and Application of Conditioning: Baseball II
.5–1 unit

Grade only
Prerequisite: *ES/T 111 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Develops the physical and mental skills needed to participate in competitive sports activities.
(Formerly PE/T112.) [D; CSU; UC]

ES/T 113.
Theory and Application of Conditioning: Baseball III
.5–1 unit

Grade only
Prerequisite: *ES/T 112 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Application of knowledge and understanding of the biomechanics of human motion through the use of film and video analysis for the improvement of advanced sports skills.
(Formerly PE/T 113.) [D; CSU; UC]

ES/T 114.
Theory and Application of Conditioning: Football I
.5–1 unit

Grade only
Laboratory 2–3 hours
Offered: Variable
Conditioning for athletics with stress on weight lifting, running, skill development games, and individual development for sports.
(Formerly PE/T 114.) [D; CSU; UC]

ES/T 115.
Theory and Application of Conditioning: Football II
.5–1 unit

Grade only
Prerequisite: *ES/T 114 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Develops the physical and mental skills needed to participate in competitive sports activities.
(Formerly PE/T 115.) [D; CSU; UC]

ES/T 116.
Theory and Application of Conditioning: Football III
.5–1 unit

Grade only
Prerequisite: *ES/T 115 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Application of knowledge and understanding of the biomechanics of human motion through the use of film and video analysis for the improvement of advanced sports skills.
(Formerly PE/T 116.) [D; CSU; UC]

ES/T 117.
Theory and Application of Conditioning: Tennis I
.5–1 unit

Grade only
Laboratory 2–3 hours
Offered: Variable
Conditioning for athletics with stress on weight lifting, running, skill development games, and individual development for sports.
(Formerly PE/T 117.) [D; CSU; UC]

ES/T 118.
Theory and Application of Conditioning: Tennis II
.5–1 unit

Grade only
Prerequisite: *ES/T 117 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Develops the physical and mental skills needed to participate in competitive sports activities.
(Formerly PE/T 118.) [D; CSU; UC]

ES/T 119.
Theory and Application of Conditioning: Tennis III
.5–1 unit

Grade only
Prerequisite: *ES/T 118 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Application of knowledge and understanding of the biomechanics of human motion through the use of film and video analysis for the improvement of advanced sports skills.
(Formerly PE/T 119.) [D; CSU; UC]

ES/T 120.
Theory and Application of Conditioning: Volleyball I
.5–1 unit

Grade only
Laboratory 2–3 hours
Offered: Variable
Conditioning for athletics with stress on weight lifting, running, skill development games, and individual development for sports.
(Formerly PE/T 120.) [D; CSU; UC]

ES/T 121.
Theory and Application of Conditioning: Volleyball II
.5–1 unit

Grade only
Prerequisite: *ES/T 120 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Develops the physical and mental skills needed to participate in competitive sports activities.
(Formerly PE/T 121.) [D; CSU; UC]

ES/T 122.
Theory and Application of Conditioning: Volleyball III
.5–1 unit

Grade only
Prerequisite: *ES/T 121 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Application of knowledge and understanding of the biomechanics of human motion through the use of film and video analysis for the improvement of advanced sports skills.
(Formerly PE/T 122.) [D; CSU; UC]

ES/T 123.
Theory and Application of Conditioning: Soccer I
.5–1 unit

Grade only
Laboratory 2–3 hours
Offered: Variable
Conditioning for athletics with stress on weight lifting, running, skill development games, and individual development for sports.
(Formerly PE/T 123.) [D; CSU; UC]

ES/T 124.
Theory and Application of Conditioning: Soccer II
.5–1 unit

Grade only
Prerequisite: *ES/T 123 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Develops the physical and mental skills needed to participate in competitive sports activities.
(Formerly PE/T 124.) [D; CSU; UC]

ES/T 125.
Theory and Application of Conditioning: Soccer III
.5–1 unit

Grade only
Prerequisite: *ES/T 124 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Application of knowledge and understanding of the biomechanics of human motion through the use of film and video analysis for the improvement of advanced sports skills.
(Formerly PE/T 125.) [D; CSU; UC]

ES/T 126.
Theory and Application of Conditioning: Track and Field I
1 unit

Grade only
Laboratory 3 hours
Offered: Variable
Designed to properly condition students in preparation for competing on a track team. Involves a gradual build up of cardiorespiratory fitness, muscle strength, flexibility, and power.
(Formerly PE/T 126.) (D; CSU; UC]

ES/T 127.
Theory and Application of Conditioning: Track and Field II
1 unit

Grade only
Prerequisite: *ES/T 126 or equivalent*
Laboratory 3 hours
Offered: Variable
Designed to properly condition students in preparation for competing on a track team. Involves a gradual build up cardiorespiratory fitness, muscle strength, flexibility, and power.
(Formerly PE/T 127.) (D; CSU; UC]

ES/T 128.
Theory and Application of Conditioning: Track and Field III
1 unit

Grade only
Prerequisite: *ES/T 127 or equivalent*
Laboratory 3 hours
Offered: Variable
Designed to properly condition students in preparation for competing on a track team. Involves a gradual build up cardiorespiratory fitness, muscle strength, flexibility, and power.
(Formerly PE/T 128.) (D; CSU; UC]

ES/T 129.
Theory and Application of Conditioning: Cross Country I
.5–1 unit

Grade only
Laboratory 2–3 hours
Offered: Variable
Conditioning for athletics with stress on weight lifting, running, skill development games, and individual development for sports.
(Formerly PE/T 129.) [D; CSU; UC]

ES/T 130.
Theory and Application of Conditioning: Cross Country II
.5–1 unit

Grade only
Prerequisite: *ES/T 129 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Develops the physical and mental skills needed to participate in competitive sports activities.
(Formerly PE/T 130.) [D; CSU; UC]

ES/T 131.
Theory and Application of Conditioning: Cross Country III
.5–1 unit

Grade only
Prerequisite: *ES/T 130 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Application of knowledge and understanding of the biomechanics of human motion through the use of film and video analysis for the improvement of advanced sports skills.
(Formerly PE/T 131.) [D; CSU; UC]

ES/T 132.
Theory and Application of Conditioning: Softball I
.5–1 unit

Grade only
Laboratory 2–3 hours
Offered: Variable
Conditioning for athletics with stress on weight lifting, running, skill development games, and individual development for sports.
(Formerly PE/T 132.) [D; CSU; UC]

ES/T 133.
Theory and Application of Conditioning: Softball II
.5–1 unit

Grade only
Prerequisite: *ES/T 132 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Develops the physical and mental skills needed to participate in competitive sports activities.
(Formerly PE/T 133.) [D; CSU; UC]

ES/T 134.
Theory and Application of Conditioning: Softball III
.5–1 unit

Grade only
Prerequisite: *ES/T 133 or equivalent*
Laboratory 2–3 hours
Offered: Variable
Application of knowledge and understanding of the biomechanics of human motion through the use of film and video analysis for the improvement of advanced sports skills. (Formerly PE/T 134.) [D; CSU; UC]

ES/T 135.
Introduction to Exercise Physiology
2 units

Grade only
Lecture 2 hours
Offered: Variable
Designed to study how the body functions under exercise stress and how fitness behaviors affect health and wellness. Emphasis on muscular, cardiorespiratory, and other physiological processes that occur as a result of exercise, conditioning, and the effects of disease. (Formerly PE/T 135.) [D; CSU; UC]

ES/T 136.
Techniques of Weight Training
2 units

Grade only
Lecture 1.5 hours, laboratory 1.5 hours
Offered: Variable
Designed to provide a through review for those intending to teach weight training. Covers anatomy and physiology, training sequences, available equipment, and safety factors including contraindications. (Formerly PE/T 136.) [D; CSU]

ES/T 137.
Exercise for Special Populations
2 units

Grade only
Lecture 2 hours
Offered: Variable
Designed to study the exercise implications for special populations related to age, medical condition, and level of fitness. Topics include cardiac conditions, diabetes, physical disabilities, other ailments, children, seniors, athletes, pregnant and postpartum women, and barriers to exercise. (Formerly PE/T 137.) [D; CSU]

ES/T 138.
Techniques of Exercise Leadership
2 units

Grade only
Lecture 1.5 hours, laboratory 1.5 hours
Offered: Variable
Designed to study the principles and techniques involved in teaching group exercise and developing a personal trainer and client relationship. Emphasis on client assessment, communication skills, program design, exercise adherence, teaching strategies, and professional responsibility and liability. (Formerly PE/T 138.) [D; CSU]

ES/T 139.
Fitness Specialist Internship
3 units

Grade only
Lecture 1 hour, laboratory 6 hours
Offered: Variable
Designed to provide students with practical experience in the field of exercise and fitness. Emphasis on participant screening, evaluation and exercise program design, self–marketing fitness specialist/client relationships, and professional responsibility in a fitness setting. (Formerly PE/T 139.) [D; CSU]

ES/T 140.
Introduction to Applied Kinesiology
2 units

Grade only
Lecture 2 hours
Offered: Variable
Covers arthrology (study of joints), osteology (bone) and myology (muscles) with special emphasis on movement analysis. Emphasis on anatomical and mechanical analysis of motion as it pertains to movement in sport and exercise.(Formerly PE/T 140.) [D; CSU]

ES/T 141.
Theory and Application of Conditioning: Water Polo I
.5–1 unit

Laboratory 1.5–3 hours
Offered: Variable
Preparing for water polo competitions. Stressing weight lifting, running, skill development, and class competition. (Formerly PE/T 141.) [D; CSU; UC]

ES/T 142.
Theory and Application of Conditioning: Water Polo II
.5–1 unit

Laboratory 1.5–3 hours
Offered: Variable
Preparing to participate in water polo. Focuses on weight lifting, running, skill development, and class competition. (Formerly PE/T 142.) [D; CSU; UC]

ES/T 143.
Theory and Application of Conditioning: Water Polo III
.5–1 unit

Grade only
Laboratory 1.5–3 hours
Offered: Variable
Preparing to participate in water polo. Focuses on weight lifting, running, skill development, individual development, and class competition. (Formerly PE/T 143.) [D; CSU; UC]

ES/T 144.
Theory and Application of Conditioning: Water Polo IV
.5–1 unit

Grade only
Laboratory 1.5–3 hours
Offered: Variable
Designed for the student to have the opportunity to prepare and participate in the sport of water polo with stress on weight lifting, running, skill development, individual development, and in class competition. (Formerly PE/T 144.) [D; CSU; UC]

ES/T 200.
Physical Education for Elementary School
2 units

Grade only
Lecture 1 hour, laboratory 3 hours
Offered: Variable
State-recommended program in physical education for the elementary school teacher including methods and techniques of teaching, planning, conducting physical education programs, and selection of age appropriate wellness and motor skill materials. (Formerly PE/T 200.) [D; CSU]

ES/T 202.
Introduction to Physical Education
3 units

Lecture 3 hours
Offered: Variable
History and principles of physical education and sports. Study of the objectives of modern physical education with a view toward the development of a basic philosophy and background for professional education. (Formerly PE/T 202.) [D; CSU; UC]

ES/T 204.
The Theory and Technical Analysis of Offensive Football
2 units

Grade only
Lecture 2 hours
Offered: Variable
Designed for those interested in increasing their knowledge of the offensive aspects of football. (Formerly PE/T 1204) [D; CSU; UC]

ES/T 205.
Theory and Technical Analysis of Defensive Football
2 units

Grade only
Lecture 2 hours
Offered: Variable
Designed for those interested in increasing their knowledge of the defensive aspects of football. (Formerly PE/T 205.) [D; CSU; UC]

ES/T 206AB.
Theory and Technical Analysis of Offensive Basketball
2 units

Grade only
Lecture 2 hours
Offered: Variable
Enhance student's knowledge of offensive basketball. Analyzing film of various offensive basketball strategies. (Repeatable one time.) (Formerly PE/T 206.) [D; CSU; UC]

ES/T 207AB.
Theory and Technical Analysis of Defensive Basketball
2 units

Grade only
Lecture 2 hours
Offered: Variable
Enhance student's knowledge of defensive basketball; includes video analysis of various defensive basketball strategies. (Repeatable one time.) (Formerly PE/T 207.) [D; CSU; UC]

ES/T 250.
Prevention and Care of Athletic Injuries
2 units

Lecture 1 hours, laboratory 3 hours
Offered: Variable
Addresses the fundamentals of elementary human anatomy and their relationship to athletic activity. Primary focus will be on the prevention and recognition of common athletic injuries including the theory and practice of emergency field care. The treatment and rehabilitation of athletic injuries will also be discussed. Bandaging and/or taping techniques will be practiced in the laboratory. (Formerly PE/T 250.) [D; CSU]

ES/T 295.
Selected Topics in Exercise Science
1–3 units

Offered: Variable
Permits students to study relevant subjects within the field of exercise science. The specific objectives, methods of instruction, and units of credit to be determined individually for projects proposed under this course description. (May be repeated for additional credit with new content.) (Formerly PE/T 295.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

ES/T 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual research or study in some facet of exercise science of interest to the student and not included in the regular courses offered by the college. (Formerly PE/T 299.) [D; CSU; * UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Fire Science Technology

School of Technology and Human Services

■ Dean

Patricia Axsom, M.S.
Room 570B
619-482-6460

■ Department Chair

Edward Selby, A.S.

General Description

Today, fire service personnel are faced with a diverse and complex environment. Fire fighters must possess sufficient knowledge and skills to deal effectively with the fire protection problem, emergency medical care response, and hazardous materials. The study of fire science includes the philosophy, history, chemistry, physics, laws, terminology, technology and detection, and prevention of fires.

Career Options

The following is a sample of the many career options available to the fire science major. Most require a certificate or associate degree and graduation from a fire academy. Positions are available in state and federal agencies and private industry. Careers in fire protection include public fire service, fire protection and engineering, and education. Openings occur each year in fire service and related fields for men and women who possess the proper education and qualifications.

Degree/Certificate Options

	Major Code
Associate in Science Degree: Career/Technical	
Fire Science Technology	*02845*
Certificate of Achievement	
Fire Science Technology	*02846*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Science Degree
Fire Science Technology

Career/Technical (Major Code: 02845)

Provides training in the theory and practice of fire technology, the fire service, and the fire protection field. It is designed to enhance qualifications for entry into the fire service, for preparation for entry-level hiring examinations, and for current firefighters wishing to complete a degree in fire technology.

FS 101	*Fire Protection Organization*	*3*
FS 102	*Fire Behavior and Combustion*	*3*
FS 103	*Fire Prevention Technology*	*3*
FS 104	*Fire Protection Equipment and Systems*	*3*
FS 106	*Building Construction for Fire Protection*	*3*
Select 20 units from electives		*20*
	Total units	***35***

Electives: *AJ 30; FS 110, 125, 126, 135, 136, 140, 141, 145, 150, 151, 290, 295, 299.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Certificate of Achievement
Fire Science Technology

Career/Technical (Major Code: 02846)

FS 101	*Fire Protection Organization*	*3*
FS 102	*Fire Behavior and Combustion*	*3*
FS 103	*Fire Prevention Technology*	*3*
FS 104	*Fire Protection Equipment and Systems*	*3*
FS 106	*Building Construction for Fire Protection*	*3*
Select 20 units from electives		*20*
	Total units	***35***

Electives: *AJ 30; FS 110, 125, 126, 135, 136, 140, 141, 145, 150, 151, 290, 295, 299.*

Fire Science Courses

FS 10.
Skills Preparation for Fire Services
3 units

Grade only
Lecture 3 hours
Offered: Spring
Extensive overview of the various testing phases of the fire service. Designed to build self-confidence and give the students valuable information to be competitive in the fire service. Each student will go through simulated testing procedures and experience the testing challenges of fire departments. Highly recommended for any student participating in the entrance exams given by fire departments. [ND]

FS 101.
Fire Protection Organization
3 units

Lecture 3 hours
Offered: Variable
Introduction to the following: career opportunities in fire protection and related fields; philosophy and history of fire protection; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics. [D; CSU]

FS 102.
Fire Behavior and Combustion
3 units

Recommended Preparation: *FS 101 or equivalent*
Lecture 3 hours
Offered: Variable
Theory and fundamentals of how and why fires start, spread, and are controlled. In-depth study of fire chemistry and physics, fire characteristics of materials, extinguishing agents, and fire control techniques. [D; CSU]

FS 103.
Fire Prevention Technology
3 units

Grade only
Recommended Preparation: *FS 101 or equivalent*
Lecture 3 hours
Offered: Variable
Provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationship of fire prevention with fire safety education and detection and suppression systems. [D; CSU]

FS 104.
Fire Protection Equipment and Systems
3 units

Grade only
Recommended Preparation: *FS 101 or equivalent*
Lecture 3 hours
Offered: Variable
Provides information relating to the features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems; water supply for fire protection, and portable fire extinguishers. [D; CSU]

FS 106.
Building Construction for Fire Protection
3 units

Grade only
Recommended Preparation: *FS 101 or equivalent*
Lecture 3 hours
Offered: Variable
Components of building construction related to fire safety, including elements of construction and design, preplanning fire operations, and operating at fires. Emphasis on building and fire codes for residential, commercial and industrial occupancies. [D; CSU]

FS 110.
Hazardous Materials
3 units

Grade only
Recommended Preparation: *FS 101 or equivalent*
Lecture 3 hours
Offered: Variable
Introduction to hazardous chemicals, including their physical properties, uses in industry, and characteristics when involved in spills, fires, and accidents. Basic information regarding emergency procedures, legal requirements compliance with regulations, health effects and treatment, and fire department protocols and responsibilities. [D; CSU]

FS 125.
Fire Prevention 1A
2 units

Lecture 2 hours
Offered: Variable
Organization and function of fire prevention, inspections, surveying and mapping procedures, recognition of fire and life hazards, engineering a solution of a fire hazard, enforcing solutions of a fire hazard, public relations as affected by fire prevention. [D; CSU]

FS 126.
Fire Prevention 1B
2 units

Prerequisite: *FS 125 or equivalent*
Lecture 2 hours
Offered: Variable
Provides fire service personnel with technical training on factors relating to life safety; fire protection and life safety considerations in buildings; purposes and location of rated building construction; general fire safety practices; requirements for decorations and furnishings; fire doors, windows and shutters; means of egress; exits; occupant loads; enclosed stairwells; sprinkler systems; stand pipe and hose system. [D; CSU]

FS 135.
Fire Command 1A
2 units

Prerequisite: *FS 200 or equivalent*
Lecture 2 hours
Offered: Variable
Provides instruction and simulation in command principles for company officers pertaining to the initial decision and action process at a working fire. Includes areas of discussion on the fire officer, fire behavior, fire-ground resources, operations, and management. [D; CSU]

FS 136.
Fire Command 1B
2 units
Prerequisite: *FS 135 or equivalent*
Lecture 2 hours
Offered: Variable
The second part of a two-part series on fire command. Designed to instruct students in the identification of factors affecting a fire department response to emergency incidents, managerial techniques needed to control fire department operations, and simulations of fire-related activities. [D; CSU]

FS 140.
Fire Investigation 1A
2 units

Lecture 2 hours
Offered: Variable
Provides the participants with an introduction and basic overview of fire scene investigation. Provides information on fire scene indicators and introduces fire personnel to concepts of investigation. [D; CSU]

FS 141.
Fire Investigation 1B
2 units

Prerequisite: FS 140 or equivalent
Lecture 2 hours
Offered: Variable
Provides the participants with information to achieve a deeper understanding of fire investigation. Builds on Investigation 1A. Topics of discussion include the juvenile fire-setter, report writing, evidence collection, and preservation procedures. [D; CSU]

FS 145.
Fire Management I (Supervision)
2 units

Lecture 2 hours
Offered: Variable
Designed to prepare or enhance the first line supervisor's ability to supervise subordinates. Introduces key management concepts and practices utilized in the California Fire Service. Includes discussions about decision making, time management, leadership styles, personnel evaluations, and counseling guidelines. [D; CSU]

FS 150.
Fire Instructor 1A
2 units

Lecture 2 hours
Offered: Variable
First of a two-course series and the standard State Board of Fire Services accredited course as offered in community colleges. Includes the occupational analysis, course outlines, concepts of learning, levels of instruction, behavioral objectives, using lesson plans, the psychology of learning, and evaluation of effectiveness. Activities include student-teaching demonstrations. [D; CSU]

FS 151.
Fire Instructor 1B
2 units

Recommended Preparation: *FS 150 or equivalent*
Lecture 2 hours
Offered: Variable
Second of a two-course series and the Standard State Board of Fire Services accredited course as offered in community colleges. Includes preparing course outlines, establishing levels of instruction, constructing behavioral objectives and lesson plans, instructional aid development, fundamentals of testing and measurements, test planning, evaluation techniques and tools. Activities include student-teaching demonstrations. [D; CSU]

FS 200.
Incident Command System
1 unit

Lecture 1 hour
Offered: Variable
Introduction and overview of the Fire Incident Command System. (ICS) [D; CSU]

FS 290–293.
Fire Science Cooperative Work Exp. I–IV
2–4 units

Grade only
Prerequisite: *FS 101 or equivalent*
Limitation on Enrollment: *Declared Fire Science major. Student must complete no less than seven units, including work experience, during each semester in order to receive credit*
Lecture 1 hour, laboratory 5–15 hours
Offered: Variable
Fire Science students will work in a fire station performing skills for which they have been certified or demonstrated competence. Field performance will be supervised and evaluated by a fire captain. [D; CSU]

FS 295.
Selected Topics in Fire Science
1–3 units

Offered: Variable
Permits students to study relevant subjects within the field of fire science. The specific objectives, methods of instruction, and units of credit to be determined individually for courses proposed under this description. (Same course as County FS X–6 5.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

FS 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Independent study or research in some area of fire science of particular interest to the student and not included in regular courses of the college. (Same course as County FS X-65.) [D; CSU]

Foreign Language

School of Languages and Humanities

■ Dean

Renee M. Kilmer, Ph.D.
Office 430J
619-482-6461

■ Faculty

Deana Alonso, M.A.
Esther Alonso, M.A.
Margarita Andrade-Robledo, M.A.
Concetta Calandra, M.A.
Pamela Ellis, M.A.
Dinorah Guadiana-Costa, M.A.
Angelina Stuart, M.A.

■ Department Chair

Esther Alonso, M.A.

General Description

The study of any foreign or nonnative language encompasses the acquisition of a language with an understanding of the culture that produces the unique form of communication. Each department offered explores the fundamentals of oral and written communication such as reading, writing, speaking, and listening while introducing the literature and cultural traditions of the language. Foreign language programs are a cultural resource to the college at large and community in general.

Career Options

The following list is a sample of the many career options available for the foreign language major. A few of these require an associate degree, most require a baccalaureate degree, and some require a graduate-level degree: high school or college instructor, interpreter, translator, foreign service officer, research assistant, international business person, airline agent, immigration officer, customs official, television/radio or newspaper correspondent, business administrator, business manager, business owner, airline attendant, cruise ship officer, public relations specialist, and banking representative.

Foreign Language Courses Offered at SWC

(SEE SEPARATE LISTING FOR EACH LANGUAGE IN THIS CATALOG)

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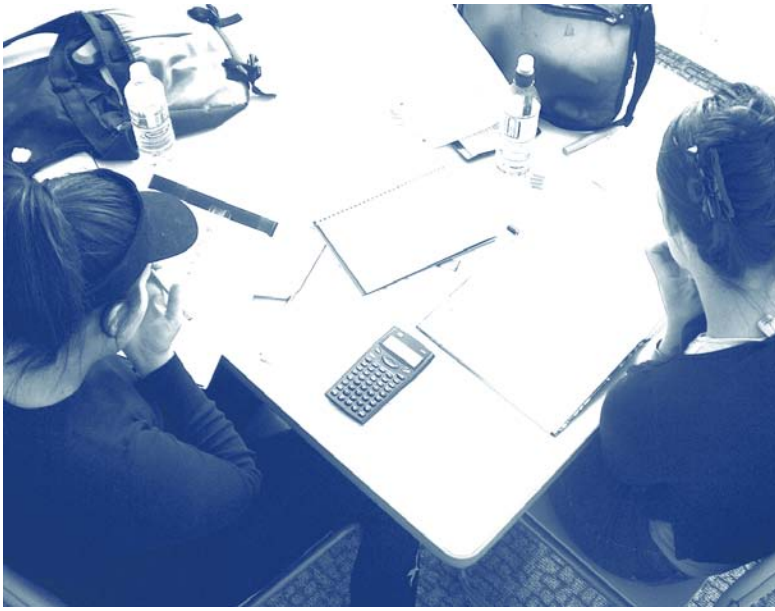

French

School of Languages and Humanities

■ Dean

Renee M. Kilmer, Ph.D., Dean
Office 430J
619-482-6461

■ Faculty

Pamela Ellis, M.A.

■ Department Chair

Esther Alonso, M.A.

General Description

The study of any foreign or nonnative language encompasses the acquisition of a language with an understanding of the culture that produces the unique form of communication. Each department offered explores the fundamentals of oral and written communication such as reading, writing, speaking, and listening while introducing the literature and cultural traditions of the language. Foreign language programs are a cultural resource to the college at large and community in general.

Career Options

The following list is a sample of the many career options available for the foreign language major. A few of these require an associate degree, most require a baccalaureate degree, and some require a graduate-level degree: high school or college instructor, interpreter, translator, foreign service officer, research assistant, international business person, airline agent, immigration officer, customs official, television/radio or newspaper correspondent, business administrator, business manager, business owner, airline attendant, cruise ship officer, public relations specialist, and banking representative.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
French	*01410*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Arts Degree
French

Transfer Preparation * (Major Code: 01410)

Foreign language courses are intended: 1) to provide required instruction for students majoring in foreign language; 2) to meet the foreign language competency for graduation required by many colleges and universities (e.g., San Diego State University); 3) to afford credit in the humanities for students seeking to meet the General Education transfer breadth requirements; 4) to provide instruction for the student seeking foreign language skills for personal development.

FIRST SEMESTER		
FREN 120	*Elementary French I*	*5*
SECOND SEMESTER		
FREN 130	*Elementary French II*	*5*
THIRD SEMESTER		
FREN 220	*Intermediate French*	*5*
FOURTH SEMESTER		
FREN 230	*Intermediate French II*	*5*
	Total units	***20***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 43 for further information.**

French Courses

FREN 120.
Elementary French I
5 units

Lecture 5 hours
Offered: Fall, Spring
A beginning course in French in which students learn to communicate in written and oral format using basic language structure, vocabulary, and expressions; students are introduced to Francophone culture via simple readings in French, film and interactive activities and projects. Equivalent to two years of high school French. [D; CSU; UC; CAN-FREN 2;
FREN 120 + FREN 130 = CAN FREN SEQ A]

FREN 130.
Elementary French II
5 units

Prerequisite: *FREN 120 or equivalent*
Lecture 5 hours
Offered: Fall, Spring
Expands coursework presented in FREN 120. Designed to further develop students' knowledge and understanding of the French language and Francophone cultures. Students will learn the structures and vocabulary necessary to converse, read, and write about present and past experiences. Readings, videos, Web-based activities, and lab assignments will further augment students' knowledge of Francophone culture. Equivalent to three years high school French. [D; CSU; UC; CAN-FREN 4;
FREN 120 + FREN 130 = CAN FREN SEQ A]

FREN 220.
Intermediate French I
5 units

Prerequisite: *FREN 130 or equivalent*
Lecture 5 hours
Offered: Variable
Provides students an opportunity to review previously learned language structure; to increase vocabulary beyond immediate needs; to improve reading comprehension in French via authentic materials, poetry and prose; to increase cultural awareness; and to communicate in both written and oral format using increasingly complex linguistic patterns. Equivalent to three years high school French. [D; CSU; UC; CAN-FREN 8;
FREN 220 + FREN 230 = CAN FREN SEQ B]

FREN 230.
Intermediate French II
5 units

Prerequisite: *FREN 220 or equivalent*
Lecture 5 hours
Offered: Variable
Expands coursework presented in French 220: increased emphasis on language structure, vocabulary development, reading comprehension of authentic materials and literature, written expression, and oral communication. Equivalent to four years high school French.
[D; CSU; UC; CAN-FREN 10;
FREN 220 + FREN 230 = CAN FREN SEQ B]

FREN 295.
Selected Topics in French
1–3 units

Offered: Variable
Permits students to study relevant subjects within the field of French. The specific objectives, methods of instruction and units of credit to be determined individually for projects proposed under this course description.
(May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

FREN 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in an area of French of particular interest to the student and not included in the regular courses of the college.
[D; CSU; * UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Geography

School of Mathematics, Science, and Engineering

■ Dean

Kathy Tyner, M.S.
Office 345
619-482-6459

■ Faculty

Ken Yanow, M.S., M.A.

■ Department Chair

Grant J. Miller, M.S.

General Description

Geography is a science that seeks to analyze the physical environment as well as study human influences to and interactions with the environment. Thus, this discipline examines the various physical forces that help shape the landscape and the role that humans play in the alteration of the landscape. Geography is a spatial and temporal science. A geographer will study the spatial and temporal distribution of vegetation across the globe, the physical forces leading to earthquakes and volcanoes, the historical and future arrangements of human societies across the planet, and the reasons behind differing climates from one part of the world to the next—presently, historically, and predicatively. The field is strongly interdisciplinary with roots in the physical and cultural sciences.

Career Options

The following list is a sample of the many career options available for the geography major. A few of these require an associate degree, most require a baccalaureate degree, and some require a graduate-level degree: geographer, high school or college instructor, cartographer, weather observer, demographer, land use planner, geographic analyst, aerial photo interpreter, remote sensing specialist, land economist, climatologist, environmental scientist, geographic information system specialist, site researcher, urban planner, and soil conservationist.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Geography	*01770*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Arts Degree

Geography

Transfer Preparation * (Major Code: 01770)

Designed to introduce students to the department through the study of physical elements and cultural aspects of geography. Physical geography examines forces shaping the landscape including weather, soil, water bodies, and the Earth's interior. Cultural geography studies and compares location and distribution of human values such as cultures, religion, political ideologies, economics, languages, technology, population, and recreation combined to produce a cultural landscape. Regional geography concentrates on specific regions of the world, for example, California.

GEOG 100	*Introduction to Geography: Physical Elements*	*3*
GEOG 101	*Physical Geography Laboratory*	*1*
GEOG 120	*Introduction to Geography: Cultural Elements*	*3*
Foreign Language		*12–15*
	Total units	***19–22***

In addition, it is recommended that each student take courses listed under one of the following areas of specialization.

METHODS OF GEOGRAPHICAL ANALYSIS:
MATH 119, 130.

NATURAL RESOURCES ENVIRONMENTAL ANALYSIS:
BIOL 100, 101; MATH 121 or 250; CHEM 100; PHYS 110, 120; PS 102.

NATURAL RESOURCES ENVIRONMENTAL POLICY:
BIOL 100, 101; ECON 101 or 102; PS 102.

PHYSICAL GEOGRAPHY:
CHEM 200; MATH 121 or 250.

URBAN AND REGIONAL ANALYSIS:
ECON 102.

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 43 for further information.**

Geography Courses

GEOG 100.
Introduction to Geography: Physical Elements
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Study of the physical forces of the environment that help shape the landscape. Includes map reading and interpretation; development of the Earth's interior and exterior character; analysis of oceanographic, climate, pedologic, and biographic patterns. [D; CSU; UC; CAN-GEOG 2]

GEOG 101.
Physical Geography Laboratory
1 unit

Grade only
Recommended Concurrent Enrollment: *GEOG 100*
Laboratory 3 hours
Offered: Fall, Spring
Provides laboratory exercises to solidify concepts learned in physical geography. [D; CSU; UC]

GEOG 120.
Introduction to Geography: Cultural Elements
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Introductory course focusing on the cultural (or human) aspects of geography. Teaches students to geographically see the human lands and human landscape on a worldwide basis and to interpret that landscape. [D; CSU; UC; CAN-GEOG 4]

GEOG 130.
Weather and Climate
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall
Principles of weather, the worldwide pattern of weather developments, and the resulting climate circumstances. [D; CSU; UC]

GEOG 143.
Biology, Oceanography, and Geoscience of Baja California
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Provides an interdisciplinary, introductory survey of Baja California's diversity in its biology, oceanography, geology, geography, and demographics. Examines the management, use, and conservation of its natural resources. Investigates regional issues associated with increased population, modernization, and industrialization of Baja California and Southern California. (Same as BIOL 143.) [D; CSU; UC]

GEOG 160.
Geography of California
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Spring
Detailed study of the physical and cultural elements of California focusing on California's diverse physical and human landscapes. [D; CSU; UC]

GEOG 295.
Selected Topics in Geography
1–3 units

Offered: Variable
Permits students to study relevant topics within the field of geography. The specific objectives, methods of instruction, and evaluation to be determined by the students and instructor throughout the semester. (May be repeated for additional credit with new content.) [D; * CSU]

** Please refer to the class schedule for specific course description and transferability information.*

GEOG 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of geography of particular interest to the student and not included in regular courses of the college. [D; CSU; * UC]

** UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

"One of the goals of any collegiate student is to learn about the uniqueness and commonality of people and places—locally or globally. This is why we study geography."

—KEN YANOW,
Geography Professor

Geology

School of Mathematics, Science, and Engineering

■ Dean

Kathy Tyner, M.S.
Office 345
619-482-6459

■ Faculty

Ken Yanow, M.S., M.A.

■ Department Chair

Grant J. Miller, M.S.

General Description

Geology is the study of the composition, structure, and evolution of the Earth. It is an interdisciplinary science that combines geological observations and concepts with those of biology, chemistry, physics, and mathematics. This department explores rocks, minerals, fossils, and geologic principles and the processes such as plate tectonics, continental drift, and rock forming that continue to shape the Earth and its environments. Specialization within the field of geology ranges from engineering and geophysics to paleontology and marine geology.

Career Options

The following list is a sample of the many career options available for the geology major. A few of these require an associate degree, most require a baccalaureate degree, and some require a graduate-level degree: geologist, soils engineer, geological technician, earth science teacher, college instructor, geophysicist, park ranger, land use planner, geochemist, astrogeologist, marine geologist, glacial geologist, mining geologist, photogeologist, oil and gas geologist, mineralogist, paleontologist, volcanologist, and seismologist.

Degree/Certificate Options

	Major Code
Associate in Science Degree: Transfer Preparation	
Geology	*01780*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Science Degree

Geology

Transfer Preparation * (Major Code: 01780)

Designed for students who desire a general background in the field of geology in preparation for transfer to another college or university. Some of the courses listed below require the completion of prerequisites, and students should begin with the study of biology and mathematics.

Geology majors are advised not to try to complete General Education requirements before transfer. First priority must be given to lower-division requirements for the major as they are prerequisites for most upper-division courses. Only as many General Education courses should be taken as can be included in the seventy-unit transfer limitation, and these must be chosen with care to ensure that they fit into the General Education pattern at the transfer school.

FIRST SEMESTER		
BIOL 100	*Principles of Biology*	*3*
BIOL 101	*Principles of Biology Laboratory*	*1*
GEOL 100	*Principles of Geology*	*3*
GEOL 101	*General Geology Laboratory*	*1*
MATH 250	*Analytic Geometry and Calculus I*	*5*
SECOND SEMESTER		
CHEM 200	*General Chemistry I*	*5*
MATH 251	*Analytic Geometry and Calculus II*	*4*
PHYS 270	*Principles of Physics I*	*3*
PHYS 271	*Principles of Physics Laboratory I*	*1*
THIRD SEMESTER		
CHEM 210	*General Chemistry II*	*5*
MATH 252	*Analytic Geometry and Calculus III*	*4*
PHYS 272	*Principles of Physics II*	*4*
FOURTH SEMESTER		
MATH 130	*Introduction to Computer Programming*	*4*
PHYS 274	*Principles of Physics III*	*4*
	Total units	***47***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 43 for further information.**

Geology Courses

GEOL 100.
Principles of Geology
3 Units

Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Spring
Introduction to Earth science. The focus of the course spans the origin of minerals and rocks, plate tectonics, and continental drift, and mountain building. Survey of world economic geologic resources will be considered as well as basic processes in weathering and erosion.
[D; CSU; UC; GEOL 100 + GEOL 101=CAN GEOL 2]

GEOL 101.
General Geology Laboratory
1 unit

Corequisite: *GEOL 100 or equivalent (May be taken previously)*
Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Laboratory 3 hours
Offered: Spring
Designed to provide practical application of the scientific method as applied to the geological science. [D; CSU; UC;
GEOL 100 + GEOL 101 = CAN GEOL 2]

GEOL 295.
Selected Topics in Geology
1–3 units

Offered: Variable
Permits students to study relevant topics within the field of geology. The specific objectives, methods of instruction, and evaluation to be determined by the students and the instructor throughout the semester. (May be repeated for additional credit with new content.) [D; * CSU]

** Please refer to the class schedule for specific course description and transferability information.*

GEOL 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of geology of particular interest to the student and not included in regular courses of the college.
[D; CSU;* UC]

** UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Health

School of Health, Exercise Science, and Athletics

Dean

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Valerie Goodwin, M.Ed.
Jennifer Harper, M.A.
Gloria Johnson, M.A.
Walt Justice, M.A.
Richard C. Mason, M.A.
Dionicio Monarrez, M.Ed.
Michael Meehan, M.Ed.
Michael Pompa, M.A.
Andrew Shim, M.A.
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Department Chair

Walt Justice, M.A.

Health Courses

HLTH 101.
Principles of Healthful Living
3 units

Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Application of modern knowledge to the development of understanding, health principles which can lead to a quality lifestyle. Includes fitness, nutrition, psychoactive drugs, alcohol, and tobacco awareness. Units satisfy the State of California Health Education requirement for teaching credential. [D; CSU; UC]

HLTH 102.
Border Health Issues: HIV
3 units

Grade only
Lecture 3 hours
Offered: Variable
Designed to increase understanding about the causes of and the differences between HIV infection, HIV disease, and AIDS. How the virus is transmitted, the myths associated with AIDS, and the basic medical aspects of HIV/AIDS. Emphasis on the social and psychological impact, and the health promotion and maintenance component for an individual with this virus. This course is geared for individuals of varying age and diverse cultural backgrounds from both sides of the border. [D; CSU]

HLTH 106.
Healing Touch Level I
1 unit

Lecture 1 hour, laboratory 1 hour
Offered: Variable
Beginning concepts of the human energy field as they relate to modern scientific principles. Covers descriptions and demonstrations of centering and assessment of the energy field. Includes principles and practice of therapeutic touch and other selected modalities from the healing touch program to help with specific body/mind issues. Includes demonstration and practice time for the different techniques and will discuss the appropriate applications and the importance of personal health promotion. [D; CSU]

HLTH 110.
First Responder
2–3 units

Lecture 2–3 hours
Offered: Variable
Fundamentals of first aid with emphasis on emergencies requiring knowledge and skills in artificial respiration, cardiopulmonary resuscitation, automated external defibrillation, oxygen therapy, care for fractures, bleeding, poisoning, and burns. Additional material covers problems of exposure, drugs, emergency rescues, childbirth, and Body Substance Isolation procedures (BSI). (Same as EMT 100.) [D; CSU]

HLTH 116.
Women's Health and Well-Being
3 units

Grade only
Lecture 3 hours
Offered: Variable
Application of modern knowledge to the development of understanding, attitudes, and practices essential to healthful living with special emphasis on women's issues. Includes comprehensive coverage of nutrition and personal fitness; stress reduction and injury prevention; chronic and infectious diseases; sexuality and reproductive health; alcohol, tobacco, and other drugs. [D; CSU; UC]

HLTH 175.
Nutrition, Health, and Safety for Children
3 units

Grade only
Lecture 3 hours
Offered: Variable
Fee: $25. Focuses on children's health, safety, and nutritional needs. Includes encouraging and promoting good health in children, dealing with illness, child abuse, planning nutritious menus, diet and child behavior, and available childcare food programs will be examined. First Aid and Cardiopulmonary Resuscitation (CPR) certification will be integrated into the program. (Same as CD 175.) [D; CSU]

HLTH 202.
Nutrition for Athletes
3 units

Grade only
Lecture 3 hours
Offered: Variable
General presentation of a wide variety of nutritional topics related to athletes and fitness. It provides introductory nutrition principles as well as exercise and sports science principles that will allow the student to understand the basic processes and applications of nutrition for athletes. [D; CSU]

HLTH 204.
Fundamentals of Nutrition
3 units

Grade only
Recommended Preparation: *BIOL 100, CHEM 100, and 110, or equivalent*
Lecture 3 hours
Offered: Variable
Nutrition as applied to the stages of the normal life cycle. Basic principles of nutrition including knowledge of daily nutritional requirements. (Same as CD 204.) [D; CSU]

HLTH 295.
Selected Topics in Health
1–3 units

Offered: Variable
Permits students to study relevant subjects within the field of health. The specific objectives, methods of instruction, and units of credit to be determined individually for projects proposed under this course description. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

HLTH 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of health of particular interest to the student and not included in regular courses of the college. [D; CSU]

History

School of Social Sciences and International Studies

Dean

Viara Giraffe, Ph.D., Dean
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Gary A. Neely, M.A.
Felix Tuyay, M.A.

Department Chair

Gary A. Neely, M.A.

General Description

History is the study of all human experience. History examines the people, institutions, ideas, and events of the past and present. This department provides the basic information necessary for analyzing the major political, economic, and social conditions affecting contemporary society. Historians usually specialize in a chronological, geographical, and/or topical area that constitutes an academic field for inquiry and research, such as U.S. history, ancient Greece, Africa, medieval Europe, Mexico, Islam, China, Latin America, or women in history.

Career Options

The following list is a sample of the many career options available for the history major. A few of these require an associate degree, most require a baccalaureate degree, and some require a graduate-level degree: research assistant, high school or college instructor, foreign service officer, state park historian or technician, writer, historian, travel journalist, archivist, research analyst, museum curator or director, lawyer, banker, market researcher, business person, public administrator, and historical society personnel.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
History	*01790*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Arts Degree
History

Transfer Preparation * (Major Code: 01790)

History is an academic department offering both breadth and focus. The study of history contributes to cultural literacy and develops critical thinking and other useful skills while helping students understand today and plan for tomorrow. Therefore, it provides a solid fundamental preparation for transfer as a history major or for a career in business, industry, government, or education.

SELECT 3 OF THE FOLLOWING 2-COURSE SEQUENCES:

HIST 100	*American Civilization I*	*3*
HIST 101	*American Civilization II*	*3*
HIST 104	*Western Civilization I*	*3*
HIST 105	*Western Civilization II*	*3*
HIST 106	*World History*	*3*
HIST 107	*World History II*	*3*
HIST 121	*Comparative History of the Americas I*	*3*
HIST 122	*Comparative History of the Americas II*	*3*
	Total units	***18***

Recommended Electives: *HIST 110, 111, 112, 113, 114, 141, 142.*

To earn an associate degree, additional General Education and Graduation requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

History Courses

HIST 100.
American Civilization I
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Survey of the political, social, economic, and cultural development of the United States from discovery through Reconstruction. Focuses on the colonial era, establishment of the new nation, sectional problems, national growth, disunion, and reconstruction. Includes study of the United States Constitution. (Partially fulfills American Institutions requirement at CSU.) [D; CSU; UC; CAN-HIST 8; HIST 100 + HIST 101 = CAN HIST SEQ B]

HIST 101.
American Civilization II
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Covers the history of the American experience from Reconstruction to the present day with an emphasis on the emergence of the United States as a world power. Includes a study of the Constitution of California and the interactions between state and local governments. (Partially fulfills American Institutions requirement at CSU.) [D; CSU; UC; CAN-HIST 10; HIST 100 + HIST 101 = CAN HIST SEQ B]

HIST 104.
Western Civilization I
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Survey of the development of Western civilization from the ancient world through the period of European expansion into the New World. Emphasis on the rise and fall of Greek, Roman, and medieval civilizations including social, economic, and political factors. [D; CSU; UC; CAN-HIST 2; HIST 104 + HIST 105 = CAN HIST SEQ A]

HIST 105.
Western Civilization II
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Survey of the development of Western civilization with emphasis on Europe from about 1600. Major movements of absolutism, the rise of modern nation states, the struggle for world power in the twentieth century and the revolutionary developments in the social, economic, and political aspects of the times. [D; CSU; UC; CAN-HIST 4; HIST 104 + HIST 105 = CAN HIST SEQ A)

HIST 106.
World History I
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Survey of the historical development of major civilizations of Europe, Asia, Africa, and the Americas and their cultural interrelationships from prehistoric times to 1500. [D; CSU; UC]

HIST 107.
World History II
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Survey of the historical developments of major civilizations of Europe, Asia, Africa, and the Americas and their cultural interrelationships from 1500 to the present. [D; CSU; UC]

HIST 110.
African-American History I
3 units

Grade only
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
An In-depth study of the African-American experience from African origins to the conclusion of the Civil War. Emphases on the Atlantic slave trade and American slavery, the African in the New World, and the United States Constitution. (Partially fulfills American Institutions requirement at CSU.) (Same as AFRO 110.) [D; CSU; UC]

HIST 111.
African-American History II
3 units

Grade only
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Covers the history of African Americans from the Civil War to the present emphasizing their contributions to the growth and development of the United States. Includes a study of the Constitution of California and its impact on state and local governments. (Partially fulfills American Institutions requirement at CSU.) (Same AFRO 111.) [D; CSU; UC]

HIST 112.
Asian-American History I
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Covers the history of Asian Americans in the social, political, economic, and cultural development of the United States from the colonial era to the annexation of California in 1848. The course will emphasize the Filipino, Japanese, Chinese, Korean, Asian-Indian, and Southeast Asian experiences. Includes study of the United States Constitution. (Partially fulfills American Institutions requirement at CSU.) (Same as ASIA 112.) [D; CSU; UC]

HIST 113.
Asian-American History II
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
The history of Asian Americans in the United States from 1846 to the present. Major themes include the study of economic developments, occupational patterns, anti-Asian movements, inter-ethnic exchanges, gender, and intergenerational issues. Includes a study of the Constitution of California. (Partially fulfills American Institutions requirement at CSU.) (Same as ASIA 113.) [D; CSU; UC]

HIST 114.
Filipino-American History
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Survey of the economic, political, and social history of Filipinos in the Philippines and in the United States. Focus on the effects of colonization from Spain, United States, and Japan. Filipino-American history will emphasize the major waves of migration and youth, intergenerational, women, gender, and political issues. (Same as ASIA 114.) [D; CSU; UC]

HIST 121.
Comparative History of the Americas I
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall
History of the Western Hemisphere from pre-Columbian times to the period of the Wars of Independence, with an emphasis on the Indian, European, African, and Latin American cultural roots of the Americas. (Partially fulfills American Institutions requirement at CSU.) [D; CSU; UC]

HIST 122.
Comparative History of the Americas II
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Spring
History of the Western Hemisphere from 1812 to the present, with an emphasis on the diverse cultural interrelationships within and among Canada, the United States, and Latin America. (Partially fulfills American Institutions requirement at SDSU.) [D; CSU; UC]

HIST 132.
Herstory: Women in Historical Perspective
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Survey of major cultural representation and contributions of women in ancient through contemporary history. A comparative, cross-cultural perspective with emphasis on political-economic, social and religious developments and their historical consequences. (Not open to students with credit in HIST 130 and 131.) [D; CSU]

HIST 141.
Mexican-American History I
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Covers the history of the roots of Mexican-American culture from Pre-Colombian times to Circa 1850. Emphasis on the political, economic, and social influences of Pre-Columbian America, Spain, Mexico, and the United States. Includes a study of the United States Constitution. (Partially fulfills American Institutions requirement at CSU.) (Same as MAS 141.) [D; CSU; UC]

HIST 142.
Mexican-American History II
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Covers the history of the Mexican-American experience from 1846 to the present day. Emphasis on the political, economic, and social influences of the peoples of Mexico and the United States. Includes a study of the Constitution of California. (Partially fulfills American Institutions requirement at CSU.) (Same as MAS 142.) [D; CSU; UC]

HIST 295.
Selected Topics in History
1–3 units

Offered: Variable
Permits students to study relevant topics within the field of history. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

HIST 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of history which is of particular interest to the student and not included in regular courses of the college. [D; CSU; * UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Humanities

School of Languages and Humanities

■ Dean

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Alejandro Orozco, M.A.
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■ Department Chair

Alejandro Orozco, M.A.

General Description

The study of humanities offers an integrated approach to the thought and culture of Western and non-Western civilizations and the impact these cultures have had upon each other. Therefore, the study of humanities presupposes the acquisition, correlation, and analysis of knowledge from many different disciplines including history, literature, philosophy, religion, art, music, and drama. This department focuses on the principle epochs from the ancient past to the present and how these periods influenced the development of major civilizations.

Career Options

The following list is a sample of the many career options available to the humanities major. A few of these require an associate degree, most require a baccalaureate degree, and some require a graduate-level degree: literary research assistant, high school or college instructor, lawyer, theologian, dramatist, public relations agent, publisher, publishing technician, journalist, artist, poet, historian, business person, literary agent, editor, publicity director, museum director, librarian, archivist, and broadcast writer.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Humanities	*01320*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Arts Degree
Humanities

Transfer Preparation * (Major Code: 01320)

The program leading to an associate in arts degree represents an innovation in interdisciplinary education. The curriculum stresses an integrated, international view of culture with emphasis given to the synthesis of the departments of philosophy, art, music, drama, and literature in a historical context. Humanities majors will, of necessity, study the creative achievement of Western and non-Western civilizations and reflect upon the contributions of human culture made by both men and women.

HIST 104	*Western Civilization I*	*3*
HIST 105	*Western Civilization II*	*3*
HUM 101	*Humanities Through the Arts I (3)*	
HUM 102	*Humanities Through the Arts II (3)*	
	or	*3–6*
HUM 104	*Introduction to Humanities: Arts and Ideas (3)*	
Select 9 units from electives		*9*
	Total units	***18–21***

Electives: *ENGL 230, 231; ENGL 260 or HUM 140; PHIL 106; ART 150, 151; HIST 106, 107; HUM 112; JOUR 101; PS 101; TA 101.*

* Students planning to transfer to SDSU with a major in Humanities should take the HUM 104. Students planning to transfer to UCSD with a major in humanities must take HUM 101 and 102.

SDSU also requires three consecutive courses in a single foreign language as part of the requirement for the B.A. degree. Foreign language competency may also be demonstrated by successfully completing four years of one foreign language in high school or by successfully completing a challenge examination. See a counselor for additional information.

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

"A college education will bring you the strength to decide who you are, the wisdom to see the truth, and the skill to invoke your creative genius.

Focus on learning, and you will never need anyone to do these things for you."

—JEFF VEAL, Ph.D,
Astronomy Professor

HUM 101.
Humanities Through the Arts I
3 units

Lecture 3 hours
Offered: Variable
Historically-organized, integrated course analyzing music, visual arts, drama, literature, architecture, philosophy, and history. Studies include slides, films, and selections from original texts of literature and philosophy from ancient Greece through the Middle Ages. [D; CSU; UC]

HUM 102.
Humanities Through the Arts II
3 units

Recommended Preparation: *HUM 101 or equivalent*
Lecture 3 hours
Offered: Variable
Historically-organized, integrated course analyzing music, visual arts, drama, literature, architecture, philosophy, and history. Studies include slides, films, and selections from original texts of literature and philosophy from the Renaissance through the twentieth century. [D; CSU; UC]

HUM 104.
Introduction to Humanities: Arts and Ideas
3 units

Lecture 3 hours
Offered: Fall, Spring
Introductory course that analyzes, interprets, interrelates important works of literature, music, drama, painting, sculpture, architecture, philosophy, and religion. Emphasis on the student's personal interaction with the human creative process. [D; CSU; UC]

HUM 112.
Culture and the Media
3 units

Lecture 3 hours
Offered: Variable
Survey of the development of electronic media with emphasis on the communicative, aesthetic, and technical history and the influence of media on society. (Same as TELE 112.) [D; CSU; UC]

HUM 140.
Word Mythology
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Analysis of myths represents seven cultural areas. Emphasis on a multiplicity of cultures with particular attention to cross-cultural influences. Includes study of the function of myth and symbol and their relation to the arts, philosophy, history, and religion. [D; CSU; UC]

HUM 150.
Introduction to African-American Culture
3 units

Grade only
Lecture 3 hours
Offered: Fall, Spring, Summer
Introduction to the origins and development of African-American culture in United States history between 1619 and the present. Emphasis on the critical analysis of significant works in art, music, theatre, and literature through examination of examples and comparison of dominant cultural themes. (Same as AFRO 150.) [D; CSU; UC]

HUM 295.
Selected Topics in Humanities
1–3 units

Offered: Variable
Permits students to study relevant topics within the field of humanities. (May be repeated for additional credit with new content.) [D; *CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

HUM 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of humanities which is of particular interest to the student and not included in regular courses of the college. [D; CSU; * UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Italian

School of Languages and Humanities

■ Dean

Renee M. Kilmer, Ph.D.
Office 430J
619-482-6461

■ Department Chair

Esther Alonso, M.A

Italian Courses

■ **ITAL 120.**
Elementary Italian I
5 units

Lecture 5 hours
Offered: Fall, Spring
Designed to enable beginning students to carry out basic interpersonal communications. Students will learn the structures and vocabulary necessary to carry out simple conversation. It also serves as an introduction to Italian-speakers' world views, behaviors, attitudes, and contributions to the world. Designed for students with very little or no knowledge of Italian. Equivalent to two years of high school Italian. [D; CSU; UC; CAN-ITAL 2; ITAL 120 + ITAL 130 = CAN ITAL SEQA]

■ **ITAL 130.**
Elementary Italian II
5 units

Prerequisite: *ITAL 120 or equivalent*
Lecture 5 hours
Offered: Fall, Spring
Continuation of Elementary Italian I. Designed to further students' knowledge and understanding of the Italian language. Students will learn the structures and vocabulary necessary to converse about present and past experiences. This course also serves to further the understanding and knowledge of Italian-speakers' world views, behaviors, attitudes, and contributions to the world. Equivalent to three years high school Italian. [D; CSU; UC; CAN-ITAL 4; ITAL 120 + ITAL 130 = CAN ITAL SEQA]

■ **ITAL 220.**
Intermediate Italian I
5 units

Prerequisite: *ITAL 130 or equivalent*
Lecture 5 hours
Offered: Variable
The first semester of second-year Italian. An extensive review of all structures learned in the first year. An integrated skills approach to intermediate Italian. The primary objective of the program is to offer students an opportunity to acquire communicative skills while developing awareness and appreciation of Italian culture. Equivalent to four years high school Italian. [D; CSU; UC; CAN-ITAL 8]

■ **ITAL 295.**
Selected Topics in Italian
1–3 units

Offered: Variable
Permits students to study relevant subjects within the field of Italian. The specific objectives, methods of instruction, and units of credit to be determined individually for projects proposed under this course description. (May be repeated for additional credit with new content.) [D; * CSU]

** Please refer to the class schedule for specific course description and transferability information.*

■ **ITAL 299.**
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of Italian of particular interest to the student and not included in regular courses of the college. [D; CSU; * UC]

** UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Japanese

School of Languages and Humanities

■ Dean

Renee M. Kilmer, Ph.D.
Office 430J
619-482-6461

■ Department Chair

Esther Alonso, M.A.

Japanese Courses

■ JPN 120.
Beginning Japanese I
5 units

Grade only
Lecture 5 hours
Offered: Fall, Spring
Introduction to Japanese, both spoken and written. Essentials of grammar, pronunciation, idiomatic expressions, hiragana, and katakana. Relationship between language and culture will be emphasized. Oral-aural drills will be stressed. Equivalent to two years of high school Japanese. [D; CSU; UC]

■ JPN 120A.
Introductory Elementary Japanese
3 units

Lecture 3 hours
Offered: Fall, Spring
Introduction to Japanese both spoken and written at the survival level including cultural topics. Essentials of grammar, pronunciation, idiomatic expressions, and Hiragana. Relationship between language and culture will be emphasized. Introduction to Japanese speaker's world-views, behaviors, attitudes, and contributions to the world. Acquisition of the vocabulary and structures necessary to carry out authentic simple conversations with native speakers. Equivalent to first half of JPN 120. (Not open to students with credit in JPN 120.) [D; CSU; UC]

■ JPN 120B.
Continuation of Elementary Japanese
3 units

Prerequisite: *JPN 120A or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Continuation of Introductory Elementary Japanese (JPN 120A) both spoken and written. Essentials of grammar, pronunciation, idiomatic expressions, Hiragana, and Katakana. Relationship between language and culture will be emphasized through basic interpersonal communication. Emphasis on authentic communication. In-depth cultural exposure to Japanese speaker's world-views, behaviors, attitudes, and contributions to the world. Equivalent to second half of JPN 120. Equivalent to two years of high school Japanese. (Not open to students with credit in JPN 120.) [D; CSU; UC]

■ JPN 130.
Beginning Japanese II
5 units

Grade only
Prerequisite: *JPN 120 or equivalent*
Lecture 5 hours
Offered: Spring
Continuation of Jap 120 with emphasis on spoken Japanese. Introduction to KANJI (Chinese characters). Equivalent to three years high school Japanese. [D; CSU; UC]

■ JPN 220.
Intermediate Japanese I
5 units

Prerequisite: *JPN 130 or equivalent*
Lecture 5 hours
Offered: Spring
First semester of second-year Japanese. Extensive review of all structures learned in the first year. Integrated skills approach to intermediate Japanese. Offers students an opportunity to acquire communicative skills while developing an awareness and appreciation of Japanese culture. Further study of grammatical principles, composition, and continued oral practice. Emphasizes appreciation of Japanese culture, art, and history. Equivalent to four years of high school Japanese. [D; CSU; UC]

■ JPN 295.
Selected Topics in Japanese
1–3 units

Offered: Variable
Permits students to study relevant subjects within the field of Japanese. The specific objectives, methods of instruction, and units of credit to be determined individually for projects proposed under this course description. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

■ JPN 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of Japanese of particular interest to the student and not included in regular courses of the college. [D; CSU; * UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Journalism

School of Arts and Communication

■ Interim Dean

Donna Arnold
Office 702B
619-482-6372

■ Faculty

Max Branscomb, M.S.

■ Department Chair

Linda Hensley, M.A.

General Description

Journalism is a cornerstone of American society and a guardian of this nation's freedoms. It is the study of mass communication media such as newspapers, television, radio, magazines, and Internet. Journalism develops clear thinking, strong writing, and solid communication skills. The Southwestern College journalism program encourages multidisciplinary study in a variety of areas. The program includes coursework and the award-winning student newspaper, The Southwestern Sun.

Career Options

The following list is a sample of the many career options available for the journalism major. A few of these require an associate degree, most require a baccalaureate degree, and some require a graduate-level degree: reporter, copy editor, photojournalist, columnist, public affairs manager, press relations officer, speech writer, critic, public information specialist, broadcaster, magazine writer, high school or college instructor, graphic designer, correspondent, production technician, and technical writer or editor.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Journalism	*01430*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Arts Degree
Journalism

Transfer Preparation * (Major Code: 01430)

Prepares students for four-year programs leading to baccalaureate degrees and eventual careers in such fields as newspaper or magazine reporting and editing, book editing, industrial journalism, public relations, advertising, radio and television writing, teaching, and communication research. The courses give students an awareness of the impact of mass media on their lives and an understanding of the skills, concepts, and values used by professional communicators.

JOUR 101	*Introduction to Mass Communication and Society*	*3*
JOUR 151	*News Reporting and Writing*	*3*
JOUR 171	*Writing for Publication*	*3*
JOUR 200	*Campus Newspaper Production I*	*3*
Select 6 units from electives		*6*
	Total units	***18***

Electives: *ART 121, 159; TELE 110, 180.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

JOUR 101.
Introduction to Mass Communication and Society
3 units

Lecture 3 hours
Offered: Fall, Spring
Surveys the mass media institutions, functions, interrelationships, and effects on society. Intended as a building block in the general education of the nonmajor student and as the introduction to the discipline of study for the communication major. (Same as COMM 200.) [D; CSU; UC; CAN-JOUR 4]

JOUR 151.
News Reporting and Writing
3 units

Grade only
Lecture 3 hours
Offered: Fall, Spring
Study and practice of reporting techniques, with intensive exploratory practice in the gathering, evaluating, and writing of news stories in the major genres of news writing, such as spot news, human interest stories, reviews, and reports of speeches and meetings. Writing for campus newspaper offered.
[D; CSU; CAN-JOUR 2]

JOUR 171.
Writing for Publication
3 units

Lecture 3 hours
Offered: Fall, Spring
Fee: $10. Instruction and practice in writing magazine articles, short stories, novels, and other material suitable for publication. Includes current information about publication procedures and marketing. [D; CSU]

JOUR 172.
Advanced Writing for Publication I
3 units

Prerequisite: *JOUR 171 or equivalent*
Lecture 3 hours
Offered: Variable
Fee: $10. Advanced technique in articles and all forms of fiction with emphasis on the various hallmarks of the professional writer. [D; CSU]

JOUR 173.
Advanced Writing for Publication II
3 units

Prerequisite: *JOUR 172 or equivalent*
Lecture 3 hours
Offered: Variable
Fee: $10. Advanced technique in fiction and nonfiction with emphasis on researching and outlining projected manuscript-in-progress.
[D; CSU]

JOUR 174.
Advanced Writing for Publication III
3 units

Prerequisite: *JOUR 173 or equivalent*
Lecture 3 hours
Offered: Variable
Fee: $10. Marketing technique involving fiction and nonfiction manuscripts with emphasis on writer's records, tax and libel, and copyright laws, working with editors and agents. [D; CSU]

JOUR 200.
Campus Newspaper Production I
3 units

Recommended Preparation: *JOUR 151 or equivalent*
Lecture 3 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $10. Practical application in newspaper work. Students will apply skills and materials learned in news writing and photo-journalism to production of the college newspaper, the *Southwestern Sun*. [D; CSU]

JOUR 201.
Campus Newspaper Production II
3 units

Prerequisite: *JOUR 200 or equivalent*
Recommended Preparation: *JOUR 151 or equivalent*
Lecture 3 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $10. Builds on skills obtained in JOUR 200. Emphasis on writing, photography and layout for the campus newspaper, the *Southwestern Sun*. [D; CSU]

JOUR 202.
Campus Newspaper Production III
3 units

Prerequisite: *JOUR 201 or equivalent*
Recommended Preparation: *JOUR 151 or equivalent*
3 hours, laboratory 4 hours
Offered: Fall, Spring
Fee: $10. Builds on skills obtained in JOUR 200 and 201. Emphasis on writing, photography, layout and editing for the campus newspaper, the *Southwestern Sun*. Includes newspaper management. [D; CSU]

JOUR 295.
Selected Topics in Journalism
1–3 units

Offered: Variable
Permits students to study relevant subjects within the fields of journalism. The specific objectives, methods of instruction, and units of credit to be determined individually for projects proposed under this course description.
(May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

JOUR 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study, research, or a special assignment for the campus newspaper in some area of particular interest not included in a regular course offered by the college. [D; CSU]

Landscape Architecture and Landscape and Nursery Technology

School of Technology and Human Services

■ Dean

Patricia Axsom, M.S.
Office 570B
619-482-6460

■ Faculty

William Homyak, M.S.
Meredith Sinclair, M.S.

■ Department Chair

Corey Breininger, M.A.Ed.

General Description

Landscape architecture is the study of principles and practices related to the design and installation of environmentally pleasing landscape designs for homes, parks, commercial buildings, and natural settings. Landscape technology deals with study of the practices of landscape installation methods and landscape maintenance techniques for homes, parks, commercial settings, and utility areas. Golf and sports turf management is the study of the installation and proper management of quality sports fields and golf course turfs. Nursery technology studies the careers of plant propagation, nursery production, and nursery sales. Floral design covers the production of quality floral arrangements, flower shop management, wedding consultations and design, and interiorscaping.

Career Options

The following list is a sample of the many career options available for students majoring in landscape architecture, landscape occupations, nursery occupations, floral design occupations, or golf and sports turf management. Most of these require a certificate or associate degree, some require a baccalaureate degree, and a few require a graduate-level degree: landscape contractor, landscape designer, licensed landscape architect, floral designer, assistant floral designer, sprinkler technician, golf course superintendent or assistant superintendent, retail nursery manager, nursery manager, greenhouse technician, floral shop owner or manager, landscape maintenance company owner or manager, or horticultural teacher.

Degree/Certificate Options

	Major Code
Associate in Science Degree: Career/Technical	
Golf and Sports Turf Management	*02601*
Landscape Architecture	*02610*
Landscape Occupations	*02600*
Nursery Occupations:	
** Floral Design Emphasis*	*02821*
** Retail Nursery and Plant Production*	*02822*
Certificate of Achievement:	
Golf and Sports Turf Management	*02602*
Landscape Architecture	*02611*
Landscape Design	*02605*
Landscape Occupations	*02603*
Nursery Occupations	
** Floral Design Emphasis*	*02823*
** Retail Nursery and Plant Production*	*02824*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Science Degree
Golf and Sports Turf Management

Career/Technical (Major Code: 02601)

Designed to provide skills and training to students pursuing careers in the golf and sports turf industry. The field requires two distinct areas of knowledge: one based on a solid background in the science of turf grass growth and one based on a solid management and business footing. The program trains persons for jobs on golf courses, park and recreation systems, athletic fields, sod farms, and any other landscape area where turfgrass plays a major role.

FIRST SEMESTER

LNT 100	*Plant and Horticultural Science*	*4*
LNT 102	*Plant Identification: Deciduous Trees*	*1*
LNT 125	*Landscape Const.: Concrete/Masonry Skills*	*1*
LNT 126	*Landscape Const.: Fence, Deck, and Lumber Skills*	*1*
LNT 127	*Landscape Const.: Sprinkler Installation*	*1*

SECOND SEMESTER

LNT 72	*Horticultural Equipment: Care and Operation*	*2*
LNT 103	*Plant Identification: Conifers and Palms*	*1*
LNT 132	*Turf Management*	*3*
LNT 134	*Soils*	*3*

THIRD SEMESTER

BUS 150	*Management*	*3*
LNT 104	*Plant Identification: Broadleaf Trees*	*1*
LNT 128	*Sprinkler Design*	*3*
LNT 136	*Plant Pest and Disease Control*	*3*

FOURTH SEMESTER

LNT 133	*Golf and Sport Turf Management * (Cuyamaca College OH 265)*	*3*
LNT 148	*Horticultural Business Practices*	*3*
CE 290–293	*Occupational Cooperative Education I–IV*	*4*
	Total unit	***37***

Recommended Electives: *ART 121; BUS 121; GEOG 130; LA 200; PSYC 101; SPAN 120; COMM 104.*

LNT 133—Golf and Sports Turf Management is only offered at Cuyamaca College, but it is fully articulated with Southwestern College. Students must enroll and register for the class at Cuyamaca College.

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Landscape Architecture

Career/Technical (Major Code: 02610)

Designed to provide skills and training to students in landscape architecture. The field requires two distinct areas of knowledge, one based on a solid background in the horticultural sciences and one based on design theory backed by an ability to express designs graphically in a professional manner. The program will train students for entry-level employment in local landscape architecture firms, allow students to start their own landscape design/construction businesses, or allow transfer to a four-year institution with the eventual goal of becoming a licensed landscape architect.

FIRST SEMESTER

LA 101	*Landscape Graphics*	*1*
LA 102	*Survey of Landscape Architecture*	*1*
LA 103	*Planting Design*	*1*
LNT 102	*Plant Identification: Deciduous Trees*	*1*
LNT 107	*Plant Identification: Foliage Shrubs I*	*1*
LNT 112	*Plant Identification: Vines and Ground*	*1*
LNT 125	*Concrete and Masonry*	*1*
LNT 126	*Fence, Deck and Lumber*	*1*
LNT 127	*Sprinkler Installation*	*1*

SECOND SEMESTER

ARCH 110	*Freehand Drawing*	*3*
ARCH 115	*Architectural Graphics*	*3*
LNT 103	*Plant Identification: Conifers and Palms*	*1*
LNT 108	*Plant Identification: Foliage Shrubs II*	*1*
LNT 110	*Plant Identification: Annuals and Perennials I*	*1*
LNT 128	*Sprinkler Design*	*3*

THIRD SEMESTER

LNT 104	*Plant Identification: Broadleaf Trees*	*1*
LNT 106	*Plant Identification: Flowering Shrubs*	*1*
LNT 111	*Plant Identification: Annuals and Perennials II*	*1*
LNT 120	*Landscape Design I*	*3*

FOURTH SEMESTER

ARCH 112	*Architectural Rendering*	*3*
LA 200	*Introduction to Computer Aided Landscape Design*	*3*
LNT 122	*Landscape Design II*	*3*
LNT 134	*Soils*	*3*
	Total units	***39***

General Education Electives: *ART 121; BIOL 100, BIOL 101; CL 120; ECON 101; ENGL 105; MATH 65; PSYC 101; SPAN 120.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Landscape Occupations

Career/Technical (Major Code: 02600)

Designed for students interested in all phases of landscape design, construction, turf management, and landscape management.

The recommended courses will allow students to complete the program in four semesters. Students are urged to see their counselor to select general education courses.

FIRST SEMESTER

LNT 100	*Plant and Horticultural Science*	*4*
LNT 102–115	*Plant Identification:*	*3*
Select 3 units from electives		*3*

SECOND SEMESTER

LNT 102–115	*Plant Identification:*	
	or	*3*
LNT 119	*Plant Materials: Xeriphytic Plants*	
LNT 134	*Soils*	*3*
Select 3 units from electives		*3*

THIRD SEMESTER

ACCT 7	*Basic Business Bookkeeping*	
	or	*3*
LNT 148	*Horticultural Business Practices*	
BIOL 100	*Principles of Biology (3)*	
BIOL 101	*Principles of Biology Laboratory (1)*	
	or	*4*
BIOL 170	*Field Botany (4)*	
Select 3 units from electives		*3*

FOURTH SEMESTER

CE 290–293	*Occupational Cooperative Education I–IV*	*4*
LNT 136	*Plant Pest and Disease Control*	*3*
Select 3 units from electives		*3*
	Total units	***39***

Electives: *LNT 72, 75, 120, 122, 123, 125, 126, 127, 128, 132.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Nursery Occupations

COMMON CORE:

LNT 100	*Plant and Horticultural Science*	*4*
LNT 136	*Plant Pest and Disease Control*	*3*
LNT 138	*Floral Design I*	*2*
LNT 142	*Floral Crops*	*1.5*
LNT 144	*Foliage Production and Interiorscaping*	*1.5*
LNT 146	*Plant Propagation*	*1.5*
LNT 148	*Horticultural Business Practices*	
	or	*3*
ACCT 7	*Basic Business Bookkeeping*	
	Total units	***16.5***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Floral Design Emphasis

Career/Technical (Major Code: 02821)

Designed to train students in the skills needed in the floral design industry. Students who successfully complete the degree are eligible for positions such as assistant floral designer, floral designer, floral shop manager, and floral shop owner. Positions may be found at floral shops, wholesale floral suppliers, retail nurseries, hotels and resorts, and as a private floral consultant. Students who have completed this degree have proven they can produce not only the normal bank of floral products but also new, creative, and innovative designs for all activities.

ART 140	*The House and Its Environment*	*3*
BUS 148	*Developing and Starting a new Business (3)*	
	or	*3*
BUS 144	*Advertising and Promotional Strategy (1)*	
BUS 145	*Financial Management for Small Business (1)*	
BUS 147	*Successful Selling Techniques (1)*	
COMM 174	*Interpersonal Communication*	*3*
LNT 95	*Portfolios, Presentations, and Consultations*	*1*
LNT 110	*Plant Identification: Annuals and Perennials I*	*1*
LNT 118	*Plant Identification for Floral Design*	*1*
LNT 140	*Floral Design II*	*2*
LNT 141	*Floral Design III*	
	or	*1*
LNT 147	*Wedding Design*	
CE 290–293	*Occupational Cooperative Education I–IV*	*8*
Plus Common Core courses for Nursery Occupations		*16.5*
	Total units	***39.5***

Recommended Elective: *BUS 174.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Retail Nursery and Plant Production

Career/Technical (Major Code: 02822)

Designed to provide students with the skills needed for working in retail and wholesale nurseries. Students who successfully complete the degree are eligible for positions such as retail nursery sales, retail nursery management, wholesale nursery growing, greenhouse management, and wholesale of horticultural products. Students completing this degree have proven a knowledge of plant identification, cultural requirement, plant propagation, and pest control.

BIOL 170	*Field Botany*	
	or	*4*
BIOL 100	*Principles of Biology (3)*	
BIOL 101	*Principles of Biology Lab (1)*	
LNT 102–119	*Plant Identification:**	*6*
LNT 134	*Soils*	*3*
CE 290–293	*Occupational Cooperative Education I–IV*	*4*
Required electives		*7*
Plus Common Core courses for Nursery Occupations		*16.5*
	Total units	***40.5***

REQUIRED ELECTIVES:

LNT 72	*Horticulture Equipment: Care and Operation*	*2*
LNT 117	*Plant Identification: Tropicals for the Interior*	*1*
LNT 125	*Landscape Construction: Concrete and Masonry Skill*	*1*
LNT 126	*Landscape Construction: Fence, Deck, and Lumber Skills*	*1*
LNT 127	*Landscape Construction: Sprinkler Installation*	*1*
LNT 143	*Floriculture and Nursery Operations: Tree and Shrubs Production*	*1*

* Students may select any of the plant identification classes, to total 6 units

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Certificate of Achievement
Golf and Sports Turf Management

Career/Technical (Major Code: 02602)

FIRST SEMESTER

LNT 100	*Plant and Horticultural Science*	*4*
LNT 102	*Plant Identification: Deciduous Trees*	*1*
LNT 125	*Landscape Construction: Concrete/Masonry Skills*	*1*
LNT 126	*Landscape Construction: Fence, Deck, and Lumber Skills*	*1*
LNT 127	*Landscape Construction: Sprinkler Installation*	*1*

SECOND SEMESTER

LNT 72	*Horticultural Equipment Care and Operation*	*2*
LNT 103	*Plant Identification: Conifers and Palms*	*1*
LNT 132	*Turf Management*	*3*
LNT 134	*Soils*	*3*

THIRD SEMESTER

BUS 150	*Management*	*3*
LNT 104	*Plant Identification: Broadleaf Trees*	*1*
LNT 128	*Sprinkler Design*	*3*
LNT 136	*Plant Pest and Disease Control*	*3*

FOURTH SEMESTER

LNT 133	*Golf and Sport Turf Management * (Cuyamaca College OH 265)*	*3*
LNT 148	*Horticultural Business Practices*	*3*
CE 290–293	*Occupational Cooperative Education I–IV*	*4*
	Total units	***37***

Recommended Electives: *ART 121; BUS 121; GEOG 130; LA 200; PSYC 101; SPAN 120; COMM 104.*

* LNT 133—Golf and Sports Turf Management is only offered at Cuyamaca College, but it is fully articulated with Southwestern College. Students must enroll and register for the class at Cuyamaca College.

Landscape Architecture

Career/Technical (Major Code: 02611)

FIRST SEMESTER

LA 101	*Landscape Graphics*	*1*
LA 102	*Survey of Landscape Architecture*	*1*
LA 103	*Planting Design*	*1*
LNT 102	*Plant Identification: Deciduous Trees*	*1*
LNT 107	*Plant Identification: Foliage Shrubs I*	*1*
LNT 112	*Plant Identification: Vines and Ground*	*1*
LNT 125	*Landscape Construction: Concrete and Masonry*	*1*
LNT 126	*Landscape Construction: Fence, Deck and Lumber*	*1*
LNT 127	*Landscape Construction.: Sprinkler Installation*	*1*

SECOND SEMESTER

ARCH 110	*Freehand Drawing*	*3*
ARCH 115	*Architectural Graphics*	*3*
LNT 103	*Plant Identification: Conifers and Palms*	*1*
LNT 108	*Plant Identification: Foliage Shrubs II*	*1*
LNT 110	*Plant Identification: Annuals and Perennials I*	*1*
LNT 128	*Sprinkler Design*	*3*

THIRD SEMESTER

LNT 104	*Plant Identification: Broadleaf Trees*	*1*
LNT 106	*Plant Identification: Flowering Shrubs*	*1*
LNT 111	*Plant Identification: Annuals and Perennials II*	*1*
LNT 120	*Landscape Design I*	*3*

FOURTH SEMESTER

ARCH 112	*Architectural Rendering*	*3*
LA 200	*Introduction to Computer Aided Landscape Design*	*3*
LNT 122	*Landscape Design II*	*3*
LNT 134	*Soils*	*3*
	Total units	***39***

Landscape Design

Career/Technical (Major Code:02605)

The program specializes in the design of landscapes for residential and commercial buildings. The curriculum provides a student with the technical knowledge and skills for employment.

FIRST SEMESTER

ARCH 115	*Architectural Graphics*	*3*
LNT 102	*Plant Identification: Deciduous Trees*	*1*
LNT 103	*Plant Identification: Conifers and Palms*	*1*
LNT 104	*Plant Identification: Broadleaf Trees*	*1*
LNT 125	*Landscape Construction: Concrete and Masonry*	*1*
LNT 126	*Landscape Construction: Fence, Deck and Lumber*	*1*
LNT 127	*Landscape Construction: Sprinkler Installation*	*1*

SECOND SEMESTER

ARCH 110	*Freehand Drawing*	*3*
ARCH 112	*Architectural Rendering*	*3*
LNT 106	*Plant Identification: Flowering Shrubs*	*1*
LNT 107	*Plant Identification: Foliage Shrubs I*	*1*
LNT 108	*Plant Identification: Foliage Shrubs II*	*1*

THIRD SEMESTER

LNT 110	*Plant Identification: Annuals and Perennials I*	*1*
LNT 111	*Plant Identification: Annuals and Perennials II*	*1*
LNT 112	*Plant Identification: Vines, Ground and Covers*	*1*
LNT 120	*Landscape Design I*	*3*
LNT 128	*Sprinkler Design*	*3*

FOURTH SEMESTER

LA 200	*Introduction to Computer Aided Landscape Design*	*3*
LNT 122	*Landscape Design II*	*3*
	Total units	***33***

Landscape Occupations

Career/Technical (Major Code: 02603)

FIRST SEMESTER

LNT 100	*Plant and Horticultural Science*	*4*
LNT 102–115	*Plant Identification:*	*3*
Select 3 units from electives		*3*

SECOND SEMESTER

LNT 102–115	*Plant Identification:*	
	or	*3*
LNT 119	*Plant Materials: Xeriphytic Plants*	
LNT 134	*Soils*	*3*
Select 3 units from electives		*3*

THIRD SEMESTER

ACCT 7	*Basic Business Bookkeeping*	
	or	*3*
LNT 148	*Horticultural Business Practices*	
BIOL 100	*Principles of Biology (3)*	
BIOL 101	*Principles of Biology Laboratory (1)*	
	or	*4*
BIOL 170	*Field Botany (4)*	
Select 3 units from electives		*3*

FOURTH SEMESTER

CE 290–293	*Occupational Cooperative Education I–IV*	*4*
LNT 136	*Plant Pest and Disease Control*	*3*
Select 3 units from electives		*3*
	Total units	***39***

Electives: L*NT 72, 75, 120, 122, 123, 125, 126, 127, 128, 132.*

Nursery Occupations

COMMON CORE:

LNT 100	*Plant and Horticultural Science*	*4*
LNT 136	*Plant Pest and Disease Control*	*3*
LNT 138	*Floral Design I*	*2*
LNT 142	*Floral Crops*	*1.5*
LNT 144	*Foliage Production and Interiorscaping*	*1.5*
LNT 146	*Plant Propagation*	*1.5*
LNT 148	*Horticultural Business Practices*	
	or	*3*
ACCT 7	*Basic Business Bookkeeping*	
	Total units	***16.5***

Floral Design Emphasis

Career/Technical (Major Code: 02823)

ART 140	*House and Its Environment*	*3*
BUS 148	*Developing and Starting a New Business (3)*	
	or	*3*
BUS 144	*Advertising and Promotional Strategy (1)*	
BUS 145	*Financial Management for Small Business (1)*	
BUS 147	*Successful Selling Techniques (1)*	
COMM 174	*Interpersonal Communication*	*3*
LNT 95	*Portfolios, Presentations, and Consultations*	*1*
LNT 110	*Plant Identification: Annuals and Perennials I*	*1*
LNT 118	*Plant Identification: for Floral Design*	*1*
LNT 140	*Floral Design II*	*2*
LNT 141	*Floral Design III*	
	or	*1*
LNT 147	*Wedding Design*	
CE 290–293	*Occupational Cooperative Education I–IV*	*8*
Plus Common Core courses for Nursery Occupations		*16.5*
	Total units	***39.5***

Recommended Elective: BU*S 174.*

Retail Nursery and Plant Production

Career/Technical (Major Code: 02824)

BIOL 170	*Field Botany (4)*	
	or	*4*
BIOL 100	*Principles of Biology (3)*	
BIOL 101	*Principles of Biology Lab (1)*	
LNT 102–119	*Plant Identification:**	*6*
LNT 134	*Soils*	*3*
CE 290–293	*Occupational Cooperative Education I–IV*	*4*
Required electives		*7*
Plus Common Core courses for Nursery Occupations		*16.5*
	Total units	***40.5***

REQUIRED ELECTIVES:

LNT 72	*Horticulture Equipment: Care and Operation*	*2*
LNT 117	*Plant Identification: Tropicals for the Interior*	*1*
LNT 125	*Landscape Construction: Concrete and Masonry Skills*	*1*
LNT 126	*Landscape Construction: Fence, Deck, and Lumber Skills*	*1*
LNT 127	*Landscape Construction: Sprinkler Installation*	*1*
LNT 143	*Floriculture and Nursery Operations: Tree and Shrubs Production*	*1*

* Students may select any of the plant identification classes, to total 6 units

Landscape Architecture Courses

LA 101.
Landscape Graphics
1 unit

Lecture .5 hour, laboratory 1.5 hours
Offered: Fall
Introduction to presentation graphics and drafting for landscape design, including step-by-step study of how to draw a concept plan and how to draft landscape construction drawings. [D; CSU]

LA 102.
Survey of Landscape Architecture
1 unit

Lecture .5 hour, laboratory 1.5 hours
Offered: Fall
Survey of the career landscape architecture. Study of the skills performed by landscape architects including: types of projects, project processes, site evaluations, design presentation methods, and needs of the client. Study of landscape architectural styles and projects used throughout the world. [D; CSU]

LA 103.
Planting Design
1 unit

Lecture .5 hour, laboratory 1.5 hours
Offered: Fall
Study of the use of material in landscape design. Methods used in selecting plant materials based on cultural requirements and aesthetic character. The art of combining plant materials to create various visual and function effects. [D; CSU]

LA 200.
Introduction to Computer-Aided Landscape Design
3 units

Recommended Preparation: *ARCH 200, LNT 120, and 128, or equivalent*
Lecture 2 hours, laboratory 3 hours
Offered: Fall, Spring
Introduction to computer-aided design for the purpose of creating landscape and sprinkler plans using the software AutoCAD and "LandCAD." Creation of computer-generated landscape, sprinkler, topographic, and elevation drawings. Production of cost estimates. (ROP option) [D; CSU]

LA 201.
Advanced Computer-Aided Landscape Design
3 units

Prerequisite: *LA 200 or equivalent*
Lecture 2 hours, laboratory 3 hours
Offered: Fall, Spring
Continued instruction in the use of the software AutoCAD and "LandCAD." Creation of complete landscape and sprinkler plans including plan and 3D views, site details, contour maps, plant database manipulation, and completing cost estimates from completed plans. [D; CSU]

LA 295.
Selected Topics in Landscape Architecture
1–3 units

Offered: Variable
Permits students to study relevant subjects within the field of landscape architecture. The specific objectives, methods of instruction, and units of credit to be determined individually for courses proposed under this description. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

LA 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of landscape architecture which is of particular interest to the student and not included in regular courses of the college. [D; CSU]

Landscape and Nursery Technology Courses

LNT 70.
Principles of Pruning Fruit Trees and Vines
1 unit

Lecture 1 hour, laboratory .5 hour
Offered: Spring
Fruit tree identification, appropriate pruning practices for specific varieties, diseases, pest recognition and control, safety procedures, and tool recommendations. (ROP option) [D]

LNT 72.
Horticultural Equipment: Care and Operation
2 units

Lecture 1 hour, laboratory 3 hours
Offered: Variable
Instruction in the safe and proper care and operation of equipment used in Landscape Construction and Maintenance. (ROP option) [D]

LNT 75.
Pond Design, Installation, and Care
1 unit

Lecture .5 hour, laboratory 2 hours
Offered: Variable
Practices and procedures in the design, construction, and maintenance of ponds used in residential landscapes. Topics covered include: design concepts, materials used, installation procedures, initial pond set-up, and pond culture including the proper use of aquatic plants, fish, and maintaining a proper pond ecology. [D]

LNT 79A.
Groundskeeping—Soil and Plants
2 units

Lecture 1 hour, laboratory 3 hours
Offered: Variable
Basic training in the knowledge and skills needed to understand the relationship between soil and healthy plants. Diagnosis and correction of problems with soil and plants. Identification of plants and the different techniques used to plant them, as well as identification of pests, diseases, and common treatments. [ND]

LNT 79B.
Groundskeeping—Pruning of Trees and Shrubs
2 units

Lecture 1 hour, laboratory 3 hours
Offered: Variable
Basic training in the natural form of plants. Techniques to train a plant into the desired landscape form; techniques of pruning; types of cuts used in pruning; how to prune the complete variety of plants, trees, shrubs, and roses. [ND]

LNT 79C.
Groundskeeping—Turf/Ground Cover Care
2 units

Lecture 1 hour, laboratory 3 hours
Offered: Fall, Spring
Identification of warm and cool season grasses. Care, fertilization, renovation of warm and cool season grasses; treatment of grasses with pest and disease problems; and ground cover identification. [ND]

LNT 79D.
Groundskeeping—Irrigation Systems
2 units

Lecture 2 hours, laboratory 1 hour
Offered: Fall, Spring
Basic training in identification of irrigation parts, modifying an existing system, tuning-up existing systems, basic training in the drip system, and troubleshooting irrigation systems. [ND]

LNT 79E.
Groundskeeping—The Groundskeeping Business
2 units

Lecture 2 hours, laboratory 1 hour
Offered: Fall, Spring
Introduction to the types of positions available in the groundskeeping field as a small business. Estimating pricing for small grounskeeping projects, maintenance contracts, and the laws that govern groundskeepers. [ND]

LNT 80.
Groundskeeper
4 units

Lecture 2 hours, laboratory 6 hours
Offered: Variable
Basic training in the knowledge and skills needed to perform the duties of a grounds maintenance employee or groundskeeper. Includes the care and maintenance of lawns, trees, shrubs, ground cover areas, and flowers, as well as the proper use of tools and equipment. Emphasis on employee reliability and job performance. [ND]

LNT 85.
Pesticide Licensing Exam Preparation
1 unit

Lecture 1 hour
Offered: Variable
Preparation to pass the California Pesticide Applicators Exam. Includes pesticide laws, understanding pesticide labels, types of pesticides, application methods, license categories, safety, and pest recognition. (ROP option) [ND]

LNT 91.
Sprinkler System Maintenance: Sprinklers, Pipes, and Backflow Devices
1 unit

Lecture 1 hour, laboratory .5 hour
Offered: Fall
Instruction in the various types, installation methods, maintenance techniques, and repair of sprinklers, pipes, and backflow devices used in the landscape irrigation industry. (ROP option) [D]

LNT 92.
Sprinkler System Maintenance: Valves and Wiring
1 unit

Lecture 1 hour, laboratory .5 hour
Offered: Fall
Instruction in the proper installation, maintenance, and repair of control valves and wiring used in the sprinkler irrigation industry. (ROP option) [D]

LNT 93.
Sprinkler System Maintenance: Controllers and Scheduling
1 unit

Lecture 1 hour, laboratory .5 hour
Offered: Fall
Instruction in the proper installation, operation, and scheduling of landscape irrigation controllers used for sprinkler systems. Scheduling criteria include soil factors, climate, topography, and plant water requirements. (ROP option) [D]

LNT 95.
Portfolios, Presentations, and Consultations for Floral Design
1 unit

Recommended Preparation: *LNT 138, 140, and 141, or equivalent*
Lecture 1 hour
Offered: Fall
Designed to provide the skills necessary for Floral sales presentations and consultations and to give assistance in the development of the student's personal portfolio. (ROP option) [D]

LNT 100.
Plant and Horticultural Science
4 units

Lecture 3 hours, laboratory 3 hours
Offered: Fall, Spring
Study of plant structures, functions, taxonomy, and plant-soil-climate relationships. Importance of plants for food, air, and ornamental purposes. Management of plants in greenhouses and nursery structures and in the landscape. [D; CSU; UC]

LNT 102.
Plant Identification: Deciduous Trees
1 unit

Lecture 1 hour
Offered: Variable
Identification, growth characteristics, environmental requirements, and uses of 40 deciduous trees common to the California landscape. (ROP option) [D; CSU]

LNT 103.
Plant Identification: Conifers and Palms
1 unit

Lecture 1 hour
Offered: Variable
Identification, growth characteristics, environmental requirements, and uses of 40 conifers and palms common to the California landscape. (ROP option) [D; CSU]

LNT 104.
Plant Identification: Broadleaf Trees
1 unit

Lecture 1 hour
Offered: Variable
Identification, growth characteristics, environmental requirements, and uses of 40 broadleaf trees common to the California landscape. (ROP option) [D; CSU]

LNT 106.
Plant Identification: Flowering Shrubs
1 unit

Lecture 1 hour
Offered: Variable
Identification, growth characteristics, environmental requirements, and uses of 40 flowering shrubs common to the California landscape. (ROP option) [D; CSU]

LNT 107.
Plant Identification: Foliage Shrubs I
1 unit

Lecture 1 hour
Offered: Variable
Identification, growth characteristics, environmental requirements, and uses of an additional 40 foliage shrubs common to the California landscape. (ROP option) [D; CSU]

LNT 108.
Plant Identification: Foliage Shrubs II
1 unit

Lecture 1 hour
Offered: Variable
Continuation of LNT 107. Identification, growth characteristics, environmental requirements, and uses of an additional 40 foliage shrubs common to the California landscape. (ROP option) [D; CSU]

LNT 110.
Plant Identification: Annuals and Perennials I
1 unit

Lecture 1 hour
Offered: Variable
Identification, growth characteristics, requirements, and uses of 40 annuals and perennials common to the California landscape. (ROP option) [D; CSU]

LNT 111.
Plant Identification: Annuals and Perennials II
1 unit

Lecture 1 hour
Offered: Variable
Continuation of LNT 110. Identification, growth characteristics, environmental requirements, and uses of an additional 40 annuals and perennials common to the California landscape. (ROP option) [D; CSU]

LNT 112.
Plant Identification: Vines and Ground Covers
1 unit

Lecture 1 hour
Offered: Variable
Identification, growth characteristics, environmental requirements, and uses of 40 vines and ground covers common to the California landscape. (ROP option) [D; CSU]

LNT 115.
Plant Identification: Poisonous Plants
1 unit

Lecture 1 hour
Offered: Variable
Identification, environmental requirements, and growth characteristics of poisonous plants in the Southern California landscape. Includes human poisoning prevention and treatment procedures. (ROP option) [D; CSU]

LNT 116.
Plant Identification: Fruiting Plants
1.5 units

Lecture 1.5 hours
Offered: Variable
Provides students with knowledge of the fruiting trees, shrubs, vines, and perennials that are suitable for growing and producing fruit within the climates found in San Diego County. Includes appropriate selection and use, scientific and varietal names, cultural requirements, pest control, and seasonal harvest periods. (ROP option) [D; CSU]

LNT 117.
Plant Identification: Tropicals for the Interior
1 unit

Lecture 1 hour
Offered: Fall
Identification, environmental requirements, growth characteristics, and uses of 120 plants commonly used for interiors. (ROP option) [D; CSU]

LNT 118.
Plant Identification for Floral Design
1 unit

Lecture 1 hour
Offered: Variable
Designed to provide the student with knowledge of the trees, shrubs, annuals, and perennials, suitable for floral design. Includes appropriate scientific names, seasonal availability, and lasting ability. (ROP option) [D; CSU]

LNT 119.
Plant Materials: Xeriphytic Plants (Drought Tolerant)
3 units

Lecture 3 hours
Offered: Variable
Identification, environmental requirements, growth characteristics, and uses of trees, shrubs, and ground covers which can survive under low water conditions. (One all-day field trip required.) (ROP option) [D; CSU]

LNT 120.
Landscape Design I
3 units

Recommended Preparation: *LNT 102, 103, 104, 106, 107, 108, 110, 111, and 112, or equivalent*
Lecture 1 hour
Offered: Fall
Fundamental and history of landscape design for residential and commercial property. Topics include drafting skills, functional and aesthetic uses of plants, circulation, site evaluation, plant selection, topography, and design theory. (One all-day field trip required.) (ROP option) [D; CSU]

LNT 122.
Landscape Design II
3 units

Prerequisite: *LNT 120 or equivalent*
Lecture 2 hours, laboratory 3 hours
Offered: Spring
Further study in the field of landscape design with emphasis on site analysis, spatial analysis, sensory evaluation, cost considerations, energy conservation through proper design, site details, landscape maintenance specifications, larger scale designs, and improved drawing methods. (One all-day field trip required.) (ROP option) [D; CSU]

LNT 123.
Landscape Maintenance
4 units

Lecture 2 hours, laboratory 6 hours
Offered: Variable
Knowledge and skills necessary to perform landscape maintenance, including proper use of landscape tools and equipment, weed control methods, planting, grading and drainage, pruning, plant identification, sprinkler maintenance and repair, and materials used in the trade. (ROP option) [D; CSU]

LNT 125.
Landscape Construction: Concrete and Masonry Skills
1 unit

Lecture .33 hour, laboratory 2 hours
Offered: Fall
Concrete and masonry skills required in the landscape construction industry. Characteristics and use of cement and concrete. Hands-on building of sidewalks, patios, foundations, masonry walls, and masonry facing products. Importance of proper drainage. (ROP option) [D; CSU]

LNT 126.
Landscape Construction: Fence, Deck, and Lumber Skills
1 unit

Lecture .33 hour, laboratory 2 hours
Offered: Fall
Fence, deck, and lumber skills required in the landscape construction industry. Characteristics and uses of wood and wood fasteners. Hands-on building projects of fences, decks, overhead shade structures, benches, and planters. (ROP option) [D; CSU]

LNT 127.
Landscape Construction: Sprinkler Installation
1 unit

Lecture .33 hour, laboratory 2 hours
Offered: Fall
Sprinkler system installation skills required in the landscape construction industry. Methods of installing valves, pipes, fittings, backflow prevention devices, controllers, wiring, and sprinklers for residential and commercial systems. (ROP option) [D; CSU]

LNT 128.
Sprinkler Design
3 units

Lecture 2 hours, laboratory 3 hours
Offered: Variable
Principles of water application to ornamental areas including hydraulics, sprinkler design, drip systems, subsurface irrigation, and related irrigation practices. Methods for efficient water application and water conservation are covered. (One all-day field trip required.) (ROP option) [D; CSU]

LNT 131.
Landscape Contracting and Estimating
3 units

Lecture 3 hours
Offered: Variable
Procedures and methods for proper landscape estimating and bidding. Interpretation of blueprints and specifications determining overhead and profit percentages. Understanding of landscape contracting regulation and business procedures. Requirements of becoming a licensed landscape contractor. (ROP option) [D; CSU]

LNT 132.
Turf Management
3 units

Lecture 2 hours, laboratory 3 hours
Offered: Variable
Identification, culture, and management of turf grass; insects and diseases affecting grasses. Includes grass identification, mowing, fertilizing, watering methods, thatch control, aeration, top-dressing, and weed control. (One all-day field trip required.) (ROP option) [D; CSU]

LNT 133.
Golf Course and Sports Turf Management
3 units

Prerequisite: *LNT 132 or equivalent*
Lecture 2 hours, laboratory 3 hours
Offered: Spring
Designed to give the student advanced study in the specialization of both golf course and athletic field management. Includes specialized turf management techniques, specialized equipment, budget development, scheduling requirements, and administrative considerations. [D; CSU]

LNT 134.
Soils
3 units

Lecture 3 hours
Offered: Spring
Soil derivation, characteristics, and classification. Use and management, including moisture requirements, cultivation, and amendments. (One all-day field trip required.) (ROP option) [D; CSU]

LNT 136.
Plant Pest and Disease Control
3 units

Lecture 3 hours
Offered: Spring
Effects of mites, insects, diseases, and weeds on ornamental plants. Identification of life cycles, hosts and habitat relationships, along with methods and materials of control. (One all-day field trip required.) (ROP option) [D; CSU]

LNT 138.
Floral Design I
2 units

Lecture 1 hour, laboratory 3 hours
Offered: Variable
Theory, techniques, and skills practiced in the floral design industry. Instruction in basic design principles, cut flower preparation and care, merchandising and packaging. (One all-day field trip required.) (ROP option) [D; CSU]

LNT 140.
Floral Design II
2 units

Prerequisite: *LNT 138 or equivalent*
Lecture 1 hour, laboratory 3 hours
Offered: Variable
Continuation of LNT 138. More emphasis on wedding, funeral, banquet and seasonal floral design work. In addition a more in-depth study of shop management. (One all-day field trip required.) (ROP option) [D; CSU]

LNT 141.
Floral Design III
1 unit

Prerequisite: *LNT 140 or equivalent*
Lecture .5 hour, laboratory 1.5 hours
Offered: Variable
Further development of the creative ability of the student. Each individual will be responsible for designing original arrangements for the following topics: tropicals, theme luncheons, specialty events, hotel lobbies, etc. (ROP option) [D; CSU]

LNT 142.
Floral Crop Production
1.5 units

Lecture 1 hour, laboratory 1.5 hours
Offered: Variable
Fundamentals of florist crop production, including culture, management, and disease control of the various green-house crops, and bedding plants. (ROP option) [D; CSU]

LNT 143.
Floriculture and Nursery Operations: Tree and Shrubs Production
1 unit

Lecture .66 hour, laboratory 1.5 hours
Offered: Variable
Designed to provide information with regard to the propagation and growth requirements of trees and shrubs, production scheduling, containers for various stages of growth, and pests and diseases encountered during production. (ROP option) [D; CSU]

LNT 144.
Foliage Production and Interiorscaping
1.5 units

Lecture 1 hour, laboratory 1.5 hours
Offered: Variable
Fundamentals of plant selection, placement, and maintenance for interior purposes. Includes plant identification, watering, fertilization practices, pest and disease control, pruning, and site evaluation. (ROP option) [D; CSU]

LNT 146.
Plant Propagation
1.5 units

Lecture 1 hour, laboratory 1.5 hours
Offered: Variable
Principles of sexual and asexual plant propagation. Methods include propagation from seed, budding, grafting, cuttings, layering, division, and tissue cultures. (One all-day field trip required.) (ROP option) [D; CSU]

LNT 147.
Wedding Design
2 units

Prerequisite: *LNT 140 or equivalent*
Lecture 1 hour, laboratory 3 hours
Offered: Spring
Focus on the mechanics and placement of professionally designed wedding floral arrangements. Emphasis on specialty designs, decorations, and placement reflecting contemporary lifestyle choices of ceremony and reception sites. Study will feature sales, planning, and implementation. (ROP option) [D; CSU]

LNT 148.
Horticultural Business Practices
3 units

Lecture 3 hours
Offered: Fall Summer
Topics in the operation of a small horticultural business including starting up, advertising, employee relationships, recordkeeping, laws and regulations, customer relations, suppliers, and obtaining new customers. (ROP option) [D; CSU]

LNT 150.
Water Management in Southern California
1 unit

Lecture 1 hour
Offered: Variable
Examination of water resources and water issues in California. Methods of water delivery and water quality. Impact of growth on water resources and the need for new water. Water conservation methods and future water costs. Use of reclaimed water in the landscape. (One all-day Saturday field trip required.) [D; CSU]

LNT 295.
Selected Topics in Landscape and Nursery Technology
1–3 units

Offered: Variable
Permits students to study relevant subjects within the field of landscape and nursery technology. The specific objectives, methods of instruction, and units of credit to be determined individually for courses proposed under this description. (May be repeated for additional credit with new content.) [D; CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

LNT 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of landscape and nursery technology which is of particular interest to the student and not included in regular courses of the college. [D; CSU]

Learning Skills

School of Languages and Humanities

Dean

Renee M. Kilmer, Ph.D.
Office 430J
619-482-6461

Coodinator/Faculty

Anna Ingalls, M.A.

Learning Skills Courses

LS 80.
Speed Reading Skills I
1 unit

Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 1 hour
Offered: Variable
Designed to increase reading speed and comprehension when reading various types of written material. [D]

LS 81.
Speed Reading Skills II
1 unit

Recommended Preparation: *LS 80 or equivalent*
Lecture 1 hour
Offered: Variable
Second-level course designed to increase reading speed and comprehension when reading various types of written material. [D]

LS 110.
College Success Skills
3 units

Lecture 3 hours
Offered: Spring
A team-taught, comprehensive course designed to assist students in attaining lifelong academic, professional, and personal success. Includes critical thinking and analysis; time and task management; learning styles; personal and educational goals and values; physiosocial and psychological health; memory and concentration; academic study strategies; use of college resources. (Same as PD 110.) [D; CSU]

LS 115.
Service Learning
1 unit

Recommended Preparation: *ENGL 114 or equivalent*
Lecture 1 hour
Offered: Fall, Spring
Service learning gives students a rigorous academic course, incorporating critical thinking and reflective assignments which utilize community service, along with readings in social issues, as a basis for the coursework. It allows students an opportunity to do volunteer work for college credit, and to apply knowledge gained in the classroom. [D; CSU]

LS 295.
Selected Topics in Learning Skills
1–3 units

Offered: Variable
Permits students to study relevant topics within the field of learning skills. (May be taken for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

Legal Interpretation and Translation

School of Business and Information Systems

■ Dean

Irma Alvarez, M.A.
Office 215
619-482-6457

■ Faculty

Raschel Parsons, A.S.

■ Department Chair

Marilynne Hudgens, Ed.M.

General Description

The legal interpreter/translator works primarily within the California Court system as a court interpreter or as a full-time or freelance interpreter/translator whose services are utilized by legal and government agencies such as the Social Security Administration, the Immigration and Naturalization Service, the Agriculture Labor Relations Board, and private legal offices as well as clinics and hospitals.

Emphasis on English/Spanish legal terminology, interpretation of oral communications between attorney and client as well as written translation of legal pleading, forms, simple reports, and certificates. The program also emphasizes terminology required by interpreters in the medical, immigration, and business areas.

Career Options

Court interpreters, freelance interpreter/translator, assistant in legal intake and services in juvenile mediation, immigration, family counseling, legal clinics, related public and private agencies, and international business entities.

Degree/Certificate Options

	Major Code
Certificate of Achievement: Career Technical	
Legal Interpretation and Translation	*02451*

Certificate of Achievement

Legal Interpretation and Translation

(English/Spanish)

Career/Technical (Major Code: 02451)

Designed for students desiring careers as interpreters and translators in the legal field. Coursework offers skills required for employment in government and the courts, as well as in private legal offices.

BUS 181	*Spanish Computer Skills for Interpretation and Translation*	*3*
BUS 210	*Business English*	
	or	*3*
BUS 211	*Communication in Business and Industry*	
	or	
BUS 212	*Business Communication*	
BUS 225	*Interpretation and Translation: General Business*	
	or	*3*
BUS 233	*Interpretation and Translation: Immigration*	
	or	
LEGL 257	*Business and Legal Communications: Spanish*	
BUS 226	*Interpretation and Translation: Legal*	*3*
BUS 227	*Interpretation and Translation: Medical*	*3*
BUS 228	*Legal Terminology*	*2*
BUS 229	*Legal Terminology—Bilingual (Engl/Span)*	*1*
BUS 234	*Advanced Interpretation and Translation: Legal*	*3*
SPAN 221	*Introduction to Literature for Bilinguals **	
	or	*5*
SPAN 230	*Intermediate Spanish II **	
	Total units	***26***

* Students who have completed high school or a higher level degree in a Spanish-speaking country may waive the Spanish language requirement by submitting a transcript of studies from their foreign institution.

Legal Office Professional

School of Business and Information Systems

■ Dean

Irma Alvarez, M.A.
Office 215
619-482-6457

■ Faculty

Marilynne Hudgens, Ed.M.
Regina Hunter, M.A.
Victoria López, J.D.

■ Department Chair

Marilynne Hudgens, Ed.M.

General Description

The legal secretary assists attorneys with a wide variety of responsibilities including performing clerical duties; maintaining office files; working closely with attorneys to meet deadlines for court calendars; preparing summonses, complaints, motions, and subpoenas; and filing documents with the courts. In some law offices, legal secretaries review legal reference books, other legal publications/or electronic media to identify court decisions pertinent to pending cases.

Southwestern College offers two excellent programs: Legal Office Professional and Legal Office Professional—Bilingual (English/Spanish). These programs provide students with strong legal secretarial skills and focus on developing excellent human relations skills with an awareness of the growing multicultural community in San Diego County. An added feature is that students have an option of working toward a certificate or degree emphasizing one of the following specialties: family law; civil litigation; criminal law; business law; international business law; immigration law; wills, trust, probate, or word processing. Students with a specialty and/or knowledge of a frequently used foreign language will have the greatest opportunities for employment.

Career Options

The following list is a sample of the many career options available for the legal secretary or the legal secretary major: claims examiner, compensation and benefits manager, corporate legal secretary, court clerk, customs agent, forms and procedures specialist, freelance legal secretary, legal aide, legal technician, title examiner.

Degree/Certificate Options

	Major Code
Associate of Science: Career/Technical	
AREAS OF SPECIALTY	
Legal Office Professional	*B2155*
Business Law	*A2152*
Civil Litigation	*A2153*
Criminal Law	*A2154*
Family Law	*A2156*
Immigration Law	*A2157*
International Business Law	*A2158*
Wills, Trusts, and Estates	*A2159*
Word Processing	*02147*
Certificate of Achievement	
AREAS OF SPECIALTY	
Legal Office Professional	*B2355*
Business Law	*A2252*
Civil Litigation	*A2253*
Criminal Law	*A2254*
Family Law	*A2256*
Immigration Law	*A2257*
International Business Law	*A2258*
Wills, Trusts, and Estates	*A2259*
Word Processing	*02148*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Science Degree
Legal Office Professional

Career/Technical (Major Code: B2155)

The associate in science degree in legal office professional is designed to prepare students to work in a legal office. Students will gain an understanding of the court system, legal terminology, and the preparation of legal documents in some of the various areas of law including family law, wills and probate, and criminal law. Word processing skills and English language skills are also emphasized.

BUS 78	*Electronic Calculator*	*1*
BUS 182	*Keyboarding for Office Professionals*	*2*
BUS 200A	*Microsoft Word: Beginning Certification Preparation*	*2.5*
BUS 210	*Business English*	
	or	*3*
BUS 211	*Communication in Business and Industry*	
	or	
BUS 212	*Business Communication*	
BUS 223	*Legal Office Procedures*	*2.5*
BUS 249	*Legal Transcription*	*2.5*
CIS 122B	*Spreadsheet Software—Excel*	*1*
LEGL 224	*Procedures for Legal Office Personnel*	*3*
LEGL 270	*Computer Skills for Legal Professionals*	*2.5*
	Total units	***20***

Recommended Electives: *ACCT 7; BUS 73, 74, 140, 177, 183, 206, 226, 228, 229, 240, 200B, 246; LEGL 255, 256, 257, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269; CIS 129, 133, 134, 139, 140, 151, 152.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

NOTE: *Certificate of Achievement or A.S. degree stating a legal specialty will be granted upon the completion of all requirements above plus completion of one of the following specialties:*

Business Law Specialty

Career/Technical (Major Code: A2152)

Designed to instruct students to prepare legal documents, forms, and contracts in local or international legal offices with a special focus in the area of business law and litigation.

BUS 74	*Keyboarding Speed and Accuracy II*	*1*
BUS 75	*Keyboarding Speed and Accuracy III*	*1*
BUS 140	*Business Law*	*3*
LEGL 258	*Legal Communications*	*3*
LEGL 272	*Business Organizations*	*2*
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional program		*20*
	Total units	***32***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Civil Litigation Specialty

Career/Technical (Major Code: A2153)

Designed to instruct students to prepare court cases, documents, and pleadings to work in legal offices with a focus in civil litigation.

BUS 74	*Keyboarding Speed and Accuracy II*	*1*
BUS 75	*Keyboarding Speed and Accuracy III*	*1*
LEGL 258	*Legal Communications*	*3*
LEGL 261	*Civil Litigation I*	*3*
LEGL 269	*Civil Litigation Procedures*	*3*
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional program		*20*
	Total units	***33***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Criminal Law Specialty

Career/Technical (Major Code: A2154)

Designed to instruct students to prepare court documents and pleadings in public or private legal offices with a focus in litigating criminal law.

AJ 151	*Concepts of Criminal Law*	*3*
AJ 161	*Principles and Procedures of the Justice System*	*3*
BUS 74	*Keyboarding Speed and Accuracy II*	*1*
BUS 75	*Keyboarding Speed and Accuracy III*	*1*
LEGL 258	*Legal Communications*	*3*
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional program		*20*
	Total units	***33***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Family Law Specialty

Career/Technical (Major Code: A2156)

Designed to instruct students to prepare documents for divorce, custody, adoptions, and related proceedings in legal offices with a particular focus in family law.

BUS 74	*Keyboarding Speed and Accuracy II*	*1*
BUS 75	*Keyboarding Speed and Accuracy III*	*1*
LEGL 258	*Legal Communications*	*3*
LEGL 263	*Family Law*	*3*
LEGL 266	*Mediation, Negotiation, and Conflict Management*	*2*
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional Program		*20*
	Total units	***32***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Immigration Law Specialty

Career/Technical (Major Code: A2157)

Designed to instruct students to prepare a variety of immigration forms, documents, and interacting with clients in legal offices with a focus on immigration law.

BUS 74	*Keyboarding Speed and Accuracy II*	*1*
BUS 75	*Keyboarding Speed and Accuracy III*	*1*
LEGL 258	*Legal Communications*	*3*
LEGL 262	*Immigration Law and Procedure*	*3*
BUS 233	*Interpretation and Translation: Immigration (3)*	
	or	*2–3*
LEGL 267	*Interviewing and Investigation for Paralegals (2)*	
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional program		*20*
	Total units	***32–33***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

International Business Law Specialty

Career/Technical (Major Code: B2158)

Designed to prepare students to work in legal offices with a focus on international law in the area of export and import trade and related international business.

BUS 73	*Keyboarding Speed and Accuracy I*	*1*
BUS 74	*Keyboarding Speed and Accuracy II*	*1*
BUS 75	*Keyboarding Speed and Accuracy III*	*1*
LEGL 256	*International Law for Business*	*3*
LEGL 257	*International Business and Legal Communications: Spanish*	
	or	*3*
LEGL 258	*Legal Communications*	
BUS 108	*Legal Aspects of International Trade for Small Business (I)*	
	or	*1–3*
BUS 177	*Principles of International Business (3)*	
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional program		*20*
	Total units	***32–34***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Wills, Trusts, and Estates Specialty

Career/Technical (Major Codes: A2159)

Designed to prepare students to work in legal offices with a focus in the preparation of wills, trusts, and probate.

BUS 74	*Keyboarding Speed and Accuracy II*	*1*
BUS 75	*Keyboarding Speed and Accuracy III*	*1*
LEGL 258	*Legal Communications*	*3*
LEGL 264	*Wills, Trusts, and Estates*	*3*
BUS 121	*Financial Planning and Money Management*	
	or	*3*
RE 101	*Real Estate Principles*	
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional program		*20*
	Total units	***33***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Word Processing Specialty

Career/Technical (Major Codes: 02147)

Designed to provide comprehensive training in the legal office support area. Emphasis on word processing and legal office procedures focusing on Microsoft Office software applications. Students have an option to become Microsoft certified by passing the Microsoft Office Specialist (MOS) core and expert certification examinations.

Students learn telephone and receptionist techniques, machine transcription, business communications, human relations, teamwork, email, and Internet office applications as well as introductory-level skills in Microsoft PowerPoint, Excel, Outlook, and Access.

BUS 74	*Keyboarding Speed and Accuracy II*	*1*
BUS 75	*Keyboarding Speed and Accuracy III*	*1*
BUS 200B	*Microsoft Word: Advanced Certification Preparation*	*2.5*
BUS 240	*Microsoft Outlook*	*2.5*
LEGL 258	*Legal Communications*	
	or	*3*
BUS 211	*Communication in Business and Industry*	
	or	
BUS 212	*Business Communication*	
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional program		*20*
	Total units	***32***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Certificate of Achievement
Legal Office Professional

Career/Technical (Major Code: B2355)

BUS 78	*Electronic Calculator*	*1*
BUS 182	*Keyboarding for Office Professionals*	*2*
BUS 200A	*Microsoft Word: Beginning Certification Preparation*	*2.5*
BUS 210	*Business English*	
	or	*3*
BUS 211	*Communication in Business and Industry*	
	or	
BUS 212	*Business Communication*	
BUS 223	*Legal Office Procedures*	*2.5*
BUS 249	*Legal Transcription*	*2.5*
CIS 122B	*Spreadsheet Software—Excel*	*1*
LEGL 224	*Procedures for Legal Office Personnel*	*3*
LEGL 270	*Computer Skills for Legal Professionals*	*2.5*
	Total units	***20***

Business Law Specialty

Career/Technical (Major Code: A2252)

BUS 74	*Keyboarding Speed and Accuracy II*	*1*
BUS 75	*Keyboarding Speed and Accuracy III*	*1*
BUS 140	*Business Law*	*3*
LEGL 258	*Legal Communications*	*3*
LEGL 272	*Business Organizations*	*2*
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional program		*20*
	Total units	***32***

Civil Litigation Specialty

Career/Technical (Major Code: A2253)

BUS 74	*Keyboarding Speed and Accuracy II*	*1*
BUS 75	*Keyboarding Speed and Accuracy III*	*1*
LEGL 258	*Legal Communications*	*3*
LEGL 261	*Civil Litigation I*	*3*
LEGL 269	*Civil Litigation Procedures*	*3*
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional program		*20*
	Total units	***33***

Criminal Law Specialty

Career/Technical (Major Code: A2254)

AJ 151	*Concepts of Criminal Law*	*3*
AJ 161	*Principles and Procedures of the Justice System*	*3*
BUS 74	*Keyboarding Speed and Accuracy II*	*1*
BUS 75	*Keyboarding Speed and Accuracy III*	*1*
LEGL 258	*Legal Communications*	*3*
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional program		*20*
	Total units	***33***

Family Law Specialty

Career/Technical (Major Code: A2256)

BUS 74	*Keyboarding Speed and Accuracy II*	*1*
BUS 75	*Keyboarding Speed and Accuracy III*	*1*
LEGL 258	*Legal Communications*	*3*
LEGL 263	*Family Law*	*3*
LEGL 266	*Mediation, Negotiation, and Conflict Management*	*2*
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional program		*20*
	Total units	***32***

Immigration Law Specialty

Career/Technical (Major Code: A2257)

BUS 74	*Keyboarding Speed and Accuracy II*	*1*
BUS 75	*Keyboarding Speed and Accuracy III*	*1*
LEGL 258	*Legal Communications*	*3*
LEGL 262	*Immigration Law and Procedure*	*3*
BUS 233	*Interpretation and Translation: Immigration (3)*	
	or	*2–3*
LEGL 267	*Interviewing and Investigation for Paralegals (2)*	
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional program		*20*
	Total units	***32–33***

International Business Law Specialty

Career/Technical (Major Code: A2258)

BUS 73	*Keyboarding Speed and Accuracy I*	*1*
BUS 74	*Keyboarding Speed and Accuracy II*	*1*
BUS 75	*Keyboarding Speed and Accuracy III*	*1*
LEGL 256		
LEGL 257	*International Business and Legal Communications: Spanish*	
	or	*3*
LEGL 258	*Legal Communications*	
BUS 108	*Legal Aspects of International Trade for Small Business (I)*	
	or	*1–3*
BUS 177	*Principles of International Business (3)*	
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional program		*20*
	Total units	***32–34***

Wills, Trusts, and Estates Specialty

Career/Technical (Major Codes: A2259)

BUS 74	*Keyboarding Speed and Accuracy II*	*1*
BUS 75	*Keyboarding Speed and Accuracy III*	*1*
LEGL 258	*Legal Communications*	*3*
LEGL 264	*Wills, Trusts, and Estates*	*3*
BUS 121	*Financial Planning and Money Management*	
	or	*3*
RE 101	*Real Estate Principles*	
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional program		*20*
	Total units	***33***

Word Processing Specialty

Career/Technical (Major Codes: 02148)

BUS 74	*Keyboarding Speed and Accuracy II*	*1*
BUS 75	*Keyboarding Speed and Accuracy III*	*1*
BUS 200B	*Microsoft Word: Advanced Certification Preparation*	*2.5*
BUS 240	*Microsoft Outlook*	*2.5*
LEGL 258	*Legal Communications*	
	or	*3*
BUS 211	*Communication in Business and Industry*	
	or	
BUS 212	*Business Communication*	
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional program		*20*
	Total units	***32***

Legal Office Professional—Bilingual

School of Business and Information Systems

■ Dean

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619-482-6457

■ Faculty

Marilynne Hudgens, Ed.M.
Regina Hunter, M.A.
Victoria López, J.D.
Raschel Parsons, A.S.

■ Department Chair

Marilynne Hudgens, Ed.M.

General Description

The legal secretary assists attorneys with a wide variety of responsibilities including performing clerical duties; maintaining office files; working closely with attorneys to meet deadlines for court calendars; preparing summonses, complaints, motions, and subpoenas; and filing documents with the courts. In some law offices, legal secretaries review legal reference books, other legal publications/or electronic media to identify court decisions pertinent to pending cases.

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Career Options

The following list is a sample of the many career options available for the legal secretary or the legal secretary major: claims examiner, compensation and benefits manager, corporate legal secretary, court clerk, customs agent, forms and procedures specialist, freelance legal secretary, legal aide, legal technician, title examiner, court interpreter, and legal documents translator.

Degree/Certificate Options

	Major Code
Bilingual	
Associate of Science: Career/Technical	
AREAS OF SPECIALTY	
Legal Office Professional—Bilingual	*B2165*
Business Law	*A2162*
Civil Litigation	*A2163*
Criminal Law	*A2164*
Family Law	*A2166*
Immigration Law	*A2167*
International Business Law	*A2168*
Legal Interpretation and Translation Specialty (English/Spanish)	*02174*
Wills, Trusts, and Estates	*A2169*
Word Processing—Bilingual	*02144*
Certificate of Achievement	
AREAS OF SPECIALTY	
Legal Office Professional—Bilingual	*B2365*
Business Law	*A2262*
Civil Litigation	*A2263*
Criminal Law	*A2264*
Family Law Specialty	*A2266*
Immigration Law	*A2267*
International Business Law	*A2268*
Legal Interpretation and Translation Specialty	*02272*
Wills, Trusts, and Estates	*A2269*
Word Processing—Bilingual	*02145*
Other Certificate of Achievement	
Legal Office Clerk—Bilingual	*02455*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Science Degree

Legal Office Professional—Bilingual (English/Spanish)

Career/Technical (Major Code: B2165)

Designed to prepare students to work in legal offices such as the state and federal court systems, the Immigration and Naturalization Service, and private law firms. Provides a basic understanding of the legal system, legal terminology, and legal office procedures.

BUS 78	*Electronic Calculator*	*1*
BUS 182	*Keyboarding for Office Professionals*	*2*
BUS 200A	*Microsoft Word: Beginning Certification Preparation*	*2.5*
BUS 223	*Legal Office Procedures*	*2.5*
BUS 226	*Interpretation and Translation: Legal*	*3*
BUS 229	*Legal Terminology—Bilingual (English/Spanish)*	*1*
BUS 249	*Legal Transcription*	*2.5*
BUS 210	*Business English*	
	or	*3*
BUS 211	*Communication in Business and Industry*	
	or	
BUS 212	*Business Communication*	
LEGL 270	*Computer Skills for Legal Professionals*	*2.5*
SPAN 230	*Intermediate Spanish II **	*5*
	Total units	***25***

Recommended Electives: *ACCT 7; BUS 73, 74, 183, 206, 225, 227, 228, 234, 240, 200B, 246; CIS 129, 133, 134, 135, 139, 140, 151, 152; LEGL 255, 256, 257, 259, 264, 265, 267, 268.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Native speakers from a Spanish-speaking country who have finished high school or the equivalent in that country will have satisfied the Spanish language requirement. Students who have completed high school in the U.S. and have completed the fourth-year level of Spanish will have satisfied the Spanish language requirement.

Business Law Specialty

Career/Technical (Major Code: A2162)

Designed to instruct students to utilize English/Spanish bilingual skills to prepare legal documents, forms, and contracts in local or international legal offices with a special focus in the area of business law and litigation.

BUS 75	*Keyboarding Speed and Accuracy III*	*1*
BUS 140	*Business Law*	*3*
LEGL 224	*Procedures for Legal Office Personnel*	*3*
LEGL 258	*Legal Communications*	
	or	*3*
BUS 211	*Communication in Business and Industry*	
	or	
BUS 212	*Business Communication*	
LEGL 272	*Business Organizations*	*2*
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional—Bilingual program		*25*
	Total units	***39***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Civil Litigation Specialty

Career/Technical (Major Code: A2163)

Designed to instruct students to utilize English/Spanish bilingual skills to prepare legal cases, documents, and pleadings in legal offices that focus on civil litigation.

BUS 75	*Keyboarding Speed and Accuracy III*	*1*
LEGL 224	*Procedures for Legal Office Personnel*	*3*
LEGL 258	*Legal Communications*	
	or	*3*
BUS 211	*Communication in Business and Industry*	
	or	
BUS 212	*Business Communication*	
LEGL 261	*Civil Litigation I*	*3*
LEGL 269	*Civil Litigation Procedures*	*3*
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional—Bilingual program		*25*
	Total units	***40***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Criminal Law Specialty

Career/Technical (Major Code: A2164)

Designed to instruct students to utilize English/Spanish bilingual skills to prepare court documents and pleadings in public or private legal offices with a focus in litigating criminal law.

AJ 151	*Concepts of Criminal Law*	*3*
AJ 161	*Principles and Procedures of the Justice System*	*3*
BUS 75	*Keyboarding Speed and Accuracy III*	*1*
LEGL 224	*Procedures for Legal Office Personnel*	*3*
LEGL 258	*Legal Communications*	
	or	*3*
BUS 211	*Communication in Business and Industry*	
	or	
BUS 212	*Business Communication*	
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional—Bilingual program		*25*
	Total units	***40***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Family Law Specialty

Career/Technical (Major Code: A2166)

Designed to instruct students to utilize English/Spanish bilingual skills to prepare divorce, custody, adoptions, and related proceedings in legal offices with a particular focus in family law.

BUS 75	*Keyboarding Speed and Accuracy III*	*1*
LEGL 224	*Procedures for Legal Office Personnel*	*3*
LEGL 258	*Legal Communications*	
	or	*3*
BUS 211	*Communication in Business and Industry*	
	or	
BUS 212	*Business Communication*	
LEGL 263	*Family Law*	*3*
LEGL 266	*Mediation, Negotiation, and Conflict Management*	*2*
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional—Bilingual program		*25*
	Total units	***39***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Immigration Law Specialty

Career/Technical (Major Code: A2167)

Designed to instruct students to utilize English/Spanish bilingual skills to prepare a variety of immigration forms, documents, and interacting with clients in legal offices with a focus on immigration law.

BUS 75	*Keyboarding Speed and Accuracy III*	*1*
LEGL 224	*Procedures for Legal Office Personnel*	*3*
LEGL 258	*Legal Communications*	
	or	*3*
BUS 211	*Communication in Business and Industry*	
	or	
BUS 212	*Business Communication*	
LEGL 262	*Immigration Law and Procedure*	*3*
BUS 233	*Interpretation and Translation: Immigration (3)*	
	or	*2–3*
LEGL 267	*Interviewing and Investigation for Paralegals (2)*	
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional—Bilingual program		*25*
	Total units	***39–40***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

International Business Law Specialty

Career/Technical (Major Code: A2168)

Designed to prepare students to utilize English/Spanish bilingual skills to work in legal offices with a focus on international law in the area of export and import trade and related international business.

BUS 75	*Keyboarding Speed and Accuracy III*	*1*
LEGL 224	*Procedures for Legal Office Personnel*	*3*
LEGL 257	*International Business and Legal Communications: Spanish*	
	or	*3*
LEGL 258	*Legal Communications*	
LEGL 256	*International Law for Business*	*3*
BUS 108	*Legal Aspects of International Trade for Small Business (1)*	
	or	*1–3*
BUS 177	*Principles of International Business (3)*	
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional—Bilingual program		*25*
	Total units	***38–40***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Legal Interpretation and Translation Specialty (English/Spanish)

Career/Technical (Major Code: 02174)

Designed to prepare students to work in legal offices, the courts, or agencies of the state and federal government, and private law firms. Provides a basic understanding of the legal systems, legal terminology, and legal office procedures. Introductory interpretation and translation skills are developed along with proficiency in keyboarding and word processing utilizing English/Spanish bilingual skills.

BUS 181	*Spanish Computer Skills for Interpretation and Translation*	*3*
BUS 211	*Communication in Business and Industry*	
	or	*3*
BUS 212	*Business Communication*	
	or	
LEGL 258	*Legal Communications*	
LEGL 224	*Procedures for Legal Office Personnel*	*3*
BUS 227	*Interpretation and Translation: Medical*	
	or	*3*
BUS 233	*Interpretation and Translation: Immigration*	
	or	
LEGL 257	*International Business and Legal Communication: Spanish*	
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional—Bilingual Program		*25*
	Total Units	***39***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Wills, Trusts, and Estates Specialty

Career/Technical (Major Codes: A2169)

Designed to instruct students to utilize English/Spanish bilingual skills to work in legal offices with a focus in the preparation of wills, trusts, and probate.

BUS 75	*Keyboarding Speed and Accuracy III*	*1*
LEGL 224	*Procedures for Legal Office Personnel*	*3*
LEGL 258	*Legal Communications*	
	or	*3*
BUS 211	*Communication in Business and Industry*	
	or	
BUS 212	*Business Communication*	
LEGL 264	*Wills, Trusts, and Estates*	*3*
BUS 121	*Financial Planning and Money Management*	
	or	*3*
RE 101	*Real Estate Principles*	
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional—Bilingual program		*25*
	Total units	***40***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Word Processing Specialty

Career/Technical (Major Codes: 02144)

Designed to provide comprehensive training in the legal office support area. Emphasis placed on word processing and legal office procedures focusing on Microsoft Office software applications. Students have an option to become Microsoft certified by passing the Microsoft Office Specialist (MOS) core and expert certification examinations. Program also provides bilingual English/Spanish language training in telephone and receptionist techniques, legal terminology and basic interpretation and translation skills for legal office support positions at the entry and intermediate levels.

BUS 75	*Keyboarding Speed and Accuracy III*	*1*
BUS 200B	*Microsoft Word: Advanced Certification Preparation*	*2.5*
BUS 240	*Microsoft Outlook*	*2.5*
BUS 211	*Communication in Business and Industry*	
	or	
BUS 212	*Business Communication*	*3*
	or	
LEGL 258	*Legal Communications*	
LEGL 224	*Procedures for Legal Office Personnel*	*3*
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional—Bilingual program		*25*
	Total units	***39***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Certificate of Achievement

Legal Office Professional—Bilingual (English/Spanish)

Career/Technical (Major Code: B2365)

BUS 78	*Electronic Calculator*	1
BUS 182	*Keyboarding for Office Professionals*	2
BUS 200A	*Microsoft Word: Beginning Certification Preparation*	2.5
BUS 223	*Legal Office Procedures*	2.5
BUS 226	*Interpretation and Translation: Legal*	3
BUS 229	*Legal Terminology—Bilingual (Engl/Span)*	1
BUS 249	*Legal Transcription*	2.5
BUS 210	*Business English*	
	or	3
BUS 211	*Communication in Business and Industry*	
	or	
BUS 212	*Business Communication*	
LEGL 270	*Computer Skills for Legal Professionals*	2.5
SPAN 230	*Intermediate Spanish II **	5
	Total units	**25**

Recommended Electives: *ACCT 7; BUS 73, 74, 183, 206, 225, 227, 228, 234, 240, 200B, 246; CIS 129, 133, 134, 135, 139, 140, 151, 152; LEGL 255, 256, 257, 259, 264, 265, 267, 268.*

NOTE: *Certificate of Achievement or A.S. degree stating a legal specialty will be granted upon the completion of all requirements above plus completion of one of the following specialties:*

* Native speakers from a Spanish-speaking country who have finished high school or the equivalent in that country will have satisfied the Spanish language requirement. Students who have completed high school in the U.S. and have completed the fourth-year level of Spanish will have satisfied the Spanish language requirement.

Business Law Specialty

Career/Technical (Major Code: A2262)

BUS 75	*Keyboarding Speed and Accuracy III*	1
BUS 140	*Business Law*	3
LEGL 224	*Procedures for Legal Office Personnel*	3
LEGL 258	*Legal Communications*	
	or	3
BUS 211	*Communication in Business and Industry*	
	or	
BUS 212	*Business Communication*	
LEGL 272	*Business Organizations*	2
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	2
Plus courses required for the Legal Office Professional—Bilingual program		25
	Total units	**39**

Civil Litigation Specialty

Career/Technical (Major Code: A2263)

BUS 75	*Keyboarding Speed and Accuracy III*	1
LEGL 224	*Procedures for Legal Office Personnel*	3
LEGL 258	*Legal Communications*	
	or	3
BUS 211	*Communication in Business and Industry*	
	or	
BUS 212	*Business Communication*	
LEGL 261	*Civil Litigation I*	3
LEGL 269	*Civil Litigation Procedures*	3
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	2
Plus courses required for the Legal Office Professional—Bilingual program		25
	Total units	**40**

Criminal Law Specialty

Career/Technical (Major Code: A2264)

AJ 151	*Concepts of Criminal Law*	3
AJ 161	*Principles and Procedures of the Justice System*	3
BUS 75	*Keyboarding Speed and Accuracy III*	1
LEGL 224	*Procedures for Legal Office Personnel*	3
LEGL 258	*Legal Communications*	
	or	3
BUS 211	*Communication in Business and Industry*	
	or	
BUS 212	*Business Communication*	
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	2
Plus courses required for the Legal Office Professional-Bilingual program		25
	Total units	**40**

Family Law Specialty

Career/Technical (Major Code: A2266)

BUS 75	*Keyboarding Speed and Accuracy III*	1
LEGL 224	*Procedures for Legal Office Personnel*	3
LEGL 258	*Legal Communications*	
	or	3
BUS 211	*Communication in Business and Industry*	
	or	
BUS 212	*Business Communication*	
LEGL 263	*Family Law*	3
LEGL 266	*Mediation, Negotiation, and Conflict Management*	2
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	2
Plus courses required for the Legal Office Professional—Bilingual program		25
	Total units	**39**

Immigration Law Specialty

Career/Technical (Major Code: A2267)

BUS 75	*Keyboarding Speed and Accuracy III*	*1*
LEGL 224	*Procedures for Legal Office Personnel*	*3*
LEGL 258	*Legal Communications*	
	or	*3*
BUS 211	*Communication in Business and Industry*	
	or	
BUS 212	*Business Communication*	
LEGL 262	*Immigration Law and Procedure*	*3*
BUS 233	*Interpretation and Translation: Immigration (3)*	
	or	*2–3*
LEGL 267	*Interviewing and Investigation for Paralegals (2)*	
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional—Bilingual program		*25*
	Total units	***39–40***

International Business Law Specialty

Career/Technical (Major Code: A2268)

BUS 75	*Keyboarding Speed and Accuracy III*	*1*
LEGL 224	*Procedures for Legal Office Personnel*	*3*
LEGL 257	*International Business and Legal Communications: Spanish*	
	or	*3*
LEGL 258	*Legal Communications*	
LEGL 256	*International Law for Business*	*3*
BUS 108	*Legal Aspects of International Trade for Small Business (1)*	
	or	*1–3*
BUS 177	*Principles of International Business (3)*	
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional—Bilingual program		*25*
	Total units	***38–40***

Legal Interpretation and Translation Specialty

Career Technical (major Code: 02272)

BUS 181	*Spanish Computer Skills for Interpretation and Translation*	*3*
BUS 211	*Communication in Business and Industry*	
	or	*3*
BUS 212	*Business Communication*	
	or	
LEGL 258	*Legal Communications*	
LEGL 224	*Procedures for Legal Office Personnel*	*3*
BUS 227	*Interpretation and Translations: Medical*	
	or	
BUS 233	*Interpretation and Translation: Immigration*	
	or	
LEGL 257	*International Business and Legal Communication: Spanish*	
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional—Bilingual Program		*25*
	Total units	***39***

Wills, Trusts, and Estates Specialty

Career/Technical (Major Codes: A2269)

BUS 75	*Keyboarding Speed and Accuracy III*	*1*
LEGL 224	*Procedures for Legal Office Personnel*	*3*
LEGL 258	*Legal Communications*	
	or	
BUS 211	*Communication in Business and Industry*	*3*
	or	
BUS 212	*Business Communication*	
LEGL 264	*Wills, Trusts, and Estates*	*3*
BUS 121	*Financial Planning and Money Management*	
	or	*3*
RE 101	*Real Estate Principles*	
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional—Bilingual Program		*25*
	Total units	***40***

Word Processing Specialty

Career/Technical (Major Codes: 02145)

BUS 75	*Keyboarding Speed and Accuracy III*	*1*
BUS 200B	*Microsoft Word: Advanced Certification Preparation*	*2.5*
BUS 240	*Microsoft Outlook*	*2.5*
BUS 211	*Communication in Business and Industry*	
	or	
BUS 212	*Business Communication*	*3*
	or	
LEGL 258	*Legal Communications*	
LEGL 224	*Procedures for Legal Office Personnel*	*3*
LEGL 290–293	*Legal Cooperative Work Experience I–IV*	*2*
Plus courses required for the Legal Office Professional—Bilingual program		*25*
	Total units	***39***

Other Certificate of Achievement

Legal Office Clerk—Bilingual

Career/Technical (Major Code: 02455)

The 17-week intensive entry-level program prepares students to work in a bilingual (English/Spanish) legal office setting. Emphasis is placed on developing skills in bilingual legal terminology, telephone and reception techniques, legal office procedures, keyboarding correspondence, word processing using Microsoft Word, translation of legal documents, and interpretation for Spanish-speaking clients. Students will complete job internships by also enrolling in BUS 290, Work Experience.

Este programa intensivo de 17-semanas prepara a los estudiantes para empleos en oficinas legales bilingües. Enfatiza el desarroyo de habilidades en terminología legal, técnicas telefónicas y de recepción, procedimientos legales de oficina, mecanografía, correspondencia, procesador de palabras (word processing), utilizando "Microsoft Word," traducción de documentos legales e interpretación para clientes de habla hispana. Los alumnos llevarán a cabo las prácticas de trabajo inscribiéndose simultáneamente en BUS 290.

BUS 36	*Legal Office Assistant—Bilingual*	*12*
BUS 290	*Work Experience in Business*	*1*
	Total units	***13***

LEGL 224.
Procedures for Legal Office Personnel
3 units

Recommended Preparation: *ENGL 105 or the equivalent skill level as determined by the Southwestern College English Assessment or equivalent; ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent; and ability to keyboard by touch at a minimum of 30 wpm*
Lecture 3 hours, laboratory 1 hour
Offered: Spring
Fee: $5. Trains students to prepare for work in a legal office, primarily focusing on federal litigation using Microsoft Word or WordPerfect; specialized legal computer software, as well as Internet resources. Preparation of court documents and forms in the areas of civil litigation, criminal law, family law, real property, and corporations using the law library to recognize legal authorities and cite cases in legal documents. [D; CSU]

LEGL 255.
Introduction to Law and Legal Terminology
3 units

Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Overview of the American system of government as it relates to our system of law; concepts and terminology in procedures, estates, business, contracts, property, criminal law; and basic introduction to legal case analysis and the law library. [D; CSU]

LEGL 256.
International Law for Business
3 units

Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Designed to give students a basic understanding of the laws governing international trade, licensing, and investment, including an overview of the North American Free Trade Agreement (NAFTA). Political, business and legal risks of doing business in countries around the world and varied ethical and legal values. [D; CSU]

LEGL 257.
International Business and Legal Communications: Spanish
3 units

Recommended Preparation: *SPAN 221 or equivalent*
Lecture 3 hours
Offered: Variable
Emphasizes principles of written communications applied to common Spanish business and legal transactions, with discussion of terminology, currencies, and measurements used in various Spanish-speaking countries. Written business and legal communications in Spanish and techniques of interpretation and translation often utilized in international business. [D; CSU]

LEGL 258.
Legal Communications
3 units

Recommended Preparation: *LEGL 260 or equivalent*
Lecture 3 hours
Offered: Variable
Preparation of legal reports, client correspondence, motions, case briefs, legal memoranda, and oral communications utilized in a variety of legal contexts. [D; CSU]

LEGL 259.
Legal Assistant: An Introduction
1 unit

Lecture 1 hour
Offered: Variable
Designed to orient students to the SWC Legal Assistant program, to provide students with information about career opportunities, and to help students gain basic knowledge about the role of the legal assistant in the legal community, legal ethics, legal terminology, the court system, basic legal research tools, and the law library. [D; CSU]

LEGL 260.
Legal Research
3 units

Recommended Preparation: *LEGL 255 and 261, or equivalent; BUS 211 or ENGL 114 or the equivalent skill level as determined by the Southwestern College English Assessment or equivalent; ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours, laboratory 1 hour
Offered: Fall, Spring
Provides a foundation in legal research techniques, primarily focusing on traditional text-based techniques with an introduction to online legal database and Internet research. Students will identify sources of law, discuss their interrelationships, define and find primary and secondary authority, learn how to employ finding tools to analyze information, formulate legal issues, and draw conclusions regarding the possible outcomes of legal situations. Introduction to the legal writing process. [D; CSU]

LEGL 261.
Civil Litigation I
3 units

Recommended Preparation: *BUS 228 or LEGL 255 or equivalent; ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Fee: $5. Broad overview of civil litigation including jurisdiction and venue, discovery, pretrial, trial proceedings, state and appellate court procedures, and judicial arbitration in order to train the student to prepare appropriate documentation and draft complaints, answers, and pretrial documents and settlement agreements. [D; CSU]

LEGL 262.
Immigration Law and Procedure
3 units

Recommended Preparation: *BUS 228 or LEGL 255 or equivalent; ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Overview of immigration law and procedure including the Immigration Act of 1990, the Code of Federal Regulations, the Visa Bulletin, and the decisions of the Board of Immigration Appeals to train the student to analyze cases for deportability, exclusion, and relief in order to prepare appropriate documentation and briefs.[D; CSU]

LEGL 263.
Family Law
3 units

Recommended Preparation: *BUS 228 or LEGL 255 or equivalent; ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Designed to train paralegals and other legal personnel in the law affecting domestic relations, as well as in the preparation of documents for the court in the areas of domestic violence, marital dissolution, child custody, child and spousal support, and visitation. [D; CSU]

LEGL 264.
Wills, Trusts, and Estates
3 units

Recommended Preparation: *BUS 228 or LEGL 255 or equivalent; ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Designed to train paralegals and other legal personnel in the laws and legal procedures for wills, trusts and probate, and in the concepts and methodology of estate planning and estate administration, including an overview of the taxation principles in effect for estate administration. [D; CSU]

LEGL 265.
Alternative Dispute Resolution
1 unit

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 1 hour
Offered: Variable
Intended to prepare legal assistants for alternative dispute resolution (ADR) in the legal field. Overview of all types of ADR with emphasis on the most common forms utilized in the legal field: negotiation, mediation, arbitration, neutral fact finding, and settlement conferences. Emphasis on the use of legal terminology in these ADR forums. [D; CSU]

LEGL 266.
Mediation, Negotiation, and Conflict Management
2 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 2 hours
Offered: Variable
Designed to be a practical, hands-on introduction to the practice of mediation, negotiation, and interest-based conflict resolution. Students will gain mastery in the formal mediation process and related skills in communication and negotiation, important workplace competencies. [D; CSU]

LEGL 267.
Interviewing and Investigation for Paralegals
2 units

Recommended Preparation: *LEGL 255 or 261 or equivalent*
Lecture 2 hours
Offered: Variable
Overview of the litigation process discussing rules of procedure, evidence, and ethics as a framework for investigating client and case facts, organizing and working with evidence and conducting a professional interview. Includes interviewing children and individuals from some of the varied cultures represented in our community. [D; CSU]

LEGL 268.
Computer Assisted Legal Research (CALR)
2 units

Recommended Preparation: *LEGL 260 or equivalent*
Lecture 2 hours, laboratory 1 hour
Offered: Variable
Fee: $5. Designed to train students to find primary and secondary authority in legal research and to verify accuracy and currency of information by utilizing electronic resources including the Internet, CD-ROM files, and online legal databases. Hands-on training will allow students to locate online database/CD-ROM/ Internet research materials, develop online query techniques, and verify research. [D; CSU]

LEGL 269.
Civil Litigation Procedures
3 units

Recommended Preparation: *LEGL 261 or equivalent; knowledge of keyboard and ability to type 25 wpm*
Lecture 3 hours, laboratory 1 hour
Offered: Variable
Various phases of the litigation process at the state and federal levels including pretrial, trial, and post trial proceedings emphasizing the federal litigation process. Students will have an opportunity to use computer software applications commonly found in legal offices to fill out forms, draft pleadings and correspondence, and to organize files and evidence for trials and appeals. [D; CSU]

LEGL 270.
Computer Skills for Legal Professionals
2.5 units

Recommended Preparation: *BUS 223, 228, or 229, or equivalent; LEGL 255 or equivalent; ability to type 25 wpm*
Lecture 2 hours, laboratory 2 hours
Offered: Variable
Fee: $5. Designed to help students in legal secretarial, paralegal, administration of justice or related careers. Understanding of the litigation process and gain skill in developing both court and non court documents on the computer. Review of basic word processing skills and preparation of common legal forms and documents including correspondence, minutes, contracts, newsletters, bylaws, footnotes, headers and footers, mail merge, macros, legal templates, tables of authorities, pleadings, billing statements, and attorney/ paralegal time records using computer software. [D; CSU]

LEGL 271.
Introduction to Intellectual Property
2 units

Recommended Preparation: *LEGL 255 or equivalent*
Lecture 2 hour, laboratory 1 hour
Offered: Variable
Introduction to the laws of intellectual property including trademarks, copyrights, patents, trade secrets, and unfair competition. Course examines each area and its creation and reviews both domestic and international procedures involved in registration of intellectual property, duration of rights, and protection from infringement. [D]

LEGL 272.
Business Organizations
2 units

Recommended Preparation: *LEGL 255 or BUS 140 or equivalent*
Lecture 2 hours
Offered: Variable
The law and practice of business entities, including sole proprietorships, general and limited partnerships, the limited liability company, and various types of corporations. Emphasis on principles of agency, formation and structure of a corporation, and the preparation of documents necessary to form and operate business organizations. [D; CSU]

LEGL 290–293.
Legal Cooperative Work Experience I–IV
2–4 units

Grade only
Limitation on Enrollment: *Declared Paralegal Studies or Legal Office Professional major. Student must complete no less than seven units, including work experience, during each semester in order to receive credit*
Lecture 1 hour, laboratory 5–15 hours
Offered: Variable
Application of the principles and skills learned in the Paralegal Studies or Legal Office Professional program to on-the-job work assignments. Student is required to attend a one-hour coordinating class weekly. The student's field performance will be evaluated by his/her employer and by the instructor. [D; CSU]

LEGL 295.
Selected Topics in Legal Assistant
1–3 units

Offered: Variable
Permits students to study relevant subjects within the field of legal assistant. The specific objectives, methods of instruction, and units of credit to be determined individually for courses proposed under this description.
(May be repeated for additional credit with new content.) [D; *CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

LEGL 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of legal assistant which is of particular interest to the student and not included in regular courses of the college. [D; CSU]

Liberal Studies: Elementary Education

School of Languages and Humanities

■ Dean

Renee Kilmer, Ph.D.
Office 430J
619-482-6461

■ Department Chair

Anna Ingalls, M.A.

"I've had a wonderful experience here at Southwestern College. I previously had heard it was a great community college and now enjoy the relaxing environment that allows you to do what you need to get done. "

—VERONICA LOPEZ,
Liberal Studies Major

General Description

The Liberal Studies major is a complex program of interdisciplinary study, designed primarily for students who intend to become teachers in elementary education. Learning provides fundamental knowledge in a wide range of departments within the core of language and literature, mathematics, natural sciences, social science, humanities, human development, foreign languages, physical education, and the visual and performing arts.

Career Options

The Liberal Studies major is interdepartmental and is designed primarily for students who intend to become teachers in elementary schools. Students will need to transfer to a four-year college or university to complete the requisite baccalaureate degree and achieve a teaching credential prior to employment. For students who do not desire to teach, this major provides a breadth of critical thinking and knowledge for a variety of career fields in business, industry, and government.

Degree / Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Liberal Studies: Elementary Education	*01880*
Students are advised to please see a counselor for areas of specialization at San Diego State University	

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Arts Degree	
Liberal Studies: Elementary Education Transfer Preparation	*01800*

Designed to prepare students for transfer into a liberal studies program at a four-year university. The required courses in Art, Communication, Composition, Exercise Science, Foreign Language, Health, History, Life Sciences, Literature, Mathematics, Music, Philosophy, and Psychology, offer students a breadth of study across disciplines. In this integrated course of study, students learn to think critically, communicate clearly and effectively, and understand the underlying connections among different subjects.

Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education though consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

LANGUAGE AND LITERATURE

1. Three units selected from the following:
   COMM 103 *Oral Communication*
   COMM 104 *Public Speaking*
   COMM 174 *Interpersonal Communication*
2. Complete the following course:
   ENGL 115 *Reading and Composition*
3. Three units selected from the following:
   COMM 160 *Argumentation and Debate*
   ENGL 116 *Critical Thinking and Composition*
   PHIL 103 *Logic and Critical Thinking*
4. Three units selected from the following:
   ENGL 220 *Introduction to Literature*
   ENGL 230 *World Literature I*
   ENGL 231 *World Literature II*
   +ENGL 270 *Multicultural Literature*

   +Transfer course acceptable for substitution to fulfill SDSU course requirement.

HISTORY AND SOCIAL SCIENCE

1. Three units selected from the following:
   AFRO 110/HIST 110 *African-American History I*
   MAS 141/HIST 141 *Mexican-American History I*
   HIST 100 *American Civilization I*
2. Three units selected from the following:
   AFRO 111/HIST 111 *African-American History II*
   MAS 142/HIST 142 *Mexican-American History Il*
   HIST 101 *American Civilization Il*
   PS 102 *American Government and Politics (highly recommended for students seeking Social Science degree authorization)*
3. Complete the following course:
   HIST 106 *World History I*

MATHEMATICS

Complete the following courses:
MATH 110 *Math for Elementary School Teachers I*
MATH 112 *Children's Mathematical Thinking*
MATH 111 *Math for Elementary School Teachers II*

SCIENCE

Complete the following courses:
BIOL 100 *Principles of Biology*
BIOL 101 *Principles of Biology*

VISUAL AND PERFORMING ARTS

1. Three units selected from the following:
   ART 104 *Introduction to Art*
   TA 100 *Survey of Drama*
2. Complete the following course:
   MUS 103 *Musicianship for General Education Teachers*

EXERCISE SCIENCE AND HEALTH

Complete the following courses:
ES/T 200 *Physical Education in Elementary School*
HLTH 101 *Principles of Healthful Living*

VALUES, ETHICS AND INDIVIDUAL PERSPECTIVE

1. Three selected from the following:
   PHIL 106 *World Religions*
   PHIL 120 *Ethics: Theory and Practice*
2. Complete the following course:
   PSYC 101 *General Psychology*
3. Three units selected from the following:
   PSYC 230 *Developmental Psychology*
   CD 170 *Principles of Child Development*

FOREIGN LANGUAGE REQUIREMENT

Complete a second semester level foreign language course if the foreign language requirement has not been completed.

NOTE: *Students in the bilingual track of Spanish can fulfill this requirement by completing SPAN 215.*

SAN DIEGO STATE UNIVERSITY

The Southwestern College Associate Degree requirements for Liberal Studies: Elementary Education are modeled after San Diego State's and will fulfill most of the requirements. Please see a counselor for additional requirements.

All SDSU majors (1991–92 or later catalog) are required to prepare an Assessment Portfolio that demonstrates their mastery of the subject matter. Because a portfolio should show growth in ability, syllabi and samples (graded papers, exams, and projects) should be saved from all lower division courses.

All SDSU majors (2003–04 or later catalog) are also required to pass part or all of the California Subject Examination for Teachers—Multiple Subject (CSET—MS), depending upon their career goal.

Library

Academic Information Services

- **Dean**

  Bob Edelbrock, Ed.D.
  Library
  619-482-6373

- **Faculty**

  Diane Gustafson, M.L.S
  Mark Hammond, J.D., M.S.L.S
  Anthony McGee, M.L.S.
  Karen Smith, M.L.S.
  Naomi Trapp Davis, M.L.S.
  Ron Vess, M.L.S.

- **Department Chair**

  Anthony McGee, M.L.S.

Come to the Library! We have many textbooks for in-house, one-hour use. We can show you how to do research for your classes. Many of our resources can be accessed from off campus, even when the Library is closed.

—**DIANE GUSTAFSON,**
Librarian
Recipient of Professional Leadership Award

Library Courses

LIB 110.
Simplified Research: Print and Electronic
1 unit

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 1 hour, laboratory 1 hour
Offered: Fall, Spring
Comprehensive introduction to library resources in both print and non-print forms. Focus on research in the college library. Design and implement research strategies. [D; CSU; UC]

LIB 151.
Research Using the Internet
1 unit

Recommended Preparation: *CIS 150 or equivalent*
Lecture .5 hour, laboratory 1 hour
Offered: Variable
Focuses on the Internet as a research tool. Topics include: finding, evaluating, downloading, citing Web resources, Web browsers, search engines, directories, databases, and Web pacs. Emphasis on developing search strategies and evaluating sources and information. (Same as CIS 151.) [D; CSU]

LIB 295.
Selected Topics in Library
1–3 units

Offered: Variable
Permits students to study relevant topics within the field of library science. (May be taken for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

LIB 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of library science of particular interest to the student and not included in regular courses of the college. [D; CSU]

Mathematics

School of Mathematics, Science, and Engineering

Dean

Kathy Tyner, M.S.
Office 345
619-482-6459

Faculty

Melanie Branca, Ph.D.
Martha Carey, M.S.
Delores Christiansen, M.S.W.
Martha S. Dillon, A.B.
Richard Fielding, M.S.
William Foley, M.S.
Valentina Goldberg, M.A.
Miriam Grifkin, M.A.
Irene Hollman, M.A.
Randy Krauss, M.S.
Richard E. Linder, M.S.
Fernando López-López Ph.D.
Janet Mazzarella, M.A.
Andrew Medin, M.A.
Mei-Lan Shaw, M.S.
Diane Short, M.A.
Patrick Staley, M.S.
Romina Tehrani, M.A.

Department Chair

Janet Mazzarella

General Description

In today's highly technological society, the study of mathematics has become increasingly important, particularly to computer science. Mathematics is a study that provides a foundation for problem solving and logical reasoning skills. It includes arithmetic, algebra, geometry, trigonometry, calculus, statistics and computer programming, etc. Mathematics is the science of numbers and their operations, interrelations, combinations, generalizations, and abstractions.

Southwestern College offers developmental courses consisting of arithmetic through intermediate algebra and college-level mathematics courses (numbered above 100) that will meet the lower-division needs of college transfer students.

Students may opt to take their developmental courses in a self-paced format. By working independently, it is possible for students to complete their courses more rapidly than through the classroom lecture format.

Many of the mathematics courses are designated "Graphing Calculator Required" in the class schedule. These classes incorporate new technology into the curriculum. Both traditional and mechanical methods of problem solving are taught. Students do not need to be proficient with their calculators before enrolling to do well.

Career Options

The following list is a sample of the many career options available for the mathematics major. A few of these require an associate degree, most require a baccalaureate degree, and some require a graduate-level degree: numerical analyst, teacher, engineering analyst, systems analyst, operations analyst, casualty rater, technical writer, research assistant, statistician, and computer specialist. In addition, there is presently a great need for high school and college mathematics instructors with this area of employment continuing to grow as society becomes more technological in business, industry, government, and education.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Mathematics	*01580*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

WEB SITES FOR MATHEMATICS MAJORS:

SDSU ***http://www.math.sdsu.edu***
UCSD ***http://www.math.ucsd.edu***
CSU, San Marcos ***http://www.csusm.edu***
Articulation: ***http://www.assist.org***

Associate in Arts Degree
Mathematics

Transfer Preparation * (Major Code: 01580)

Mathematics has become essential and pervasive in the workplace. Projections indicate that its use will expand as will the need for more workers with knowledge of college-level mathematics.

FIRST SEMESTER		
MATH 250	*Analytic Geometry and Calculus I*	*5*
SECOND SEMESTER		
MATH 130	*Introduction to Computer Programming ***	*4*
MATH 251	*Analytic Geometry and Calculus II*	*4*
THIRD SEMESTER		
MATH 252	*Analytic Geometry and Calculus III*	*4*
*Select 3–4 units from electives ****		*3–4*
FOURTH SEMESTER		
*Select 3–4 units from electives ****		*3–4*
	Total units	***23–25***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. Page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

** *MATH 130 may be taken in any semester; however, it should be noted that MATH 130 is a prerequisite for one of the elective: MATH 140.*

*** *Electives: MATH 119, 140, 253, 254, 260.*

Mathematics Courses

MATH 10.
Overcoming the Fear of Mathematics
1 unit

Credit/No Credit only
Lecture 1 hour
Offered: Fall, Spring
Assists students to become more aware of their math anxiety and the relationship of the anxiety to their seeming inability to perform well in mathematics courses. Helps students to recognize, understand, and reduce the fear of mathematics. Not a mathematics refresher course. [ND]

MATH 20.
Basic Mathematics
3 units

Credit/No Credit only
Recommended Preparation: *ENGL 52 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent; placement as determined by the Southwestern College Mathematics Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Review of elementary mathematics designed to upgrade computational skills in preparation for other mathematics classes. Operations with whole numbers, proper fractions, decimals, percentages, and measurements. (Not open to students with credit in any higher-numbered mathematics course.) [ND]

MATH 35.
Pre-Algebra
4 units

Prerequisite: *MATH 20 or equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 4 hours
Offered: Fall, Spring
Review of basic mathematics skills, properties of integers, introduction to geometry, and applications of arithmetic to common problems. [ND]

MATH 45.
Elementary Algebra
4 units

Prerequisite: *MATH 35 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 4 hours
Offered: Fall, Spring
Elementary concepts of algebra, including sets, number systems, special products and factoring, solution of linear equations and inequalities, rational expressions, graphing, integer exponents, radicals, and systems of equations in two variables. (Not open to students with credit in any higher-numbered mathematics course except 105.) [D]

MATH 65.
Intermediate Algebra
5 units

Prerequisite: *MATH 45 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 5 hours
Offered: Fall, Spring
Solving first degree equations/inequalities in one variable, writing the equation of a line, graphing a line, graphing a line, solving systems of equations in two or three variables, polynomials and factoring, simplifying rational/radical expressions, solving rational/radical equations, complex numbers, solving quadratic equations, identifying and graphing conic sections, exponential and logarithmic properties and equations. [D]

MATH 65L.
Intermediate Algebra Laboratory
1 unit

Prerequisite: *MATH 45 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Laboratory 3 hours
Offered: Variable
Provides students the opportunity to study MATH 65 concepts in more depth. Activities such as journal writing, projects, computer work, and advanced topics will better prepare students for more advanced courses. [D]

MATH 100.
Topics in Mathematics for Non-Sciences Majors
3 units

Prerequisite: *Math 65 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Provides an overview of mathematics through the examination of selected topics chosen from: history of mathematics and numeration systems; elementary number theory; logic; algebra; geometry; probability; statistics; finance; applications of technology to real-world problems; graphs, functions, exponential growth; the use of mathematics in other disciplines. [D; CSU]

MATH 101.
College Algebra
3 units

Prerequisite: *MATH 65 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Recommended Concurrent Enrollment: *MATH 104 (or take MATH 101 prior to MATH 104)*
Lecture 3 hours
Offered: Fall, Spring
Functions, relations, theory of equations and inequalities, matrices, binomial theorem, sequences and series, curve fitting using the graphing calculator. Emphasis on functions (algebraic and transcendental) and graphing. Graphing calculator is required. A student can earn a maximum of six units for successfully completing Math 244 or both 101 and 104. (Not open to students with credit in MATH 250 or the equivalent.) [D; CSU; CAN-MATH 16]

MATH 104.
Trigonometry
3 units

Prerequisite: *MATH 65 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Recommended Concurrent Enrollment:
MATH 101 (prior enrollment in MATH 101 is also acceptable)
Lecture 3 hours
Offered: Fall, Spring
Graphic and numerical applications of trigonometry, circular and inverse trigonometric functions, proving and applying identities, solutions and practical applications of right and oblique triangles, application of DeMoivre's Theorem. A student can earn a maximum of six units for successfully completing MATH 244 or both 101 and 104. [D; CSU; CAN-MATH 8]

MATH 105.
Basic Technical Mathematics I
3 units

Lecture 3 hours
Offered: Fall, Spring
Review of basic operations and fundamental algebraic concepts, exponents, logarithms, quadratic equations, graphic methods. [D; CSU]

MATH 110.
Mathematics for Elementary School Teachers I
3 units

Prerequisite: *MATH 65 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Topics of the current elementary school curricula from an advanced perspective of number and number sense, system of numeration, operation concepts, estimation, mental arithmetic, algorithms, problem solving, whole numbers, integers, rational and real numbers, ratio probability, statistics, and number theory. Designed for elementary education majors. [D; CSU; UC]

MATH 111.
Mathematics for Elementary School Teachers II
3 units

Prerequisite: *MATH 110 or equivalent*
Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Topics of the current elementary school curricula from an advanced perspective. Emphasis on problem solving, patterns and functions, number sense, geometry and measurement, and proportional reasoning. Designed for elementary education majors. [D; CSU; UC]

MATH 112.
Children's Mathematical Thinking
2 units

Prerequisite: *MATH 65 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Recommended Concurrent Enrollment: MATH 110 (may be taken previously)
Lecture 2 hours
Offered: Variable
Assists students in undertaking an in-depth analysis of children's understanding of operations, place values, and fractions. Helps students understand how children approach mathematics and how children best learn mathematics. Designed for elementary education majors. [D; CSU]

MATH 118.
Finite Mathematics
3 units

Prerequisite: *MATH 65 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Elementary introduction to mathematics, emphasizing the deductive process and concepts of contemporary mathematics. Topics include set theory, logic, finance, probability, and statistics. [D; CSU; UC]

MATH 119.
Elementary Statistics
4 units

Prerequisite: *MATH 65 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 4 hours
Offered: Fall, Spring
Measures of central tendency and variability, probability, sampling techniques, binomial, hypergeometric, and normal distributions, statistical estimation and hypothesis testing, regression and correlation. Emphasis on descriptive statistics, probability and probability distributions, and inferences concerning single population means and proportions. Graphing calculator and other technologies will be used. Graphing calculator required. [D; CSU ; UC; CAN-STAT 2]

MATH 120.
Calculus for Business Analysis
3 units

Prerequisite: *MATH 65 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Recommended Preparation: *ACCT 101 or equivalent; ENGL 54 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Matrix algebra, differential and integral calculus, graphing and optimization, exponential and logarithmic functions. Applications to business. Graphing calculator is required. (Not open to students with credit in MATH 122, 250 or the equivalent.) [D; CSU; UC; CAN-MATH 34]

MATH 121.
Applied Calculus I
3 units

Prerequisite: *MATH 65 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Concepts and applications of algebra, analytic geometry and the polynomial calculus. Applications from the physical, biological and social sciences. Graphing calculator is required. (Not open to students with credit in MATH 250 or equivalent.) [D; CSU; UC; CAN-MATH 30; MATH 121 + MATH 122 = CAN MATH SEQ D]

MATH 122.
Applied Calculus II
3 units

Prerequisite: MATH 121 or equivalent
Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Continued study of the differential and integral calculus, with emphasis on logarithmic, exponential and trigonometric functions, techniques of integration, and applications. Multivariable calculus. Graphing calculator is required. (Not open to students with credit in MATH 251 or equivalent.)
[D; CSU; UC; CAN-MATH 32;
MATH 121 + MATH 122 = CAN MATH SEQ D]

MATH 130.
Introduction to Computer Programming
4 units

Prerequisite: *MATH 65 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Fall, Spring
Beginning course in computer science. Use of the computer to solve problems from engineering, mathematics, and sciences. Emphasis on computer software and programming in "C" Language. [D; CSU; UC]

MATH 140.
Intermediate Computer Programming
3 units

Prerequisite: *MATH 130 or equivalent*
Lecture 2 hours, laboratory 3 hours
Offered: Spring
Training in program design and development. Introduction to data structure: arrays, lists, linked structures, trees and stacks. Training in use of pointers and recursion. Implementation and analysis of sorting and searching algorithms. [D; CSU; UC]

MATH 230.
Assembly Language Programming
4 units

Prerequisite: *MATH 140 or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Fall
Introduction to Assembly Language Programming and computer concepts in a third generation operating system environment. Topics include Input-Output Control Systems, memory organization, machine language, and data management. Emphasis on the solution of scientific applications in assembly language. (Not open to students with credit in CIS 209.)
[D; CSU; UC]

MATH 244.
Pre-Calculus With Trigonometry
6 units

Prerequisite: *MATH 65 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 6 hours
Offered: Variable
Functions, relations, theory of equations and inequalities, matrices, binomial theorem, sequences and series, curve fitting using the graphing calculator. Emphasis on functions (algebraic and transcendental) and graphing. Graphic and numerical applications of trigonometry, circular and inverse functions, proving and applying identities, solutions and practical applications of right and oblique triangles, application of DeMoivre's Theorem. Graphing calculator is required. A student can earn a maximum of six units for successfully completing MATH 244 or both MATH 101 and 104. (Not open to students with credit in MATH 250 or the equivalent.) [D; CSU]

MATH 250.
Analytic Geometry and Calculus I
5 units

Prerequisite: *MATH 244 or equivalent; or MATH 101 and 104, or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*
Lecture 5 hours
Offered: Fall, Spring
Covers analytic geometry, functions, limits, derivations of algebraic functions, applications of the derivative, integration, applications of the definite integral, and transcendental functions. Graphing calculator is required.
[D; CSU; UC; CAN-MATH 18;
MATH 250 + MATH 251 = CAN MATH SEQ B;
MATH 250 + MATH 251 + MATH 252 = CAN MATH SEQ C]

MATH 251.
Analytic Geometry and Calculus II
4 units

Prerequisite: *MATH 250 or equivalent*
Lecture 4 hours
Offered: Fall, Spring
Hyperbolic functions, techniques of integration, plane analytic geometry, polar coordinates, infinite series, and parametric equations. Inverse trigonometric functions, applications of integration (surface area, work, moments), L'Hospital's rule and indeterminant forms. Graphing calculator is required.
[D; CSU; UC; CAN-MATH 20;
MATH 250 + MATH 251 = CAN MATH SEQ B;
MATH 250 + MATH 251 + MATH 252 = CAN MATH SEQ C]

MATH 252.
Analytic Geometry and Calculus III
4 units

Prerequisite: *MATH 251 or equivalent*
Lecture 4 hours
Offered: Fall, Spring
Last course in the three-semester-calculus sequence that covers analytic geometry, vectors, and vector-valued functions. Topics include vector calculus; surfaces and solid analytic geometry; partial differentiation; multiple integrals; functions, limits, derivations of algebraic functions; applications of the derivative; integration; applications of the definite integral and transcendental functions. Graphing calculator is required.
[D; CSU; UC; CAN-MATH 22;
MATH 250 + MATH 251 + MATH 252 = CAN MATH SEQ C]

MATH 253.
Introduction to Differential Equations
3 units

Prerequisite: *MATH 251 or equivalent*
Lecture 3 hours
Offered: Variable
Methods for solving first, second, and higher order differential equations, and how to interpret these equations and their solutions in a physical setting. The methods of solution will include numerical, power series, and Laplace transform. Graphing calculator is required.
[D; CSU; UC; CAN-MATH 24]

MATH 254.
Introduction to Linear Algebra
3 units

Prerequisite: MATH 251 or equivalent
Lecture 3 hours
Offered: Fall
Introduction to linear algebra including matrix algebra, Gaussian elimination, determinants, vector spaces, transformations, orthogonality, eigenvalues and eigenvectors. Graphing calculator is required.
[D; CSU; UC; CAN-MATH 26]

MATH 260.
Discrete Mathematics
3 units

Prerequisite: *MATH 122 or 251 or equivalent*
Lecture 3 hours
Offered: Variable
Logic, methods of proof, set theory, number theory, equivalence and order relations, counting (combinations and permutations), and solving recurrence relations. The topics for the proofs come from the discrete math concepts that predominate throughout many areas of mathematics and computer science. [D; CSU; UC]

MATH 295.
Selected Topics in Mathematics
1–3 units

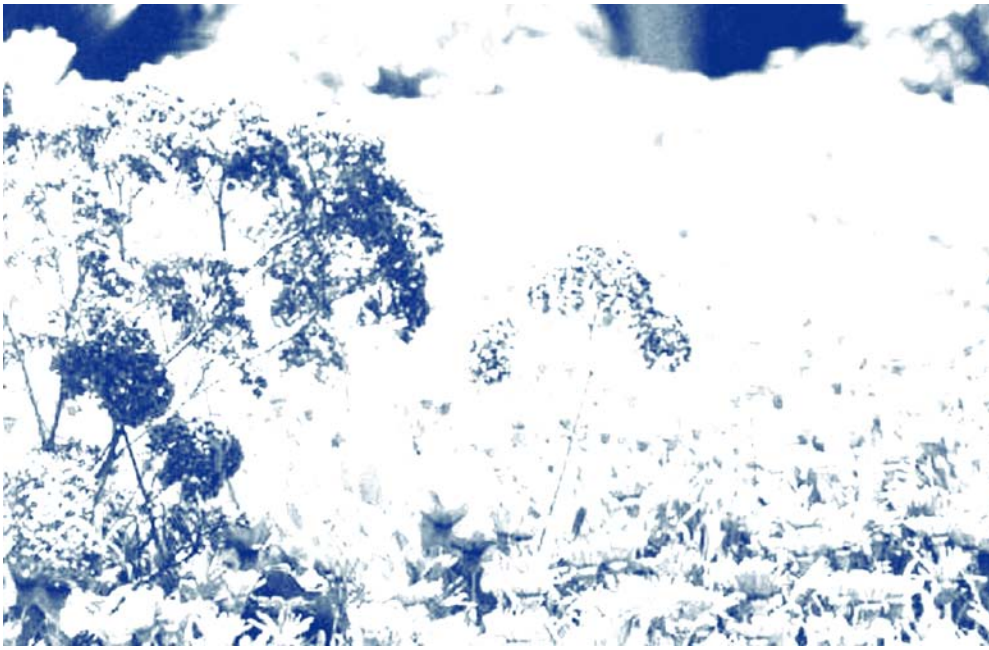
Offered: Variable
Study of relevant topics within the field of mathematics. The specific objectives, methods of instruction and evaluation to be determined by the students and the instructor throughout the semester. (May be repeated for additional credit with new content.) [D; * CSU]

** Please refer to the class schedule for specific course description and transferability information.*

MATH 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Independent study or research in some area of the mathematical sciences of particular interest to the student and not included in regular courses of the college. [D; CSU; * UC]

** UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*



Medical Office Professionals

School of Business and Information Systems

■ Dean

Irma Alvarez, M.A.
Office 215
619-482-6457

■ Faculty

Raschel Parsons, A.S.

■ Department Chair

Marilynne Hudgens, Ed.M.

General Description

Designed to respond to the ever-increasing need for well-trained, skilled personnel to fill positions in the allied healthcare industry. Presently, there are not enough trained medical office workers to meet the demand. In today's continually changing healthcare industry, job restructuring is a fact of life. New healthcare roles demand a higher level of thinking and performance skills than ever before. The medical office professional programs will prepare students to meet the future demands of the healthcare industry for office professionals and will allow students to develop a solid foundation on which to build a career.

Career Options

The U.S. Bureau of Labor and Statistics has placed medical offices and healthcare facilities among the top ten industries expected to generate the largest number of new jobs. Employment in health services is expected to grow quickly during the coming decades because of the expanding healthcare needs of an aging population. Few fields are as immune to recession as healthcare. Potential employers include, but are not limited to hospitals and doctors' offices, urgent care, outpatient surgery, industrial and sports medicine clinics; insurance companies, drug rehabilitation and skilled nursing facilities, state and federal health agencies, and medical research institutions.

Some of the career options available to the medical office professionals are: medical office clerk, medical secretary, medical transcriptionist, medical record clerk, medical records coder, medical records technician, registered records administrator, health insurance specialist, health information administrator, medical office manager, quality assurance specialist, and medical interpreter/translator. Self-employment or freelancing is also a viable option, particularly in the area of transcription.

Degree/Certificate Options

	Major Code
Associate in Science Degree: Career/Technical	
Medical Office Professional	*04100*
Medical Insurance Specialist	*04104*
Medical Coding Specialist	*04102*
Medical Transcription	*04108*
Medical Interpretation and Translation	*04106*
Medical Word Processing Specialist	*04110*
Certificate of Achievement	
Medical Office Professional	*04101*
Medical Insurance Specialist	*04105*
Medical Coding Specialist	*04103*
Medical Transcription	*04109*
Medical Interpretation and Translation	*04107*
Medical Word Processing Specialist	*04111*
Other Certificate of Achievement	
Medical Office Assistant—Bilingual (English/Spanish)	*A2055*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Science Degree

Medical Office Professional

Career/Technical (Major Code: 04100)

Designed to prepare students to work in a medical office setting. Students will gain an understanding of basic medical terminology, medical office procedures including receptionist and telephone techniques, filing of medical records, and preparation of documents and forms. Students also receive training in CPR, first aid, and acquire an understanding of anatomy and physiology for medical office professionals.

BUS 78	*Electronic Calculator*	*1*
BUS 182	*Keyboarding for Office Professionals*	*2*
BUS 200A	*Microsoft Word: Beginning Certification Preparation*	*2.5*
BUS 210	*Business English*	*3*
HLTH 110	*First Responder*	*2–3*
MEDOP 230	*Medical Terminology **	*3*
MEDOP 231	*Medical Office Procedures **	*4*
MEDOP 233	*Anatomy for Medical Office Professionals*	*3*
	Total units	***20.5–21.5***

* Students who have completed MEDOP 40, do not need to take MEDOP 230 or MEDOP 231

To earn an associate degree, additional General Education and Graduation requirements must be completed. See page 36.

Medical Office Professional—Medical Coding Specialist

Career Technical (Major Code: 04102)

Principles and conventions for using ICD-9 CM and coding techniques by body system with emphasis on pathology concepts and their relationship to these body systems. Program also emphasizes health insurance procedures and Ambulatory Care CPT coding.

MEDOP 21	*Medical Coding I*	*3*
MEDOP 22	*Medical Coding II*	*3*
BUS 211	*Communication in Business and Industry*	
	or	*3*
BUS 212	*Business Communication*	
MEDOP 41A	*Medical Insurance I*	*2*
BUS 290–291	*Work Experience in Business I–II*	*2*
Plus completion of Medical Office Professional Program		*20.5–21.5*
	Total units	***33.5–34.5***

To earn an associate degree, additional General Education and Graduation requirements must be completed. See page 36.

Medical Office Professional—Medical Insurance Specialist

Career/Technical (Major Code: 04104)

Prepares students for employment in insurance companies, healthcare facilities, and state and federal agencies. Emphasis on medical insurance billing and common insurance practices in all aspects of the healthcare field.

BUS 211	*Communication in Business and Industry*	
	or	*3*
BUS 212	*Business Communication*	
MEDOP 41A	*Medical Insurance I*	*2*
MEDOP 41B	*Medical Insurance II*	*2*
MEDOP 42	*Medical Transcription I*	*3*
BUS 290–291	*Work Experience in Business I–II*	*2*
Plus courses required for Medical Office Professional		*20.5–21.5*
	Total units	***32.5–33.5***

To earn an associate degree, additional General Education and Graduation requirements must be completed. See page 36.

Medical Office Professional—Medical Interpretation/Translation (Spanish/English)

Career Technical (Major Code: 04106)

Designed to prepare students to work in a bilingual (English-Spanish) medical office, clinic, or hospital setting. English and Spanish medical terminology, interpretation of medical information between patient and doctor as well as translation of medical charts, forms, and reports are emphasized. In addition, training is provided in transcription, CPR, first aid, human anatomy, office procedures, bilingual telephone and receptionist techniques, filing and management of medical records, bookkeeping procedures, and word processing.

BUS 181	*Spanish Computer Skills for Interpretation and Translation*	*2.5*
BUS 211	*Communications in Business and Industry*	
	or	*3*
BUS 212	*Business Communication*	
BUS 227	*Interpretation and Translation: Medical*	*3*
BUS 290–291	*Work Experience in Business I–II*	*2*
SPAN 230	*Intermediate Spanish II **	*5*
Plus courses for Medical Office Professional		*20.5–21.5*
	Total units	***36–37.5***

To earn an associate degree, additional General Education and Graduation requirements must be completed. See page 36.

* Students who have completed high school or a higher level degree in a Spanish-speaking country may waive the Span 230 requirement by submitting a transcript of study from their foreign institution.

Medical Office Professional—Medical Transcription

Career/Technical (Major Code: 04108)

Designed for those students who wish to develop a high degree of proficiency in transcribing medical dictation for permanent records. The student will learn automated information systems, medical terminology, confidentiality of patient information, and pathology.

BUS 211	*Communication in Business & Industry*	
	or	*3*
BUS 212	*Business Communication*	
MEDOP 42	*Medical Transcription I*	*3*
MEDOP 43	*Medical Transcription II*	*2*
MEDOP 41A	*Medical Insurance I*	*2*
BUS 290–291	*Work Experience in Business I–II*	*2*
Plus courses for the Medical Office Professional program		*20.5–21.5*
	Total units	***32.5–33.5***

To earn an associate degree, additional General Education and Graduation requirements must be completed. See page 36.

Medical Office Professional—Medical Word Processing Specialist

Career/Technical (Major Code: 04110)

Designed to prepare students to work in a medical office setting. Students will gain an understanding of basic medical terminology, medical office procedures including receptionist and telephone techniques, filing of medical records, and preparation of documents and forms. Emphasis placed on word processing in a medical setting using Microsoft Word and Outlook for email and appointment calendaring. Students have the option to become certified by passing the Microsoft Office Specialist certification examinations.

BUS 200B	*Microsoft Word: Advanced Certification Preparation*	*2.5*
BUS 211	*Communication in Business and Industry*	
	or	*3*
BUS 212	*Business Communication*	
BUS 240	*Microsoft Outlook: Basic Certification Preparation*	*2.5*
BUS 290–291	*Work Experience in Business I–II*	*2*
MEDOP 42	*Medical Transcription I*	*3*
Plus courses for the Medical Office Professional program		*20.5–21.5*
	Total units	***33.5–34.5***

To earn an associate degree, additional General Education and Graduation requirements must be completed. See page 36.

Certificates of Achievement

Medical Office Professional

Career/Technical (Major Code: 04101)

BUS 78	*Electronic Calculator*	*1*
BUS 182	*Keyboarding for Office Professionals*	*2*
BUS 200A	*Microsoft Word: Beginning Certification Preparation*	*2.5*
BUS 210	*Business English*	*3*
HLTH 110	*First Responder*	*2–3*
MEDOP 230	*Medical Terminology **	*3*
MEDOP 231	*Medical Office Procedures **	*4*
MEDOP 233	*Anatomy for Medical Office Professionals*	*3*
	Total units	***20.5–21.5***

* Students who have completed MEDOP 40, do not need to take MEDOP 230 or MEDOP 231

Medical Office Professional—Medical Coding Specialist

Career Technical (Major Code: 04103)

MEDOP 21	*Medical Coding I*	*3*
MEDOP 22	*Medical Coding II*	*3*
BUS 211	*Communication in Business & Industry*	
	or	*3*
BUS 212	*Business Communication*	
MEDOP 41A	*Medical Insurance I*	*2*
BUS 290–291	*Work Experience in Business I–II*	*2*
Plus courses for the Medical Office Professional program		*20.5–21.5*
	Total units	***33.5–34.5***

Medical Office Professional—Medical Insurance Specialist

Career/Technical (Major Code: 04105)

BUS 211	*Communication in Business and Industry*	
	or	*3*
BUS 212	*Business Communication*	
MEDOP 41A	*Medical Insurance I*	*2*
MEDOP 41B	*Medical Insurance II*	*2*
MEDOP 42	*Medical Transcription I*	*3*
BUS 290–291	*Work Experience in Business I–II*	*2*
Plus courses for the Medical Office Professional program		*20.5–21.5*
	Total units	***32.5–33.5***

Medical Office Professional—Medical Interpretation/Translation (Spanish/English)

Career Technical (Major Code: 04107)

BUS 181	*Spanish Computer Skills for Interpretation and Translation*	*2.5*
BUS 211	*Communications in Business and Industry*	
	or	*3*
BUS 212	*Business Communication*	
BUS 227	*Interpretation and Translation: Medical*	*3*
BUS 290–291	*Work Experience in Business I–II*	*2*
SPAN 230	*Intermediate Spanish II **	*5*
Plus courses for the Medical Office Professional program		*20.5–21.5*
	Total units	***36–37.5***

* Students who have completed high school or a higher level degree in a Spanish-speaking country may waive the Span 230 requirement by submitting a transcript of study from their foreign institution.

Medical Office Professional—Medical Transcription

Career/Technical (Major Code: 04109)

BUS 211	*Communication in Business & Industry*	
	or	*3*
BUS 212	*Business Communication*	
MEDOP 42	*Medical Transcription I*	*3*
MEDOP 43	*Medical Transcription II*	*2*
MEDOP 41A	*Medical Insurance I*	*2*
BUS 290–291	*Work Experience in Business I–II*	*2*
Plus courses for the Medical Office Professional program		*20.5–21.5*
	Total units	***32.5–33.5***

▪ Medical Office Professional—Medical Word Processing Specialist

Career/Technical (Major Code: 04111)

BUS 200B	*Microsoft Word: Advanced Certification Preparation*	*2.5*
BUS 211	*Communication in Business and Industry*	
	or	*3*
BUS 212	*Business Communication*	
BUS 240	*Microsoft Outlook: Basic Certification Preparation*	*2.5*
BUS 290–291	*Work Experience in Business I–II*	*2*
MEDOP 42	*Medical Transcription I*	*3*
Plus courses for the Medical Office Professional program		*20.5–21.5*
	Total units	***33.5–34.5***

Other Certificate of Achievement

Medical Office Assistant—Bilingual (English/Spanish)

Career/Technical (Major Code: A2055)

Trains students to utilize their bilingual backgrounds for entry-level positions in the medical office field. The program covers instruction in medical office procedures (English/Spanish), interpretation and translation (English/Spanish), bilingual telephone techniques, word processing, insurance and billing procedures, vital signs, and CPR. Emphasis on bilingual medical terminology.

Capacita a los estudiantes para poner en práctica las aptitudes bilingües en empleos a nivel básico en el campo de consultorios médicos. El programa incluye instrucción en procedimientos de consultorios médicos, traducción e interpretación (español/inglés), técnicas telefónicas bilingües, procesador de palabras (word processing), procedimientos sobre seguros médicos y cobros, y técnicas de resucitación (CPR). Enfasis en la terminología médica bilingüe.

MEDOP 40	*Medical Office Assistant—Bilingual*	*12*
	Total units	***12***

Medical Office Professionals Courses

MEDOP 21.
Medical Coding I
3 units

Prerequisite: *MEDOP 40 or 230 or equivalent*
Recommended Preparation: *BUS 71 or equivalent*
Lecture 3 hours, laboratory 1 hour
Offered: Variable
Entry-level training in medical coding. Students will develop an understanding of Current Procedural Terminology (CPT), International Classification of Diseases (ICD-9-CM) Volumes I and II, and HCFA Common Procedural Coding System (HCPCS) as they are used in medical claims processing and records management. (Formerly BUS 21.) (ROP option) [D]

MEDOP 22.
Medical Coding II
2.5 units

Prerequisite: *MEDOP 21 or equivalent*
Recommended Preparation: *BUS 71 or equivalent*
Lecture 2 hours, laboratory 2 hours
Offered: Variable
Advanced training in medical coding. Students will develop an understanding of International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) Volume 3 and HCFA Common Procedural Coding System (HCPCS) Levels I, II, and III as they are used in hospital inpatient claims processing and records management. (Formerly BUS 22.) (ROP option) [D]

MEDOP 40.
Medical Office Assistant: Bilingual (English/Spanish)
12 units

Recommended Preparation: *SPAN 216 or 230 or equivalent; BUS 71 or equivalent; ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 9 hours, laboratory 8 hours
Offered: Fall, Spring
Students will learn to utilize their bilingual backgrounds for entry-level positions at the receptionist, clerk-typist, or secretarial assistant level. Provides training in medical office procedures, interpretation and translation (Spanish/English), and bilingual telephone techniques. Includes training on word processing equipment with data entry capabilities and insurance billing procedures, grooming, CPR, and vital signs. Major emphasis on bilingual medical terminology. (Formerly BUS 40.) (ROP option) [D]

MEDOP 41A.
Medical Insurance I
2 units

Grade only
Lecture 2 hours
Offered: Variable
Study of introductory principles of medical records documentation, medical insurance practices, and plans. Practical experience in completion of universal claim forms. Basic instruction in diagnostic and procedural coding. (Formerly BUS 232.) [D]

MEDOP 41B.
Medical Insurance II
2 units

Prerequisite: *MEDOP 41A or equivalent*
Lecture 1 hour, laboratory 3 hours
Offered: Variable
Prepares students for positions in physicians' offices, insurance billing departments, and hospitals and clinics. Emphasis on ICD-9 and DPT coding, processing and monitoring healthcare claims both manually and on computer; also interpretation and processing EOB information; claims review and appeal. (Formerly BUS 41.) (ROP option) [D]

MEDOP 42.
Medical Transcription I
3 units

Grade only
Prerequisite: *MEDOP 40 or 230 or equivalent*
Recommended Preparation: *BUS 182 or equivalent; BUS 210 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 2 hours, laboratory 2 hours
Offered: Variable
Preparation for advanced training in the medical transcription profession. Medical transcriptionists work in a variety of settings including public and private medical clinics, hospitals, medical centers, extended-care facilities, medical researchgroups, and city and state health departments. (Formerly BUS 42.) (ROP option) [D]

MEDOP 43.
Medical Transcription II
2 units

Grade only
Prerequisite: *MEDOP 42 or equivalent*
Lecture 1 hour, laboratory 3 hours
Offered: Variable
Preparation for advanced training in the medical transcription career. Medical transcriptionists work in a variety of settings including public and private medical clinics, hospitals, medical centers, extended-care facilities, medical research groups, and city and state health departments. (Formerly BUS 43.) (ROP option) [D]

MEDOP 230.
Medical Terminology
3 units

Grade only
Lecture 3 hours
Offered: Variable
Introduction to the study of medical terminology with emphasis on word structure and usage in vocabulary that relates to body systems, medical processes and procedures, human disease, and pharmacology. (Formerly BUS 230.) (D; CSU)

MEDOP 231.
Medical Office Procedures
4 units

Grade only
Recommended Preparation: *Bus 71 or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Variable
Fee: $3. Students will gain competence in the standard medical office procedures of scheduling patient appointments; completing, maintaining and filing medical records; and billing patients. Students will learn word processing for medical correspondence and transcription. Emphasis on medical office procedures, proper telephone techniques, and medical office etiquette and grooming. (Formerly BUS 231.) [D; CSU]

MEDOP 233.
Anatomy for Medical Office Professionals
3 units

Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Introduction to anatomy and physiology concepts required by medical office professionals. Basic human anatomy, physiology, and pathophysiology as used in the allied health professions. [D; CSU]

MEDOP 295.
Selected Topics in Medical Office Professionals
1–3 units

Offered: Variable
Permits students to study relevant subjects within the field of medical office professionals. The specific objectives, methods of instruction and units of credit to be determined individually for projects proposed under this course description. (May be repeated for additional credit with new content.) [D; * CSU]

** Please refer to the class schedule for specific course description and transferability information.*

MEDOP 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of business of particular interest to the student and not included in regular courses of the college. [D; CSU]

Mexican-American Studies

School of Social Sciences and International Studies

■ Dean

Viara Giraffe, Ph.D.
Office 470K
619-482-6582

■ Faculty

Arthur J. Diaz, M.A.
Victor Chavez, M.A.
Rosalinda González, Ph.D.
Barry Horlor, M.A.

■ Department Chair

Gary Neely, M.A.

General Description

Mexican-American Studies is a unique interdisciplinary course of learning that provides an introduction to the Hispanic community within the context of the American experience. This department explores its history, culture, society, politics, religion, economics, art, and major contributions to the development of the United States. Essentially, Mexican-American Studies is part of American history, nationality, and race that utilizes knowledge from the humanities, arts, and social sciences to explore issues and experiences unique to Hispanics.

Career Options

The following list is a sample of the many career options available for the Mexican-American Studies major. A few of these require an associate degree, most require a baccalaureate degree, and some require a graduate-level degree: high school or college instructor, historian, researcher, research assistant, urban planner, lawyer, politician, political scientist, international trade specialist, foreign service officer, government employee, business administrator, publisher, librarian, library technician, philosopher, cultural arts director, social service worker, business manager, and consultant.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Mexican-American Studies	*01810*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Arts Degree
Mexican-American Studies

Transfer Preparation (Major Code: 01810)

Lower-division requirements are designed to provide students a well-rounded curriculum in Hispanic history and culture in the Southwest. A comparative approach to the study of the history of Mexico, California, and the United States provides students with an understanding of the U.S. Constitution and the development of state and local government, culture, and contemporary issues affecting the region

ANTH 112	*Cultures of Mexico*	*3*
ENGL 271	*Latin American Literature*	*3*
ENGL 272	*Chicano Literature*	*3*
MAS 141	*Mexican-American History I*	*3*
MAS 142	*Mexican-American History II*	*3*
Foreign Language		*6–10*
	Total units	***21–25***

Mexican-American History (MAS 141–142) fulfills the American Institutions requirement at San Diego State University and most other campuses of the California State University and Colleges System.

To earn an associate degree, additional General Education and Graduation requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

MAS 141.
Mexican-American History I
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Covers the history of the roots of Mexican-American culture from Pre-Colombian times to Circa 1850. Emphasis on the political, economic, and social influences of Pre-Columbian America, Spain, Mexico, and the United States. Includes a study of the United States Constitution. (Partially fulfills American Institutions requirement at CSU.) (Same as HIST 141.) [D; CSU; UC]

MAS 142.
Mexican-American History II
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Covers the history of the Mexican-American experience from 1846 to the present day. Emphasis on the political, economic, and social influences of the peoples of Mexico and the United States. Includes a study of the Constitution of California. (Partially fulfills American Institutions requirement at CSU.) (Same as HIST 142.) [D; CSU; UC]

MAS 150.
Mexican and Latino Culture in the United States
3 units

Grade only
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
An examination of the direction of Mexican, Mexican-American, and Latino cultural development in the United States; to include the diffusion and inter-penetration of this culture into mainstream America. Emphasis on the intellectual foundations of Chicano culture. (Same as SOC 150.) [D; CSU; UC]

MAS 295.
Selected Topics in Mexican-American Studies
1–3 units

Lecture 1–3 hours
Offered: Variable
Study of relevant topics within the field of Mexican-American studies. [D; *CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

MAS 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of Mexican-American studies which is of particular interest to the student and not included in regular courses of the college. [D; CSU; * UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Music

School of Arts and Communication

■ Interim Dean

Donna Arnold
Office 702B
619-482-6372

■ Faculty

Todd Caschetta, M.A.
Jay Henry, B.A.
Berke McKelvey, M.A.
Jeffrey Nevin, Ph.D.

■ Department Chair

Teresa Russell, D.M.A.

General Description

Music is the art and science of incorporating intelligible combinations of tones into a composition having structure and continuity. The most abstract of the arts, music is sound moving in time. The four elements of music are rhythm, melody, harmony, and tone color. Composers and performers are concerned with each of the musical elements, which are experienced by the listener as a web of sound that makes it difficult to single out any one individually. Though little is known of ancient music, it would seem the earliest form was probably the beating out of rhythms long before the existence of either melody or human speech. Rhythm is part of the universe, from our heartbeat to the pulsation of stars.

Career Options

The following list is a sample of the many career options available to the music major. A few of the these require an associate degree, most require a baccalaureate degree, and some require a graduate-level degree: soloist, conductor, composer, private music teacher, high school or college instructor, music librarian, recording technician, band performer, backup artist, music critic, church music director, administrator, studio performer, record/CD producer, accompanist, arranger, copyist, publisher, and music therapist.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Music	*01240*
Music—Mariachi Specialization	*02543*
Associate in Science Degree: Career/Technical	
Music: Commercial	*02540*
Certificate of Achievement	
Music: Commercial	*02541*
Music—Mariachi Specialization	*02542*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Southwestern College Choir performing at Notre Dame Cathedral

Associate in Arts Degree
Music

Transfer Preparation * (Major Code: 01240)

Provides programs for students who wish to become professional musicians; prepare for a career in public school teaching; broaden their general knowledge of music, develop performance skills, or pursue an advanced degree in music. Includes theory, keyboarding, and sight reading skills. Transfer students must pass proficiency exams in these areas.

FIRST SEMESTER

MUS 101	*Foundations of Music Theory I*	*3*
MUS 111	*Keyboard—Sight Singing and Dictation I*	*1*
MUS 125	*Applied Music I*	*1*
MUS 132A	*Class Piano I*	*1*

SECOND SEMESTER

MUS 100	*Computers and Music*	*3*
MUS 102	*Foundations of Music Theory II*	*3*
MUS 113	*Keyboard—Sight Singing and Dictation II*	*1*
MUS 126	*Applied Music II*	*1*
MUS 132B	*Class Piano II*	*1*
MUS 140	*Class Voice I*	*1*

THIRD SEMESTER

MUS 109	*Foundations of Music Theory III*	*3*
MUS 141	*Class Voice II*	*1*
MUS 127	*Applied Music III*	*1*
MUS 132C	*Class Piano III*	*1*
Select four courses from the required performance courses listed below		*4*
	Total units	***26***

REQUIRED PERFORMANCE COURSES:

Students are required to complete a minimum of one course per semester with a maximum of four courses.

MUS 136 A–D	*Jazz Vocal Ensemble I–IV*
MUS 153–154	*Mariachi Ensemble*
MUS 166–169	*Jazz Ensemble I–IV*
MUS 170–173	*Small Performance Groups I–IV*
MUS 175–178	*Orchestra I–IV*
MUS 180–183	*Chamber Singers I–IV*
MUS 185–188	*Concert Choir I–IV*
MUS 189–192	*Music and Rhythms of Africa I–IV*
TELE 160–163	*Workshop—Musical I–IV*

NOTE: *This is a course requirement, not a unit requirement.*

To earn an associate degree, additional General Education and Graduation requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Music—Mariachi Specialization

Transfer Preparation * (Major Code: 02542)

Associate in Arts degree provides students the unique musical training and study necessary to pursue aforementioned musical careers though specifically within the mariachi tradition. Each mariachi major must declare and take courses on a primary instrument (guitar, vihuela, guitarrón, harp, violin, trumpet, flute, voice), as well as taking courses on secondary instruments. Includes theory, keyboarding, and sight reading skills. Transfer students must pass proficiency exams in these areas.

FIRST SEMESTER

MUS 101	*Foundations of Music Theory I*	*3*
MUS 111	*Keyboard—Sight Singing and Dictation I*	*1*
MUS 125	*Applied Music I*	*1*
MUS 124A	*Introduction to Mariachi Performance I*	
	or	*2*
MUS 157A	*Mariachi Garibaldi I*	
Mus 202	*Development of Mariachi: Style and Culture*	*3*
*Primary instrument instruction**		*1–2*

SECOND SEMESTER

MUS 102	*Foundations of Music Theory II*	*3*
MUS 113	*Keyboard—Sight Singing and Dictation II*	*1*
MUS 126	*Applied Music II*	*1*
MUS 124B	*Introduction to Mariachi Performance II*	
	or	*2*
MUS 157B	*Mariachi Garibaldi II*	
*Primary instrument instruction**		*1–2*

THIRD SEMESTER

MUS 109	*Foundations of Music Theory III*	*3*
MUS 127	*Applied Music III*	*1*
MUS 124C	*Introduction to Mariachi Performance III*	
	or	*2*
MUS 157C	*Mariachi Garibaldi III*	
*Secondary instrument instruction**		*1–2*

FOURTH SEMESTER

MUS 124D	*Introduction to Mariachi Performance IV*	
	or	*2*
MUS 157D	*Mariachi Garibaldi IV*	
*Secondary instrument instruction**		*1–2*
		29–33

***PRIMARY OR SECONDARY INSTRUMENT INSTRUCTION**

(Take 4–8 units from the following courses.)

MUS 119A	*Brass Instrument Class I (2)*
MUS 119B	*Brass Instrument Class II (2)*
MUS 119C	*Brass Instrument Class III (2)*
MUS 119D	*Brass Instrument Class IV (2)*
MUS 137	*Beginning Guitar I (1)*
MUS 138	*Beginning Guitar II (1)*
MUS 140	*Class Voice I (1)*
MUS 141	*Class Voice II (1)*
MUS 142	*Class Voice III (1)*
MUS 193A	*String Instrument Class I (2)*
MUS 193B	*String Instrument Class II (2)*
MUS 193C	*String Instrument Class III (2)*
MUS 193D	*String Instrument Class IV (2)*

To earn an associate degree, additional General Education and Graduation requirements must be completed. See page 36.

NOTE: *Students with music degrees from elsewhere or who have previously completed courses equivalent to MUS 101, 102, 109, 111 and 113 at other institutions may petition to have their previous courses fulfill this requirement.*

Associate in Science Degree
Music—Commercial

Career/Technical (Major Code: 02540)

Designed to prepare students at the apprentice level for employment in night club entertainment, dance bands, backup singing groups, lead singing, studios, music sales, music retailing, music copying, or as side players in big bands.

FIRST SEMESTER

MUS 100	*Computers and Music*	*3*
MUS 101	*Foundations of Music Theory I*	*3*
MUS 111	*Keyboard—Sight Singing and Dictation I*	*1*
MUS 132A	*Class Piano I*	*1*
MUS 150	*Introduction to the Music Industry*	*3*

SECOND SEMESTER

MUS 102	*Foundations of Music Theory II*	*3*
MUS 113	*Keyboard—Sight Singing and Dictation II*	*1*
MUS 125	*Applied Music I*	*1*
MUS 132B	*Class Piano II*	*1*
Select 1–3 units from electives		*1–3*

THIRD SEMESTER

MUS 107	*The Contemporary Scene of Am. Popular Music*	*3*
MUS 126	*Applied Music II*	*1*
MUS/TELE 151	*Recording Techniques I*	*3*
Select 1–3 units from electives		*1–3*
Select 1 unit from the performance courses listed below		*1*

FOURTH SEMESTER

MUS 155	*Electronic Music*	*3*
Select 1–3 units from electives		*1–3*
Select four courses from the required performance courses listed below		*4*
	Total units	***35–41***

Electives: *BUS 174, MUS 132C; MUS 140–141, 162; TA 117.*

REQUIRED PERFORMANCE COURSES:

Students are required to complete a minimum of one course per semester with a maximum of four courses.

MUS 136 A–D	*Jazz Vocal Ensemble I–IV*
MUS 153–154	*Mariachi Ensemble*
MUS 166–169	*Jazz Ensemble I–IV*
MUS 170–173	*Small Performance Groups I–IV*
MUS 175–178	*Orchestra I–IV*
MUS 180–183	*Chamber Singers I–IV*
MUS 185–188	*Concert Choir I–IV*
MUS 189–192	*Music and Rhythms of Africa I*

NOTE: *This is a course requirement, not a unit requirement.*

To earn an associate degree, additional General Education and Graduation requirements must be completed. See page 36.

Certificate of Achievement
Music—Commercial

Career/Technical (Major Code: 02541)

FIRST SEMESTER

MUS 100	*Computers and Music*	*3*
MUS 101	*Foundations of Music Theory I*	*3*
MUS 111	*Keyboard—Sight Singing and Dictation I*	*1*
MUS 132A	*Class Piano I*	*1*
MUS 150	*Introduction to the Music Industry*	*3*

SECOND SEMESTER

MUS 102	*Foundations of Music Theory II*	*3*
MUS 113	*Keyboard—Sight Singing and Dictation II*	*1*
MUS 125	*Applied Music I*	*1*
MUS 132B	*Class Piano II*	*1*
Select 1–3 units from electives		*1–3*

THIRD SEMESTER

MUS 107	*The Contemporary Scene of Am. Popular Music*	*3*
MUS 126	*Applied Music II*	*1*
MUS/TELE 151	*Recording Techniques I*	*3*
Select 1–3 units from electives		*1–3*
Select 1 unit from the performance courses listed below		*1*

FOURTH SEMESTER

MUS 155	*Electronic Music*	*3*
Select 1–3 units from electives		*1–3*
Select four courses from the required performance courses listed below		*4*
	Total units	***35–41***

Electives: *BUS 174, MUS 132C; MUS 140–141, 162; TA 117.*

Music—Mariachi Specialization

Career Technical (Major Code: 02543)

CERTIFICATE OF ACHIEVEMENT

MUS 101	*Foundations of Music Theory I*	*3*
MUS 102	*Foundations of Music Theory II*	*3*
MUS 111	*Keyboard—Sight, Singing, and Dictation I*	*1*
MUS 113	*Keyboard—Sight, Singing, and Dictation II*	*1*
MUS 202	*Development of Mariachi: Style and Culture*	*3*

MARIACHI PERFORMANCE CLASSES **4**

MUS 124A	*Introduction to Mariachi Performance I (2)*
MUS 124B	*Introduction to Mariachi Performance II (2)*
MUS 124C	*Introduction to Mariachi Performance III (2)*
MUS 124D	*Introduction to Mariachi Performance IV (2)*
MUS 157A	*Mariachi Garibaldi I (2)*
MUS 157B	*Mariachi Garibaldi I (2)*
MUS 157C	*Mariachi Garibaldi I (2)*
MUS 157D	*Mariachi Garibaldi I (2)*
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Music Courses

There are six types of Music courses:

- Music Appreciation and History Courses
- Music Theory and Analysis Courses
- Recording Arts and Technology Courses
- Applied Music Courses
- Music Performance Ensembles
- Music Miscellaneous

Music Appreciation and History Courses

MUS 105.
Introduction to Music
3 units

Grade only
Lecture 3 hours
Offered: Fall, Spring
Traditional music history with a practical approach to hearing music with understanding and pleasure, through study of representative compositions of various styles and performance media, great musicians, and their art. Music correlated with other arts through lectures, recordings, and concerts. [D; CSU; UC]

MUS 106.
Introduction to Jazz
3 units

Grade only
Lecture 3 hours
Offered: Fall, Spring
Survey of the styles of jazz with a historical overview of the great jazz artists who contributed to its growth of jazz. From the influence of African music to the jazz performances of the eighties, students will listen to the great jazz artists of the century and learn what makes their art so important to American music. [D; CSU; UC]

MUS 107.
The Contemporary Scene of American Popular Music
3 units

Grade only
Lecture 3 hours
Offered: Fall, Spring
Survey course covering all aspects of American music from 1900 to the present. Dixieland, Blues, Big Band Era, Jazz, Progressive Jazz, Bebop, Third Stream Jazz, Combos, Rock 'n' Roll, Hardrock, Soul, Jazz, Folk Music, etc.
[D; CSU; UC]

MUS 108.
Introduction to the Music of México
3 units

Grade only
Lecture 3 hours
Offered: Variable
Historical survey of music in Mexico from the early pre-Cortesian cultures through the present. The art music of Mexico and the compositions of leading Mexican composers. Aspects of indigenous, folk and traditional music, as well as music in Mexican-American society. [D; CSU; UC]

MUS 194.
Survey of Music From Africa and the African Diaspora
3 units

Grade only
Lecture 3 hours
Offered: Variable
A survey of music and culture of the African continent and the African Diaspora. Includes the study of geography and demographics of the African continent; the history of Africa as a continent and its pertinence to world history; specific focus on various cultures' musical instruments; performance practices, and other pertinent forms of artistic and cultural expression. It will also explore African music and culture in the New World, specifically, the Caribbean region. [D; CSU; UC]

MUS 195.
Survey of World Music Cultures
3 units

Grade only
Lecture 3 hours
Offered: Variable
The course is a geographical survey of music, and specific societies that create music. The geocultural areas will include but not be limited to music in Africa (North and Sub-Saharan), China, Japan, Indonesia, India, Australia, The Caribbean, South and Latin America. "Traditional" (folk), "classical," and popular musical forms will be included for study.
[D; CSU; UC]

MUS 202.
Development of Mariachi: Style and Culture
3 units

Grade only
Lecture 3 hours
Offered: Fall
In-depth and critical study examination of mariachi music history, style, and culture. Includes how and why mariachi became what it is, mariachi music theory, its importance in the community, placement within global musical and historical contexts, survey of important performers, songs and composers, and thoughts on the future of mariachi. [D; CSU; UC]

Music Theory and Analysis Courses

MUS 101.
Foundations of Music Theory I
3 units

Grade only
Corequisite: *MUS 111*
Lecture 3 hours
Offered: Variable
Rudiments of music including note reading, time classification and rhythm, time signatures, intervals, modes, major and minor scales; elementary triads. [D; CSU; UC]

MUS 102.
Foundations of Music Theory II
3 units

Grade only
Corequisite: *MUS 113*
Lecture 3 hours
Offered: Variable
Beginning harmony and reviews of scales and triad chords. Principle of voice leading between triads in root, first and second inversion, and chord progression. [D; CSU; UC]

MUS 103.
Musicianship For General Elementary Teachers
3 units

Lecture 3 hours, laboratory 1 hour
Offered: Variable
Elementary music theory and skills including performance with autoharp and voice; developing elementary piano keyboard facility.
[D; CSU]

MUS 109.
Foundations of Music Theory III
3 units

Grade only
Prerequisite: *MUS 113 or equivalent*
Corequisite: *MUS 114*
Recommended Preparation: *MUS 102 or equivalent*
Lecture 3 hours
Offered: Variable
Chord progressions in four-part harmony using triads, seventh chords, multifunctional chords, chromatic chords, and compound chords. Study of bach four-part chorale writing and the classical sonata styles. [D; CSU; UC]

MUS 110.
Foundations of Music Theory IV
3 units

Grade only
Prerequisite: *MUS 109 and 114, or equivalent*
Recommended Concurrent Enrollment: *MUS 115*
Lecture 3 hours
Offered: Variable
Sixteenth and eighteenth century contrapuntal practices. Analysis, critique and writing of compositions representative of the periods: Motet, Madrigal, Invention, and Fugue. [D; CSU; UC]

MUS 111.
Keyboard—Sight , Singing, and Dictation I
1 unit

Grade only
Corequisite: *MUS 101*
Laboratory 2 hours
Offered: Variable
Keyboard performance, singing and dictation of major-minor scales, triads, basic cadences and root progressions, diatonic melodies and simple rhythmic divisions. [D; CSU; UC]

MUS 113.
Keyboard—Sight, Singing, and Dictation II
1 unit

Grade only
Prerequisite: *MUS 101 and 111, or equivalent*
Corequisite: *MUS 102*
Laboratory 2 hours
Offered: Variable
Keyboard realization of figured bases, emphasizing root progressions, cadences and major and minor scales. Singing and dictation of more complex pitch and rhythmic series; triad oriented melodies. [D; CSU; UC]

MUS 114.
Keyboard—Sight, Singing, and Dictation III
1 unit

Grade only
Prerequisite: *MUS 102 and 113, or equivalent*
Recommended Concurrent Enrollment: *MUS 109*
Laboratory 2 hours
Offered: Variable
Sight singing and dictation of melodies in stepwise motion to melodies with larger skips. Perform and take dictation of rhythms in simple and compound meters. Score reading, modulation, and chromatic chords at the keyboard. [D; CSU; UC]

MUS 115.
Keyboard—Sight, Singing, and Dictation IV
1 unit

Grade only
Prerequisite: *MUS 109 and 114, or equivalent*
Recommended Concurrent Enrollment: *MUS 110*
Laboratory 2 hours
Offered: Variable
Sight singing and dictation of sixteenth and eighteenth century contrapuntal melodies. Chromatic nineteenth century melodies. Dictation of complex rhythmic patterns. Keyboard: figured basses, score reading, and chromatic progressions. [D; CSU; UC]

MUS 116.
Survey of Music Literature I
3 units

Lecture 3 hours, laboratory 1 hour
Offered: Variable
Aural and score analysis of master pieces from Gregorian chant through the Baroque era. Representative compositions are studied in terms of historical perspective, harmony practice, formal structure-media, and style. [D; CSU]

MUS 117.
Survey of Music Literature II
3 units

Lecture 3 hours, laboratory 1 hour
Offered: Variable
Aural and score analysis of masterpieces from the classical era through the twentieth century. Representative compositions are studied in terms of historical perspective, harmonic practice, form, and structure-media style. [D; CSU]

Recording Arts and Technology Courses

MUS 100.
Computers and Music
3 units

Grade only
Lecture 3 hours
Offered: Fall, Spring
Fee: $10. Introduction to the computer's role in music, synthesizer parameter definition, drum machine, sequencers, editors, and notation programs. Computer-assisted instruction in music theory. [D; CSU]

MUS 150.
Introduction to the Music Industry
3 units

Grade only
Lecture 3 hours
Offered: Variable
Investigation of the business aspects of music, emphasizing copyright law, production, contract law, personal management, professional organizations and other elements of music which account for success in commercial music. Students are not required to perform, read, or write music. [D; CSU]

MUS 151.
Recording Techniques
3 units

Grade only
Lecture 2 hours, laboratory 3 hours
Offered: Fall, Spring
Introduction to audio recording with an emphasis on current techniques, equipment, and practices. Focus on sound physics, introductory psychoacoustics, microphones, mixers, analog audio recording, multitrack recording and mixing, and signal processing.
(Same as TELE 151.) [D; CSU]

MUS 152.
Advanced Recording Techniques
2 units

Grade only
Prerequisite: *MUS/TELE 151 or equivalent*
Lecture 1 hour, laboratory 2 hours
Offered: Variable
Emphasis on the development of advanced recording skills, including digital multitrack recording, automated mixing, and digital editing. Class projects include the practical application of learned skills in diverse recording projects. [D; CSU]

MUS 155.
Electronic Music
3 units

Lecture 3 hours
Offered: Fall, Spring
Introduction to electronic music theory and techniques. Experience includes use of the Putney, Moog and Oberheim synthesizers. [D; CSU]

MUS 205.
Audio for New Media
3 units

Prerequisite: *MUS 100 or equivalent*
Lecture 3 hours
Offered: Variable
Emphasis on digital audio production techniques that apply to using audio in multimedia authoring programs, Internet, Intranet, embedded technologies, and games. [D; CSU]

Applied Music Courses

MUS 119A.
Brass Instrument Class I
2 units

Grade only
Limitation on Enrollment: *Demonstrated proficiency and rudimentary knowledge of brass instrument*
Recommended Preparation: *One or more of the following courses: MUS 137, 140, or 193A, or equivalent*
Lecture 1 hour, laboratory 5 hours
Offered: Variable
Group and individual one-on-one instruction on any of the following brass instruments: trumpet, French horn, trombone, tuba, and baritone. All levels of students, from beginning to advanced, may enroll. [D; CSU; UC]

MUS 119B.
Brass Instrument Class II
2 units

Grade only
Prerequisite: *MUS 119A or equivalent*
Lecture 1 hour, laboratory 5 hours
Offered: Variable
Group and individual one-on-one instruction on any of the following brass instruments: trumpet, French horn, trombone, tuba, and baritone. All levels of students, from beginning to advanced, may enroll. [D; CSU; UC]

MUS 119C.
Brass Instrument Class III
2 units

Grade only
Prerequisite: *MUS 119B or equivalent*
Lecture 1 hour, laboratory 5 hours
Offered: Variable
Group and individual one-on-one instruction on any of the following brass instruments: trumpet, French horn, trombone, tuba, and baritone. All levels of students, from beginning to advanced, may enroll. [D; CSU; UC]

MUS 119D.
Brass Instrument Class IV
2 units

Grade only
Prerequisite: *MUS 119C or equivalent*
Lecture 1 hour, laboratory 5 hours
Offered: Variable
Group and individual one-on-one instruction on any of the following brass instruments: trumpet, French horn, trombone, tuba, and baritone. All levels of students, from beginning to advanced, may enroll. [D; CSU; UC]

MUS 125–128.
Applied Music—Individual Study I–IV
1 unit

Grade only
Prerequisite: *MUS 125 is a prerequisite for MUS 126; MUS 126 is a prerequisite for MUS 127; MUS 127 is a prerequisite for MUS 128*
Lecture 1 hour
Offered: Fall, Spring
Required of all students in a music degree or certificate program. Designed to develop performing skills on a selected instrument or voice. Students study with a master private instructor (at their own expense) and meet with class members on a weekly basis to listen to peer performances. [D; CSU; UC]

MUS 132A.
Class Piano I
1 unit

Grade only
Lecture 1 hour, laboratory 1 hour
Offered: Fall, Spring
Basic keyboard experience through the study of music reading, notation, scales, chords, hand positions and basic fingering patterns. [D; CSU; UC]

MUS 132B.
Class Piano II
1 unit

Grade only
Prerequisite: *MUS 132A or equivalent*
Lecture 1 hour, laboratory 1 hour
Offered: Fall, Spring
Study of the standard piano repertoire with emphasis upon practice techniques and principles of interpretation. [D; CSU; UC]

MUS 132C.
Class Piano III
1 unit

Grade only
Prerequisite: *MUS 132B or equivalent*
Lecture 1 hour, laboratory 1 hour
Offered: Fall, Spring
Development of advanced technique through the study of scales (in 2, 3, and 4 octaves with various accent patterns), arpeggios and etudes, and the development of sight-reading skills. [D; CSU; UC]

MUS 137.
Beginning Guitar I
1 unit

Laboratory 2 hours
Offered: Fall, Spring
Study of elementary plectrum and classical guitar techniques. Scales, arpeggios and chord progressions studied, related to melody and accompaniment styles in both the popular and classical fields. Introduction includes some history of the guitar. [D; CSU; UC]

MUS 138.
Beginning Guitar II
1 unit

Prerequisite: *MUS 137 or equivalent*
Laboratory 2 hours
Offered: Fall, Spring
Continued extensive study of guitar techniques as they apply to classic, folk rock and electric guitar playing. [D; CSU; UC]

MUS 140.
Class Voice I
1 unit

Laboratory 3 hours
Offered: Fall, Spring
A class for vocal field beginners working on breath control, tone quality, and diction. [D; CSU; UC]

MUS 141.
Class Voice II
1 unit

Prerequisite: *MUS 140 or equivalent*
Laboratory 3 hours
Offered: Fall, Spring
Study of songs in English, Italian, and German representing various styles of different periods of music and songs from musical comedy. Attention to quality. [D; CSU; UC]

MUS 142.
Class Voice III
1 unit

Prerequisite: *MUS 141 or equivalent*
Laboratory 3 hours
Offered: Fall, Spring
Study of songs in Italian, German, and English representing different periods of music and musical comedy songs. Attention given to interpretation. Continued work on breath control, diction, and tone quality. [D; CSU; UC]

MUS 143.
Popular Vocal Techniques
1 unit

Prerequisite: *Music 140 or equivalent*
Laboratory 2 hours
Offered: Variable
Training in the performance of popular singing styles. Includes the development of interpretive techniques such as rhythmic variation and phrasing as needed for solo work and background singing in jazz, rock, blues, country, folk, and easy listening. Stage deportment and microphone techniques. [D; CSU]

MUS 145.
Vocal Techniques for Musical Theatre I
1 unit

Grade only
Laboratory 5 hours
Offered: Variable
Production of dramatic musical works. Techniques for vocal theatrical auditions and performance. Emphasis on individualized development and experience in singing theatrical musical literature. Attendance at rehearsals and performances is an integral part of this course. [D; CSU; UC]

MUS 146.
Vocal Techniques for Musical Theatre II
1 unit

Grade only
Prerequisite: *MUS 145 or equivalent*
Laboratory 5 hours
Offered: Variable
Production of dramatic musical works. Techniques for vocal theatrical auditions and performance. Emphasis on individualized development and experience in singing theatrical musical literature. Attendance at rehearsals and performances is an integral part of this course. [D; CSU; UC]

MUS 147.
Singing for Musical Theatre I
1 unit

Grade only
Prerequisite: *MUS 146 or equivalent*
Laboratory 5 hours
Offered: Variable
Audition required. Designed to train the student to perform a major role in a musical production. Training in phrasing, diction, breathing, and voice control as related to specific dramatic pieces. Attendance at rehearsals and performances is required. [D; CSU; UC]

MUS 148.
Singing for Musical Theatre II
1 unit

Grade only
Prerequisite: *MUS 147 or equivalent*
Laboratory 5 hours
Offered: Variable
Designed to train the student to perform a major role in a musical production. Training in phrasing, diction, breathing, and voice control as related to specific dramatic pieces. Audition required. Attendance at rehearsals and performances is required. [D; CSU; UC]

MUS 162.
Introduction to Improvisation
1 unit

Grade only
Laboratory 5 hours
Offered: Variable
Introduction to the skills of music improvisation with emphasis on commercial music and related styles. Techniques learned will apply to all forms of music. [D; CSU; UC]

MUS 164.
Jazz Performance Workshop
1 unit

Grade only
Laboratory 5 hours
Offered: Variable
Development of basic skills in reading and interpreting contemporary jazz and jazz and rock styles. Students will work in small groups and emphasize part reading and translating chord symbols. Some public performances may be scheduled. [D; CSU; UC]

MUS 193A.
String Instrument Class I
2 units

Grade only
Limitation on Enrollment: *Demonstrated proficiency and rudimentary of string instrument*
Recommended Preparation: *One or more of the following courses: MUS 137, 140, 119A, or 193A, or equivalent*
Lecture 1 hour, laboratory 5 hours
Offered: Variable
Group and private instruction on any of the following string instruments: violin, viola, cello, contrabass. All levels of students, from beginning to advanced, may enroll. [D; CSU; UC]

MUS 193B.
String Instrument Class II
2 units

Grade only
Prerequisite: *MUS 193A or equivalent*
Lecture 1 hour, laboratory 5 hours
Offered: Variable
Group and private instruction on any of the following string instruments: violin, viola, cello, contrabass. All levels of students, from beginning to advanced, may enroll. [D; CSU; UC]

MUS 193C.
String Instrument Class III
2 units

Grade only
Prerequisite: *MUS 193B or equivalent*
Lecture 1 hour, laboratory 5 hours
Offered: Variable
Group and private instruction on any of the following string instruments: violin, viola, cello, contrabass. All levels of students, from beginning to advanced, may enroll. [D; CSU; UC]

MUS 193D.
String Instrument Class IV
2 units

Grade only
Prerequisite: *MUS 193C or equivalent*
Lecture 1 hour, laboratory 5 hours
Offered: Variable
Group and private instruction on any of the following string instruments: violin, viola, cello, contrabass. All levels of students, from beginning to advanced, may enroll. [D; CSU; UC]

Music Performance Ensembles

MUS 124A.
Introduction to Mariachi Performance I
2 units

Grade only
Limitation on Enrollment: *Demonstrated proficiency and rudimentary knowledge of mariachi music*
Recommended Preparation: *One or more of the following courses: MUS 137, 140, 119A, or 193A, or equivalent*
Lecture 1 hour, laboratory 5 hours
Offered: Variable
An ensemble for musicians interested in playing and singing mariachi music. Emphasis on learning to play mariachi instruments (violin, trumpet, guitar, vihuela, guitarron, flute, voice) in the proper style to play well as part of a group and to differentiate mariachi music from other types of Mexican music. [D; CSU; UC]

MUS 124B.
Introduction to Mariachi Performance II
2 units

Grade only
Prerequisite: *MUS 124A or equivalent*
Lecture 1 hour, laboratory 5 hours
Offered: Variable
An ensemble for musicians interested in playing and singing mariachi music. Emphasis on learning to play mariachi instruments (violin, trumpet, guitar, vihuela, guitarron, flute, voice) in the proper style to play well as part of a group and to differentiate mariachi music from other types of Mexican music. [D; CSU; UC]

MUS 124C.
Introduction to Mariachi Performance III
2 units

Grade only
Prerequisite: *MUS 124B or equivalent*
Lecture 1 hour, laboratory 5 hours
Offered: Variable
An ensemble for musicians interested in playing and singing mariachi music. Emphasis on learning to play mariachi instruments (violin, trumpet, guitar, vihuela, guitarron, flute, voice) in the proper style to play well as part of a group and to differentiate mariachi music from other types of Mexican music. [D; CSU; UC]

MUS 124D.
Introduction to Mariachi Performance IV
2 units

Grade only
Prerequisite: *MUS 124C or equivalent*
Lecture 1 hour, laboratory 5 hours
Offered: Variable
An ensemble for musicians interested in playing and singing mariachi music. Emphasis on learning to play mariachi instruments (violin, trumpet, guitar, vihuela, guitarron, flute, voice) in the proper style to play well as part of a group and to differentiate mariachi music from other types of Mexican music. [D; CSU; UC]

MUS 136A.
Jazz Vocal Ensemble I
2 units

Grade only
Recommended Preparation: *MUS 185 or equivalent*
Lecture 1 hour, laboratory 5 hours
Offered: Fall, Spring
Choral ensemble for music students with aural and score analysis of jazz vocal literature from its traditional roots to the present. Emphasis on historical context, performance practice, style and interpretation; public performance required. [D; CSU; UC]

MUS 136B.
Jazz Vocal Ensemble II
2 units

Grade only
Prerequisite: *MUS 136A or equivalent*
Recommended Preparation: *MUS 185 or equivalent*
Lecture 1 hour, laboratory 5 hours
Offered: Fall, Spring
Choral ensemble for music students with aural and score analysis of jazz vocal literature from its traditional roots to the present. Emphasis on historical context, performance practice, style and interpretation. Public performance required. [D; CSU; UC]

MUS 136C.
Jazz Vocal Ensemble III
2 units

Grade only
Prerequisite: *MUS 136B or equivalent*
Recommended Preparation: *MUS 185 or equivalent*
Lecture 1 hour, laboratory 5 hours
Offered: Fall, Spring
Choral ensemble for music students with aural and score analysis of jazz vocal literature from its traditional roots to the present. Emphasis on historical context, performance practice, style and interpretation. Public performance required. [D; CSU; UC]

MUS 136D.
Jazz Vocal Ensemble IV
2 units

Grade only
Prerequisite: *MUS 136C or equivalent*
Recommended Preparation: *MUS 185 or equivalent*
Lecture 1 hour, laboratory 5 hours
Offered: Fall, Spring
Choral ensemble for music students with aural and score analysis of jazz vocal literature from its traditional roots to the present. Emphasis on historical context, performance practice, style and interpretation. Public performance required. [D; CSU; UC]

MUS 153.
Mariachi Ensemble
2 units

Grade only
Lecture 1 hour, laboratory 5 hours
Offered: Fall, Spring
Ensemble for all students interested in learning to play and sing mariachi. Emphasis is placed on learning to play mariachi instruments (violin, trumpet, guitar, vihuela, guitarron, and flute) in the proper style, to play well as part of a group, and learn to differentiate mariachi from other Mexican music. [D; CSU; UC]

MUS 154.
Advanced Mariachi Ensemble
2 units

Grade only
Recommended Preparation: *Demonstrated ability to perform a mariachi instrument to a reasonable degree of proficiency, and a demonstrated rudimentary knowledge of mariachi music.*
Lecture 1 hour, laboratory 5 hours
Offered: Fall, Spring
Ensemble for the experienced mariachi musician stressing: authentic mariachi style, excellence in personal and group performance, repertoire building, sight-reading music, playing and transposing songs by ear, improvising arrangements, memorization techniques, working and performing in a group, stage presence and other aspects of performance, overall professionalism. [D; CSU; UC]

MUS 157A.
Mariachi Garibaldi I
2 units

Grade only
Limitation on Enrollment: *Demonstrated proficiency and rudimentary knowledge of mariachi music*
Recommended Preparation: *One or more of the following courses: MUS 137, 140, 119A, or 193A, or equivalent*
Lecture 1 hour, laboratory 5 hours
Offered: Variable
An ensemble for the experienced mariachi musician stressing: authentic mariachi style, excellence in personal and group performance, repertoire building, sight-reading music, laying and transposing songs by ear, memorization techniques, working and performing in a group, stage presence and other aspects of performance, and overall professionalism. [D; CSU; UC]

MUS 157B.
Mariachi Garibaldi II
2 units

Grade only
Prerequisite: *MUS 157A or equivalent*
Lecture 1 hour, laboratory 5 hours
Offered: Variable
An ensemble for the experienced mariachi musician stressing: authentic mariachi style, excellence in personal and group performance, repertoire building, sight-reading music, laying and transposing songs by ear, memorization techniques, working and performing in a group, stage presence and other aspects of performance, and overall professionalism. [D; CSU; UC]

MUS 157C.
Mariachi Garibaldi III
2 units

Grade only
Prerequisite: *MUS 157B or equivalent*
Lecture 1 hour, laboratory 5 hours
Offered: Variable
An ensemble for the experienced mariachi musician stressing: authentic mariachi style, excellence in personal and group performance, repertoire building, sight-reading music, laying and transposing songs by ear, memorization techniques, working and performing in a group, stage presence and other aspects of performance, and overall professionalism. [D; CSU; UC]

MUS 157D.
Mariachi Garibaldi IV
2 units

Grade only
Prerequisite: *MUS 157C or equivalent*
Lecture 1 hour, laboratory 5 hours
Offered: Variable
An ensemble for the experienced mariachi musician stressing: authentic mariachi style, excellence in personal and group performance, repertoire building, sight-reading music, laying and transposing songs by ear, memorization techniques, working and performing in a group, stage presence and other aspects of performance, and overall professionalism. [D; CSU; UC]

MUS 166.
Jazz Ensemble I
2 units

Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Performance required. Introduction to jazz ensemble performance including history, theory, aesthetics, and contemporary criticism of jazz. Emphasis on performance techniques and stylistic interpretation in basic swing style. [D; CSU; UC]

MUS 167.
Jazz Ensemble II
2 units

Recommended Preparation: *MUS 166 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Intermediate jazz ensemble performance including history, theory, aesthetics, and contemporary criticism of jazz. Emphasis on performance techniques and stylistic interpretation in '40s and '50s swing and basic jazz rock styles. Performance required. [D; CSU; UC]

MUS 168.
Jazz Ensemble III
2 units

Recommended Preparation: *MUS 167 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Performance required. Intermediate jazz ensemble performance including history, theory, aesthetics, and contemporary criticism of jazz. Emphasis on performance techniques and stylistic interpretation in '40s, '50s, and '60s swing, intermediate jazz rock, basic bossa nova, and nonstandard time signatures. [D; CSU; UC]

MUS 169.
Jazz Ensemble IV
2 units

Recommended Preparation: *MUS 168 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Performance required. Advanced jazz ensemble performance including history, theory, aesthetics, and contemporary criticism of jazz. Emphasis on performance techniques and stylistic interpretation in twentieth century swing styles, advanced jazz rock, intermediate and advanced bossa nova, nonstandard time signature, and avante guard or "free" playing styles. [D; CSU; UC]

MUS 170–173.
Small Performing Groups I–IV
1 unit

Grade only
Prerequisite: *MUS 170 is a prerequisite to MUS 171; MUS 171 is a prerequisite to MUS 172; MUS 172 is a prerequisite to MUS 173*
Laboratory 6 hours
Offered: Variable
Performance experience as a small group musician. Sections for string, woodwind, brass, guitar, piano, vocal, electronic, and mixed ensemble groups. [D; CSU; UC]

MUS 175.
Orchestra I
2 units

Lecture 1 hour, laboratory 5 hours
Offered: Variable
Performance experience for string, wind, and percussion instrumentalists. Exploration of various styles of orchestra literature including standard, contemporary, and new music compositions. A limited number of public performances will be scheduled. Ability to play an orchestra instrument and read music is required. [D; CSU; UC]

MUS 176.
Orchestra II
2 units

Prerequisite: *MUS 175 or equivalent*
Lecture 1 hour, laboratory 5 hours
Offered: Variable
Performance experience for string, wind, and percussion instrumentalists. Exploration of various styles of orchestra literature including standard, contemporary, and new music compositions. A limited number of public performances will be scheduled. Ability to play an orchestra instrument and read music is required. [D; CSU; UC]

MUS 177.
Orchestra III
2 units

Prerequisite: *MUS 176 or equivalent*
Lecture 1 hour, laboratory 5 hours
Offered: Variable
Performance experience for string, wind, and percussion instrumentalists. Exploration of various styles of orchestra literature including standard, contemporary, and new music compositions. A limited number of public performances will be scheduled. Ability to play an orchestra instrument and read music is required. [D; CSU; UC]

MUS 178.
Orchestra IV
2 units

Prerequisite: *MUS 177 or equivalent*
Lecture 1 hour, laboratory 5 hours
Offered: Variable
Performance experience for string, wind, and percussion instrumentalists. Exploration of various styles of orchestra literature including standard, contemporary, and new music compositions. A limited number of public performances will be scheduled. Ability to play an orchestra instrument and read music is required. [D; CSU; UC]

MUS 180.
Chamber Singers I
2 units

Limitation on Enrollment: *Demonstrated proficiency*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Audition and participation in public performance required. Ensemble for the advanced choral musician, in which aural and score analysis of choral masterworks from classical eras to the present are analyzed, interpreted, and performed. Representative compositions are studied in terms of historical perspective, performance practice, and style. [D; CSU; UC]

MUS 181.
Chamber Singers II
2 units

Limitation on Enrollment: *Demonstrated proficiency*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Audition and participation in public performance required. Ensemble for the advanced choral musician, in which aural and score analysis of choral masterworks from classical eras to the present are analyzed, interpreted, and performed. Representative compositions are studied in terms of historical perspective, performance practice, and style. [D; CSU; UC]

MUS 182.
Chamber Singers III
2 units

Limitation on Enrollment: *Demonstrated proficiency*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Audition and participation in public performance required. Ensemble for the advanced choral musician, in which aural and score analysis of choral masterworks from classical eras to the present are analyzed, interpreted, and performed. Representative compositions are studied in terms of historical perspective, performance practice, and style. [D; CSU; UC]

MUS183.
Chamber Singers IV
2 units

Limitation on Enrollment: *Demonstrated proficiency*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Audition and participation in public performance required. Ensemble for the advanced choral musician, in which aural and score analysis of choral masterworks from classical eras to the present are analyzed, interpreted, and performed. Representative compositions are studied in terms of historical perspective, performance practice, and style. [D; CSU; UC]

MUS 185.
Concert Choir I
1 unit

Lecture 1 hour, laboratory 5 hours
Offered: Fall, Spring
Public performance required. A choral ensemble for music students with aural and score analysis of choral literature from traditional classics to the present. Emphasis is on historical context, performance practice, style, and interpretation. [D; CSU; UC]

MUS 186.
Concert Choir II
1 unit

Lecture 1 hour, laboratory 5 hours
Offered: Fall, Spring
Public performance required. A choral ensemble for music students with aural and score analysis of choral literature from traditional classics to the present. Emphasis is on historical context, performance practice, style, and interpretation. [D; CSU; UC]

MUS 187.
Concert Choir III
1 unit

Lecture 1 hour, laboratory 5 hours
Offered: Fall, Spring
Public performance required. A choral ensemble for music students with aural and score analysis of choral literature from traditional classics to the present. Emphasis is on historical context, performance practice, style, and interpretation. [D; CSU; UC]

MUS 188.
Concert Choir IV
1 unit

Lecture 1 hour, laboratory 5 hours
Offered: Fall, Spring
Public performance required. A choral ensemble for music students with aural and score analysis of choral literature from traditional classics to the present. Emphasis is on historical context, performance practice, style, and interpretation. [D; CSU; UC]

MUS 189.
Music and Rhythms of Africa I
1 unit

Grade only
Laboratory 3 hours
Offered: Fall, Spring
Observation, imitation, and participation of African music with emphasis on historical and contemporary music genres. Practical instruction in traditional African instruments and vocal techniques, historical and cultural aspects of indigenous musical traditions, and related art forms. [D; CSU; UC]

MUS 190.
Music and Rhythms of Africa II
1 unit

Grade only
Prerequisite: *MUS 189 or equivalent*
Laboratory 3 hours
Offered: Fall, Spring
Observation, imitation, and participation of African music with continued emphasis on historical and contemporary music genres. Practical instruction in the more advanced performance skills of traditional African instruments and vocal techniques. Covers the historical and cultural aspects of indigenous musical traditions and related art forms. [D; CSU; UC]

MUS 191.
Music and Rhythms of Africa III
1 unit

Grade only
Prerequisite: *MUS 190 or equivalent*
Laboratory 3 hours
Offered: Fall, Spring
Observation, imitation, and participation of African music with emphasis on historical and contemporary music genres. Practical instruction for the more advanced performance skills of traditional African instruments and vocal techniques. Covers the historical and cultural aspects of indigenous musical traditions and related art forms. [D; CSU; UC]

MUS 192.
Music and Rhythms of Africa IV
1 unit

Grade only
Prerequisite: *MUS 191 or equivalent*
Laboratory 3 hours
Offered: Fall, Spring
Observation, imitation, and participation of African music with emphasis on historical and contemporary music genres. Practical instruction will be given to the advanced student in traditional African instruments and vocal techniques. Covers historical and cultural aspects of indigenous musical traditions and related art forms. [D; CSU; UC]

Music Miscellaneous

MUS 295.
Selected Topics in Music
1–3 units

Offered: Variable
Permits students to study relevant topics within the field of music. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

MUS 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of music of particular interest to the student and not included in regular courses of the college. [D; CSU; * UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Nursing

School of Technology and Human Services

Dean

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Linda Williams, M.S.N.

Department Chair

Catherine L. McJannet, M.N.

Director

Sandra Comstock, M.S.N.

General Description

Nursing is the diagnosis and treatment of human responses to actual or potential health problems. The nurse assists the individual, sick or well, in the performance of those activities contributing to health or its recovery (or to peaceful death) that the individual would perform unaided if possessing the necessary strength, will, or knowledge. The nurse practices in many settings including hospitals, clinics, physicians' offices, extended care facilities, and homes in the community.

Career Options

The following list is a sample of the many career options available for the nursing major. Some of these require an associate degree, most require a baccalaureate degree, and a few require a graduate degree: licensed vocational nurse, registered nurse, nurse clinician, nurse practitioner, nurse midwife, nurse administrator, and nurse educator. Nurses practice in many settings such as hospitals, extended care facilities, homes and clinics, and in the military. They may specialize in caring for specific age groups such as children or the aged. They may also specialize in certain areas such as medical, surgical, psychiatric, critical or emergency room care, obstetrics, pediatrics, and operating room.

Degree/Certificate Options

	Major Code
Associate in Science Degree: Career/Technical	
Nursing	*02360*
Surgical Technology	*02345*
Vocational Nursing	*02390*
Associate in Arts Degree: Transfer Preparation	
Transfer Education/Preparation for Nursing	*A1330*
Certificates of Achievement:	
Central Service Technology	*02347*
Certified Nursing Assistant	*02371*
Nursing, Vocational	*02392*
Operating Room Nursing	*02361*
Surgical Technology	*02346*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

NOTE: *In the VN, ST, and ORN programs, a minimum grade of "C" is required in each course for progression and satisfactory completion. Nursing courses may be repeated no more than one time with a maximum of one re-entry to the program.*

Courses must be completed in sequence as stated.

Associate in Science Degree

SOUTHWESTERN COLLEGE MISSION STATEMENT

"Southwestern College is committed to meeting the educational goals of its students in an environment that promotes intellectual growth and develops human potential."

THE ASSOCIATE DEGREE NURSING PROGRAM PHILOSOPHY

The associate degree nursing faculty advocates the mission and goals of Southwestern College; furthermore, the faculty is committed to the following beliefs, which guide the nursing curriculum:

Beliefs About Man, Health, Illness, and Nursing

* *Man is a unique individual with inseparable bio-psycho-social-spiritual needs.*
* *Man's culture is an integral component in health and wellness throughout the life span.*
* *Health is a state of complete physical, mental, and social well-being, not merely the absence of disease or infirmity.*
* *Health is on a continuum of maximum wellness to maximum illness throughout the life span.*

Beliefs About Nursing

* *Nursing is both an art and a science. The science of nursing is the knowledge base for the care that is given; the art of nursing is the skilled application of that knowledge to help others reach maximum function and quality of life throughout the life span.*
* *Nursing is a profession that utilizes special skills and knowledge to give safe care to the whole person in health and illness and in a variety of practice settings.*
* *Nursing requires critical thinking skills that focus on health promotion, illness prevention, restoring health, and facilitating coping while utilizing therapeutic communication methods.*
* *Nursing care is determined by man's human responses resulting from changes in the structure and/or function of all body systems.*

Beliefs About Students, Faculty, and Education

* *Students are individuals with unique combinations of ethnic and cultural backgrounds, learning abilities, and support systems.*
* *Optimal student learning takes place in a safe environment that is supportive and provides frequent feedback.*
* *Nursing faculty believe that learning is a lifelong process involving external changes in behavior and internal changes in thought process and attitudes.*
* *Nursing faculty believe that the role of faculty is to facilitate student learning by providing instruction, clinical experiences, resources, counseling, and guidance.*
* *Nursing education incorporates knowledge from the humanities and the behavioral, physical, and natural sciences.*

The Associate Degree Nursing program serves as the beginning preparation for the registered nurse with identified competencies, critical thinking, supervision, leadership, and entry-level computer skills. Various nursing roles are also emphasized as the student nurse prepares for state licensure.

The Associate Degree Nursing program is accredited by the National League for Nursing Accreditation Commission (NLNAC).

The National League for Nursing Accrediting Commission
61 Broadway
New York, NY 10006
Phone (212) 363-5555 ext.153

HOW TO APPLY

Applicants must be eligible for admission to the college. Students accepted into the nursing programs are subject to further screening to determine eligibility to be admitted into the programs. In addition to the college application, a special application for the program is required. Program application forms are available in the School of Technology and Human Services office, Room 560J. Applications for each program will be accepted after prerequisite courses and other requirements are met. Students are admitted to nursing programs in the order in which their applications were completed. Applicants are notified of being accepted into the program during the semester prior to beginning the program. All applications received on any one day receive equal priority for admission. In the event that space is not available for all qualified applicants from any one day, a random drawing will be used to select the applicants to be accepted for that day.

An individual evaluation will be made for students wishing to transfer from a nursing program or to receive credit for previous nursing education.

SPECIAL INSTRUCTIONS

Students enrolled in the nursing programs are required to provide their own transportation to off-campus clinical agencies and for home visits. A fee for malpractice insurance is charged for each year of the program as well as a minimal fee for supplies. Students are also responsible for purchasing certain equipment such as a stethoscope.

CPR certification: Students are required to be certified prior to admission and to maintain certification throughout the program. American Heart Association (AHA) certification, healthcare provider course or American Red Cross (ARC) Professional Rescuer is required. (Both Level C).

Basic nursing skills: Students must be certified nursing assistants or provide evidence of equivalent skills to be admitted to the nursing programs.

A grade of "C" or better is required in all nursing courses for progression and satisfactory completion. Progress in the nursing programs is dependent upon completion of nursing courses in the prescribed sequence as outlined for each program. Students will not be permitted to progress to the next semester until previous semester nursing courses are completed. Nursing courses may be repeated only once.

REGISTERED NURSING—ASSOCIATE IN SCIENCE DEGREE

In order to apply and be placed on the priority list for the ADN program, applicants must document the following:

* *Basic science prerequisites (BIOL 260, 261, and 265) must be completed with a cumulative GPA of 2.5. Foreign transcripts not submitted at time of application may not be used to meet program or graduation requirements. Required science courses taken at Southwestern College have prerequisites including college-level biology, chemistry, and algebra courses or credit for the appropriate college-level examination (CLEP).*
* *Recency: science prerequisite courses must be completed within seven years of beginning the program.*
* *Graduation from a U.S. high school or a satisfactory score on the GED or evidence of other high school equivalency certificate or a degree from a U.S. accredited institution.*

* *College-level reading ability as evidenced by a satisfactory result on the Southwestern College Reading Assessment process, earning a "C" or better in ENGL 158, 116, or equivalent reading course; equivalency documented by approved petition; or college transcript showing an earned associate or baccalaureate degree from a U.S. accredited institution.*
* *Math proficiency as evidenced by eligibility for MATH 45 or higher as demonstrated on the college math assessment process, earning a "C' or better in MATH 35 or higher-numbered math course, or equivalent as documented by an approved petition.*

NOTE: *MATH 45 or equivalent is required for graduation from Southwestern College.*

Before a space in the nursing program can be offered, applicants must verify completion of the series of vaccinations for Hepatitis B or immunity to Hepatitis B or sign a form declining to be vaccinated, and basic nursing skills must be documented by means of nursing assistant certificate or equivalent. Further information on acceptable equivalency is available from the program office.

Students who have been accepted into the program must meet the following conditions: attend a scheduled class orientation, submit a completed physical examination form with evidence of required immunizations, tuberculosis screening, CPR certification, provide evidence of payment of malpractice insurance premium, and supply fees.

In addition to the above costs, students are required to pay for testing services provided by Assessment Technologies Institute, LLC (ATI). These diagnostic tests are administered periodically throughout the nursing program beginning with an entrance test given during the first two weeks of classes. The test identifies weaknesses for the student to enable them to seek appropriate assistance during the program. Periodic additional tests must be passed before the student progresses in the program. Remediation is available for every student. A summer non-credit "Success in Nursing" course is encouraged for all students entering nursing.

Some financial assistance is available through the Financial Aid and Placement office. Application for assistance should be made early (preferably by April or May for new students) in the Financial Aid office. It is recommended that the student not work more than 20 hours per week.

Upon completion of degree requirements, the graduate is eligible to apply to take the National Council Licensure examination for Registered Nursing (NCLEX-RN). The Board of Registered Nursing (BRN) may refuse licensure to individuals who have been convicted of crimes and/or certain misdemeanors, Further information may be obtained from the BRN at 400 "R" Street, Suite 4030, Sacramento, CA 94814 or the Program Director may be consulted. Program information may also be obtained from the National League for Nursing, 61 Broadway, New York, NY 10006.

Associate in Science Degree
Nursing

Career/Technical (Major Code: 02360)

Prepares students for careers in nursing through the study of the humanities, natural/social sciences, and the field of nursing. Emphasis is on nursing theory and clinical practice. Graduates are eligible to apply to the California Board of Registered Nursing to take the examination for licensure as a registered nurse.

PREREQUISITES:

Nursing Assistant Certification or equivalent		
BIOL 260	*Human Anatomy **	*5*
BIOL 261	*Principles of Human Physiology**	*4*
BIOL 265	*General Microbiology **	*5*
	Total prerequisite units	***14***

FIRST SEMESTER

ADN 111A	*Pathophysiology and Pharmacology I*	*2*
ADN 112	*Fundamentals of Nursing*	*2*
ADN 112L	*Fundamentals of Nursing Clinical Laboratory*	*5*

SECOND SEMESTER

ADN 111B	*Pathophysiology and Pharmacology II*	*2*
ADN 113	*Maternal and Child Nursing*	*3*
ADN 113L	*Maternal and Child Nursing Laboratory*	*5*
ADN 114	*Nursing Supervision and Leadership I*	*2*

THIRD SEMESTER

ADN 221	*Adult Nursing*	*5*
ADN 221L	*Adult Nursing Laboratory*	*5*

FOURTH SEMESTER

ADN 223	*Gerontology*	*2*
ADN 223L	*Gerontology Laboratory*	*4*
ADN 225	*Nursing Supervision and Leadership II*	*2*
		39

COMM 103	*Oral Communication*	
	or	*3*
COMM 174	*Interpersonal Communication*	
PSYC 101	*General Psychology*	*3*
CD 170	*Principles of Child Development*	
	or	*3*
PSYC 230	*Lifespan Development*	
ENGL 115	*Reading and Composition: Exposition and Argumentation*	*3*
Humanities: One course from Group 1: Fine Arts		*3*
MATH 45 or equivalent		
	Total units	***15***

Proficiencies required for department acceptance into this program include basic nursing skills (CNA or equivalent) college-level reading (ENGL 158), and pre-algebra math (MATH 35).

To earn an associate degree, additional General Education and Graduation requirements must be completed. See page 36.

* Four semester units of equivalent courses from an accredited institution. Required science courses taken at Southwestern College have prerequisite courses of BIOL 100, 101 and CHEM 100 or 170 or equivalent.

LVN TO ADN TRANSITION PROGRAM

California licensed vocational nurses are eligible to apply for a one-year LVN-ADN transition program. Credit toward first year ADN courses is granted upon evidence of licensure. Students take a transition course before joining the ADN class in the third semester.

PREREQUISITES

LVN License

BIOL 260	*Human Anatomy **	*5*
BIOL 261	*Human Physiology*	*4*
BIOL 265	*General Microbiology **	*5*
No recency requirement on science courses		
	Total prerequisite units	***14***

SUMMER SESSION

ADN 115	*Transition to Associate Degree Nursing*	*3*

FIRST SEMESTER

ADN 221	*Adult Nursing*	*5*
ADN 221L	*Adult Nursing Laboratory*	*5*

SECOND SEMESTER

ADN 223	*Gerontology*	*2*
ADN 223L	*Gerontology Laboratory*	*4*
ADN 225	*Nursing Supervision and Leadership II*	*2*
	Total units	***21***

30 UNIT OPTION

California LVNs may take the "30 unit option" but will not be graduates from the nursing program or the college unless all other requirements are met. Please contact the director of the program for an explanation of the advantages and limitations of this option. Vocational nurses completing this option may be graduates of the Southwestern College nursing program and of the college only if they complete other graduation requirements prior to taking the licensure examination. Only those completing the requirements in the major are eligible to wear the Southwestern College nursing pin.

PREREQUISITES

BIOL 261	*Human Physiology*	*4*
BIOL 265	*General Microbiology **	*5*
	Total prerequisite units	***9***

SUMMER SESSION

ADN 115	*Transition to Associate Degree Nursing*	*3*

FIRST SEMESTER

ADN 221	*Adult Nursing*	*5*
ADN 221L	*Adult Nursing Laboratory*	*5*

SECOND SEMESTER

ADN 223	*Gerontology*	*2*
ADN 223L	*Gerontology Laboratory*	*4*
ADN 225	*Nursing Supervision and Leadership II*	*2*
	Total Units	***21***

Surgical Technology

Career/Technical (Major Code: 02345)

Prepares the student to function in operating rooms under the direct supervision of physicians and nurses. A major portion of the learning experience will take place in hospital operating rooms.

PREREQUISITES

BIOL 190	*Anatomy and Physiology (4)*	
	or	*4–5*
BIOL 260	*Human Anatomy (5)*	
Acceptance into the Surgical Technology program		

FIRST SEMESTER

ST 110	*Introduction to Surgical Technology*	*8*
ST 120	*Surgical Laboratory*	*4*

SECOND SEMESTER

ST 130	*Adv. Operating Room Techniques*	*4*
ST 140	*Practicum: Major Surgical Specialties*	*8*
ST 150	*Current Concepts in Surgical Tech.*	*1*

SUMMER SESSION

ST 160	*Practicum: Subspecialties*	*6*
	Total units	***35–36***

The following courses must be taken as part of the General Education requirement for Surgical Technology:

BIOL 265	*General Microbiology (5)*
COMM 174	*Interpersonal Communication (3)*
PSYC 101	*General Psychology (3)*

To earn an associate degree, additional General Education and Graduation requirements must be completed. See page 36.

NOTE: *Upon successful completion of the program, the student is eligible to apply to take the Surgical Technology Certification Examination, which is sponsored by the Association of Surgical Technologists. Passing this examination allows the individual to use the title Certified Surgical Technologist.*

Students wishing to apply to the Surgical Technology program should come to the ROP office (Room 213) for program information.

Nursing, Vocational

Career/Technical (Major Code: 02390)

Prepares students for direct patient care in situations where he/she is under the supervision of physicians and/or registered nurses. A major portion of the educational experience takes place in a variety of healthcare settings.

PREREQUISITES:

CNA Certification or equivalent		*0–7*
BIOL 190	*Human Anatomy and Physiology*	*4*
CD 170	*Principles of Child Development*	*3*
CD 204	*Fundamentals of Nutrition*	*3*
	Total prerequisite units	*10–17*

FIRST SEMESTER

CL 120	*Computer Literacy*	*1*
VN 30	*Introduction to Pharmacology*	*1.5*
VN 101	*Introduction to Vocational Nursing I*	*2.5*
VN 101L	*Introduction to Vocational Nursing I Lab*	*2*
VN 102	*Introduction to Vocational Nursing II*	*2.5*
VN 102L	*Introduction to Vocational Nursing II Lab*	*2*

SECOND SEMESTER

VN 130	*Pharmacology for Nurses*	*2*
VN 201	*Vocational Nursing*	*5*
VN 201L	*Vocational Nursing Laboratory*	*6*

THIRD SEMESTER

PSYC 101	*General Psychology*	*3*
VN 250	*Nursing Care in Specialty Areas and Career Preparation*	*5*
VN 250L	*Nursing Care in Specialty Areas and Career Preparation Laboratory*	*6*
	Total units	***38.5–45.5***

COMM 174. Interpersonal Communication 3 units must be taken as part of the General Education requirement for Vocational Nursing.

Proficiencies required for department acceptance into this program include basic nursing skills (CNA or equivalent), college-level reading, and prealgebra math.

Transfer credit shall be given for related previous education completed within the last five years, and it will be considered on a case by case basis (Vocational Nursing Practice Act, Article 5, Section 2535).

To earn an associate degree, additional General Education and Graduation requirements must be completed. See page 36.

NOTE: *Upon successful completion of the program, the student is eligible to apply to the California Board of Vocational Nurses and Psychiatric Technicians to take the examination for licensure as a vocational nurse.*

The student is required to demonstrate competence in basic medical terminology for entrance into VN 102. This can be accomplished by:

* A grade of "C" or better in a college-level medical terminology course or,
* Challenging medical terminology and passing at 74 percent or above as scheduled by the VN faculty or,
* Studying from a self-paced medical terminology module with guidance from the nursing department and passing an exam with 74 percent or above after the first nine weeks in order to continue in VN 102.

Associate in Arts Degree

Transfer Education/ Preparation for Nursing

Transfer Preparation * (Major Code: A1330)

A bachelor's degree is generally required for public health/community nursing, school and industrial nursing, and for commissioned officer status in the armed forces. It is also recommended as basic preparation for further study for those seeking careers in leadership positions, in nursing research or nursing education, and as nurse practitioners, midwives, and anesthetists.

There are several institutions in California which grant the bachelor of science degree in nursing including SDSU and Point Loma Nazarene College.

BIOL 260	*Human Anatomy*	*5*
BIOL 261	*Principles of Human Physiology*	*4*
BIOL 265	*General Microbiology*	*5*
CHEM 110	*Elementary Organic Chemistry*	*4*
ENGL 115	*Reading and Composition: Exposition and Argumentation*	*3*
PSYC 101	*General Psychology*	*3*
SOC 101	*Introduction to Sociology*	*3*
	Total units	***27***

To earn an associate degree, additional General Education and Graduation requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Certificates of Achievement

Central Service Technology

Career/Technical (Major Code: 02347)

Designed for students interested in a career as a Central Service Technician. CST's work in the central service unit in hospitals or the operating room sterilizing and packaging surgical instruments. Upon completion of this program, students are eligible to apply for national certification.

FIRST SEMESTER

ST 10A	*Central Service Technology*	*4.5*
ST 10B	*Central Service Technology Laboratory*	*3.5*

SECOND SEMESTER

ST 10C	*Central Service Technology Practicum*	*3.5*
	Total units	***11.5***

Certified Nursing Assistant (CNA)

Career/Technical (Major Code: 02371)

Designed for students interested in a career in nursing. Completion of the program is required for entrance into the associate degree nursing program and the vocational nursing program and confers eligibility to take the state certification exam. Hospitals, skilled nursing facilities, and other healthcare settings employ CNAs.

CNA 10	*Certified Nursing Assistant*	*7*
	Total units	***7***

Certificate of Achievement only

Operating Room Nursing

Career/Technical (Major Code: 02361)

Designed to teach nurses to function in the operating room. A major portion of the experience will take place in operating rooms around San Diego, with opportunities to practice and circulating.

RN LICENSE
CPR CERTIFICATE
ACCEPTANCE INTO THE ORN PROGRAM

ORN 110	*Introduction to Surgical Technology*	*8*
ORN 120	*Surgical Laboratory*	*4*
ORN 211	*Perioperative Nurses Training*	*2*
ORN 211L	*Perioperative Nurses Training Laboratory*	*4*
	Total units	***18***

NOTE: *In the VN, ST, and ORN programs, a minimum grade of "C" is required in each course for progression and satisfactory completion. Nursing courses may be repeated no more than one time with a maximum of one re-entry to the program.*

Courses must be completed in sequence as stated.

Surgical Technology

Career/Technical (Major Code: 02346)

PREREQUISITES

BIOL 190	*Anatomy and Physiology (4)*	
	or	*4–5*
BIOL 260	*Human Anatomy (5)*	

Acceptance into the Surgical Technology program

FIRST SEMESTER

ST 110	*Introduction to Surgical Technology*	*8*
ST 120	*Surgical Laboratory*	*4*

SECOND SEMESTER

ST 130	*Adv. Operating Room Techniques*	*4*
ST 140	*Practicum: Major Surgical Specialties*	*8*
ST 150	*Current Concepts in Surgical Tech.*	*1*

SUMMER SESSION

ST 160	*Practicum: Subspecialties*	*6*
	Total units	***35–36***

Nursing, Vocational

Career/Technical (Major Code: 02392)

PREREQUISITES:

CNA Certification or equivalent		*0–7*
BIOL 190	*Human Anatomy and Physiology*	*4*
CD 170	*Principles of Child Development*	*3*
CD 204	*Fundamentals of Nutrition*	*3*
		10–17

FIRST SEMESTER

CL 120	*Computer Literacy*	*1*
VN 30	*Introduction to Pharmacology*	*1.5*
VN 101	*Introduction to Vocational Nursing I*	*2.5*
VN 101L	*Introduction to Vocational Nursing I Lab*	*2*
VN 102	*Introduction to Vocational Nursing II*	*2.5*
VN 102L	*Introduction to Vocational Nursing II Lab*	*2*

SECOND SEMESTER

VN 130	*Pharmacology for Nurses*	*2*
VN 201	*Vocational Nursing*	*5*
VN 201L	*Vocational Nursing Laboratory*	*6*

THIRD SEMESTER

PSYC 101	*General Psychology*	*3*
VN 250	*Nursing Care in Specialty Areas and Career Preparation*	*5*
VN 250L	*Nursing Care in Specialty Areas and Career Preparation Laboratory*	*6*
	Total units	***38.5–45.5***

COMM 174. Interpersonal Communication 3 units must be taken as part of the General Education requirement for Vocational Nursing.

Proficiencies required for department acceptance into this program include basic nursing skills (CNA or equivalent), college-level reading, and prealgebra math.

Transfer credit shall be given for related previous education completed within the last five years, and it will be considered on a case by case basis (Vocational Nursing Practice Act, Article 5, Section 2535).

Nursing Courses

There are five types of Nursing courses:

- Associate Degree Nursing Courses
- Certified Nursing Assistant Courses
- Operating Room Nursing Courses
- Surgical Technology Courses
- Vocational Nursing Courses

Associate Degree Nursing Courses

ADN 51.
Health Occupations Academy
2 units

Grade only
Lecture 2 hours
Offered: Variable
Introduces high school students and recent high school graduates to a variety of health care occupations. Professional and technical skills necessary for health care careers. (Formerly ADN 295A.) [D]

ADN 111A.
Pathophysiology and Pharmacology I
2 units

Grade only
Prerequisite: *BIOL 260, 261, and 265, or equivalent*
Corequisite: *ADN 112 and 112L*
Lecture 2 hours
Offered: Fall
First of two courses. Includes pathophysiology and pharmacological treatment of the neurological musculoskeletal, respiratory, cardiovascular, endocrine and urinary systems; fluid, electrolyte, and acid base disturbances. Focuses on specific diseases and disorders with selected drugs, their mechanism of action, dosage, effects, route of administration, side effects, contraindications, and classification. Emphasis on understanding of medications as they relate to disease pathology. [D; CSU]

ADN 111B.
Pathophysiology and Pharmacology II
2 units

Grade only
Prerequisite: *ADN 111A or equivalent*
Corequisite: ADN 113 and 113L
Lecture 2 hours
Offered: Spring
This second course is designed to cover the pathophysiology and pharmacological treatment of diseases of the reproductive neurosensory including ENT, integumentary, hematological systems, gastrointestinal systems, and nutrition. Includes mental disorders and their pharmacological treatment, and illicit drugs. The cultural and age specific aspects of the medications will be reviewed with an emphasis on utilizing critical thinking skills. [D; CSU]

ADN 112.
Fundamentals of Nursing
2 units

Grade only
Corequisite: *ADN 111A and 112L*
Lecture 2 hours
Offered: Fall
Introduction to nursing practice. Includes nursing process, physical assessment, documentation, legal and ethical considerations, therapeutic communication techniques, healthcare delivery systems, teaching and learning, and cultural considerations. [D; CSU]

ADN 112L.
Fundamentals of Nursing Clinical Laboratory
5 units

Credit/No Credit only
Limitation on Enrollment: *Nurse Assistant Certification*
Corequisite: *ADN 111A and 112*
Laboratory 15 hours
Offered: Fall
Fee: $25. Companion laboratory class for ADN 112. Acute and ambulatory care experiences provided in medical-surgical nursing settings. [D; CSU]

ADN 113.
Maternal and Child Nursing
3 units

Grade only
Prerequisite: *ADN 112 or equivalent*
Corequisite: *ADN 111B and 113L*
Lecture 3 hours
Offered: Spring
Factors which influence growth and development within the context of family and community. Alterations and diseases, both simple and complex that can occur and impede normal growth and development are presented. Conditions affecting the individual and family including pregnancy, violence, surgery, and selected common mental diseases are presented. [D; CSU]

ADN 113L.
Maternal and Child Nursing Laboratory
5 units

Credit/No Credit only
Corequisite: *ADN 111B and 113*
Laboratory 15 hours
Offered: Spring
Fee: $25. Companion laboratory class for ADN 113. Acute and ambulatory care experiences provided in maternal-child, pediatric, and surgical nursing settings. [D; CSU]

ADN 114.
Nursing Supervision and Leadership I
2 units

Grade only
Prerequisite: *ADN 112 or equivalent*
Recommended Concurrent Enrollment: *ADN 113L*
Lecture 2 hours
Offered: Spring
Nursing concepts with emphasis on leadership skills and professional responsibility. [D; CSU]

ADN 115.
Transition to Associate Degree Nursing
3 units

Credit/No Credit only
Limitation on Enrollment: *LVN License*
Lecture 2 hours, laboratory 3 hours
Offered: Variable
Facilitates transition of LVN into ADN program. Orientation to ADN policies, procedures, and curriculum. Emphasis on role change and application of classroom content to the clinical setting. Includes roles of the nurse, nursing process, supervision and delegation, assertiveness, therapeutic communication, group dynamics, advanced nursing care skills, and high-risk obstetrics. [D; CSU]

ADN 116.
ADN Practicum
2 units

Credit/No Credit only
Prerequisite: *Completion of first semester of an ADN program or ADN 112 and 112L*
Laboratory 6 hours
Offered: Variable
Laboratory course providing hospital experiences with a variety of acute and chronic health conditions. Students will utilize the nursing process to assist patients in restoring optimal health functions and illness prevention. [D; CSU]

ADN 117.
Advanced Critical Thinking in Nursing
1 unit

Credit/No Credit only
Limitation on Enrollment: *Currently enrolled in nursing program (VN or ADN)*
Lecture 1 hour
Offered: Variable
Designed for nursing students to improve their critical thinking skills in a very demanding and constantly evolving nursing practice. Topics for discussion are needs analysis, anatomy and physiology as related to nursing care, the role of other behavioral sciences, making appropriate decisions, critical thinking applications, and test-taking strategies for nursing. [D; CSU]

ADN 150.
Physical Assessment
2 units

Credit/No Credit only
Limitation on Enrollment: *Registered nurses or student nurses*
Lecture 2 hours
Offered: Variable
Learn to apply the nursing process while conducting a physical assessment of all body systems on an adult patient. [D; CSU]

ADN 210.
Emergency Nursing
8 units

Grade only
Limitation on Enrollment: *Must be a Registered Nurse (RN)*
Lecture 8 hours
Offered: Variable
Designed for new registered nurses (RNs) to prepare them for specialized practice in the unpredictable and constantly changing emergency environment. Topics include: information about the EMS system, multi-level assessments, care of the patient with system dysfunction, shock, trauma, victims of abuse, and disaster management. [D; CSU]

ADN 211.
Home Health Nursing
3 units

Grade only
Limitation on Enrollment: *RN License or ADN degree or BSN graduate*
Lecture 1.5 hours, laboratory 4.5 hours
Offered: Variable
Addresses opportunities and challenges in home care through didactic and clinical experiences. Topics include current issues of reimbursement and regulations, roles and responsibilities of the home health nurse, documentation, quality assurance, interpersonal aspects, risk management, clinical management, and future trends in home health nursing. [D; CSU]

ADN 221.
Adult Nursing
5 units

Grade only
Prerequisite: *ADN 114 or equivalent*
Corequisite: *ADN 221L*
Lecture 5 hours
Offered: Fall
Use of the nursing process to assist adult patient/clients in the promotion of wellness and treatment of illnesses. This course will include nursing care of body systems and psychiatric conditions. [D; CSU]

ADN 221L.
Adult Nursing Laboratory
5 units

Credit/No Credit only
Corequisite: *ADN 221*
Laboratory 15 hours
Offered: Fall
Companion course for ADN 221. Clinical sites include psychiatric, acute medical and surgical settings, home health, ambulatory clinics, and community facilities. [D; CSU]

ADN 223.
Gerontology
2 units

Grade only
Prerequisite: *ADN 221 or equivalent*
Corequisite: *ADN 223L*
Lecture 2 hours
Offered: Spring
Includes the normal aging process, health problems common in aging and nursing practices and interventions for the aging client in a variety of settings. Also included are demographics, legal/ethical issues, effects of multiple chronic illnesses, and socioeconomic status as it affects human functioning in the elderly. [D; CSU]

ADN 223L.
Gerontology Laboratory
4 units

Credit/No Credit only
Corequisite: *ADN 223*
Laboratory 12 hours
Offered: Spring
Companion laboratory class for ADN 223. Provided at a variety of clinical settings. [D; CSU]

ADN 225.
Nursing Supervision and Leadership II: Perceptorship
2 units

Credit/No Credit only
Prerequisite: *ADN 223 or equivalent*
Laboratory 6 hours
Offered: Spring
Final course to facilitate transition to graduate practice as a RN. Students are assigned to and supervised by a staff RN. [D; CSU]

ADN 290–292.
Associate Degree Nursing Work Experience I–III
1–3 units

Credit/No Credit only
Prerequisite: *ADN 112L or equivalent*
Limitation on Enrollment: *Declared Associate Degree Nursing major. Students must complete no less than 7 units, including work experience, during each semester in order to receive credit*
Lecture 1 hour, laboratory 5–15 hours
Offered: Variable
Associate degree nursing students will be employed in a hospital setting performing nursing skills for which they have acquired and demonstrated competence. Student's field performance will be supervised and evaluated by facility supervisor. [D; CSU]

ADN 295.
Selected Topics in Nursing
1–5 units

Offered: Variable
Permits students to study relevant topics within the field of nursing. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

ADN 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study and/or clinical laboratory experience in some area of nursing of particular interest to the student. [D; CSU]

Certified Nursing Assistant Courses

CNA 10.
Certified Nursing Assistant
7 units

Grade only
Lecture 4.5 hours, laboratory 7.5 hours
Offered: Variable
Fee: $10. Provides entry-level skills for employment, awareness of opportunities in healthcare occupations, and promotes quality of patient care. The curriculum, based on state regulations, provides theory and practical application of skills needed to function as a CNA in a long-term care facility. (Not open to students with credit in VN 8.) [D]

CNA 11.
Acute Care Nursing Assistant
3 units

Credit/No Credit only
Prerequisite: *CNA 10 or equivalent*
Lecture 2 hours, laboratory 3 hours
Offered: Variable
Fee: $10. Provides entry-level skills training in acute care settings. Instruction includes classroom and clinical experiences in hospital settings as a nursing assistant delivering care to patients in medical and surgical units. Content covers basic body systems related to healthcare [D]

Operating Room Nursing Course

ORN 110.
Introduction to Surgical Technology
8 units

Grade only
Limitation on Enrollment: *Registered Nurse License and acceptance into program*
Corequisite: *ORN 120*
Lecture 8 hours
Offered: Variable
Introduction to operating room, aseptic technique, disinfection, sterilization, instruments, equipment, supplies needed for general, gynecologic, thoracic, cardiovascular, and orthopedic surgery. Moral, ethical, legal responsibilities, basics of patient care, communication, professional behavior, stress management, pharmacology used in surgery, and anesthetic agents and anesthesia. [D; CSU]

ORN 120.
Surgical Laboratory
4 units

Credit/No Credit only
Corequisite: *ORN 110*
Laboratory 12 hours
Offered: Variable
Laboratory practice in basic surgical technique, asepsis, instrumentation, and surgical procedures in the major specialties. Simulated laboratory includes hands-on experience scrubbing actual cases. [D; CSU]

ORN 131.
Perioperative Circulating Registered Nurse Training
9 units

Grade only
Limitation on Enrollment: *Registered nurses or graduates*
Lecture 6 hours, laboratory 9 hours
Offered: Variable
Basic knowledge, skills, and ability to meet competency as a perioperative circulating registered nurse in the operating room with emphasis on patient advocacy. [D; CSU]

ORN 132.
Advanced Perioperative Nursing in Surgical Specialties
7 units

Grade only
Prerequisite: *ORN 131 or registered nursing license with operating room experience*
Lecture 2 hours, laboratory 15 hours
Offered: Variable
Advanced surgical specialties including general surgery, laparoscopic procedure, genitourinary surgery, gynecologic surgery, neurosurgery, orthopedics, plastics, ophthalmology, otolaryngology, and peripheral vascular surgery. All areas address age-specific criteria, and the role and function of the perioperative nurse in the different surgical specialties. [D; CSU]

ORN 133.
Perianesthesia (PACU)
7 units

Grade only
Limitation on Enrollment: *Registered Nurses*
Recommended Preparation: *Advanced Cardiac Life Support (ACLS) and Pediatric Advanced Life Support (PALS)*
Lecture 2 hours, laboratory 15 hours
Offered: Variable
Addresses age-specific patient outcome criteria as it relates to the Post Anesthesia Care Unit (PACU) environment. Based on the American Society of Perianesthesia Nursing Practice (ASPN) competency core curriculum with emphasis on the Standards of Perianesthesia Nursing Practice. [D; CSU]

ORN 211.
Perioperative Nurses Training
2 units

Grade only
Corequisite: *ORN 211L.*
Limitation on Enrollment: *RN License or graduate nurse*
Lecture 2 hours
Offered: Variable
Basic information on the role of the perioperative registered nurse's responsibility to function independently in the perioperative, intraoperative and postoperative phases with competency in the "scope of practice". Emphasis on setting priorities in decision making tasks, and the ability to utilize new emerging technology in the surgical clinical setting. [D; CSU]

ORN 211L.
Perioperative Nurses Training Laboratory
4 units

Credit/No Credit only
Prerequisite: *Registered Nurse License or graduate nurse*
Corequisite: *ORN 211*
Laboratory 12 hours
Offered: Variable
Companion to ORN 211 with emphasis on setting priorities in decision-making tasks and adapting to new emerging technology in the surgical clinical setting. Basic information on the role of the ORN's responsibility to function independently in the perioperative, intraoperative and postoperative phases gaining competency in knowledge and skills required for the surgical clinical setting to meet the needs of the surgical patient. [D; CSU]

ORN 295.
Selected Topics in Nursing
1–8 units

Offered: Variable
Permits students to study relevant topics within the field of nursing. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

Surgical Technology Courses

ST 10A.
Central Service Technology
4.5 units

Grade only
Lecture 4 hours, laboratory 2 hours
Offered: Variable
Introduction to Central Service. Topics include microbiology, aseptic technique, disinfecting, decontamination, sterilization, and wrapping and packaging of surgical instruments. Review of body systems and identification of surgical instruments used in surgery. Includes medical terminology, safety, risk management, regulations, inventory management, ethical responsibilities, and communication skills. [D]

ST 10B.
Central Service Technology Laboratory
3.5 units

Grade only
Prerequisite: *ST 10A or equivalent*
Laboratory 11 hours
Offered: Variable
Laboratory experience to support the introduction to the hospital Central Service unit and the role of the central service technician. Laboratory will focus on site training in aseptic technique, cleaning, disinfecting, and sterilization. Laboratory work will also include the practice of wrapping, packing, and inspecting surgical instruments. [D]

ST 10C.
Central Service Technology Practicum
3.5 units

Credit/No Credit only
Prerequisite: *ST 10B or equivalent*
Laboratory 11 hours
Offered: Variable
Laboratory experience to support the introduction to the hospital central supply service unit and the roll of the central service technician. [D]

ST 110.
Introduction to Surgical Technology
8 units

Grade only
Prerequisite: *BIOL 190 or equivalent*
Limitation on Enrollment: *Acceptance into the Surgical Technology program*
Corequisite: *ST 120*
Lecture 8 hours
Offered: Variable
Introduction to operating room, aseptic technique, disinfection, sterilization, instruments, equipment, supplies needed for general, gynecologic, thoracic, cardiovascular and orthopedic surgery. Moral, ethical, legal responsibilities, basics of patient care, communication, professional behavior, stress management, pharmacology used in surgery, anesthetic agents, and anesthesia. (ROP option) [D; CSU]

ST 120.
Surgical Laboratory
4 units

Credit/No Credit only
Corequisite: *ST 110*
Laboratory 12 hours
Offered: Variable
Laboratory practice in basic surgical technique, asepsis, instrumentation, and surgical procedures in the major specialties. Simulated laboratory includes hands-on experience scrubbing actual cases. (ROP option) [D; CSU]

ST 130.
Advanced Operating Room Techniques
4 units

Grade only
Prerequisite: *ST 110 and 120, or equivalent*
Corequisite: *ST 140 and 150*
Lecture 4 hours
Offered: Variable
Advanced concepts of patient care, aseptic technique, and microbiology. Subspecialties of ear, nose, throat, eye, neurosurgery, urology, pediatric, and plastic surgery are examined, as are the hospital system and the role of each member of the healthcare team. (Not open to students with credit in ORN 130.) (ROP option.) [D; CSU]

ST 140.
Practicum: Major Surgical Specialties
8 units

Credit/No Credit only
Prerequisite: *ST 110 and 120, or equivalent*
Corequisite: *ST 130 and 150*
Laboratory 24 hours
Offered: Variable
Beginning experience scrubbing in the clinical setting. Emphasis on allowing maximum time as first or second scrub. Clinical hours are supplemented with time in the campus laboratory covering instrumentation, equipment, and supplies in the specialties of neurology, urology, ENT, eye, plastic, laporoscopic, orthopedic, and pediatric surgery. (ROP option) [D; CSU]

ST 150.
Current Concepts in Surgical Technology
1 unit

Grade only
Corequisite: *ST 130 and 140*
Lecture 1 hour
Offered: Variable
Lecture and discussion on current topics and concepts encountered in the surgical setting with emphasis on developing awareness of moral and ethical responsibilities. (ROP option.) [D; CSU]

ST 160.
Practicum: Subspecialties
6 units

Credit/No Credit only
Prerequisite: *ST 130, 140, and 150, or equivalent*
Laboratory 18 hours
Offered: Variable
Clinical experience with instructor and preceptor supervision, functioning as first scrub and solo scrub in all specialties. Emphasis on allowing maximum time in the major specialties of general, gynecological, orthopedic, thoracic, and vascular surgery. (ROP option) [D; CSU]

ST 295.
Selected Topics in Surgical Technology
1–3 units

Offered: Variable
Permits students to study relevant topics within the field of surgical technology.
(May be repeated for additional credit with new content. [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

ST 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. Page 26.*
Offered: Variable
Individual study or research in surgical technology of particular interest to the student. [D; CSU]

Vocational Nursing Courses

NOTE: *Vocational Nursing courses subject to change pending state regulation changes.*

VN 30.
Introduction to Pharmacology
1.5 units

Grade only
Prerequisite: *Acceptance into Vocational Nursing program*
Corequisite: *VN 101*
Lecture 1 hour, laboratory 1.5 hours
Offered: Variable
Content includes math review for dosage calculations, conversions between different systems of measurement, dosage calculation and measurement, drug orders and labels, and intravenous calculations. Includes instruction in the technique of safe medication administration. [D]

VN 101.
Introduction to Vocational Nursing I
2.5 units

Grade only
Limitation on Enrollment: *CNA certification or equivalent*
Corequisite: *VN 30 and 101L*
Recommended Preparation: *ENGL 114 or equivalent*
Lecture 2.5 hours
Offered: Variable
Introduction to vocational nursing and human functioning framework. Content includes healthcare system, therapeutic communication, professional communication and relationships, nursing process overview, stress and coping, and psychosocial and cultural issues. [D; CSU]

VN 101L.
Introduction to Vocational Nursing I Laboratory
2 units

Credit/No Credit only
Corequisite: *VN 101*
Laboratory 6.5 hours
Offered: Variable
Fee: $25. Companion laboratory to VN 101 including patient care experiences in selected clinical settings: Application of therapeutic and professional communication, nursing process, charting, and fundamental patient care skills. [D; CSU]

VN 102.
Introduction to Vocational Nursing II
2.5 units

Grade only
Prerequisite: *VN 101 or equivalent*
Corequisite: *VN 102L*
Lecture 2.5 hours
Offered: Variable
Concepts of vocational nursing including data collection (phase one of nursing process), geriatrics, rehabilitation, death and dying, spiritual care, and assertive behavior. Includes enhancing and supporting protective functions of the patient in all age groups. [D; CSU]

VN 102L.
Introduction to Vocational Nursing II Laboratory
2 units

Credit/No Credit only
Prerequisite: *VN 101 or equivalent*
Corequisite: *VN 102*
Laboratory 6.5 hours
Offered: Variable
Fee: $35. Content supports theory in VN 102 by offering clinical practice in data collection and documentation, geriatric nursing procedures, disease screening, and methods and procedures to prevent and control infection. [D; CSU]

VN 130.
Pharmacology for Nurses
2 units

Grade only
Prerequisite: *VN 30 or equivalent*
Corequisite: *VN 201*
Lecture 2 hours
Offered: Variable
Basic introduction to pharmacology for VN students. Content organized according to major drug groups and major disease treatments with emphasis on nursing implications of various drugs. Also mechanisms of action, dosage, side effects, contraindications, interactions, and classification of all drugs. (Not open to students with credit in ADN 130.) [D; CSU]

VN 201.
Vocational Nursing
5 units

Grade only
Prerequisite: *VN 102 or equivalent*
Corequisite: *VN 201L and 130*
Lecture 5 hours
Offered: Variable
Concepts of nursing care related to selected disorders of human functioning: sterile procedures, mechanical ventilation, suctioning, preparation for surgery, patient instruction, and selected advanced procedures. [D; CSU]

VN 201L.
Vocational Nursing Laboratory
6 units

Credit/No Credit only
Prerequisite: *VN 102 or equivalent*
Corequisite: *VN 201*
Laboratory 18 hours
Offered: Variable
Fee: $35. Lab/clinical companion to VN 201. Application of nursing concepts including selected system disorders involving sterile procedures, mechanical ventilation, suctioning, preparation for surgery-patient instruction, and selected advanced procedures. [D; CSU]

VN 250.
Nursing Care in Specialty Areas and Career Preparation
5 units

Grade only
Prerequisite: *VN 201 and CD 204, or equivalent*
Corequisite: *VN 250L*
Lecture 5 hours
Offered: Fall, Spring
Fundamentals of maternal and infant care; nursing care of the sick child, nursing care for emergencies and disasters, medical-surgical conditions affecting human functioning, patient care management of clients with chemical abuse, and victims of elder abuse and child abuse. Basic information related to career management, leadership, home health nursing care, and contemporary issues. [D; CSU]

VN 250L.
Nursing Care in Specialty Areas and Career Preparation Laboratory
6 units

Credit/No Credit only
Prerequisite: *VN 201 or equivalent*
Corequisite: *VN 250*
Laboratory 18 hours
Offered: Fall, Spring
Advanced concepts of nursing care including childbearing and childrearing and alterations in these areas. Basic emergencies and disasters, information related to career management, home healthcare, ambulatory care, and contemporary issues affecting nursing practice. Clinical laboratory in hospitals, home healthcare agency, ambulatory care clinics, and skilled nursing facilities. [D; CSU]

VN 295.
Selected Topics in Vocational Nursing
1–5 units

Offered: Variable
Permits students to study relevant topics within the field of vocational nursing. (May be repeated for additional credit with new content.) [D; * CSU]

** Please refer to the class schedule for specific course description and transferability information.*

VN 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in vocational nursing of particular interest to the student. [D; CSU]

Office Information Systems Professioanl

School of Business and Information Systems

■ Dean

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■ Faculty

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Marilynne Hudgens, M.A.
Regina Hunter, M.A.
Raschel Parsons, A.S.

■ Department Chair

Marilynne Hudgens, M.A.

General Description

The study of office information systems is a field within the school of business that provides concepts and skills requisite for contemporary work environments where the emphasis is on team building and technology. The role of secretary, receptionist, office assistant, administrative assistant, and transcriptionist will become more challenges and dynamic in the next decade. Students learn traditional secretarial skills, mastery of office technology and computers, communication techniques, and how to exercise initiative and sound judgment in their work.

Career Options

The following list is a sample of the many career options available for the office information systems major. Some require a certificate of achievement and most require an associate degree: receptionist, secretary, legal secretary, clerk typist, word processor, office clerk, medical office assistant, legal assistant, medical transcriptionist, legal interpreter/translator, bilingual office personnel, data entry clerk, and administrative assistant. Many entry-level positions are available in business, industry, education, and government for students with good organizational and communication abilities.

Degree/Certificate Options

	Major Code
Associate of Science: Career/Technical	
Office Information Systems Professional	*02046*
Certificates of Achievement	
Office Information Systems Professional—Basic	*02047*
Office Information Systems Professional—Advanced	*02048*
Microsoft Office Specialist (MOS)—Basic	*02052*
Microsoft Office Specialist (MOS)—Advanced	*02053*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Science Degree

OIS: Office Information Systems Professional

Career/Technical (Major Code: 02046)

The curriculum is designed to prepare students to work in an automated office environment. Students will gain comprehensive training in word processing, filing and records management, machine transcription, business communications, and the integrated electronic office including email, Internet office applications, and management information system software. Students will gain preparation for Microsoft Office Specialist (MOS) certification and may desire to pass a certifying examination. Associate in science degree is granted upon the completion of courses listed in both basic and advanced certificates.

BUS 73	*Keyboarding Speed and Accuracy I*	*1*
BUS 74	*Keyboarding Speed and Accuracy II*	*1*
BUS 75	*Keyboarding Speed and Accuracy III*	*1*
BUS 78	*Electronic Calculator*	*1*
BUS 182	*Keyboarding for Office Professionals*	*2*
BUS 200A	*Microsoft Word: Beginning Certification Preparation*	*2.5*
BUS 200B	*Microsoft Word: Advanced Certification Preparation*	*2.5*
BUS 206	*Filing and Records Management*	*3*
BUS 210	*Business English*	*3*
BUS 211	*Communications in Business and Industry*	
	or	*3*
BUS 212	*Business Communication*	
BUS 218	*Procedures for Office Professionals*	*4*
BUS 240	*Microsoft Outlook*	*2.5*
CIS 246	*Desktop Publishing*	*1*
CIS 122B	*Spreadsheet Software—Excel*	*1*
BUS 290–293	*Work Experience in Business I–IV*	*2*
	Total units	***30.5***

Recommended Electives: *BUS 70, 71, 81, 140, 142, 152, 153, 158, 159, 160, 161, 162, 164, 165, 166, 167, 181, 183, 225, 226, 227, 228, 229, 233, 247, 291, 292, 293; CIS 92, 101, 133, 134, 135, 139, 140.*

To earn an associate degree, additional General Education and Graduation requirements must be completed. See page 36.

Certificates of Achievement

OIS: Office Information Systems Professional—Basic

Career/Technical (Major Code: 02047)

BUS 73	*Keyboarding Speed and Accuracy I*	*1*
BUS 78	*Electronic Calculator*	*1*
BUS 182	*Keyboarding for Office Professionals*	*2*
BUS 200A	*Microsoft Word: Beginning Certification Preparation*	*2.5*
BUS 206	*Filing and Records Management*	*3*
BUS 210	*Business English*	*3*
BUS 240	*Microsoft Outlook*	*2.5*
BUS/CIS 246	*Desktop Publishing*	*1*
CIS 122B	*Spreadsheet Software—Excel*	*1*
	Total units	***17***

OIS: Office Information Systems Professional—Advanced

(Major Code: 02048)

BUS 73	*Keyboarding Speed and Accuracy I*	*1*
BUS 74	*Keyboarding Speed and Accuracy II*	*1*
BUS 75	*Keyboarding Speed and Accuracy III*	*1*
BUS 78	*Electronic Calculator*	*1*
BUS 182	*Keyboarding for Office Professionals*	*2*
BUS 200A	*Microsoft Word: Beginning Certification Preparation*	*2.5*
BUS 200B	*Microsoft Word: Advanced Certification Preparation*	*2.5*
BUS 206	*Filing and Records Management*	*3*
BUS 210	*Business English*	*3*
BUS 211	*Communications in Business and Industry*	
	or	*3*
BUS 212	*Business Communication*	
BUS 218	*Procedures for Office Professionals*	*4*
BUS 240	*Microsoft Outlook*	*2.5*
BUS/CIS 246	*Desktop Publishing*	*1*
CIS 122B	*Spreadsheet Software—Excel*	*1*
BUS 290–293	*Work Experience in Business I–IV*	*2*
	Total units	***30.5***

Recommended Electives: *BUS 70, 71, 81, 140, 142, 152, 153, 158, 159, 160, 161, 162, 164, 165, 166, 167, 181, 183, 225, 226, 227, 228, 229, 233, 247, 291, 292, 293; CIS 92, 101, 133, 134, 135, 139, 140.*

▪ OIS: Microsoft Office Specialist (MOS)—Basic

Career/Technical (Major Code: 02052)

Students will be trained in preparation for passing the Microsoft Officer Specialist (MOS) certification test in word processing at the expert level. Gaining certification will allow students to be more competitive in obtaining well-paid office and related technical positions in our community or for career advancement in present positions.

BUS 182	*Keyboarding for Office Professionals*	*2*
BUS 200A	*Microsoft Word: Beginning Certification Preparation (2.5)*	
	or	*2.5–3*
CIS 92	*Software Technologies for the Workplace (3)*	
BUS 200B	*Microsoft Word: Advanced Certification Preparation*	*2.5*
BUS 210	*Business English*	*3*
BUS 240	*Microsoft Outlook*	*2.5*
	Total units	***12.5–13***

▪ OIS: Microsoft Office Specialist (MOS)—Advanced

Career/Technical (Major Code: 02053)

Students will be trained in preparation for passing the Microsoft Officer Specialist (MOS) certification test in word processing at the expert level. Gaining certification will allow students to be more competitive in obtaining well-paid office and related technical positions in our community or for career advancement in present positions. The certificate of achievement—advanced will be granted upon completion of the required basic and advanced courses.

BUS 75	*Keyboarding Speed and Accuracy III*	*1*
BUS 182	*Keyboarding for Office Professionals*	*2*
BUS 200A	*Microsoft Word: Beginning Certification Preparation (2.5)*	
	or	*2.5–3*
CIS 92	*Software Technologies for the Workplace (3)*	
BUS 200B	*Microsoft Word: Advanced Certification Preparation*	*2.5*
BUS 210	*Business English*	*3*
BUS 211	*Communications in Business and Industry*	
	or	*3*
BUS 212	*Business Communication*	
BUS 218	*Procedures for Office Professionals*	*4*
BUS 240	*Microsoft Outlook*	*2.5*
CIS 129	*Multimedia Presentations (PowerPoint)*	*1*
CIS 122B	*Spreadsheet Software—Excel*	
	or	*1*
CIS 133	*Advanced Microcomputer Spreadsheet Software*	
CIS 134	*Microcomputer Database Software*	
	or	*1*
CIS 135	*Advanced Microcomputer Database Software*	
	Total units	***23.5–24***

Recommended Electives: *BUS 35, 36, 70, 71, 73, 211, 212, 246, 247; CIS 134, 139, 140, 150, 151, and 152.*

Office Information Systems Professional-Bilingual

School of Business and Information Systems

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Raschel Parsons, A.S.

■ Department Chair

Marilynne Hudgens, M.A.

General Description

The study of Office Information Systems is a field within the school of business that provides concepts and skills requisite for contemporary work environments where the emphasis is on team building and technology. The role of secretary, receptionist, office assistant, administrative assistant, and transcriptionist has been changing rapidly due to the downsizing of companies and major shifts in the philosophy of the work ethic. Students learn traditional secretarial skills, mastery of office technology and computers, communication techniques, and how to assume responsibility for their work by exercising initiative and sound judgment.

Career Options

The following list is a sample of the many career options available for the office information systems major. Some require a certificate of achievement and most require an associate degree: receptionist, secretary, legal secretary, clerk typist, word processor, office clerk, medical office assistant, legal assistant, medical transcriptionist, legal interpreter/translator, bilingual office personnel, data entry clerk, and administrative assistant. Many entry-level positions are available in business, industry, education, and government for students with good organizational and communication abilities.

Degree/Certificate Options

	Major Code
Associate of Science: Career/Technical	
Office Information Systems Professional—Bilingual	*02041*
Certificates of Achievement	
Office Information Systems Professional-Bilingual—Basic	*02042*
Office Information Systems Professional-Bilingual—Advanced	*02043*
Other Certificate of Achievement	
Administrative Office Assistant—Bilingual	*02045*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Science Degree

OIS: Office Information Systems Professional—Bilingual

Career/Technical (Major Code: 02041)

The curriculum is designed to prepare students to work in an automated office environment in a bilingual (English/Spanish) or multicultural setting. Students will gain comprehensive training in word processing, filing and records management, machine transcription, business communications, and in the integrated electronic office including knowledge of email, Internet office applications, and management information systems software. Students will gain preparation for Microsoft Office Specialist (MOS) certification and may desire to pass a certifying examination. Associate in science degree is granted upon the completion of courses listed in both basic and advanced certificates.

BUS 73	*Keyboarding Speed and Accuracy*	*1*
BUS 74	*Keyboarding Speed and Accuracy II*	*1*
BUS 75	*Keyboarding Speed and Accuracy III*	*1*
BUS 78	*Electronic Calculator*	*1*
BUS 181	*Spanish Computer Skills for Interpretation and Translation*	*3*
BUS 182	*Keyboarding for Office Professionals*	*2*
BUS 200A	*Microsoft Word: Beginning Certification Preparation*	*2.5*
BUS 200B	*Microsoft Word: Advanced Certification Preparation*	*2.5*
BUS 206	*Filing and Records Management*	*3*
BUS 210	*Business English*	*3*
BUS 211	*Communication in Business and Industry*	
	or	*3*
BUS 212	*Business Communication*	
BUS 218	*Procedures for Office Professionals*	*4*
BUS 225	*Interpretation and Translation: General Business*	
	or	*3*
LEGL 257	*International Business and Legal Communications: Spanish*	
BUS 246	*Desktop Publishing*	*1*
SPAN 216	*Spanish for Bilinguals II **	
	or	*5*
SPAN 230	*Intermediate Spanish II **	
BUS 290–293	*Work Experience in Business I–IV*	*2*
	Total units	***38***

Recommended Electives: *BUS 70, 71, 81, 140, 142, 152, 153, 158, 159, 160, 161, 162, 164, 165, 166, 167, 183, 226, 227, 228, 229, 233, 247, 291, 292, 293; CIS 92, 101, 133, 134, 135, 139, 140.*

To earn an associate degree, additional General Education and Graduation requirements must be completed. See page 36.

* Native speakers from a Spanish-speaking country who have finished high school or the equivalent in that country will have satisfied the Spanish language requirement. Students who have completed high school in the United States and have completed the fourth-year level of Spanish will have satisfied the Spanish language requirement.

Certificates of Achievement

OIS: Office Information Systems Professional— Bilingual— Basic

Career/Technical (Major Code: 02042)

BUS 73	*Keyboarding Speed and Accuracy*	*1*
BUS 78	*Electronic Calculator*	*1*
BUS 181	*Spanish Computer Skills for Interpretation and Translation*	*3*
BUS 182	*Keyboarding for Office Professionals*	*2*
BUS 200A	*Microsoft Word: Beginning Certification Preparation*	*2.5*
BUS 206	*Filing and Records Management*	*3*
BUS 210	*Business English*	*3*
BUS 246	*Desktop Publishing*	*1*
SPAN 216	*Spanish for Bilinguals II **	
	or	*5*
SPAN 230	*Intermediate Spanish II **	
	Total units	***21.5***

* Native speakers from a Spanish-speaking country who have finished high school or the equivalent in that country will have satisfied the Spanish language requirement. Students who have completed high school in the United States and have completed the fourth-year level of Spanish will have satisfied the Spanish language requirement.

OIS: Office Information Systems Professional— Bilingual— Advanced

Career/Technical (Major Code: 02043)

BUS 73	*Keyboarding Speed and Accuracy*	*1*
BUS 74	*Keyboarding Speed and Accuracy II*	*1*
BUS 75	*Keyboarding Speed and Accuracy III*	*1*
BUS 78	*Electronic Calculator*	*1*
BUS 181	*Spanish Computer Skills for Interpretation and Translation*	*3*
BUS 182	*Keyboarding for Office Professionals*	*2*
BUS 200A	*Microsoft Word: Beginning Certification Preparation*	*2.5*
BUS 200B	*Microsoft Word: Advanced Certification Preparation*	*2.5*
BUS 206	*Filing and Records Management*	*3*
BUS 210	*Business English*	*3*
BUS 211	*Communication in Business and Industry*	
	or	*3*
BUS 212	*Business Communication*	
BUS 218	*Procedures for Office Professionals*	*4*
BUS 225	*Interpretation and Translation: General Business*	
	or	*3*
LEGL 257	*International Business and Legal Communications: Spanish*	
BUS 246	*Desktop Publishing*	*1*
SPAN 216	*Spanish for Bilinguals II **	
	or	*5*
SPAN 230	*Intermediate Spanish II **	
BUS 290–293	*Work Experience in Business I–IV*	*2*
	Total units	***38***

Recommended Electives: *BUS 70, 71, 81, 140, 142, 152, 153, 158, 159, 160, 161, 162, 164, 165, 166, 167, 183, 226, 227, 228, 229, 233, 247, 291, 292, 293; CIS 92, 101, 133, 134, 135, 139, 140.*

Other Certificate of Achievement
Administrative Office Assistant— Bilingual

Career/Technical (Major Code: 02045)

Prepares students to work in a bilingual (Spanish/English) office setting in an entry-level position. Emphasis on developing skills in business English, keyboarding, word processing (Microsoft Office software applications), filing, record keeping, and office procedures. Students will complete work experience internships while enrolled in this course by also enrolling in BUS 290.

Prepara a los estudiantes para empleos en oficinas bilingües (español/inglés) a nivel básico. Enfatiza el desarrollo de aptitudes en inglés comercial, mecanografía, procesador de palabras (word processing, utilizando Microsoft Office) archivonomía, contabilidad y procedimientos de oficina. Los estudiantes llevarán a cabo la práctica de trabajo inscribiéndose simultáneamente en BUS 290.

BUS 35	*Administrative Office Assistant—Bilingual*	*12*
BUS 290	*Work Experience in Business I–IV*	*1*
		13

Paralegal Studies

School of Business and Information Systems

- **Dean**

  Irma Alvarez, M.A.
  Office 215
  619-482-6457

- **Faculty**

  Larry Christiansen, J.D.
  Richard Dittbenner, J.D.
  Victoria López, J.D.

- **Department Chair**

  Larry Christiansen, J.D.

- **Coordinator**

  Victoria López, J.D.

General Description

The paralegal (legal assistant) works under the supervision of an attorney. Responsibilities are broad and varied including preparing and interpreting legal documents, interviewing clients, performing legal research, preparing for trial, and organizing and managing documentation. Paralegals often work with attorneys in specialized areas of law such as immigration, family law, personal injury, contracts, wills, trusts, and probate.

Southwestern offers two programs, paralegal studies and paralegal studies—bilingual, which provide students with a litigation background and focus on developing an awareness and sensibility to the language, culture, and common legal issues of clients from various ethnic groups within the community. An understanding of international legal issues which impact San Diego due to its geographical location, the North American Free Trade Agreement (NAFTA), and other legal and business related activities is also developed.

Employment in the field tends to vary. Larger, well-established law firms commonly require a bachelor's degree, and smaller law firms and legal agencies often require a two-year associate degree or its equivalent. Potential employees who have an advanced education level, knowledge of a frequently used foreign language, and/or an emphasis in a legal specialty will have the greatest opportunities in the job market.

Career Options

Following are some of the career options available to the paralegal major: claims examiner, compensation and benefits manager, corporate legal assistant, court clerk, customs agent, forms and procedures specialist, freelance paralegal, legal assistant, investigator (for local, state, and federal departments and agencies), legal aide, legal research assistant, legal technician, patent agent, title examiner. This training can also provide entrance to some careers in administration of justice such as youth authority, probation, and parole officer when a candidate passes appropriate tests and gains related experience.

Degree/Certificate Options

	Major Code
Associate in Science Degree: Career/Technical	
Paralegal Studies	*A2516*
Certificate of Achievement	
Paralegal Studies	*A2518*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goals.

Associate in Science Degree
Paralegal Studies

Career/Technical (Major Code: A2516)

Designed for students interested in a paralegal or related career with a multicultural international perspective. The curriculum includes a combination of legal theory, principles, procedures, and practical applications, including a hands-on paralegal internship. Emphasis on research, litigation, and trial preparation skills including filing court documents, interviewing clients, and drafting legal documents.

LEGL 255	*Introduction to Law and Legal Terminology*	*3*
LEGL 258	*Legal Communications*	*3*
LEGL 259	*Introduction to Paralegal Studies and Professional Ethics*	*1*
LEGL 260	*Legal Research*	*3*
LEGL 261	*Civil Litigation I*	*3*
LEGL 268	*Computer Assisted Legal Research (CALR)*	*2*
LEGL 270	*Computer Skills for Legal Professionals*	*2.5*
LEGL 290–293	*Legal Cooperative Work Experience I–IV **	*2*

SELECT 11 UNITS FROM THE FOLLOWING COURSES: 11

LEGL 256	*International Law for Business (3)*
LEGL 262	*Immigration Law and Procedure (3)*
LEGL 263	*Family Law (3)*
LEGL 264	*Wills, Trusts, and Estates (3)*
LEGL 266	*Mediation, Negotiation, and Conflict Resolution (2)*
LEGL 267	*Interviewing and Investigation for Paralegals (2)*
LEGL 269	*Civil Litigation Procedures (3)*
LEGL 271	*Introduction to Intellectual Property (2)*
LEGL 272	*Business Organizations (2)*
LEGL 295	*Selected Topics in Legal Assistant (1–3)*

SELECT 3 UNITS FROM THE FOLLOWING COURSES: 3

AJ 151	*Concepts of Criminal Law (3)*
AJ 156	*Legal Aspects of Evidence (3)*
AJ 181	*Juvenile Law and Procedures (3)*
BUS 140	*Business Law (3)*
RE 106	*Legal Aspects of Real Estate (3)*

Total units ***33.5***

Electives: *AJ 156, 167, 181; AFRO/HIST 110, 111, 150; ASIA/HIST 112, 113, 114; BUS 36, 45, 108, 111, 112, 113, 114, 115, 116, 119, 140, 177, 181, 211, 212, 223, 225, 226, 227, 228, 229, 242, 246, 249; CIS 101; HIST 141, 142; JPN, PIL, SPAN 120 or higher; LEGL 224, 257, 291, 292, 293; SOC/ASIA 115.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See Page 36.

* 60 or more hours of on-the-job work experience internship, paid or volunteer, are required in LEGL 290. Program faculty and Student Employment Services assist students with placements, which can consist of as few as four-hours per week for students working full-time. Students who are presently employed in a law office may use their employment to fulfill this requirement. These hours may include summer work. The instructor must approve the work experience for application to the program.

NOTE: *The Paralegal Studies Program prepares students to work under the supervision of an attorney in accordance with California law. A paralegal may not engage in the unauthorized practice of law by accepting cases, giving legal advice, appearing in court or setting fees for clients. To do so would be a crime in the state of California.*

Certificate of Achievement
Paralegal Studies

Career/Technical (Major Code: A2518)

LEGL 255	*Introduction to Law and Legal Terminology*	*3*
LEGL 258	*Legal Communications*	*3*
LEGL 259	*Introduction to Paralegal Studies and Professional Ethics*	*1*
LEGL 260	*Legal Research*	*3*
LEGL 261	*Civil Litigation I*	*3*
LEGL 268	*Computer Assisted Legal Research (CALR)*	*2*
LEGL 270	*Computer Skills for Legal Professionals*	*2.5*
LEGL 290–293	*Legal Cooperative Work Experience I–IV **	*2*

SELECT 11 UNITS FROM THE FOLLOWING COURSES: 11

LEGL 256	*International Law for Business (3)*
LEGL 262	*Immigration Law and Procedure (3)*
LEGL 263	*Family Law (3)*
LEGL 264	*Wills, Trusts, and Estates (3)*
LEGL 266	*Mediation, Negotiation, and Conflict Resolution (2)*
LEGL 267	*Interviewing and Investigation for Paralegals (2)*
LEGL 269	*Civil Litigation Procedures 3*
LEGL 271	*Introduction to Intellectual Property (2)*
LEGL 272	*Business Organizations (2)*
LEGL 295	*Selected Topics in Legal Assistant (1–3)*

SELECT 3 UNITS FROM THE FOLLOWING COURSES: 3

AJ 151	*Concepts of Criminal Law (3)*
AJ 156	*Legal Aspects of Evidence (3)*
AJ 181	*Juvenile Law and Procedures (3)*
BUS 140	*Business Law (3)*
RE 106	*Legal Aspects of Real Estate (3)*

Total units ***33.5***

NOTE: *The certificate of achievement is awarded only to students who possess an associate or higher degree in any major prior to completing the paralegal program.*

NOTE: *The Paralegal Studies Program prepares students to work under the supervision of an attorney in accordance with California law. A paralegal may not engage in the unauthorized practice of law by accepting cases, giving legal advice, appearing in court or setting fees for clients. To do so would be a crime in the state of California.*

Paralegal Studies—Bilingual

School of Business and Information Systems

■ Dean

Irma Alvarez, M.A.
Office 215
619-482-6457

■ Faculty

Larry Christiansen, J.D.
Richard Dittbenner, J.D.
Victoria López, J.D.

■ Department Chair

Larry Christiansen, J.D.

General Description

The paralegal (legal assistant) works under the supervision of an attorney. Responsibilities are broad and varied including preparing and interpreting legal documents, interviewing clients, performing legal research, preparing for trial, and organizing and managing documentation. Paralegals often work with attorneys in specialized areas of law such as immigration, family law, personal injury, contracts, wills, trusts, and probate.

Southwestern offers two programs, paralegal studies and paralegal studies—bilingual, which provide students with a litigation background and focus on developing an awareness and sensibility to the language, culture, and common legal issues of clients from various ethnic groups within the community. An understanding of international legal issues which impact San Diego due to its geographical location, the North American Free Trade Agreement (NAFTA), and other legal and business related activities is also developed.

Employment in the field tends to vary. Larger, well-established law firms commonly require a bachelor's degree, and smaller law firms and legal agencies often require a two-year associate degree or its equivalent. Potential employees who have an advanced education level, knowledge of a frequently used foreign language, and/or an emphasis in a legal specialty will have the greatest opportunities in the job market.

Career Options

Following are some of the career options available to the paralegal major: claims examiner, compensation and benefits manager, corporate legal assistant, court clerk, customs agent, forms and procedures specialist, freelance paralegal, legal assistant, investigator (for local, state, and federal departments and agencies), legal aide, legal research assistant, legal technician, patent agent, title examiner. This training can also provide entrance to some careers in administration of justice such as youth authority, probation, and parole officer when a candidate passes appropriate tests and gains related experience.

Degree/Certificate Options

	Major Code
Associate in Science Degree: Career/Technical	
Paralegal Studies: Bilingual	*A2517*
Certificate of Achievement	
Paralegal Studies: Bilingual	*A2519*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goals.

Associate in Science Degree

Paralegal Studies: Bilingual

(English/Spanish)

Career/Technical (Major Code: A2517)

Designed for Spanish bilingual students interested in a paralegal or related career with a multicultural/international perspective. An overview of NAFTA regulations and legal issues that impact San Diego, due to our proximity to the Mexican border, will be presented. The curriculum includes a combination of legal theory, principles, procedures, and practical applications, including a hands-on paralegal internship. Emphasis on case research, litigation and trial preparation skills including filing court documents, interviewing clients, and drafting legal documents. Students will gain skills in interpreting for Spanish-speaking clients and in translating common documents such as correspondence, contracts, and wills.

BUS 226	*Interpretation/Translation: Legal*	*3*
BUS 229	*Legal Terminology—Bilingual*	*1*
LEGL 255	*Introduction to Law and Legal Terminology*	*3*
LEGL 256	*International Law for Business*	*3*
LEGL 258	*Legal Communications*	*3*
LEGL 259	*Introduction to Paralegal Studies and Professional Ethics*	*1*
LEGL 260	*Legal Research*	*3*
LEGL 261	*Civil Litigation I*	*3*
LEGL 262	*Immigration Law and Procedure*	*3*
LEGL 270	*Computer Skills for Legal Professionals*	*2.5*
LEGL 290–293	*Legal Cooperative Work Experience I–IV **	*2*
SPAN 230	*Intermediate Spanish II ***	*5*
SELECT 5 UNITS FROM THE FOLLOWING COURSES:		**5**
LEGL 263	*Family Law (3)*	
LEGL 264	*Wills, Trusts, and Estates (3)*	
LEGL 266	*Mediation, Negotiation, and Conflict Resolution (2)*	
LEGL 267	*Interviewing and Investigation for Paralegals (2)*	
LEGL 268	*Computer Assisted Legal Research (2)*	
LEGL 269	*Civil Litigation Procedures 3 units*	
LEGL 271	*Introduction to Intellectual Property (2)*	
LEGL 272	*Business Organizations (2)*	
LEGL 295	*Selected Topics in Legal Assistant (1–3)*	
	Total units	*37.5*

Recommended Electives: *BUS 36, 181, 225 227, 233, 234; LEGL 257; SPAN 216, 220.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See Page 36.

* 60 or more hours of on-the-job work experience internship, paid or volunteer, are required in the LEGL 290–291 series. Program faculty and Student Employment assist students with placements, which can consist of as few as four hours per week for students working full-time. Students who are presently employed in a law office may use their employment to fulfill their requirement. These hours must be spread over a minimum of two semesters and can include summer work. The instructor must approve the work experience for application to the program.

NOTE: *The Paralegal Studies Program prepares students to work under the supervision of an attorney in accordance with California law. A paralegal may not engage in the unauthorized practice of law by accepting cases, giving legal advice, appearing in court or setting fees for clients. To do so would be a crime in the state of California.*

** Native speakers from a Spanish-speaking country who have finished high school or the equivalent in that country will have satisfied the Spanish language requirement. Students who have completed high school in the United States and have completed the fourth-year level of Spanish will have satisfied the Spanish language requirement.

Certificate of Achievement

Paralegal Studies: Bilingual (English/Spanish)

Career/Technical (Major Code: A2519)

BUS 226	*Interpretation/Translation: Legal*	*3*
BUS 229	*Legal Terminology—Bilingual*	*1*
LEGL 255	*Introduction to Law and Legal Terminology*	*3*
LEGL 256	*International Law for Business*	*3*
LEGL 258	*Legal Communications*	*3*
LEGL 259	*Introduction to Paralegal Studies and Professional Ethics*	*1*
LEGL 260	*Legal Research*	*3*
LEGL 261	*Civil Litigation I*	*3*
LEGL 262	*Immigration Law and Procedure*	*3*
LEGL 270	*Computer Skills for Legal Professionals*	*2.5*
LEGL 290–293	*Legal Cooperative Work Experience I–IV **	*2*
SPAN 230	*Intermediate Spanish II ***	*5*
SELECT 5 UNITS FROM THE FOLLOWING COURSES:		**5**
LEGL 263	*Family Law (3)*	
LEGL 264	*Wills, Trusts, and Estates (3)*	
LEGL 266	*Mediation, Negotiation, and Conflict Resolution (2)*	
LEGL 267	*Interviewing and Investigation for Paralegals (2)*	
LEGL 268	*Computer Assisted Legal Research (2)*	
LEGL 269	*Civil Litigation Procedures (3)*	
LEGL 271	*Introduction to Intellectual Property (2)*	
LEGL 272	*Business Organizations (2)*	
LEGL 295	*Selected Topics in Legal Assistant (1–3)*	
	Total units	***37.5***

NOTE: *The certificate of achievement is awarded only to students who possess an associate or higher degree in any major prior to completing the paralegal program.*

* 60 or more hours of on-the-job work experience internship, paid or volunteer, are required in the LEGL 290–291 series. Program faculty and Student Employment assist students with placements, which can consist of as few as four hours per week for students working full-time. Students who are presently employed in a law office may use their employment to fulfill their requirement. These hours must be spread over a minimum of two semesters and can include summer work. The instructor must approve the work experience for application to the program.

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Personal Development

School of Counseling and Personal Development

■ Interim Dean

Beatrice Zamora-Aguilar, M.S.
Office 107V
619-482-6317

■ Faculty

Maria Abuan, M.S.
Dean Aragoza, M.S.
Diana Avila, M.A.
Maya Bloch, M.S.
Cecilia Cabico, M.S.
Norma Cázares, M.S.
Ed Cosio, M.Ed
Sylvia Felan-Gonzales, M.S.
Scott Finn, M.A.
James Jimenez, M.A.
Caree Lesh, M.S.
David Ramírez, M.S.
Nicole Ratliff, M.S.
Jaime Salazar, M.S.
Maria Elena Solis, M.S.
Corina Soto, M.S.
T.J. Tate, M.A.
Beatrice Zamora-Aguilar, M.S.

■ Department Chair

Ed Cosio, M.Ed.

The world is filled with all types of actions and inactions, how we choose to exist in this environment will ultimately determine our true worth. I strive to live my life by these words, "What shall it profit a person who gains the world, if they should lose their soul in the process." (Adaptation of a biblical verse)

—T.J. TATE,
Counselor

General Description

Fulfilling your dreams and reaching your goals requires hard work and dedication. Personal Development courses will ease stress and guide students through the process of becoming a successful college student. The Personal Development curriculum focuses on two primary goals:

* College Success Skills
* Work Success Skills

College Success Skills assists students in gaining knowledge and skills about campus resources, educational planning, decision-making and self-confidence. They include:

***PD 101**—Orientation to College*
***PD 105**—Student Leadership*
***PD 110**—College Success Skills*
***PD 115**—College Success for ESL Students*
***PD 295**—Selected Topics in Personal Development*

Work Success Skills assists students in preparation for entering the work force by sharpening interpersonal skills. The Work Success curriculum will assist in the development of career goals and life planning. They include:

***PD 48**—Job Readiness*
***PD 100**—Lifelong Success*
***PD 100A**—Career Assessment*
***PD 100B**—Career Exploration*
***PD 100C**—Career Planning*
***PD 106**—Career Management*
***PD 107**—Confidence in the Workplace*
***PD 108**—Effective Communication in the Workplace*
***PD 109**—Successful Workplace Behavior*
***PD 290–293**—Occupation Cooperative Work Experience I–IV*

Personal Development Courses

■ **PD 48.**
Job Readiness
3 units

Credit/No Credit only
Lecture 3 hours
Offered: Fall, Spring
Activity-based course, integrating elements of prevocational job readiness, which will include career literacy, work ethic, and prevocational transitional skills with an emphasis on vocational English development. [D]

■ **PD 100.**
Lifelong Success
3 units

Lecture 3 hours
Offered: Variable
Applies physiological, social, and psychological principles to success in college, the world of work and life. Students will assess personality, interests, skills, and values to increase self-understanding and select an appropriate major and career. Strategies for lifelong learning are explored by identifying learning styles, applying psychological principles of learning, examining life management techniques, adult stages of development, practicing creative and critical thinking techniques, and planning for wellness and a long and healthy life. [D; CSU]

■ **PD 100A.**
Career Planning: Career Assessment
1 unit

Credit/No Credit only
Lecture 1 hour
Offered: Fall, Spring
Designed to assist students in identifying, through the use of various assessment instruments and techniques, their interests, values, skills, aptitudes, learning styles, personality style and goals as they relate to careers and the world of work. [D; CSU]

■ **PD 100B.**
Career Planning: Career Exploration, Goal Setting, and Decision Making
1 unit

Credit/No Credit only
Recommended Preparation: *PD 100A or equivalent*
Lecture 1 hour
Offered: Fall, Spring
Designed to assist students in exploring and investigating careers and jobs through the use of various career search software and other resources available through the college career center. Goal setting and decision-making skills are applied to the career decision-making process. [D; CSU]

PD 100C.
Career Planning: Job Search Skills
1 unit

Credit/No Credit only
Recommended Preparation: *PD 100A and 100B, or equivalent*
Lecture 1 hour
Offered: Fall; Spring
Designed to assist students in organizing a job search plan. This plan will include labor market analysis, resume writing, job applications, and interviewing. [D; CSU]

PD 101.
Orientation to College
1 unit

Credit/No Credit only
Lecture 1 hour
Offered: Fall, Spring
Designed to assist students in obtaining skills and knowledge necessary to reach their educational objectives. Includes career exploration, time management, campus resources, decision-making, and educational planning. [D; CSU]

PD 104.
Pre-Nursing College Success Skill
3 units

Credit/No Credit only
Lecture 2 hours, laboratory 3 hours
Offered: Variable
A team-taught course designed for students who are considering entering nursing and/or other health professions. Includes health career exploration, educational planning, time management, individual learning styles, medication measurement, cardiopulmonary functions, health-related math refresher, communication styles, and critical thinking. Course requires a hospital visitation and orientation at a designated community hospital. [D; CSU]

PD 105.
Student Leadership
2 units

Lecture 1 hour, laboratory 3 hours
Offered: Variable
Designed for students interested in leadership within a student club or an organization. Assists students in campus leadership positions to identify effective leadership characteristics and their role in governance. Introduces a theoretical and experiential perspective of leadership styles, instruction in parliamentary procedure, communication (interpersonal and group), and organizational structures. Course content will include multicultural and general themes. [D; CSU]

PD 106.
Work Success: Career Management
2 units

Credit/No Credit only
Lecture 1–2 hours
Offered: Fall, Spring
Designed to assist students in developing the tools to manage the demands of a progressive work setting. The topics will include: setting priorities, time management, effective decision making, increasing productivity and performance, delegating, and understanding informal and formal organizational structures. [D; CSU]

PD 107.
Work Success: Confidence in the Workplace
2 units

Credit/No Credit only
Lecture 1–2 hours
Offered: Fall, Spring
Designed to assist students in identifying those characteristics contributing to self-confidence in the workplace. Students will learn to consider intrinsic and extrinsic support systems as part of their preparation for the work force. Lectures, assessments, group activities, service learning, and journal writing will require active participation. [D; CSU]

PD 108.
Work Success: Effective Communication in the Workplace
2 units

Credit/No Credit only
Lecture: 2 hours
Offered: Fall, Spring
Provides students with effective interpersonal communication skills needed for a variety of work settings. Through lecture, interactive role play, and group assignments, students will learn appropriate workplace communication skills to include active listening, verbal and nonverbal communication, accepting criticism, team participation, negotiation skills, networking, and sociability skills. [D; CSU]

PD 109.
Work Success: Successful Workplace Behavior
1–2 units

Credit/No Credit only
Lecture 1–2 hours
Offered: Fall, Spring
Designed to assist students in identifying and employing appropriate workplace behavior. Students will study, share, and observe workplace scenarios to better prepare for future career placement. All students will demonstrate a clear understanding of appropriate business and office etiquette. [D; CSU]

PD 110.
College Success Skills
3 units

Lecture 3 hours
Offered: Variable
A team-taught, comprehensive course designed to assist students in attaining lifelong academic, professional, and personal success. Includes critical thinking and analysis; time/task management; learning styles; personal and educational goals and values; physiosocial and psychological health; memory and concentration; academic study strategies and use of college resources. (Same as LS 110.) [D; CSU]

PD 115.
College Success for ESL Students
2 units

Lecture 2 hours
Offered: Fall, Spring
A team taught, activity-centered course designed to assist students in developing specific skills and knowledge to manage their personal and academic lives in order to achieve their educational goals of preparing for transfer to a university. Cooperative learning will be stressed. Class will be conducted in English and Spanish. (Same as ESL 115.) [D; CSU]

PD 290–293.
Occupational Cooperative Work Experience I–IV
2–4 units

Credit/No Credit only
Limitation on Enrollment: *Completed Student Educational Contract (SEC). Student must complete no less than seven units, including work experience, during each semester in order to receive credit*
Lecture 1 hour, laboratory 5–15 hours
Offered: Variable
Provides students with disabilities the opportunity to apply the principles and skills learned in career preparation courses to on-the-job work assignments. The student is required to attend a one-hour coordinating class weekly. The student's field performance will be evaluated by his employer and by the teacher. [D; CSU]

PD 295.
Selected Topics in Personal Development
1–3 units

Offered: Variable
Selected topics in personal development not covered by regular catalog offering. Course content and unit credit to be determined by the Counseling Department in relation to community student needs and available staff. (May be taken for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

Personal Development—Disability Support Services

Department of Disability Support Services

- Dean of Student Support Services

  Virginia Hansen, Ph.D.
  Office 428S
  619-482-6512

- Faculty

  Malia Flood, Ph.D.
  Diane Branman, M.S.
  Patricia Flores-Charter, M.A.
  Frank Post, M.S.
  Sherilyn Salahuddin, M.Ed.

- Department Chair

  Malia Flood, Ph.D.

General Description

Disability Support Services offers special classes to develop specialized skills and strategies that help students integrate into college courses. Some classes are offered every semester; others are offered only one semester each year. Check the Southwestern College class schedule for offerings each semester.

Personal Development—Disability Support Courses

PD 1.
Speech—Language—Hearing Assistance
1 unit

Limitation on Enrollment: *Approval of speech—language pathologist*
Credit/No Credit only
Laboratory 2 hours
Offered: Variable
Designed to assess and provide special assistance to students with speech, hearing and/or language problems including distortions of speech, stuttering, voice disorders, or speech associated with physical disorders. Assistance provided by a licensed speech-language pathologist. [ND]

PD 7.
Memory Skills
3 units

Grade only
Lecture 3 hours
Offered: Variable
Designed to offer special instruction to students with memory problems or disorders. Teaches students to locate, identify, organize, and recall using advanced strategies. [ND]

PD 8.
Fluency
2 units

Grade only
Limitation on Enrollment: *Approval of speech-language pathologist*
Recommended Preparation: *PD 1 or equivalent*
Lecture 1 hour, laboratory 2 hours
Offered: Fall
Designed to meet the individual needs of students with stuttering disorders and is taught by a licensed speech-language pathologist. Fluency strategies and increased fluency techniques related to vocational and education objectives will be included. [ND]

PD 9.
Diagnostic Assessment
.5 unit

Credit/No Credit only
Lecture .5 hour
Offered: Variable
Individual diagnostic assessment to identify learning strengths and weaknesses along with an appropriate Education Plan based upon assessment results. [ND]

PD 11.
Voice and Articulation
2 units

Grade only
Limitation on Enrollment: *Approval of speech-language pathologist*
Recommended Preparation: *PD 1 or equivalent*
Lecture 1 hour, laboratory 2 hours
Offered: Spring
Designed to meet the individual needs of students with voice and articulation disabilities. Class is taught by a licensed speech-language pathologist and stresses appropriate vocal hygiene, inflection, manner, and placement for speech production, and increased intelligibility. [ND]

PD 12.
Oral Language and Comprehension Skills
2 units

Lecture 2 hours
Offered Variable
Designed to offer special assistance to students to improve skills in understanding and expressing themselves using oral and written language. [ND]

PD 13.
Language Comprehension Skills
3 units

Grade only
Lecture 3 hours
Offered: Variable
Designed to offer special instruction to students with difficulties in oral language and reading comprehension. Paraphrasing and intervention strategies for visualization and verbalization will be taught. [ND]

PD 14.
Vocabulary Development and Word Recall
3 units

Lecture 3 hours
Offered: Spring
Designed to offer strategies to improve oral and written vocabulary, word retrieval skills for college-level language expression, and improve memory for new vocabulary learned. [ND]

PD 18.
Adapted Computer Instruction
2 units

Grade only
Lecture 2 hours
Offered: Variable
Introduces students with disabilities to basic computer vocabulary, functions of computers, and common computer software applications using adapted technology. Provides specialized computer-delivered instruction to improve information processing skills, and/or composing skills adapted to the needs of the individual student's disability. [ND]

PD 21.
Adapted Computer Support Laboratory I
1 unit

Credit/No Credit only
Laboratory 2 hours
Offered: Variable
Provides students with specialized programs designed to improve basic skills in reading, spelling, grammar, vocabulary, speech, computers, and study skills. Students will work in the computer lab following their individual educational contract. Laboratory time arranged with the instructor. [ND]

PD 22.
Adapted Computer Support Laboratory II
2 units

Credit/No Credit only
Laboratory 4 hours
Offered: Variable
Provides students with specialized programs designed to improve basic skills in reading, spelling, grammar, vocabulary, speech, computers, and study skills. Students will work in the computer lab following their individual educational contract. Laboratory time arranged with the instructor. [ND]

PD 23.
Adapted Computer Support Laboratory III
3 units

Credit/No Credit only
Laboratory 6 hours
Offered: Variable
Provides students with specialized programs designed to improve basic skills in reading, spelling, grammar, vocabulary, speech, computers, and study skills. Students will work in the computer lab following their individual educational contract. Laboratory time arranged with the instructor. [ND]

PD 80.
Fundamentals of Grammar and Sentence Writing I
3 units

Grade only
Lecture 3 hours
Offered: Fall
First course of a two-part sequence designed to provide specialized instruction in grammar and sentence construction. Prepare students for mainstreaming into English curricula by providing extensive review of grammatical terms, sentence structure, common grammatical errors, and methods of correcting errors. Practical applications of grammar will be exercised through short-writing assignments. [ND]

PD 81.
Fundamentals of Grammar and Sentence Writing II
3 units

Grade only
Prerequisite: *PD 80 or equivalent*
Lecture 3 hours
Offered: Spring
Second course in two-part sequence designed to provide specialized instruction in grammar and sentence construction. Prepares students for mainstreaming into the English curricula by providing extensive review of grammatical terms, sentence structure, common grammatical errors, and methods of correcting errors. Practical applications of grammar will be exercised through short-writing assignments. [ND]

PD 87.
Writing Fundamentals
3 units

Grade only
Lecture 3 hours
Offered: Variable
Writing course focusing on sentence structure and paragraph development. Introduction of the writing process, the structure of paragraph development, types of paragraphs, development of expressive paragraphs, review of sentence structure, grammar, and punctuation. [ND]

PD 89.
Fundamentals of Mathematics
3 units

Grade only
Lecture 3 hours
Offered: Variable
Basic mathematics course which uses special instructional methods and materials to teach learning strategies for computation, problem solving, and real life applications. Prepares students to enter into MATH 20. [ND]

PD 94A.
Fundamentals of Spelling I
4 units

Lecture 4 hours
Offered: Fall
The beginning course in a sequence of developmental spelling classes. Designed to meet the perceptual and processing needs of the student with learning deficits. Develops an awareness of sound identity and sequence in words, promotes the ability to use single-syllable word attack generalizations, and introduces multi-syllable concepts. [ND]

PD 94B.
Fundamentals of Spelling II
4 units

Prerequisite: *PD 94A or equivalent*
Lecture 4 hours
Offered: Spring
The second course in a sequence of developmental spelling classes. Designed to meet the perceptual and processing needs of the student with learning deficits. Continues to develop phonetic awareness and self-correction skills. Teaches multi-syllable word attack generalizations, prefixes, suffixes, strategies for visual memory, and proofreading. [ND]

PD 101.
Orientation to College
1 unit

Credit/No Credit only
Lecture 1 hour
Offered: Fall, Spring
Designed to assist students in obtaining skills and knowledge necessary to reach their educational objectives. Includes career exploration, time management, campus resources, decision-making, and educational planning. [D;CSU]

PD 110.
College Success Skills
3 units

Lecture 3 hours
Offered: Variable
A team-taught, comprehensive course designed to assist students in attaining lifelong academic, professional, and personal success. Includes critical thinking and analysis; time/task management; learning styles; personal and educational goals and values; physiological and psychological health; memory and concentration; academic study strategies and use of college resources. (Same as LS 110.) [D;CSU].

PD 290–293.
Occupational Cooperative Work Experience I–IV
2–4 units

Credit/No Credit only
Limitation on Enrollment: *Completed Student Educational Contract (SEC). Student must complete no less than seven units, including work experience, during each semester in order to receive credit*
Lecture 1 hour, laboratory 5–15 hours
Offered: Variable
Provides students with disabilities the opportunity to apply the principles and skills learned in career preparation courses to on-the-job work assignments. The student is required to attend a one-hour coordinating class weekly. The student's field performance will be evaluated by his employer and by the teacher. [D; CSU]

Philosophy

School of Languages and Humanities

■ Dean

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■ Faculty

Alejandro Orozco, M.A.
Penelope Banks, M.A.
Henry Quan, M.A.

■ Department Chair

Alejandro Orozco, M.A.

General Description

Philosophy is humanity's oldest intellectual department and asks fundamental questions about the nature of and justification for various perspectives. This discipline explores the scope and limits of human knowledge, the ultimate constituents of reality, the sources of value and obligation, and the nature of logic and correct reasoning. Through philosophy, one may think about and develop perspectives on topics as diverse as science, language, logic, truth, ethics, politics, and law.

Career Options

The following list is a sample of the many career options available for the philosophy major. A few of these require an associate degree, some require a baccalaureate degree, and most require a graduate-level degree: lawyer, government administrator or personnel, labor relations specialist, minister, publisher, literary critic, research assistant, educational researcher, ethics specialist, high school or college instructor, writer, business manager, journalist, and educational broadcaster.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Philosophy	*01830*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Arts Degree

Philosophy

Transfer Preparation * (Major Code: 01830)

The lower-division requirements give both the philosophy major and the general education student an excellent vehicle for refining his/her skills in critical reasoning and rational decision making. The application of philosophical ideas to the practical problems of life is an essential part of the curriculum. Philosophy majors who plan a career in teaching at the college or university level must complete a bachelor's degree and a graduate degree.

PHIL 101	*Introduction to Philosophy*	*3*
PHIL 103	*Logic and Critical Thinking*	*3*
PHIL 106	*World Religions*	*3*
PHIL 120	*Ethics: Theory and Practice*	*3*
Select 6 units from electives		*6*
	Total units	***18***

Electives: *HUM 101 and 102 or HUM 104 and 140.*

SDSU also requires three consecutive courses in a single foreign language as part of the requirement for the B.A. degree. Foreign language competency may also be demonstrated by successfully completing four years of one foreign language in high school or by successfully completing a challenge examination. See a counselor for additional information.

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Philosophy Courses

PHIL 101.
Introduction to Philosophy
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Introduction to the themes, issues, methodologies, practice of philosophy, and exploration of the nature of reality, the boundaries of knowledge, the origin and validity of values, and the meaning of existence utilizing historical, analytic, and critical approaches. Inquiry into the world's wisdom traditions leading toward the cultivation of independent philosophical thought. [D; CSU; UC; CAN-PHIL 2]

PHIL 103.
Logic and Critical Thinking
3 units

Grade only
Prerequisite: ENGL 115 or equivalent
Recommended Preparation: *ENGL 54 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Designed to develop the critical reading, writing, and reasoning skills necessary for both academic success and good citizenship. Introduction to deductive and inductive reasoning and the logic of analysis. Systematic study of fallacies in reasoning. Emphasis on the practical applications of logic in daily life. Method of instruction includes analytical and argumentative writing exercises.
[D; CSU; UC; CAN-PHIL 6]

PHIL 106.
World Religions
3 units

Recommended Preparation: *ENGL 54 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
The philosophical significance of major themes in religious thought. Critical study of the comparative and contrasting features of major religious philosophies, including an examination of the historical background and contemporary outlook. [D; CSU; UC]

PHIL 107.
Asian Philosophy
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Exploration of the major philosophical traditions of central and East Asia, including Hinduism, Buddhism, Daoism, and Confucianism, and the impact those traditions have on Asian culture. Examination of the patterns of Asian philosophy leading toward the cultivation of a greater appreciation of non-Western philosophical thought. [D; CSU; UC]

PHIL 120.
Ethics: Theory and Practice
3 units

Recommended Preparation: *PHIL 101 and 103, or equivalent; ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Critical examination of the basis of morality. Analysis of various ethical theories in terms of their origin, development, and application. The student will be encouraged to develop his/her own ethical position. Current moral and social issues will provide the basis for discussing the application of the ethical theories.
[D; CSU; UC; CAN-PHIL 4]

PHIL 295.
Selected Topics in Philosophy
1–3 units

Offered: Variable
Permits students of philosophy to study relevant topics within the field. Specific objectives, methods of instruction, and units of credit to be determined individually for each course offered under this course designation. (May be repeated for additional credit with new content.)
[D; *CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

PHIL 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of philosophy of particular interest to the student and not included in regular courses of the college. [D; CSU; *UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Physical Education

Physical Education/Activity Courses

See Exercise Science/Activity, pages 228–234.

Physical Education/Intercollegiate Courses

See Exercise Science/Intercollegiate, page 234.

Physical Education/Limited Courses

See Exercise Science/Limited, pages 235–236.

Physical Education/Theory Courses

See Exercise Science/Theory, pages 236–239.

Physical Science

School of Mathematics, Science, and Engineering

■ Dean

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■ Faculty

Ken Yanow, M.S., M.A.

■ Department Chair

Grant J. Miller, M.S.

General Description

The physical science program is an interdisciplinary approach to the study of science that stresses the interrelationship of chemistry and physics, as well as geology, biology, astronomy, earth science, and mathematics. Learning in this department offers a broad academic background and facility in analytic thinking requisite for advanced study in any of the sciences while providing a greater diversity of knowledge than is possible with study in a single science.

Career Options

The usual career goal of the physical science major is to become a teacher in high school. Upon completion of the baccalaureate degree in physical science and other requirements for a single subject credential, graduates will be able to teach the following subjects in California high schools: chemistry, general science, physics, and physical science. Jobs for physical science teachers are becoming more plentiful with an increasing need for instructors in high school during the next ten years. Minority students or those proficient in Spanish are particularly in demand.

Degree/Certificate Options

	Major Code
Associate in Science Degree: Transfer Preparation	
Geography	*01670*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Science Degree
Physical Science

Transfer Preparation * (Major Code: 01670)

Lower-division requirements are not the same for all universities. The curriculum is designed for students who intend to transfer to a four-year college or university, such as SDSU, to earn a bachelor's of science degree in order to become a high school science teacher. The State of California does not offer separate credentials in either chemistry or physics.

ASTR 100	*Descriptive Astronomy*	*3*
CHEM 200	*General Chemistry I*	*5*
CHEM 210	*General Chemistry II*	*5*
GEOL 100	*Principles of Geology*	*3*
MATH 130	*Introduction Computer Programming*	*4*
MATH 250	*Analytic Geometry and Calculus I*	*5*
MATH 251	*Analytic Geometry and Calculus II*	*4*
MATH 252	*Analytic Geometry and Calculus III*	*4*
PHYS 270	*Principles of Physics I*	*3*
PHYS 271	*Principles of Physics Laboratory I*	*1*
PHYS 272	*Principles of Physics II*	*4*
PHYS 274	*Principles of Physics III*	*4*
	Total units	***45***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Physical Science Courses

PHS 101.
Introduction to the Physical Sciences
3 units

Grade only
Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Overview of the basic concepts of astronomy, physics, chemistry, and Earth science, with emphasis on the understanding and significance of accepted scientific fundamental principles. Contemporary issues such as energy production versus environmental problems will be explored as well as the methods, limitations, and societal implications of scientific advancement.
[D; CSU; UC]

PHS 110.
Introduction to Oceanography
3 units

Grade only
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Introduction to the physical, chemical, geophysical, and geological aspects of the ocean. Instruction spans the historical evolution of the discipline, identification of the basic marine environment, animal and plant relationship, as well as ecological problems.
[D; CSU; UC]

PHS 111.
Oceanography Laboratory
1 unit

Grade only
Recommended Concurrent Enrollment: *PHS 110*
Laboratory 3 hours
Offered: Variable
Provides a laboratory setting for students to become familiar with the physical, chemical, and geological aspects of the oceanic environment.
[D; CSU; UC]

PHS 250.
Our Global Future: Values for Survival
3 units

Lecture 3 hours
Offered: Fall, Spring
Interdisciplinary course designed to challenge students to consider the limits of science, broad issues involved in global survival, and the need to develop a social consciousness in relation to the biosphere. The course also embodies a critical examination of the relationship between social, political, and economic institutions in a contemporary as well as a historical setting. Both a Western and non-Western context is explored allowing consideration of new modes of thinking and possible acquisition of a more harmonious world view. (Same as PS 250.)
[D; CSU; UC]

PHS 295.
Selected Topics in Physical Science
1–3 units

Offered: Variable
Permits students to study relevant subjects within the field of physical science. The specific objectives, methods of instruction, and units of credit to be determined individually for projects proposed under this course description.
(May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

PHS 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of physical science of particular interest to the student and not included in regular courses of the college. [D; CSU; * UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Physics

School of Mathematics, Science, and Engineering

■ Dean

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■ Faculty

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Jeff Veal, Ph.D.

■ Department Chair

Grant J. Miller, M.S.

General Description

Physics is the most fundamental science and underlies our understanding of nearly all areas of science and technology. In a broad sense, physics is concerned with the study of energy, space, matter, the interactions between matter and the laws which govern these interactions. More specifically, physicists study mechanics, heat, light, electric and magnetic fields, gravitation, relativity, atomic and nuclear physics, and condensed-matter physics.

Career Options

The following list is a sample of the many career options available to the physics major. A few of these require an associate degree, some require a baccalaureate degree, and most require a graduate-level degree: research assistant, laboratory technician, high school or college instructor, technical writer and research or applied physicist in acoustics, atmospheric physics, astrophysics, astronomy, atomic and molecular physics, electricity and magnetism, electronic instrumentation, energy conservation, geophysics, health physics, mechanics, heat or light physics, medical imaging, nuclear medicine, solar energy, nuclear physics, engineering, and scientific computing.

Degree/Certificate Options

	Major Code
Associate in Science Degree: Transfer Preparation	
Physics	*01680*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

WEB SITES FOR PHYSICS MAJORS:

SDSU ***http://www.physics.sdsu.edu/***
UCSD ***http://www.physics.ucsd.edu/***
CSU, San Marcos ***http://www.physics.csusm.edu/***
Articulation: ***http://www.assist.org***

Associate in Science Degree

Physics

Transfer Preparation* (Major Code: 01680)

Physicists are engaged in applying the fundamental principles of science to problems ranging from understanding life processes to exploring the universe. Specializations include mechanics, heat, optics, acoustics, electrodynamics, astrophysics, atomic physics, biophysics, and geophysics.

FIRST SEMESTER		
CHEM 200	*General Chemistry I*	*5*
MATH 250	*Analytic Geometry and Calculus I*	*5*
SECOND SEMESTER		
MATH 251	*Analytic Geometry and Calculus II*	*4*
PHYS 270	*Principles of Physics I*	*3*
PHYS 271	*Principles of Physics Laboratory I*	*1*
THIRD SEMESTER		
MATH 252	*Analytic Geometry and Calculus III*	*4*
PHYS 272	*Principles of Physics II*	*4*
FOURTH SEMESTER		
PHYS 274	*Principles of Physics III*	*4*
	Total units	***30***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Physics Courses

PHYS 110.
General Physics I
4 units

Grade only
Prerequisite: *MATH 45 or equivalent*
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Fall, Spring
Study of force, motion, heat and fluids. A two-semester non-calculus-based general physics course for architecture, electronics engineering technology and biology majors. (Not open to students with credit in PHYS 170 or 171.) [D; CSU; CAN-PHYS 2]

PHYS 120.
General Physics II
4 units

Grade only
Prerequisite: *PHYS 170 and MATH 122, or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Variable
Physics of electricity, magnetism, light, and modern physics. (Not open to students with credit in PHYS 172, 173, 174, or 175.) [D; CSU; CAN-PHYS 4]

PHYS 170.
College Physics I
3 units

Prerequisite: *MATH 121 or equivalent*
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
First of a three-semester, calculus-based sequence intended mainly for majors in the life sciences. Topics include: Newtonian mechanics; waves. (Not open to students with credit in PHYS 110) [D; CSU; UC]

PHYS 171.
College Physics Laboratory I
1 unit

Corequisite: *PHYS 170 (May be taken previously)*
Laboratory 3 hours
Offered: Variable
Laboratory course to accompany College Physics I (PHYS 170) (Not open to students with credit in PHYS 110.)[D; CSU; UC]

PHYS 172.
College Physics II
3 units

Prerequisite: *PHYS 170 and MATH 122, or equivalent*
Lecture 3 hours
Offered: Variable
Second of a three-semester, calculus-based sequence intended mainly for majors in the life sciences. Topics include: electric fields; direct current; magnetic fields; alternating current; thermal physics. (Not open to students with credit in PHYS 120.) [D; CSU; UC]

PHYS 173.
College Physics Laboratory II
1 unit

Corequisite: *PHYS 172 (May be taken previously)*
Laboratory 3 hours
Offered: Variable
Laboratory course to accompany College Physics II (PHYS 172) (Not open to students with credit in PHYS 120.) [D; CSU; UC]

PHYS 174.
College Physics III
3 units

Prerequisite: *PHYS 172 or equivalent*
Lecture 3 hours
Offered: Variable
Third of a three-semester, calculus-based sequence intended mainly for majors in the life sciences. Topics include: light and its interaction with matter; optics; special relativity; quantum mechanics; nuclear physics. (Not open to students with credit in PHYS 120) [D; CSU; UC]

PHYS 175.
College Physics Laboratory III
1 unit

Corequisite: *PHYS 174 (May be taken previously)*
Laboratory 3 hours
Offered: Variable
Laboratory course to accompany College Physics III (PHYS 174) (Not open to students with credit in PHYS 120.) [D; CSU; UC]

PHYS 270.
Principles of Physics I
3 units

Grade only
Prerequisite: *MATH 250 or equivalent*
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
First of a three semester, calculus-based sequence intended for majors in the physical sciences and engineering; mechanics and wave motion. [D; CSU; UC; PHYS 270 + PHYS 271 = CAN PHYS 8; PHYS 270 + PHYS 271 + PHYS 272 + PHYS 274 = CAN PHYS SEQ B]

PHYS 271.
Principles of Physics Laboratory I
1 unit

Grade only
Corequisite: *PHYS 270 (may be taken previously)*
Laboratory 3 hours
Offered: Fall, Spring
Laboratory course to accompany PHYS 270. [D; CSU; UC; PHYS 270 + PHYS 271 = CAN PHYS 8; PHYS 270 + PHYS 271 + PHYS 272 + PHYS 274 = CAN PHYS SEQ B]

PHYS 272.
Principles of Physics II
4 units

Grade only
Prerequisite: *PHYS 270 and MATH 251, or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Fall, Spring
Second of a three-semester, calculus-based sequence intended mainly for majors in the physical sciences and engineering. Covers electricity and magnetism. [D; CSU; UC; CAN-PHYS 12; PHYS 270 + PHYS 271 + PHYS 272 + PHYS 274 = CAN PHYS SEQ B]

PHYS 274.
Principles of Physics III
4 units

Grade only
Prerequisite: *PHYS 272 and MATH 252, or equivalent*
Lecture 3 hours, laboratory 3 hours
Offered: Spring
Third of a three-semester, calculus-based sequence intended mainly for majors in the physical sciences and engineering: optics and modern physics. [D; CSU; UC; CAN-PHYS 14; PHYS 270 + PHYS 271 + PHYS 272 + PHYS 274 = CAN PHYS SEQ B]

PHYS 295.
Selected Topics in Physics
1–3 units

Offered: Variable
Permits students to study relevant topics within the field of physics. The specific objectives, methods of instruction, and evaluation to be determined by the students and the instructor throughout the semester. (May be repeated for additional credit with new content.) [D; *CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

PHYS 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of physics of particular interest to the student and not included in regular courses of the college. [D; CSU; * UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Pilipino

School of Languages and Humanities

Dean

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Department Chair

Esther Alonso, M.A.

Pilipino Courses

PIL 120.
Elementary Tagalog I
5 units

Lecture 5 hours
Offered: Fall, Spring
Fundamentals of the Pilipino language with verbal fluency and accuracy of the main dialect, Tagalog, as the main goal. Essentials of grammar and a sufficient vocabulary to enable students to acquire a speaking and reading knowledge of the language. Equivalent to two years of high school Pilipino. [D; CSU; UC]

PIL 130.
Elementary Tagalog II
5 units

Prerequisite: *PIL 120 or equivalent*
Lecture 5 hours
Offered: Spring
Continuation of PIL 120, with focus being given to oral proficiency in Tagalog, the principal dialect of the Philippines. Equivalent to three years of high school Pilipino. [D; CSU; UC]

PIL 220.
Intermediate Tagalog I
5 units

Prerequisite: *PIL 130 or equivalent*
Lecture 5 hours
Offered: Variable
Extensive review of all structures learned previously. Uses an integrated skills approach to intermediate Tagalog, the principal dialect of the Philippines. Offers students an opportunity to acquire communicative skills while developing an awareness and appreciation of Pilipino culture. Conducted entirely in Tagalog. Equivalent to four years of high school Tagalog. [D; CSU; UC]

PIL 295.
Selected Topics in Pilipino
1–3 units

Offered: Variable
Permits students to study relevant subjects within the field of Pilipino. The specific objectives, methods of instruction, and units of credit to be determined individually for projects proposed under this course description. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

PIL 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of Pilipino of particular interest to the student and not included in regular courses of the college. [D; CSU; * UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Political Science

School of Social Sciences and International Studies

■ Dean

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619-482-6582

■ Faculty

Alma Aguilar, M.A.
Norris S. Nagao, Ed.M.
Gary Neely, M.A.
Phil Saenz, J.D.

■ Department Chair

Gary Neely, M.A.

General Description

Political science is the study of the theory and practice of government. Prelaw is the preparation for the study of application of law within the juridical system of government. Public administration is the study of the implementation practices of the governmental agencies and legal bodies. These three departments are closely related through the common interests of the people and in service of the populace either at the local, state, or national level. These departments explore social behavior, customs, rules, and practices within the context of the self-defined common good of the community and the willingness of the members of the community to delegate authority under proscribed conditions to individuals, groups, and agencies.

Career Options

The following list is a sample of the many career options available for the political science, prelaw, or public administration major. A few of these require an associate degree, most require a baccalaureate degree, and some require a graduate-level degree: politician, political scientist, political campaign worker, lawyer, legal assistant, legal researcher, government employee, agency director, historian, high school or college instructor, research assistant, consultant, administrative aide to a public official, budget analyst, lobbyist, city planner, administrator, and foreign service officer

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Political Science	*01840*
Public Administration	*01860*

Consult with a counselor to develop a Student Education Plan (SEP), which lists courses necessary to achieve your academic goal.

Associate in Arts Degree
Political Science

Transfer Preparation * (Major Code: 01840)

Prepares students for law school, teaching, government services on the local, state, and national levels, and private employment where government institutions are involved. Careers are also available in public relations and journalism.

PS 101	*Introduction to Political Science*	*3*
PS 102	*Introduction to American Government and Politics*	*3*
PS 103	*Introduction to Comparative Government*	*3*
PS 104	*Introduction to International Relations*	*3*
HUM 112	*Culture and the Media*	
	or	*3*
JOUR 101	*Introduction to Mass Communication and Society*	
	or	
PHIL 120	*Ethics: Theory and Practice*	
MATH 119	*Elementary Statistics (4)*	
	or	*3–4*
PSYC/SOC 270	*Statistical Methods of Psychology (3)*	
	Total units	***18–19***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Public Administration

Transfer Preparation * (Major Code: 01860)

Public administration courses provide skills for paraprofessionals in public employment such as school districts and cities, county agencies, state agencies, and various federal positions.

ACCT 101	*Principles of Accounting I*	*4*
CIS 101	*Introduction to Computers and Information Processing*	*4*
ECON 101	*Principles of Economics I*	*3*
ECON 102	*Principles of Economics II*	*3*
MATH 119	*Elementary Statistics*	*4*
PS 102	*American Government and Politics*	*3*
	Total units	***21***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Political Science Courses

PS 101.
Introduction to Political Science
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Survey of the basic concepts of political science including an introduction to the scope of the discipline and the representative methods of acquiring political knowledge. Basic materials will be drawn from the American experience as well as other political systems. CSU.)
[D; CSU; UC]

PS 102.
Introduction to American Government and Politics
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Surveys the processes and institutions of the United States, California, and local government. Analysis and discussion will include a variety of topics and current issues including: education, health, civil liberties and rights, domestic policy, foreign party, environment, relations between government and business, taxation, democracy, voting, special interest, political values and attitudes, the presidency, congress, and courts and the media. (Partially fulfills American Institutions requirement at CSU.)
[D; CSU; UC; CAN-GOVT 2]

PS 103.
Introduction to Comparative Government
3 units

Recommended Preparation: *PS 101 or equivalent; ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall
Analytical models and techniques for examination of the problems for decision making and control in various political systems. Emphasis on patterns of political action in various cultural contexts. [D; CSU; UC]

PS 104.
Introduction to International Relations
3 units

Recommended Preparation: *PS 101 and 103, or equivalent; ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Survey of historical and geographical perspectives of political relations among states to include the dynamics of national goods, diplomacy, struggle for power, and war. Theories looking for significant patterns in world politics are analyzed and discussed. [D; CSU; UC]

PS 130.
Public Administration in an Urban Setting
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
A review of issues in public administration relevant to urban environments. Study of government structure and public decision-making process, criminal justice policies, city planning, economic development strategy, and zoning and land use. [D; CSU]

PS 250.
Our Global Future: Values for Survival
3 units

Lecture 3 hours
Offered: Fall, Spring
Interdisciplinary course designed to challenge students to consider the limits of science, broad issues involved in global survival, and the need to develop a social consciousness in relation to the biosphere. The course also embodies a critical examination of the relationship between social, political, and economic institutions in a contemporary as well as a historical setting. Both a Western and non-Western context is explored allowing consideration of new modes of thinking and possible acquisition of a more harmonious world view. (Same as PHS 250.)
[D; CSU; UC]

PS 260.
Principles of U.S. Public and Private Partnerships
4 units

Lecture 4 hours
Offered: Variable
Principles of public and private organizations, their organizational structures, and resources. Provides an overview of public administration and principles of leadership as well as analyze how public policy decisions are made and implemented. [D; CSU]

PS 261.
U.S. Public and Private Partnerships: State and National
4 units

Lecture 4 hours
Offered: Variable
Explores the interaction between business, government, and public policy. Utilizes a multidisciplinary approach, the course will address topics from principles of public and private partnerships in greater depth. Analysis of case studies with an emphasis on the state and federal levels of public administration and social institutions. [D; CSU]

PS 262.
Public and Private Partnerships: International Opportunities, Challenges, and Applications
4 units

Lecture 4 hours
Offered: Variable
Explores the interaction between business, government, and public policy, particularly at the international level. Utilizes a multidisciplinary approach, addresses public and private partnerships. Emphasis on international trade development and public policy. Culminates an in-depth analysis, synthesis, and application of the leadership series to a selected topic.
[D; CSU]

PS 295.
Selected Topics in Political Science
1–3 units

Offered: Variable
Permits students of political science to study relevant topics within the field. The specific objectives, methods of instruction and units of credit to be determined individually for each course offered under this course designation. (May be repeated for additional credit with new content.) [D; *CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

PS 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of political science of particular interest to the student and not included in regular courses of the college. [D; CSU; * UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Portuguese

School of Languages and Humanities

■ Dean

Renee M. Kilmer, Ph.D.
Office 430J
619-482-6461

■ Department Chair

Esther Alonso, M.A.

Portuguese Courses

■ PORT 120.
Elementary Portuguese I
5 units

Lecture 5 hours
Offered: Variable
Designed to enable beginning students to carry out basic interpersonal communications. Students will learn the structures and vocabulary necessary to carry out simple conversations. It also serves as an introduction to Portuguese-speakers' world views, behaviors, attitudes, and contributions to the world. Equivalent to two years of high school Portuguese. [D; CSU; UC]

■ PORT 130.
Elementary Portuguese II
5 units

Prerequisite: *PORT 120 or equivalent*
Lecture 5 hours
Offered: Variable
Continuation of elementary PORT 120. Designed to further students' knowledge and understanding of the Portuguese language. Students will learn the structures and vocabulary necessary to converse about present and past experiences. Also serves to further the understanding and knowledge of Portuguese-speakers' world views, behaviors, attitudes, and contributions to the world. Equivalent to three years of high school Portuguese. [D; CSU; UC]

■ PORT 220.
Intermediate Portuguese I
5 units

Prerequisite: *PORT 130 or equivalent*
Lecture 5 hours
Offered: Variable
This first semester of second-year Portuguese includes an extensive review of all structures learned in the first year. This course employs integrated skills approach to intermediate Portuguese. The primary objective of the program is to offer students an opportunity to acquire communicative skills while developing an awareness and appreciation of Portuguese cultures. [D; CSU; UC]

■ PORT 295.
Selected Topics in Portuguese
1–3 units

Offered: Variable
Permits students to study relevant subjects within the field of Portuguese. The specific objectives, methods of instruction, and units of credit to be determined individually for projects proposed under this course description. (May be repeated for additional credit with new content.) [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

■ PORT 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of Portuguese of particular interest to the student and not included in regular courses of the college. [D; CSU; * UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Psychology

School of Social Sciences and International Studies

■ Dean

Viara Giraffe, Ph.D.
Office 470K
619-482-6582

■ Faculty

Roger I. Bailey, Ph.D.
Danielle McAneney, M.A.
Lina Rocha, M.A.

■ Department Chair

Robin Franck, Cand. Ph.D.

General Description

Psychology is both a natural and social science in which people study human and animal behavior. As such, it is a broad department which includes basic science and the application of basic science in everyday life. Learning concentrates on the use of scientific methods to understand and predict behavior, to develop procedures for changing behavior, and to evaluate treatment strategies. Areas of study within psychology are social psychology, developmental psychology, comparative psychology, cognitive psychology, organizational psychology, counseling psychology, and experimental psychology.

Career Options

The following list is a sample of the many career options available for the psychology major. A few of these require an associate degree, most require a baccalaureate degree, and some require a graduate-level degree: personnel manager, drug abuse counselor, research assistant, research analyst, psychometrist, marriage/family/child counselor, high school or college counselor or instructor, test validation and development specialist, personnel technician, training specialist, outreach worker, behavior analyst, consultant, opinion survey designer, mental health worker, employment counselor, and psychologist.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Psychology	*01850*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary for you to achieve your academic goal.

Associate in Arts Degree

Psychology

Transfer Preparation * (Major Code: 01850)

Designed to serve several goals: to expose students to the variety of subfields in psychology; to engender knowledge of and appreciation for the spirit and nature of scientific inquiry; to facilitate insight into oneself and increase knowledge of and sensitivity to others; and to introduce students to the basic body of knowledge, thus preparing them for further study in psychology as a transfer major.

PSYC 101	*General Psychology*	*3*
PSYC 211	*Learning*	*3*
PSYC 230	*Developmental Psychology*	*3*
PSYC 260	*Physiological Psychology*	*3*
PSYC 270	*Statistical Methods of Psychology*	*3*
Select 3–4 units from electives		*3–4*
	Total units	***18–19***

Electives: *BIOL 100 and 101; BIOL 130, 180, 190.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Psychology Courses

PSYC 101.
General Psychology
3 units

Recommended Preparation: *ENGL 54 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Introduces the student to the study of behavior with a focus on the history and the development of basic theories and concepts contained in the discipline. Attention given to experimental techniques used in gathering and recording behavioral data. Emphasis on the development of intellectual skills, which may be effective in understanding and applying theories of learning, memory, problem solving, perception, personality, life span development, emotion, maladaptive behavior, psycho-physiology, and group behavior. [D; CSU; UC; CAN PSY 2]

PSYC 103.
Parapsychology
3 units

Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
Introduction to the field of parapsychology; development of the field from its prehistoric origins to most recent research across cultures. A delineation of techniques of measuring telepathy, clairvoyance, precognition, psycho kinesis, and the statistical method used for evaluating such phenomena. A scrutiny of hypotheses which attempt to describe, explain, and understand paranormal behavior. [D; CSU]

PSYC 106.
Human Sexuality
3 units

Lecture 3 hours
Offered: Fall, Spring
In-depth study of the processes involved in the experience of human sexual activity. A discussion of the role of psychological, sociological, physiological, and social aspects applicable to human sexuality, including topical commentaries on sexually transmitted diseases, child abuse, contemporary sexual activities and lifestyles, and methods of treatment utilized for healthy sexuality. [D; CSU; UC]

PSYC 109.
The Psychology of Death and Dying
3 units

Lecture 3 hours
Offered: Fall, Spring
Comprehensive survey of the human experience of death and dying focused on social, physical, emotional, and psycho-logical aspects of behavior. Exploring difficult issues such as the death of a spouse or child, medical ethics involving death, suicide, funerals, and healthcare systems available to the dying and their survivors. Assessment of personal attitudes toward death leading to an understanding of diverse viewpoints and clarification of personal values. [D; CSU]

PSYC 116.
Introduction to Social Psychology
3 units

Lecture 3 hours
Offered: Fall, Spring
Human behavior and personality development in a social context. Includes investigation of self-identity, conformity, aggression, attraction, affiliation, etc., with an emphasis on the interconnections of events within people and between people. (Same as SOC 116.)
[D; CSU; UC]

PSYC 201A.
Practicum in Learning and Development I
3 units

Grade only
Lecture 3 hours
Offered: Variable
For students in sociology, psychology, child development, and teacher preparation. Students will be required to spend a minimum of two hours per week in a supervised after-school setting at one of the designated community field sites involving children. Additional time will be devoted to readings and class preparation, writing and transmitting clinical field notes, and writing a final paper on some aspect of the fieldwork experience as it relates to class lectures and readings.
(Same as SOC 201A.) (PSYC 201A, 201B combined, maximum credit 6 units.)
[D; CSU; UC]

PSYC 201B.
Practicum in Learning and Development II
3 units

Grade only
Prerequisite: *PSYC/SOC 201A or equivalent*
Lecture 3 hours
Offered: Variable
Advanced course for students in psychology, sociology, child development, and teacher preparation. Students will be required to spend a minimum of two hours per week in a supervised after-school setting at one of the designated community fields sites involving children. Additional time will be devoted to readings and class preparation, writing and transmitting clinical field notes, and writing a final paper on some aspect of the fieldwork experience as it relates to class lectures and readings.
(Same as SOC 201B.) (PSYC 201A, 201B, combined, maximum credit 6 units.)
[D; CSU; UC]

PSYC 211.
Learning
3 units

Prerequisite: *PSYC 101 or equivalent*
Recommended Preparation: *ENGL 52 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Study of the principles of animal and human learning, comparison of classical and instrumental conditioning, schedules of reinforcement and punishment, and applications of learning principles to practical verbal and motor skill behaviors. [D; CSU; UC]

PSYC 230.
Developmental Psychology
3 units

Prerequisite: *PSYC 101 or equivalent*
Lecture 3 hours
Offered: Variable
Overview of the development of the normal individual, beginning with conception and prenatal development and continuing through infancy, childhood, adolescence, adulthood, and old age. [D; CSU; UC]

PSYC 250.
Abnormal Psychology
3 units

Grade only
Prerequisite: *PSYC 101 or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Study of psychological disorders in children, adolescents, adults, and the aged. Focus on description, assessment, and treatment of abnormal behavior patterns including disorders of stress, adjustment, and anxiety; schizophrenia, paranoid disorders, and the affective disorders; suicide, substance abuse, personality and sexual disorders, and mental retardation. [D; CSU; UC]

PSYC 260.
Introduction to Physiological Psychology
3 units

Prerequisite: *PSYC 101 or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Covers basic understanding of the brain and its relationship to behavior. Physiological roots of sensation, perception, emotion, motivation, learning, memory, arousal, sleep, and behavioral disorders. [D; CSU; UC]

PSYC 270.
Statistical Methods of Psychology
3 units

Prerequisite: *PSYC/SOC 101 or equivalent; MATH 65 or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Statistical methods of behavioral science including measures of central tendency, variability, correlation and regression, applications of the normal probability curve, statistical inference, analysis of variance, and chi square. (Same as SOC 270.)
[D; CSU; UC; CAN-PSY 6]

PSYC 295.
Selected Topics in Psychology
1–3 units

Offered: Variable
Permits students to study relevant topics within the field of psychology. (May be repeated for additional credit with new content.) [D; * CSU]

** Please refer to the class schedule for specific course description and transferability information.*

PSYC 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of psychology of particular interest to the student and not included in regular courses of the college. [D; CSU; * UC]

** UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Real Estate

School of Business and Information Systems

■ Dean

Irma Alvarez, M.A.
Office 215
619-482-6457

■ Department Chair

Larry Christiansen, J.D.

General Description

Real estate is a subfield of the department of business that studies real property and land use affairs. It explores the principles, practices, finances, economics, laws, regulations, appraisal and valuation, management, escrow, title, insurance, sales, marketing, development, ownership, contracts, ethics, and brokerage of structures and land. Real estate is interdisciplinary in nature, combining aspects of law and finance with the study of sociology and human psychology.

Career Options

The following list is a sample of the many career options available for the real estate major. Most of these require a certificate or associate degree, some require a baccalaureate degree, and a few require a graduate-level degree: licensed broker, licensed salesperson, appraiser, escrow officer, insurance agent, claims adjuster, real estate administrator or manager, investment specialist, urban planner, government employee, public relations agent, lawyer, researcher, tax advisor, and property manager.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Real Estate	*01170*
Associate in Science Degree: Career/Technical	
Real Estate	*02130*
Certificates of Achievement	
Real Estate	*02133*
Broker License	*02131*
Salesperson License	*02132*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Arts Degree
Real Estate

Transfer Preparation * (Major Code: 01170)

The associate in arts degree in real estate prepares a student for positions with organizations involved in marketing, financing, development, management of real property as well as for government careers involving real property assessment, condemnation, management of publicly owned lands, and control of land utilization.

ACCT 101	*Principles of Accounting I*	*4*
ACCT 102	*Principles of Accounting II—Managerial*	*4*
BUS 140	*Business Law*	*3*
BUS 212	*Business Communication*	*3*
CIS 101	*Introduction to Computers and Information Processing*	*4*
ECON 101	*Principles of Economics I*	*3*
ECON 102	*Principles of Economics II*	*3*
MATH 119	*Elementary Statistics*	*4*
MATH 120	*Calculus for Business Analysis*	*3*
	Total units	***31***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Associate of Science
Real Estate

Career/Technical (Major Code: 02130)

The associate of science in Real Estate is designed for those planning to enter the profession or for real estate professionals who are upgrading their skills.

FIRST SEMESTER		
ACCT 101	*Principles of Accounting I*	*4*
BUS 140	*Business Law*	*3*
RE 101	*Real Estate Principles*	*3*
SECOND SEMESTER		
BUS 147	*Successful Selling Techniques*	*1*
RE 102	*Real Estate Practice*	*3*
RE 104	*Real Estate Finance*	*3*
RE 110	*Real Estate Appraisal*	*3*
THIRD SEMESTER		
RE 106	*Legal Aspects of Real Estate*	*3*
RE 108	*Real Estate Economics*	*3*
	Total units	***26***

Recommended Electives: *BUS 123, 183, 212; CIS 121A or 121B, 122A or 122B; PSYC 101; RE 114, 120.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Certificates of Achievement
Real Estate

Career/Technical (Major Code: 02133)

Designed for those planning to enter the profession or for real estate professionals who are upgrading their skills.

FIRST SEMESTER		
ACCT 101	*Principles of Accounting I*	*4*
BUS 140	*Business Law*	*3*
RE 101	*Real Estate Principles*	*3*
SECOND SEMESTER		
BUS 147	*Successful Selling Techniques*	*1*
RE 102	*Real Estate Practice*	*3*
RE 104	*Real Estate Finance*	*3*
RE 110	*Real Estate Appraisal*	*3*
THIRD SEMESTER		
RE 106	*Legal Aspects of Real Estate*	*3*
RE 108	*Real Estate Economics*	*3*
	Total units	***26***

Broker License

Career/Technical (Major Code: 02131)

To qualify for the broker license examination, the student must complete eight courses in addition to other experience and educational requirements. Five of the eight courses must include: RE 102, 104, 106, 108 or ACCT 101, and RE 110.

RE 102	*Real Estate Practice*	*3*
RE 104	*Real Estate Finance*	*3*
RE 106	*Legal Aspects of Real Estate*	*3*
RE 108	*Real Estate Economics (3)*	
	or	*3–4*
ACCT 101	*Principles of Accounting I (4)*	
RE 110	*Real Estate Appraisal*	*3*
SELECT 9 UNITS FROM THE FOLLOWING:		**9**
BUS 140	*Business Law (3)*	
RE 101	*Real Estate Principles (3)*	
RE 114	*Property Management (3)*	
RE 120	*Escrow Principles (3)*	
	Total units	***24–25***

Salesperson License

Career/Technical (Major Code: 02132)

To qualify for the salesperson license examination, the student must complete Real Estate Principles (RE 101). Then prior to issuance of the original license or within eighteen months after issuance, he/she must complete TWO additional basic real estate courses from the courses below.

ACCT 101	*Principles of Accounting I*	*4*
BUS 140	*Business Law*	*3*
RE 102	*Real Estate Practice*	*3*
RE 104	*Real Estate Finance*	*3*
RE 106	*Legal Asp. of Real Estate*	*3*
RE 108	*Real Estate Economics*	*3*
RE 110	*Real Estate Appraisal*	*3*
RE 114	*Property Management*	*3*
RE 120	*Escrow Principles*	*3*
	Total units	***28***

NOTE: *To qualify for the salesperson license examination, RE 101 must be completed. Prior to the issuance of the original license or within eighteen months after issuance, two additional courses from the following list must be completed: ACCT 101; BUS 140; RE 102, 104, 106, 108, 110, 114, 120.*

To qualify for the broker license examination, the student must complete eight courses in addition to other experience and educational requirements. Five of the eight courses must include: RE 102, 104, 106, 110, ACCT 101 or, RE 108. The remaining three courses to be selected from the following: RE 101, 114, 120, and BUS 140.

Real Estate Courses

RE 101.
Real Estate Principles
3 units

Grade only
Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Introductory course for the consumer or the career-minded. Real property laws pertaining to contracts, deeds, land titles, liens, escrow, leases, financing, land description, and brokerage. [D; CSU]

RE 102.
Real Estate Practice
3 units

Grade only
Prerequisite: *RE 101 or equivalent*
Recommended Preparation: *ENGL 52 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Practical day-to-day operations in real estate brokerage. Emphasis on listing procedures, comparative market analysis, computer skills, multiple listing service use, Internet research, effective advertising, sales techniques, financing, appraising, property management, leasing, and ethics. [D; CSU]
*(**NOTE:** Real Estate License is accepted in lieu of completion of RE 101. Bring copy of license to first class meeting.)*

RE 104.
Real Estate Finance
3 units

Grade only
Recommended Preparation: *RE 101 or equivalent*
Lecture 3 hours
Offered: Fall
Practical understanding of the economics of financing, mathematics of real estate finance and appraisal for financing purposes. [D; CSU]
*(**NOTE:** Real Estate License is accepted in lieu of completion of RE 101. Bring copy of license to first class meeting.)*

RE 106.
Legal Aspects of Real Estate
3 units

Grade only
Prerequisite: *RE 101 or equivalent*
Recommended Preparation: ENGL 52 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent
Lecture 3 hours
Offered: Spring
California real estate law including the more complex aspects of ownership, use, and transferability of real estate. [D; CSU]
*(**NOTE:** Real Estate License is accepted in lieu of completion of RE 101. Bring copy of license to first class meeting.)*

RE 108.
Real Estate Economics
3 units

Grade only
Prerequisite: *RE 101 or equivalent*
Lecture 3 hours
Offered: Spring
Covers economic aspects of real estate and land use, the dynamic factors in the community and the country, which create real estate values. [D; CSU]

RE 110.
Real Estate Appraisal
3 units

Grade only
Recommended Preparation: *RE 101 or 108 or equivalent*
Lecture 3 hours
Offered: Fall
Principles and methods of appraisal as they may be used in listing or selling property. Establishing or interpreting appraisal information. [D; CSU]
*(**NOTE:** Real Estate License is accepted in lieu of completion of RE 101. Bring copy of license to first class meeting.)*

RE 114.
Property Management
3 units

Grade only
Recommended Preparation: *RE 101 or equivalent*
Lecture 3 hours
Offered: Spring
Introduction to the practice of property management including a study of the physical, social, financial, and legal aspects of operating rental properties. [D; CSU]
*(**NOTE:** Real Estate License is accepted in lieu of completion of RE 101. Bring copy of license to first class meeting.)*

RE 120.
Escrow Principles
3 units

Grade only
Recommended Preparation: *ENGL 52 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Spring
Principles and practices in handling escrow involving land titles. Study of forms used in the escrow departments of banks, title insurance companies, lending institutions, and independent escrow firms. Sample escrow instructions, grant deeds and notes, and other documents used in escrow. [D; CSU]

RE 295.
Selected Topics in Real Estate
1–3 units

Offered: Variable
Permits students to study relevant subjects within the field of real estate. The specific objectives, methods of instruction, and units of credit to be determined individually for projects proposed under this course description. (May be repeated for additional credit with new content.) [D; *CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

RE 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of real estate of particular interest to the student and not included in regular courses of the college. [D; CSU]

Recreation and Leisure Studies

School of Health, Exercise Science, and Athletics

■ Dean

Bruce H. Turner, M.A.
Office 1000J
619-482-6551

■ Faculty

Melanie Durkin, M.A.

■ Department Chair

Melanie Durkin, M.A.

General Description

Recreation and leisure studies focuses on the understanding of human beings to enhance the quality of their lives while maintaining the natural environment. This department explores the basic philosophical, historical, psychological, medical, and scientific foundations for the need of non work activities in daily human life. Study includes the nature and management of such recreational management and services. The word "recreation" means to review and restore after toil while the word "leisure" implies the freedom provided by the cessation of work duties and responsibilities.

Career Options

The following list is a sample of the many career options available for the recreation and leisure studies major. Some of these require an associate degree, most require a baccalaureate degree, and a few require a graduate-level degree: park manager, recreation specialist, recreation therapist, camp supervisor, resort manager, meeting or conference planner, park ranger, outdoor recreation specialist, marina manager, travel consultant planner, community center director, environmental interpreter, fitness club manager, and entertainment facility manager.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Recreation and Leisure Studies	*01370*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Arts Degree
Recreation and Leisure Studies

Transfer Preparation * (Major Code: 01370)

For students pursuing careers in recreation fields with federal, state and municipal governments; industrial firms; private, volunteer, and commercial agencies.

Additional emphasis courses are recommended for entry-level full-time and part-time seasonal positions in various career settings. Students are encouraged to pursue these entry-level opportunities early in their studies.

HLTH 110	*First Responder*	*2–3*
PSYC 101	*General Psychology*	*3*
REC 101	*Introduction Recreation and Leisure Studies*	*3*
REC 110	*Recreation Leadership*	*3*
REC 290–293	*Recreation Cooperative Work Experience I–IV*	*4*
SOC 101	*Introduction to Sociology*	*3*
	Total units	***18–19***

RECOMMENDED ELECTIVES FOR TRANSFER:

Outdoor Recreation: *BIOL 100, 101; GEOG 100; GEOL 100, 101.*
Recreation Therapy: *BIOL 260; BUS 212; SOC 110.*
Recreation Administration: *ACCT 101; BUS 140, 212; CIS 101; ECON 101.*

RECOMMENDED ELECTIVES FOR CAREER EMPHASIS:

Aquatic Recreation: *ES/A 235, 236; 1–2 units activity class selected from ES/A 223 or 231.*
Fitness and Health: *ES/A 109; ES/A 186 or 190; ES/A 111 or 115; ES/A 119ABCD or 227; ES/A 123 or 127; ES/A 101 or 215.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education though consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Recreation and Leisure Studies Courses

REC 101.
Introduction to Recreation Services and Leisure Studies
3 units

Grade only
Lecture 3 hours
Offered: Variable
Introductory survey course for students desiring to pursue a career in recreation services. Material covers historical and philosophical foundation of leisure activities, the socio-economic importance of leisure, and the development of recreation in the public, private, and commercial sectors of America. [D; CSU]

REC 110.
Recreation Leadership
3 units

Grade only
Lecture 3 hours
Offered: Variable
Study of the principles and practices of effective leadership in recreation and leisure settings with emphasis on program planning, implementation, and evaluation in social recreation activities for the various age groups: preschool, elementary school, teenagers, and seniors. [D; CSU]

REC 290–293.
Recreation Cooperative Work Experience I–IV
2–4 units

Credit/No Credit only
Limitation on Enrollment: *Declared Recreation major. Student must complete no less than seven units, including work experience, during each semester in order to receive credit*
Lecture 1 hour, 5–15 hours of work experience.
Offered: Variable
Places the student in a supervisory position to provide experience in working with and directing recreation personnel in a variety of programs. [D; CSU]

REC 295.
Selected Topics in Recreation
1–3 units

Offered: Variable
Permits students to study relevant topics within the field of recreation. The specific objectives, methods of instruction, and evaluation to be determined by the students and the instructor throughout the semester. (May be repeated for additional credit with new content.) [D; * CSU]

** Please refer to the class schedule for specific course description and transferability information.*

REC 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of recreation of particular interest to the student and not included in regular courses of the college. [D; CSU]

Sociology

School of Social Sciences and International Studies

■ Dean

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619-482-6582

■ Faculty

Elizabeth Ballesteros, M.A.
Faustino Escalera, Ph.D.
Robin Franck, Cand. Ph.D.
Felix Tuyay, M.A.

■ Department Chair

Robin Franck, Cand. Ph.D.

General Description

Sociology is the study of groups people build, the structure of human groups, and changes in their organization over time. As a social science, the department is the scientific study of human interaction both at the micro and macro level of society. Any topic related to how or why people treat each other in the ways they do is a legitimate study in sociology. Social work is related to sociology as it is concerned with improving the quality of life for individuals or groups. Both departments analyze human behavior in regard to serious social issues and circumstances such as racism, poverty, crime, psychology, health, politics, law, economics, and class inequality. Social work attempts to remedy the most basic needs.

Career Options

The following list is a sample of the many career options available for the sociology or social work major. A few of these require an associate degree, most require a baccalaureate degree, and some require a graduate-level degree: sociology-industrial sociologist, urban planner, high school or college instructor, criminologist, public opinion analyst, employment counselor, social worker, adoptions worker, social planner, child and family counselor, corrections counselor, and child protective counselor.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Sociology	*01900*
Social Work	*01890*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary for you to achieve your academic goal.

Associate in Arts Degree

Sociology

Transfer Preparation * (Major Code: 01900)

Designed to provide students with an understanding of these areas: social theory and methods of inquiry; social arrangements such as the family, education, politics, the class structure, the methods of social control; changes in social arrangements, social change, deviant behavior, and social problems. Sociology, like other social sciences departments, does not educate students in specialized skills. Sociology and other liberal arts majors stress the ability to observe, organize, and write clearly, as well as skills in the analysis of data and in collaborating with others.

SOC 101	*Introduction to Sociology*	*3*
SOC 110	*Contemporary Social Problems*	*3*
SOC 270	*Statistical Methods of Sociology*	*3*
Foreign Language		*10–15*
	Total units	***19–24***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Social Work

Transfer Preparation * (Major Code: 01890)

Prepares students to transfer in the major to a four-year college or university. Beginning study focuses on general comprehension of the needs, perspectives, and experiences of populations at risk in contemporary society. Coursework in biology, economics, health, psychology, and sociology are essential to having the knowledge and skills to make careful assessment of problems, to search for reasonable solutions, and to intervene at multiple levels to effect individual, group, or policy changes.

BIOL 100	*Principles of Biology*	*3*
BIOL 101	*Principles of Biology Laboratory*	*1*
ECON 100	*Contemporary Economic Problems*	*3*
HLTH 101	*Principles of Healthful Living*	*3*
PSYC 101	*General Psychology*	*3*
SOC 101	*Introduction to Sociology*	*3*
SOC 110	*Contemporary Social Problems*	*3*
SOC 135	*Sociology of the Family*	*3*
PSYC/SOC 270	*Statistical Methods of Psychology*	*3*
	Total units	***25***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

SOC 101.
Introduction to Sociology
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Introduction to concepts and generalizations about human group and individual behavior in an attempt to better understand interaction, social relationships, groups, and the reciprocal influences of society on individuals and individuals on society. [D; CSU; UC; CAN-SOC 2]

SOC 110.
Contemporary Social Problems
3 units

Recommended Preparation: *SOC 101 or equivalent; ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Examination and analysis, from the sociological perspective, of the organization and structure of society as being a major component in understanding particular human behavior patterns presently defined as problems. Exploration of the reciprocal relationships between individuals and groups in determining criteria for the existence of a problem and how, or if, it could be "solved," ameliorated, or substantially changed. [D; CSU; UC; CAN-SOC 4]

SOC 115.
Filipino-American Culture
3 units

Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
The roots of Filipino-American culture and role in American society today. Focus on social, political, and economic influences, as well as, problems and progress that affect Filipino-American society. Emphasis on family structure, social behavior, family life, language, education, and religion. (Same as ASIA 115.) [D; CSU; UC]

SOC 116.
Introduction to Social Psychology
3 units

Recommended Preparation: *ENGL 54 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Human behavior and personality development in a social context. Includes investigation of self-identity, conformity, aggression, attraction, affiliation, etc., with an emphasis on the interconnections of events within people and between people. (Same as PSYC 116.)
[D; CSU; UC]

SOC 135.
Sociology of the Family
3 units

Recommended Preparation: *ENGL 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Analysis and discussion of family lifestyles, functions, patterns, and public policies that influence differing realities of family experiences for its members and society in general. Ethnic, class, gender, and age differences in family organization will be considered. Current research on contemporary and historical family systems will be applied in viewing the family as an enduring social institution. [D; CSU; UC; CAN-FCS 12]

SOC 150.
Mexican and Latino Culture in the United States
3 units

Grade only
Recommended Preparation: *ENGL 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*
Lecture 3 hours
Offered: Variable
An examination of the direction of Mexican, Mexican-American, and Latino cultural development in the United States, to include the diffusion and inter-penetration of this culture into mainstream America. Emphasis on the intellectual foundations of Chicano culture. (Same as MAS 150.) [D; CSU; UC]

SOC 201A.
Practicum in Learning and Development I
3 units

Grade only
Lecture 3 hours
Offered: Variable
For students in sociology, psychology, child development, and teacher preparation. Students will be required to spend a minimum of two hours per week in a supervised after-school setting at one of the designated community field sites involving children. Additional time will be devoted to readings and class preparation, writing and transmitting clinical field notes, and writing a final paper on some aspect of the fieldwork experience as it relates to class lectures and readings.
(Same as PSYC 201A.) (PSYC/SOC 201A, 201B combined, maximum credit 6 units.)
[D; CSU; UC]

SOC 201B.
Practicum in Learning and Development II
3 units

Grade only
Prerequisite: *SOC/PSYC 201A or equivalent*
Lecture 3 hours
Offered: Variable
Advanced course for students in psychology, sociology, child development, and teacher preparation. Students will be required to spend a minimum of two hours per week in a supervised after-school setting at one of the designated community fields sites involving children. Additional time will be devoted to readings and class preparation, writing and transmitting clinical field notes, and writing a final paper on some aspect of the fieldwork experience as it relates to class lectures and readings. (Same as PSYC 201B.) (PSYC/SOC 201A, 201B combined, maximum credit 6 units.) [D; CSU; UC]

SOC 270.
Statistical Methods of Sociology
3 units

Prerequisite: *SOC/PSYC 101 or equivalent; MATH 65 or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Statistical methods of behavioral science including measures of central tendency, variability, correlation and regression, applications of the normal probability curve, statistical inference, analysis of variance, and chi square. (Same as PSYC 270.) [D; CSU; UC]

SOC 295.
Selected Topics in Sociology
1–3 units

Lecture 1–3 hours
Offered: Variable
A study of relevant topics within the field of sociology. [D; * CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

SOC 299.
Independent Study
1–3 units

Limitation on Enrollment: Eligibility for independent study. See page 26.
Offered: Variable
Individual study or research in some area of sociology of particular interest to the student and not included in regular courses of the college. [D; CSU; *UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Spanish

School of Languages and Humanities

■ Dean

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■ Faculty

Deana Alonso, M.A.
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Angelina Stuart, M.A.

■ Department Chair

Esther Alonso, M.A.

General Description

The study of any foreign or nonnative language encompasses the acquisition of a language with an understanding of the culture that produces the unique form of communication. Each discipline offered explores the fundamentals of oral and written communication such as reading, writing, speaking, and listening while introducing the literature and cultural traditions of the language. Foreign language programs are a cultural resource to the college at large and community in general.

Career Options

The following list is a sample of the many career options available for the foreign language major. A few of these require an associate degree, most require a baccalaureate degree, and some require a graduate-level degree: high school or college instructor, interpreter, translator, foreign service officer, research assistant, international business person, airline agent, immigration officer, customs official, television/radio or newspaper correspondent, business administrator, business manager, business owner, airline attendant, cruise ship officer, public relations specialist, and banking representative.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Spanish	*01460*
Spanish for Bilinguals	*A1490*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Arts Degree

Spanish

Transfer Preparation * (Major Code: 01460)

Foreign language courses are intended to provide required instruction for students majoring in foreign language; to meet the foreign language competency for graduation required by many colleges and universities (e.g., San Diego State University); to afford credit in the Humanities for students seeking to meet the General Education transfer breadth requirements; and to provide instruction for the student seeking foreign language skills for personal development.

FIRST SEMESTER		
SPAN 120	*Elementary Spanish I (5)*	
	or	*5–6*
SPAN 120A	*Introduction to Elementary Spanish (3)*	
SPAN 120B	*Continuing Elementary Spanish (3)*	
SECOND SEMESTER		
SPAN 130	*Elementary Spanish II*	*5*
THIRD SEMESTER		
SPAN 220	*Intermediate Spanish I*	*5*
FOURTH SEMESTER		
SPAN 225	*Inter. Conversation and Writing on Spanish Culture*	*3*
SPAN 226	*Inter. Conversation and Writing on Latin American Culture*	*3*
SPAN 230	*Intermediate Spanish II*	*5*
	Total units	***26–27***

Recommended Electives: *SPAN 125A, 125B, 125C, 127, 205.*

NOTE: *The following courses are recommended after SPAN 120: SPAN 125A, 125B, and 125C.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Spanish for Bilinguals

Transfer Preparation * (Major Code: A1490)

Designed for students who have learned Spanish at home. Foreign language courses are intended to provide required instruction for students majoring in foreign language; to meet the foreign language competency for graduation required by many colleges and universities; to afford credit in the humanities for students seeking to meet the General Education transfer breadth requirements; and to provide instruction for the student seeking enhancement and development of their first language for professional growth.

FIRST SEMESTER		
SPAN 215	*Spanish for Bilinguals I*	*5*
SECOND SEMESTER		
SPAN 216	*Spanish for Bilinguals II*	*5*
THIRD SEMESTER		
SPAN 221	*Introduction to Literature for Bilinguals*	*5*
SPAN 225	*Intermediate Conversation and Writing on Spanish Culture*	
	or	*3*
SPAN 226	*Intermediate Conversation and Writing on Latin American Culture*	
FOURTH SEMESTER		
SPAN 230	*Intermediate Spanish II*	*5*
SPAN 225	*Intermediate Conversation and Writing on Spanish Culture*	
	or	*3*
SPAN 226	*Intermediate Conversation and Writing on Latin American Culture*	
	Total units	***26***

Recommended Electives: *SPAN 125A, 125B, 125C, 127, 205.*

NOTE: *The following courses are recommended after SPAN 215: SPAN 125A, 125B, and 125C.*

NOTE: *SDSU and other transfer institutions will not grant credit for graduation for any lower-division courses to students who have graduated from a high school in a Spanish-speaking country.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Spanish Courses

SPAN 120.
Elementary Spanish I
5 units

Lecture 5 hours
Offered: Fall, Spring
Designed to enable beginning students to carry out basic interpersonal communication and the structures and vocabulary necessary to carry out simple conversation. Introduction to Spanish-speakers' world views, behaviors, attitudes, and contributions to the world. Designed for students with very little or no knowledge of Spanish. (Not open to students who already speak Spanish fluently.) Equivalent to two years of high school Spanish. [D; CSU; UC; CAN-SPAN 2; SPAN 120 + SPAN 130 = CAN SPAN SEQ A]

SPAN 120A.
Introduction to Elementary Spanish
3 units

Lecture 3 hours
Offered: Fall, Spring
Designed to enable students to acquire structure and vocabulary necessary for basic interpersonal communication and simple conversation. Introduction to Spanish-speakers' world views, behaviors, and attitudes. Designed for students with very little or no knowledge of Spanish. (Not open to students with credit in SPAN 120.) [D; CSU; UC]

SPAN 120B.
Continuation of Elementary Spanish
3 units

Prerequisite: *SPAN 120A or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Continuation of SPAN 120A, equivalent to second half of SPAN 120. Designed to further enable beginning students to communicate in basic Spanish. Course also serves as an introduction to Spanish-speakers' world views, behaviors, and attitudes. Designed for students who have completed SPAN 120A. (Not open to students with credit in SPAN 120.) [D; CSU; UC]

SPAN 125A.
Spanish Reading Strategies and Vocabulary I
1 unit

Credit/No Credit only
Prerequisite: *SPAN 120 or equivalent*
Laboratory 3 hours
Offered: Fall, Spring
First in a series designed for native or non-native Spanish language students to improve reading, comprehension, and vocabulary skills in preparation for continued study of Spanish. [D; CSU]

SPAN 125B.
Spanish Reading Strategies and Vocabulary II
1 unit

Credit/No Credit only
Prerequisite: *SPAN 125A or equivalent*
Laboratory 3 hours
Offered: Variable
Second in a series specially designed for native or non-native Spanish language students to improve reading, comprehension, and vocabulary skills in preparation for continued study of Spanish at an intermediate level. [D; CSU]

SPAN 125C.
Spanish Reading Strategies and Vocabulary III
1 unit

Credit/No Credit only
Prerequisite: *SPAN 125B or equivalent*
Laboratory 3 hours
Offered: Variable
Third in a series designed for native or non-native students who wish to improve their reading, comprehension, and vocabulary skills in preparation for advanced study of Spanish. [D; CSU]

SPAN 127.
Beginning Conversation and Writing on Spanish Culture
3 units

Recommended Preparation: *SPAN 120 or equivalent*
Lecture 3 hours
Offered: Variable
Emphasis on the spoken language with some writing practice and the development of practical vocabulary and useful phrases. Conversation at the beginning level covering historical, social and cultural topics dealing with the Iberian experience. Class will be conducted in both English and Spanish. [D; CSU]

SPAN 130.
Elementary Spanish II
5 units

Prerequisite: *SPAN 120 or equivalent*
Lecture 5 hours
Offered: Fall, Spring
Continuation of SPAN 120. Designed to further students' knowledge and understanding of the Spanish language. Structures and vocabulary necessary to converse about present and past experiences. Also serves to further the understanding and knowledge of the Spanish-speakers' world views, behaviors, attitudes, and contributions to the world. (Not open to students who already speak Spanish fluently.) Equivalent to three years high school Spanish. [D; CSU; UC; CAN-SPAN 4; SPAN 120 + SPAN 130 = CAN SPAN SEQ A]

SPAN 205.
Intermediate Conversation and Writing on Baja California
3 units

Prerequisite: *SPAN 130 or equivalent*
Lecture 3 hours
Offered: Variable
This course will use the culture of Baja California, México, as a vehicle to develop intermediate oral and written communication skills in Spanish. Class will be conducted in Spanish. Students will participate in a minimum of three field trips. [D; CSU]

SPAN 215.
Spanish for Bilinguals I
5 units

Lecture 5 hours
Offered: Variable
Designed to help bilingual students who are fluent in spoken informal Spanish but who need to improve writing, reading, and grammar skills. Emphasis on acquiring formal oral Spanish skills, a greater appreciation of Hispanic culture, and literature. Introduction to technology in Spanish language acquisition. In addition to classroom time, students will be required to spend one hour every other week in the Language Acquisition Center. (Not open to students with credit in SPAN 121.) [D; CSU; UC]

SPAN 216.
Spanish for Bilinguals II
5 units

Prerequisite: *SPAN 215 or equivalent*
Lecture 5 hours
Offered: Variable
Continuation of SPAN 215. Fluent Spanish speakers refine formal oral, writing, and reading skills. Extensive reading in Hispanic literature and culture with emphasis on tasks reflecting real life usage of formal Spanish. Further practice with the use of technology in Spanish language acquisition. In addition to classroom time, students will be required to spend one hour every other week in the Language Acquisition Center. (Not open to students with credit in SPAN 131.) [D; CSU; UC]

SPAN 220.
Intermediate Spanish I
5 units

Prerequisite: *SPAN 130 or equivalent*
Lecture 5 hours
Offered: Fall, Spring
First semester of second-year Spanish. Extensive review of all structures learned in the first year. Integrated skills approach to intermediate Spanish. The primary objective of the program is to offer students an opportunity to acquire communicative skills while developing an awareness and appreciation of Hispanic cultures. Equivalent to four years high school Spanish. [D; CSU; UC; CAN-SPAN 8; SPAN 220 + SPAN 230 = CAN SPAN SEQ B]

SPAN 221.
Introduction to Literature for Bilinguals
5 units

Prerequisite: *SPAN 216 or equivalent*
Lecture 5 hours
Offered: Fall, Spring
Designed specifically for the second year of study for bilingual students of Spanish. Introductory study of Latin American and Peninsular literature for the intermediate native speaker. Emphasis on reading, writing and analysis of fiction, drama, and poetry to include the utilization of current technology in the research of class topics. [D; CSU; UC]

SPAN 225.
Intermediate Conversation and Writing on Spanish Culture
3 units

Prerequisite: *SPAN 220 or equivalent*
Lecture 3 hours
Offered: Fall
Class discussions will be conducted in Spanish. Designed for the intermediate student of Spanish with emphasis on the spoken language with some writing practice and the development of practical vocabulary and useful phrases. Conversations at the intermediate level will cover assigned social, cultural, or literary topics dealing with Spain and the Iberian experience. [D; CSU; UC]

SPAN 226.
Intermediate Conversation and Writing on Latin American Culture
3 units

Prerequisite: *SPAN 220 or equivalent*
Lecture 3 hours
Offered: Spring
Class discussions will be conducted in Spanish. Designed for the intermediate student of Spanish with emphasis on the spoken language with some writing practice and the development of practical vocabulary and useful phrases. Conversations at the intermediate level will cover assigned social, cultural, or literary topics dealing with the Latin-American experience. [D; CSU; UC]

SPAN 230.
Intermediate Spanish II
5 units

Prerequisite: *SPAN 220 or 221 or equivalent*
Lecture 5 hours
Offered: Fall
Continuation of SPAN 220. Designed to expand students' communicative functions from familiar to unfamiliar topics in the four basic skills (reading, writing, speaking, and listening comprehension) and to further review complex structures supplemented by short stories representing Hispanic culture.
[D; CSU; UC; CAN-SPAN 10;
SPAN 220 + SPAN 230 = CAN SPAN SEQ B]

SPAN 295.
Selected Topics in Spanish
1–3 units

Offered: Variable
Relevant subjects within the field of Spanish. The specific objectives, methods of instruction, and units of credit to be determined individually for projects proposed under this course description. (May be repeated for additional credit with new content.) [D; *CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

SPAN 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of Spanish of particular interest to the student and not included in regular courses of the college. [D; CSU; *UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Telemedia

School of Arts and Communication

■ Interim Dean

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■ Faculty

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Robert Schneider, M.A.
Mark Sisson, M.F.A.

■ Department Chair

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General Description

Telemedia is the study of television, video, film, and related new media. It combines elements of the visual and performing arts with writing, speech, engineering, computer science, theory, history, technology, criticism, literature, law, psychology, sociology, and management in the production of visual and aural communications. Telemedia explores concepts and implications of the information age while focusing on the means of its production.

Career Options

The following list is a sample of the many career options available for the telemedia major. Most of these require a certificate or associate degree, some require a baccalaureate degree, and a few require a graduate-level degree: producer, director, art director, advertising agent, broadcaster, special effects technician, camera operator, studio manager, actor, script writer, grip, high school or college instructor, performance artist, computer graphics artist, animator, editor, and communication manager.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Telemedia	*01280*
Associate in Science Degree: Career/Technical	
Telemedia Production Specialist	*02530*
Telemedia Technology	*02535*
Certificates of Achievement	
Telemedia Production Specialist—Basic	*02531*
Telemedia Production Specialist—Advanced	*02532*
Telemedia Technology	*02536*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Arts Degree
Telemedia

Transfer Preparation * (Major Code: 01280)

Southwestern College offers most of the lower-division courses that are required by colleges and universities offering a four-year curriculum in telecommunications. Enrollment in the courses will develop the student's competency and understanding in audio, video, television, and film. It will satisfy the lower-division course requirements for the B.A. in television, film, and new media production at SDSU.

ART 121	*Basic Photography*	*3*
ART 159	*Graphic Design—Layout*	*3*
TELE 110	*Writing for the Media*	*3*
TELE 112	*Culture and the Media*	
	or	*3*
TELE 113	*History of Film as Art*	
	or	
TELE 114/ COMM 185	*Cinema as a Form of Expression and Communication*	
TELE/ART 131	*Introduction to Video and Film Production*	*3*
TELE/TA 150	*Technical Design and Production*	*3*
TELE/MUS 151	*Recording Techniques*	*3*
TELE 180	*Introduction to Electronic Media*	*3*
TELE 183	*Video Studio Production*	*3*
	Total units	***27***

Recommended Electives: *TELE 115, 116, 132, 135, 233, 234, 242; JOUR 101, 151.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Associate in Science Degree

Telemedia Production Specialist

Career/Technical (Major Code: 02530)

Prepares students to pursue careers as telemedia specialists and media production consultants in telecommunications, public relations, industry, education, government, and medical institutions. Students will learn needs analysis, scripting, graphics, studio and field production, and editing as applied to the production of media, such as instructional, documentary, and broadcast

ART 121	*Basic Photography (3)*	
	or	*3–4*
TELE 100	*Fundamentals of Film/Video Cameras and Recorders (2)*	
TELE 101	*Fundamentals of Film and Video Editing (2)*	
TELE 112	*Culture and the Media*	
	or	*3*
TELE 113	*History of Film as Art*	
	or	
TELE 114/ COMM 185	*Cinema as a Form of Expression and Communication*	
TELE 180	*Introduction to Electronic Media*	
	or	*3*
ELEC 100	*Introduction to Electronics*	
TELE/ART 128	*Multimedia Photography*	
	or	*3*
ART 159	*Graphic Design—Layout*	
TELE 110	*Writing for the Media*	*3*
TELE/ART 131	*Introduction to Video and Film Production*	*3*
TELE/MUS 151	*Recording Techniques*	*3*
TELE 102	*Computer Fundamentals For Video and Film (2)*	
TELE 103	*Fundamentals of Animation (2)*	
	or	*3–4*
TELE 163	*Video Computer Graphics (3)*	
TELE/TA 150	*Technical Design and Production*	*3*
TELE 155	*Introduction to Video Engineering*	*3*
TELE 183	*Video Studio Production*	*3*
TELE 290–293	*Educational Media Work Experience I–IV*	*2–4*
	Total units	***35–39***

Recommended Electives: *BUS 174; ELEC 10A, 10B, 14, 162; TELE 114, 115, 116, 132, 233, 234, 242; TELE 104, 105, 106, 107; BUS 147, 183, 210; HLTH 101.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Telemedia Technology

Career/Technical (Major Code: 02535)

Prepares students for technical careers in television and related media. Some typical job titles are technical operator, maintenance engineer, field service engineer, and television equipment operator.

Well-equipped television studios and electronics laboratories facilities are provided. Students learn theory, application, practical operation, tuning, and testing skills.

ELEC 100	*Introduction to Electronics (3)*	
	or	*3–4*
TELE 180	*Introduction to Electronic Media (3)*	
	or	
TELE 100	*Fundamentals of Film and Video Cameras and Recorders (2)*	
TELE 101	*Fundamentals of Film and Video Editing (2)*	
ELEC 111	*DC Circuit Principles*	*2*
ELEC 113	*DC Circuit Analysis and Computer Simulation*	*2*
ELEC 116	*AC Circuit Principles*	*2*
ELEC 122	*Solid State Principles*	*2*
ELEC 131	*Digital Electronics Principles*	*2*
ELEC 138	*Digital Circuits and IC Families*	*2*
ELEC 162	*Electronics Fabrication*	*1*
ELEC 226	*Diode and Transistor Circuits Theory and Troubleshooting*	*2*
ELEC 271	*Introduction to Electronics Communications*	*2*
ELEC 272	*Communications Equipment Theory, Operation, and Maintenance*	*2*
ENGL 105	*Technical Writing*	*3*
TELE/ART 131	*Video and Film Production*	*3*
TELE 155	*Introduction to Video Engineering*	*3*
TELE 183	*Video Studio Production*	*3*
TELE 290–293	*Educational Media Work Experience I–IV*	*2–4*
	Total units	***36–39***

Recommended Electives: *CIS 101, 111; ELEC 10A, 10B, 14; TELE 100, 128, 150, 151.*

Recommended General Education Courses: *PHYS 110.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Certificates of Achievement

Telemedia Production Specialist—Basic

Career/Technical (Major Code: 02531)

ART 121	*Basic Photography (3)*	
	or	*3–4*
TELE 100	*Fundamentals of Film/Video Cameras and Recorders (2)*	
TELE 101	*Fundamentals of Film and Video Editing (2)*	
TELE 112	*Culture and the Media*	
	or	*3*
TELE 113	*History of Film as Art*	
	or	
TELE 114/ COMM 185	*Cinema as a Form of Expression and Communication*	
TELE 180	*Introduction to Electronic Media*	
	or	*3*
ELEC 100	*Introduction to Electronics*	
TELE 110	*Writing for the Media*	*3*
TELE 102	*Computer Fundamentals For Video and Film (2)*	
TELE 103	*Fundamentals of Animation (2)*	
	or	*3–4*
TELE 163	*Video Computer Graphics (3)*	
	Total units	***15–17***

Telemedia Production Specialist—Advanced

Career/Technical (Major Code: 02532)

TELE 128	*Multimedia Photography*	
	or	*3*
ART 128	*Multimedia Photography*	
	or	
ART 159	*Graphic Design-Layout*	
ART 131	*Introduction to Video and Film Production*	
	or	*3*
TELE 151	*Recording Techniques*	
	or	
MUS 151	*Recording Techniques*	
TELE 150	*Technical Design and Production*	
	or	*3*
TA 150	*Technical Design and Production*	
TELE 155	*Introduction to Video Engineering (3)*	
	or	*3–4*
TELE 183	*Video Studio Production (3)*	
	or	
TELE 290–293	*Educational Media Work Experience I–IV (2–4)*	
	Total units	***12–13***

Telemedia Technology

Career/Technical (Major Code: 02536)

ELEC 100	*Introduction to Electronics (3)*	
	or	*3–4*
TELE 180	*Introduction to Electronic Media (3)*	
	or	
TELE 100	*Fundamentals of Film and Video Cameras and Recorders (2)*	
TELE 101	*Fundamentals of Film and Video Editing (2)*	
ELEC 111	*DC Circuit Principles*	*2*
ELEC 113	*DC Circuit Analysis and Computer Simulation*	*2*
ELEC 116	*AC Circuit Principles*	*2*
ELEC 122	*Solid State Principles*	*2*
ELEC 131	*Digital Electronics Principles*	*2*
ELEC 138	*Digital Circuits and IC Families*	*2*
ELEC 162	*Electronics Fabrication*	*1*
ELEC 226	*Diode and Transistor Circuits Theory and Troubleshooting*	*2*
ELEC 271	*Introduction to Electronics Communications*	*2*
ELEC 272	*Communications Equipment Theory, Operation, and Maintenance*	*2*
ENGL 105	*Technical Writing*	*3*
TELE/ART 131	*Video and Film Production*	*3*
TELE 155	*Introduction to Video Engineering*	*3*
TELE 183	*Video Studio Production*	*3*
TELE 290–293	*Educational Media Work Experience I–IV*	*2–4*
	Total units	***36–39***

Telemedia Courses

TELE 100.
Fundamentals of Film and Video Cameras and Recorders
2 units

Grade only
Lecture 2 hours
Offered: Fall, Spring
Fundamental knowledge to operate film and video cameras and associated recorders. Emphasis on equipment descriptions, operational procedures, and practical demonstrations to give the student sound basis for operation of the equipment. [D; CSU]

TELE 101.
Fundamentals of Film and Video Editing
2 units

Grade only
Lecture 2 hours
Offered: Variable
Fundamental principles and mechanics of editing film and video with audio and graphics. Emphasis on practical application and operation of equipment. [D; CSU]

TELE 102.
Computer Fundamentals for Video and Film
2 units

Grade only
Lecture 2 hours
Offered: Variable
Fee: $10. Introduces the student to computer applications and operation in video and film. Includes the use of word processing, titling, database, and spreadsheet programs. [D; CSU]

TELE 103.
Fundamentals of Animation
2 units

Grade only
Lecture 2 hours
Offered: Variable
Fundamental principles of computer and film animation. Emphasis on practical application and operation of computer equipment. [D; CSU]

TELE 104.
Fundamentals of Lighting
2 units

Grade only
Lecture 2 hours
Offered: Variable
Fundamental principles of lighting and lighting equipment operation and setup. Emphasis on equipment descriptions, operational procedures, and practical demonstrations to give the student a sound basis for equipment setups. [D; CSU]

TELE 105.
Fundamentals of Audio
2 units

Grade only
Lecture 2 hours
Offered: Fall
Introduction to audio recording and playback principles and systems, with an emphasis on practical applications in various contexts, including telemedia, music, and audiovisual presentations. [D; CSU]

TELE 106.
Audio/Video Setups and Troubleshooting
1 unit

Grade only
Recommended Preparation: *TELE 100, 104, and 105, or equivalent*
Laboratory 3 hours
Offered: Spring
Application and development of audio/video systems design, implementation, and operation. Emphasis on practical experience within a simulated work environment. [D; CSU]

TELE 107.
Audio and Video Applications
1 unit

Grade only
Laboratory 3 hours
Offered: Variable
Field trips to a variety of media businesses and agencies that are potential employers. Presentations on organization and function of the business, as well as job requirements and responsibilities. [D; CSU]

TELE 110.
Writing for the Media
3 units

Grade only
Prerequisite: *ENGL 105 or 114 or the equivalent skill level as determined by the Southwestern College English Assessment or equivalent*
Lecture 3 hours
Offered: Fall, Spring
Theory and practice in writing materials for oral presentation. Problems of timing and pacing, conversational expression, and word color used in the news media. Includes writing assignments in audio, television, film, and nonbroadcast media. [D; CSU]

TELE 112.
Culture and the Media
3 units

Lecture 3 hours
Offered: Variable
Survey of the development of electronic media with emphasis on the communicative, aesthetic and technical history and the influence of media on society. (Same as HUM 112.) [D; CSU; UC]

TELE 113.
History of Film as Art
3 units

Lecture 3 hours
Offered: Variable
Appreciative survey of cinema with emphasis on the chronological development of styles and techniques within the medium. Aesthetic and historical influences on cinema, as well as the effects of cinema upon society.
(Same as ART 130.) [D; CSU; UC]

TELE 114.
Cinema as a Form of Expression and Communication
3 units

Lecture 3 hours
Offered: Variable
Introduction to the appreciation of film as a medium of expression and communication. Selected domestic and foreign films (screen, video, television) will be viewed and analyzed for methods, techniques, and objectives creating the films' messages to increase cinematic literacy and understanding of this uniquely powerful, communication medium.
(Same as COMM 185.) [D; CSU; UC]

TELE 115.
Acting for Television and Film
3 units

Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Study of the basic techniques of acting on camera. Includes exercises in sense memory and effective memory, action and relaxation, will, and concentration. Emphasis on improvisational techniques, subjective camera monologues, auditions, and scene performance.
(Same as TA 115.) [D; CSU; UC]

TELE 116.
Media Performance
3 units

Grade only
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Performance training including newscasting, interviewing, speaking for radio, television, and film with the study of articulation, interpretation, and communication. Emphasis on practical skill development and criticism of media performance. [D; CSU]

TELE 128.
Multimedia Photography
3 units

Recommended Preparation: *ART 121 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Study of photography in multimedia with emphasis on the history, design production, and evaluation of multi-image and sound presentation. Includes story boarding, graphics, and basic sound recording techniques.
(Same as ART 128.) [D; CSU]

TELE 131.
Introduction to Video and Film Production
3 units

Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Basic instruction in camera operation, editing and sound production techniques. Introduction to significant examples of filmmaking and video as a creative stimulus and a basis for the development of critical judgment.
(Same as ART 131.) [D; CSU; UC]

TELE 132.
Intermediate Video and Film Production
3 units

Prerequisite: *TELE/ART 131 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Use of film and video tape as a means of creative expression with emphasis on advanced photographic sound recording and editing techniques. Scriptwriting, directing, producing, and acting will be included. (Same as ART 132.) [D; CSU; UC]

TELE 135.
Experiments in Media
3 units

Prerequisite: *ART 121 or TELE/ART 131 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Explores the nontraditional utilization of media technology and theory in the production of creative work. Interdisciplinary experimentation will be encouraged. [D; CSU]

TELE 150.
Technical Design and Production
3 units

Lecture 2 hours, laboratory 3 hours
Offered: Fall, Spring
Introduction to staging. Includes the fundamentals of set design and graphics, theory and practice of construction, painting, scene shifting, basic lighting for stage, television, and film. Practical assignments in technical and managerial phases of college productions.
(Same as TA 150.) [D; CSU; UC]

TELE 151.
Recording Techniques
3 units

Grade only
Lecture 2 hours, laboratory 3 hours
Offered: Fall, Spring
Introduction to audio recording, with an emphasis on current techniques, equipment, and practices. Areas of focus include sound physics, introductory psychoacoustics, microphones, mixers, analog audio recording, multitrack recording and mixing, and signal processing.
(Same as MUS 151.) [D; CSU]

TELE 152.
Lighting and Sound Techniques
3 units

Lecture 2 hours, laboratory 3 hours
Offered: Fall, Spring
Theory and practice of lighting and sound techniques for stage, television, and film. Fundamentals of design, equipment setup, and operation. Practical experience in the lighting and sound crews of college productions.
(Same as TA 152.) [D; CSU; UC]

TELE 153.
Sound Reinforcement
3 units

Grade only
Lecture 2 hours, laboratory 3 hours
Offered: Variable
Basics of sound reinforcement including theory and application, sound equipment and systems, and developing system designs. Emphasis on matching equipment to the functional requirements of reinforcement.
(Same as TA 153.) [D; CSU]

TELE 155.
Introduction to Video Engineering
3 units

Grade only
Lecture 3 hours
Offered: Variable
Technical fundamentals of monochrome and color television. Introduction to signal processing and the functioning of cameras, monitors, VCRs, TBCs, waveform and vectorscope, and other video equipment. Basic troubleshooting and equipment maintenance.
[D; CSU]

TELE 161.
Graphic Design—Draw
3 units

Grade only
Prerequisite: *ART 159 or equivalent*
Recommended Preparation: *ART 100 or 101 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Application of basic design principles, skills, and concepts related to the combination of words and images in graphic communications.
(Same as ART 161.) [D; CSU]

TELE 163.
Video Computer Graphics
3 units

Recommended Preparation: *TELE/ART 131 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Basic instruction in design and production of graphics for video includes the use of paint, titling and animation techniques of character generators and computer graphic systems.
[D; CSU]

TELE 180.
Introduction to Electronic Media
3 units

Lecture 3 hours
Offered: Fall, Spring
Survey of the world of broadcasting including basic concepts of the nature of radio energy, broadcast channels, storage, distribution and delivery systems. Survey of the origins, growth, business practices, social control, and effects of broadcasting in the United States. Introduction to non-commercial and non-broadcast systems.
(Same as COMM 180.) [D; CSU]

TELE 183.
Video Studio Production
3 units

Grade only
Recommended Preparation: *TELE/ART 131 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Introduction to video programming and production. Theory and practice of camera, lighting, audio, recording, editing and special effects techniques. Practical experience in the use of control room, studio, and auxiliary equipment in the production of programs. [D; CSU]

TELE 190.
Media Laboratory
1 unit

Recommended Preparation: *TELE/ART 131 or equivalent*
Laboratory 3 hours
Offered: Variable
Development of presentation materials for a media portfolio. Special projects and theme work in telemedia. Emphasis on technical and aesthetic procedures, development, and evaluation. [D; CSU]

TELE 208.
Introduction to Dramatic Scriptwriting
3 units

Lecture 3 hours
Offered: Variable
History, theory, and practice of dramatic writing for television, radio, film, and theatre. Particular emphasis on character development, plotting, and dialogue creation. Addresses style, timing, and adaptation. (Same as TA 108.) [D; CSU]

TELE 233.
Film Production
3 units

Recommended Preparation: *TELE/ART 131 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Theoretical knowledge and practical application of production skills extended through the detailed study of film stock, lighting, sound, film editing, and processing. Writing, producing, and editing of a short film is required of each student. [D; CSU]

TELE 234.
Electronic Field Production
3 units

Recommended Preparation: *TELE/ART 131 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Technical and aesthetic aspects of video field production including videotape recording and editing lighting and sound for remote productions. Student is required to complete program preplanning, production, and postproduction for a video project. [D; CSU]

TELE 242.
Television and Film Directing
3 units

Recommended Preparation: *TELE/ART 131 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Development of directing skills in a full range of production types. Emphasis on writing, visualization, production techniques for film style, and multiple camera directing. (Same as TA 242.) [D; CSU; UC]

TELE 283.
Video Studio Production II
3 units

Grade only
Prerequisite: *TELE 183 or TELE/ART 131 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Multi-camera advanced video studio production. Program design and development, script writing, directing and producing for live multi-camera studio production, and production planning for multi-camera shoots. Review basic production theories and practical use of switcher, studio cameras, studio lighting, sound recording, special effects, and graphic design. Practical experience in all control room and studio production equipment. (Formerly TELE 295B.) [D; CSU]

TELE 290–293.
Educational Media Work Experience I–IV
2–4 units

Grade only
Recommended Preparation: *TELE 110, 183, or TELE 131, or equivalent*
Limitation on Enrollment: *Declared Telemedia major. Students must complete no less than seven units, including work experience, during each semester in order to receive credit.*
Lecture 1 hour, laboratory 5–15 hours
Offered: Variable
Practical application of media tools and techniques in work experience projects. Students will work with college instructors on a producer-client basis to develop and produce instructional media materials. [D; CSU]

TELE 295.
Selected Topics in Telemedia
1–3 units

Lecture variable; laboratory variable
Offered: Variable
Relevant topics within the field. The specific objectives and methods of instruction to be determined individually for each course offered under this course designation. [D; *CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

TELE 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of telemedia of particular interest to the student and not included in regular courses of the college. [D; CSU; *UC]

* *UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Theatre Arts

School of Arts and Communication

■ Interim Dean

Donna Arnold
Office 702B
619-482-6372

■ Faculty

Carla Kirkwood, M.F.A.
Gary Larson, M.F.A.

■ Department Chair

Teresa Russell, D.M.A.

General Description

Theatre arts is the study of acting, technical theatre, and dramatic literature. Drama is an ancient art form used by such civilizations as the Greeks to teach, inform, entertain, and bring the community together in positive environment. The word drama means a composition in verse, or prose intended to portray life, or a character, or a story through action and dialogue that is designed for theatrical performance. This department explores the history, theories, dramatic modes, techniques, practices, and technical aspects of production.

Career Options

The following list is a sample of the many career options available for the theatre arts major. A few require an associate degree, most require a baccalaureate degree, and some require a graduate-level degree: actor, director, producer, public relations specialist, advertising personality, theatre technician, stage designer, choreographer, makeup artist, costume designer, high school or college instructor, theatre manager, set designer, scriptwriter, lighting specialist, construction crew member, and community theatre administrator.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Theatre Arts (Drama)	*01220*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Science Degree

Theatre Arts (Drama)

Transfer Preparation * (Major Code: 01220)

Drama encompasses numerous skills that will benefit the student in relation to the social context. The student of dramatic arts exercises imagination and observation while developing sensitivity, insight, and the ability to articulate and confidently present his or her ideas to an audience. The theatre arts major is encouraged to develop a sound understanding of theory and its practical applications in voice and diction, mime and physical agility, character study and improvisation as well as the technical aspects of lighting, set and costume design, make up, management and directing. Theatre arts graduates will be prepared to transfer to a college or university for further training, to seek entry-level jobs in the technical theatre, or to utilize their acting skills in amateur, community or professional theatre, film or television.

TA 100	*Survey of Drama*	*3*
TA 101	*Introduction to the Theatre*	*3*
TA 110	*Elementary Acting I*	*3*
TA 111	*Elementary Acting II*	*3*
TA 117	*Pantomime and Stage Movement I*	*3*
TA 150	*Technical Design and Production*	*3*
TA 151	*Theatre Makeup and Costume Construction*	*3*
SELECT 6–8 UNITS FROM THE FOLLOWING:		**6–8**
TA 120	*Theatre Workshop—Perf. I (1.5–2)*	
TA 121	*Theatre Workshop—Perf. II (1.5–2)*	
TA 122	*Theatre Workshop—Perf. III (1.5–2)*	
TA 123	*Theatre Workshop—Perf. IV (1.5–2)*	
TA 160	*Theatre Workshop—Technical Crews I (1.5–2)*	
TA 161	*Theatre Workshop—Technical Crews II (1.5–2)*	
TA 162	*Theatre Workshop—Management and Supervision I (1.5–2)*	
TA 163	*Theatre Workshop-Management and Supervision II (1.5–2)*	
	Total units	***27–29***

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Theatre Arts Courses

TA 100.
Survey of Drama
3 units

Lecture 3 hours
Offered: Variable
Survey of dramatic history and literature including Classical, Medieval, Renaissance, Restoration, Neoclassical, Romantic, realistic, and modern plays. [D; CSU; UC]

TA 101.
Introduction to the Theatre
3 units

Lecture 3 hours
Offered: Fall, Spring
Evaluation of the theatre experience, including the study of analytical tools of drama to provide the student with insight into the theatrical imaginative process. Study of the theatre as it relates to human existence and the real world. Attendance at selected theatrical events. This is a nontechnical course for the general student. [D; CSU; UC]

TA 105.
Survey of Hispanic-American Theatre
3 units

Lecture 3 hours
Offered: Variable
Study and analysis of major Hispanic-American theatrical movements from early Spanish religious Colonial Drama of the Southwest to the contemporary Hispanic-American theatre movement. Includes theatre literature, playwrights, performing artists with analysis of the contribution of the Mexican-American, Mainland Puerto Ricans, Latino-Nuyoricum, Chicano, and Cuban Americans. [D; CSU; UC]

TA 106.
Introduction to Musical Theatre
3 units

Lecture 3 hours
Offered: Variable
Survey of the historical development of America musical theatre from nineteenth century extravaganzas through vaudeville, burlesque, and the modern musical. Optional performance opportunity. [D; CSU]

TA 108.
Introduction to Dramatic Scriptwriting
3 units

Lecture 3 hours
Offered: Variable
History, theory, and practice of dramatic writing for television, radio, film, and theatre. Particular emphasis on character development, plotting, and dialogue creation. Addresses style, timing, and adaptation. (Same as TELE 208.) [D; CSU]

TA 110.
Elementary Acting I
3 units

Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Fundamental principles of acting and the development of physical and vocal self-expression in every day communication and character interpretation. Emphasis on classical and contemporary character techniques in theatrical history. [D; CSU; UC; CAN-DRAM 8]

TA 111.
Elementary Acting II
3 units

Recommended Preparation: *TA 110 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Principles of acting and the development of physical and vocal self-expression in every day communication and character interpretation on an advanced level. Emphasis on classical and contemporary character techniques in theatrical history. [D; CSU; UC]

TA 113.
Voice and Articulation in Performance
3 units

Lecture 2 hour, laboratory 4 hours
Offered: Variable
Designed to provide the beginning student with a knowledge of the basic skills in vocal production. Exercises and drills to improve the quality, flexibility, and effectiveness of the stage speaking voice will be employed. [D; CSU; UC]

TA 115.
Acting for Television and Film
3 units

Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring
Basic techniques of acting on camera. Includes the theory of technique and exercises in sense memory and effective memory, action and relaxation, will, and concentration. Emphasis on improvisational techniques, subjective camera monologues, the problems of auditions, and scene performance. (Same as TELE 115.) [D; CSU; UC]

TA 117.
Pantomime and Stage Movement I
3 units

Lecture 3 hours, laboratory 2 hours
Offered: Variable
Study in the conscious control of the body and the development of meaningful movement for self-expression in everyday communication and character portrayal. Analysis and performance of fundamental body and facial techniques requisite to create characterization and express emotion. Study of classical and conventional mime and acting movement in theatre history. [D; CSU; UC]

TA 118.
Pantomime and Stage Movement II
3 units

Recommended Preparation: *TA 117 or equivalent*
Lecture 3 hours, laboratory 2 hours
Offered: Variable
Continuation of TA 117. Advanced study of history, aesthetics, theory and techniques of pantomime and nonverbal communication. Emphasis on fundamental techniques of group mime and tumbling. Performance required. [D; CSU; UC]

TA 120.
Theatre Workshop—Performance I
1.5–2 units

Laboratory 5–6 hours
Offered: Fall, Spring
Acting techniques and choreography for theatre productions. Attendance at rehearsals and performances is required. (Selection by audition.) [D; CSU; UC]

TA 121.
Theatre Workshop—Performance II
1.5–2 units

Prerequisite: *TA 120 or equivalent*
Laboratory 5–6 hours
Offered: Fall, Spring
Production of intermediate acting techniques for theatre presentation. Intermediate acting techniques and choreography for theatre productions. (Selection by audition.) [D; CSU; UC]

TA 122.
Theatre Workshop—Performance III
1.5–2 units

Prerequisite: *TA 121 or equivalent*
Laboratory 5–6 hours
Offered: Fall, Spring
Emphasis on performance skills in lead and major supporting roles, character analysis, and execution of such roles before an audience. Audience exposure available. (Selection by audition.) [D; CSU; UC]

TA 123.
Theatre Workshop—Performance IV
1.5–2 units

Prerequisite: *TA 122 or equivalent*
Laboratory 5–6 hours
Offered: Fall, Spring
Emphasis upon performance skills in lead and major supporting roles, character analysis, and execution of such roles before an audience. Audience exposure available. (Selection by audition.) [D; CSU; UC]

TA 130–133.
Choreography for Musical Theatre I–IV
.5–1 units

Grade only
Prerequisite: *TA 130 or equivalent is a prerequisite to TA 131; TA 131 or equivalent is a prerequisite to TA 132; TA 132 or equivalent is a prerequisite to TA 133*
Laboratory 2.5–5 hours
Offered: Variable
Production of dances for musical theatre production. Dance techniques and choreography for musical performance. Attendance at rehearsals and performances is required. [D; CSU; UC]

TA 140.
Techniques of Directing
3 units

Lecture 3 hours
Offered: Variable
Principles of casting and the scheduling and conducting of rehearsals, taught through lectures, reading assignments, class projects, and the preparation of a complete director's production script. Students serve as assistant directors on major productions and also direct scenes and one-act plays for studio production. [D; CSU; UC]

TA 145.
New Media in Performance
3 units

Lecture 2 hours, laboratory 4 hours
Offered: Variable
Explores integrated performance models through critical analysis of contemporary new media performance. Develops an understanding of design and performance principles to effectively combine performance, image, audio, and written text into public performance. Covers history of new media, contemporary performance, and conceptual art movement. [D; CSU]

TA 150.
Technical Design and Production
3 units

Lecture 2 hours, laboratory 3 hours
Offered: Fall, Spring
Introduction to staging including the fundamentals of set design and graphics, theory and practice of construction, painting, scene shifting, basic lighting for stage, television, and film. Practical assignments in technical and managerial phases of college productions. (Same as TELE 150.) [D; CSU; UC]

TA 151.
Theatre Makeup and Costume Construction
3 units

Grade only
Lecture 2 hours, laboratory 3 hours
Offered: Variable
Basic theories, techniques, and procedures in costume design and construction make-up application for stage, film, and television. Practical application in college productions. [D; CSU; UC]

TA 152.
Lighting and Sound Techniques
3 units

Lecture 2 hours, laboratory 3 hours
Offered: Fall, Spring
Theory and practice of lighting and sound techniques for stage, television, and film. Fundamentals of design, equipment setup, and operation. Practical experience in the lighting and sound crews of college productions. (Same as TELE 152.) [D; CSU; UC; CAN DRAM 10]

TA 153.
Sound Reinforcement
3 units

Grade only
Lecture 2 hours, laboratory 3 hours
Offered: Variable
Basics of sound reinforcement including theory and application, sound equipment and systems, and developing system designs. Emphasis on matching equipment to the functional requirements of reinforcement. (Same as TELE 153.) [D; CSU]

TA 160.
Theatre Workshop—Technical Crews I
1.5–2 units

Laboratory 5–6 hours
Offered: Fall, Spring
Practical experience in lighting, construction, painting, sound, costume, makeup, publicity, and box office in college productions. [D; CSU; UC]

TA 161.
Theatre Workshop—Technical Crews II
1.5–2 units

Prerequisite: *TA 160 or equivalent*
Laboratory 5–6 hours
Offered: Fall, Spring
Practical experience in lighting, construction, painting, sound, costume, makeup, publicity, and box office in college productions. [D; CSU; UC]

TA 162.
Theatre Workshop—Management and Supervision I
1.5–2 units

Prerequisite: *TA 161 or equivalent*
Laboratory 5–6 hours
Offered: Fall, Spring
Supervision and management of technical crews in lighting, sound, painting, construction, costume, makeup, and house in college productions. [D; CSU]

TA 163.
Theatre Workshop—Management and Supervision II
1.5–2 units

Prerequisite: *TA 162 or equivalent*
Laboratory 5–6 hours
Offered: Fall, Spring
Supervision and management of technical crews in lighting, sound, painting, construction, costume, makeup, and house in college productions. [D; CSU]

TA 210.
Intermediate Acting
3 units

Recommended Preparation: *TA 110 and 111, or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Study of major acting theorists and application to performance technique for self-expression and critical thinking in everyday communication and character interpretation. Analysis and performance of advanced scene study and essential action. Emphasis on classical and contemporary styles in theatrical performance. [D; CSU; UC]

TA 242.
Television and Film Directing
3 units

Recommended Preparation: *ART/TELE 131 or equivalent*
Lecture 2 hours, laboratory 4 hours
Offered: Variable
Development of directing skills in a full range of production types. Emphasis on writing, visualization, production techniques for film style, and multiple camera directing.
(Same as TELE 242.) [D; CSU; UC]

TA 295.
Selected Topics in Theatre
1–3 units

Offered: Variable
Permits students of theatre to study relevant subjects within the field of theatre arts. The specific objectives, methods of instruction, and units of credit to be determined individually for projects proposed under this course description. (May be repeated for additional credit with new content.) [D; * CSU]

** Please refer to the class schedule for specific course description and transferability information.*

TA 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in an area of theatre arts of particular interest to the advanced student and not included in the regular courses of the college. [D; CSU; * UC]

** UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

Travel and Tourism

School of Business and Information Systems

■ Dean

Irma Alvarez, M.A.
Office 215
619-482-6457

■ Department Chair

Larry Christiansen, J.D.

General Description

Travel and tourism is the study of the method and means of moving an individual or groups from one place to another that involves transportation and accommodation. Travel means passage or journey while tourism implies the practice of travel for recreation and leisure. This department explores communication skills, reservation techniques, fiscal affairs, operations, computer applications, guiding practices, services, and locales. Sociology is a requisite to the travel and tourism practitioner.

Career Options

The following list is a sample of the many career options available for the travel and tourism major. Most of these require a certificate or associate degree: travel agent, hotel/motel clerk, tour guide, ticketing agent, reservations clerk, travel agency owner, tour operator, cruise ship personnel, airline attendant, travel writer, hospitality specialist, accommodations critic, sales representative, conference coordinator, conference facility director, and meeting planner for business and industrial, governmental, or educational organizations.

Degree/Certificate Options

	Major Code
Associate in Science Degree: Career/Technical	
Travel and Tourism	*02961*
Certificate of Achievement	
Travel and Tourism	*02962*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Science Degree
Travel and Tourism

Career/Technical (Major Code: 02961)

The associate in science degree in travel and tourism prepares the students for entry-level or advancement in travel consultant positions. Emphasis on travel consultant responsibilities and all facets of travel and tourism from both the consumer and professional travel agent perspective.

FIRST SEMESTER		
T&T 140	*Introduction to Travel and Tourism*	*3*
T&T 150	*Domestic and International Ticketing*	*3*
T&T 164	*Travel Destination: South Pacific, Asia, and Orient*	*3*
SECOND SEMESTER		
CL 120	*Computer Literacy*	*1*
T&T 160	*Travel Destination: Western Hemisphere*	*3*
T&T 258	*Worldwide Cruise Travel*	*3*
THIRD SEMESTER		
T&T 139	*Meeting Planning and Convention Services*	*3*
T&T 162	*Travel Dest: Europe, Africa, the Middle East*	*3*
T&T 260	*Basic Computer Appl. in Travel and Tourism*	*2*
FOURTH SEMESTER		
BUS 211	*Communication In Business and Industry*	*3*
T&T 261	*Adv. Computer Appl. in Travel and Tourism*	*2*
T&T 272	*Travel Agency Operations*	*3*
T&T 290–293	*Cooperative Work Experience Travel and Tourism I–IV*	*2–4*
	Total units	***34–36***

Recommended Electives: *BUS 147, 156; T&T 45.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

Certificate of Achievement
Travel and Tourism

Career/Technical (Major Code: 02962)

FIRST SEMESTER

T&T 140	*Introduction to Travel and Tourism*	*3*
T&T 150	*Domestic and International Ticketing*	*3*
T&T 164	*Travel Destination: South Pacific, Asia, and Orient*	*3*

SECOND SEMESTER

CL 120	*Computer Literacy*	*1*
T&T 160	*Travel Destination: Western Hemisphere*	*3*
T&T 258	*Worldwide Cruise Travel*	*3*

THIRD SEMESTER

T&T 139	*Meeting Planning and Convention Services*	*3*
T&T 162	*Travel Dest: Europe, Africa, the Middle East*	*3*
T&T 260	*Basic Computer Appl. in Travel and Tourism*	*2*

FOURTH SEMESTER

BUS 211	*Communication In Business and Industry*	*3*
T&T 261	*Adv. Computer Appl. in Travel and Tourism*	*2*
T&T 272	*Travel Agency Operations*	*3*
T&T 290–293	*Cooperative Work Experience Travel and Tourism I–IV*	*2–4*
	Total units	***34–36***

Recommended Electives: *BUS 147, 156; T&T 45.*

T&T 40.
Hotel and Motel Front Desk Clerk
3 units

Lecture 3 hours, laboratory 1 hour
Offered: Variable
Provides entry-level training for front-desk services in hotels and motels. Basic front-office operations including registration, reservations, and general office and guest services. (ROP option) [ND]

T&T 45.
Tour and Tour Guiding
3 units

Lecture 3 hours
Offered: Variable
Study of tour development and guiding with emphasis on local attractions, visitors and convention services, meeting services, and the hospitality industry. Additional focus on communication skills, personal appearance, and ability to work with the public. [ND]

T&T 55.
Hotel and Motel Front Desk Supervision
3 units

Recommended Preparation: *T&T 40 or equivalent*
Lecture 3 hours
Offered: Spring
Offers job training in management of employees, fiscal affairs, hotel/motel front desk operations, and occupancy level functions. Includes analysis of hotel/motel productivity rates and costs, customer challenges, employee selection, training, and development. (ROP option) [ND]

T&T 139.
Meeting Planning and Convention Services
3 units

Grade only
Recommended Preparation: *T&T 140 or equivalent*
Lecture 3 hours
Offered: Variable
Designed to prepare students to provide services required by meeting planners, trade show organizers, convention service personnel, and incentive house employees. Familiarizes students with job opportunities available and job skills needed for entry into this field. [D; CSU]

T&T 140.
Introduction to Travel and Tourism
3 units

Lecture 3 hours
Offered: Fall, Spring
Introduction to the extensive world of travel. Includes: tourism as a bridge between people, basic concepts of tourism and the people affected, economic and sociological importance of tourism, how tourism is organized, the history of the industry, the industry segments, and career possibilities. Required for all T&T majors. [D; CSU]

T&T 150.
Domestic and International Ticketing
3 units

Lecture 3 hours
Recommended Preparation: *T&T 140 or equivalent*
Offered: Variable
Preparation of airline reservations and ticketing for domestic and international destinations. [D; CSU]

T&T 160.
Travel Destinations: Western Hemisphere
3 units

Lecture 3 hours
Offered: Variable
Introduction to exploration of the Western Hemisphere from the travel industry point of view. Includes: North America, México, Central America, the Caribbean, and South America, all the major destinations and their points of interest, the air carriers, tours, and tour companies. [D; CSU]

T&T 162.
Travel Destinations: Europe, Africa, and the Middle East
3 units

Lecture 3 hours
Offered: Variable
A study of European, African, and Middle Eastern destinations, degrees of appeal for the traveler, and activities offered. Major tour operators serving these destinations including Britrail and Eurail travel for the independent traveler will be covered. [D; CSU]

T&T 164.
Travel Destinations: South Pacific, Asia, Orient
3 units

Lecture 3 hours
Offered: Variable
Introduction to and exploration of Asia, South Pacific, and the Orient from the travel industry point of view. Includes the Far East, and the South Pacific(all the major destinations and their points of interest, the air carriers, tours, and tour companies. [D; CSU]

T&T 258.
Worldwide Cruise Travel
3 units

Lecture 3 hours
Offered: Variable
Instruction in the modes of travel by ship. Study of the major cruise lines and use of cruise reference guides. Ports of call worldwide differences between cruise lines, river cruises, and barge travel. [D; CSU]

T&T 260.
Basic Computer Applications in Travel and Tourism
2 units

Recommended Preparation: *T&T 150 or equivalent*
Lecture 1 hour, laboratory 2 hours
Offered: Variable
Hands-on use of airline computer system (American Airline SABRE). Includes building, modifying, pricing, and ticketing of a basic passenger name record. Introduction to computerized selling of airline seats, offering appropriate fare quotes for each itinerary. [D; CSU]

T&T 261.
Advanced Computer Applications in Travel and Tourism
2 units

Prerequisite: *T&T 260 or equivalent*
Lecture 1 hour, laboratory 2 hours
Offered: Variable
Continuation of T&T 260 to include and concentrate on booking rental cars and hotel rooms; using the direct reference system and special travel account record systems. Training on SABRE computer. [D; CSU]

T&T 272.
Travel Agency Operations
3 units

Recommended Preparation: *T&T 150 or equivalent*
Lecture 3 hours
Offered: Variable
Study in the routine operations of a travel agency. Includes airline accounting procedures, travel agency law, advertising, group booking, travel insurance, sales agreement, marketing, sales techniques, and time management for travel agents. [D; CSU]

T&T 290–293.
Cooperative Work Experience Travel and Tourism I–IV
2–4 units

Grade only
Limitation on Enrollment: *Declared Travel and Tourism major. Students must complete no less than seven units, including work experience, during each semester in order to receive credit*
Lecture 1 hour, laboratory 5–15 hours
Offered: Variable
Work experience in travel agency operations and tourism occupations coordinated with classroom discussion. Designed to assist students in successfully completing minimum entrance requirements for full- or part-time employment in travel-related jobs. [D; CSU]

T&T 295.
Selected Topics in Travel and Tourism
1–3 units

Offered: Variable
Permits students to study relevant subjects within the field of travel and tourism. The specific objective, methods of instruction, and units of credit to be determined individually for courses proposed under this description. [D; *CSU]

* *Please refer to the class schedule for specific course description and transferability information.*

T&T 299.
Independent Study
1–3 units

Limitation on Enrollment: *Eligibility for independent study. See page 26.*
Offered: Variable
Individual study or research in some area of travel and tourism of particular interest to the student and not included in regular courses of the college. [D; CSU]

Women's Studies

School of Social Sciences and International Studies

■ Dean

Viara Giraffe, Ph.D.
Office 470K
619-482-6582

■ Faculty

Rosalinda González, Ph.D.

■ Department Chair

Gary Neely, M.A.

General Description

The Department of women's studies focuses on female experiences and questions of gender from a variety of perspectives including feminist theory, history, religion, literature, cross-cultural studies, psychology, sociology, sexuality, women and work, and society and family. This department explores the historical, social, and cultural contributions of women within a global perspective while providing knowledge about sexual forms of oppression. The study of women is the study of the history of humanity.

Career Options

The following list is a sample of the many career options available to the women's studies major. A few of these require an associate degree, most require a baccalaureate degree, and some require a graduate-level degree: historian, high school or college instructor, researcher, writer, lawyer, politician, lobbyist, commentator, social critic, research assistant, film producer, judge, cultural anthropologist, museum curator, publisher, cultural affairs specialist, business owner, administrator, sociologist, and mother.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Women's Studies	*01201*

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Associate in Arts Degree
Women's Studies

Transfer Preparation * (Major Code: 01201)

Designed to provide both female and male students with a historical and global perspective on the role of women in society, a comprehension of the dynamics of gender, race, and class; and an introduction to contemporary issues current in the women's movement. The major is cross-cultural and interdisciplinary in nature. The coursework seeks to promote teaching and research in the service of eliminating sexism while providing a rigorous scholarly inquiry of women's rapidly changing economic, legal, and political position in society.

ENGL 280	*Literature by Women*	*3*
HIST 132	*Herstory: Women in Historical Perspective*	*3*
SOC 135	*Sociology of the Family*	*3*
Foreign Language		*5*
Electives		*6*
	Total units	***20***

Recommended Electives: *AFRO 110, 111,150; ANTH 102; ART 149; ASIA 113, 114; ENGL 260; HLTH 116; HUM 140, 150; HIST 121, 122; MAS 141, 142, 150; SOC 150.*

To earn an associate degree, additional General Education and Graduation Requirements must be completed. See page 36.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 42 for further information.**

Overview of Continuing Education Services

Continuing education is an umbrella term that includes noncredit, contract, and fee-based courses. Continuing Education provides the opportunity for community residents to improve, upgrade, and learn new skills and knowledge. This effort responds to the need for a well-trained workforce as well as the individual need for intellectual or cultural enrichment. The Continuing Education Program supports the mission of California Community Colleges.

Noncredit Courses

Noncredit courses are courses that meet community needs in nine instructional areas: parenting, basic skills, English as a Second Language (ESL), citizenship for immigrants, courses for the disabled, vocational courses, courses for older adults, home economics, and health and safety. (California Education Code, Section 84757.) Noncredit courses are open to the public, are tuition-free, and are not offered for college credit. The College receives apportionment for noncredit courses at approximately half the rate for credit courses. Credit and noncredit courses are approved by the college's Curriculum Committee (see Section 4.D.1 for a more detailed explanation);

Fee-Based Community Service Courses and Services

Fee-based courses are community services courses for which a fee is charged to individual students. Community service courses are not-for-credit courses that are open to the public and are "designed for the physical, mental, moral, economic, or civic development of persons...." (California Code of Regulations Title 5, 55002 d.) No apportionment is collected for students in fee-based courses.

Contract Education

Contract courses (which may be credit or not-for-credit) are paid by an employer/organization. Contract services are offered to specific businesses and organizations per a mutually established agreement and participation is restricted to contract designees. Contract Education is not usually designated for credit nor is any state apportionment funding generated. Contract Education is paid for by the Contracting entity and must be self-sustaining.

How to Apply and Register—Steps To Register For a Noncredit Course, Fee Class, or Tour

Applications are accepted by mail, fax, or in person during office hours.

Noncredit courses are tuition free and are subsidized by state funds. These courses require all students to complete the Noncredit Application. Most noncredit classes do allow on-site registration on a space-available basis. Course numbers for Noncredit classes start with "NC." Students seeking to enroll in a non-credit class must complete a Noncredit Application, if they have not taken a noncredit course within the last semester.

Noncredit Registration is also available by telephone registration. If you are currently attending Southwestern College or have attended a credit or noncredit class within the last semester, you may register by phone through the campus T-REG system. To register, you must have your student identification number, your social security number, the course and section number, and obtain the Add Code (listed under the course description). This option is only available up to the first day of class. Class adds after the first day require a completed Noncredit Application or class Add Form.

To register for a fee-class, please use the Fee Class and Tour Registration form. Course numbers for fee-classes start with "CS." Applications are available in the Continuing Education Department.

SOUTHWESTERN COLLEGE CONTINUING EDUCATION
900 Otay Lakes Road, Building 1600
Chula Vista, CA 91910-7299
619-482-6376
Office Hours: M–F, 8 a.m.–4:30 p.m

Registration Details

CLASS CANCELLATION: Courses are subject to cancellation due to low enrollment or other unexpected circumstances. If the college has advance notice that a class will be cancelled, you will be contacted by mail or by phone. Please be sure to provide complete phone contact information on your application.

REFUNDS: If the college cancels a class or tour, any registration fees collected will be refunded.

MATERIAL FEE: A material fee is required in a few noncredit and fee classes. Cash, check, and credit card payments are accepted.

CLASS DATE OR LOCATION CHANGE: Class dates or locations may be subject to change. Students will be notified of any date or location changes prior to the class either by mail or by phone.

Noncredit Courses

NC 1.
Home Safety for Older Adults
0 units

Lecture 6 hours
Most accidents occur in the home. Learn ways to make all areas of the home safer and more secure. Includes safety factors and recommendations, most common home injuries and problems, fall prevention tips, disaster kits, and security measures. [ND]

NC 2.
Conscientious Cuisine
0 units

Lecture 28 hours
Learn practical ways of eating healthier while keeping the creativity and taste alive. Emphasis on fun resources for healthy menu planning, shopping strategically, recipe modification, interpreting food labels, healthy food preparation techniques, healthy lunches, and dining out tips. [ND]

NC 3.
Supervised Tutoring
0 units

Variable hours
Provides learning assistance through supervised one-to-one, group, and online tutoring by trained tutors in most academic subjects. Students receive academic support outside of class time to achieve specific course objectives, and to improve learning and study skills to assist them in becoming independent learners. Content varies according to the course for which tutoring is needed. Open entry/open exit. May be repeated. [ND]

NC 4.
College Skills Development
0 units

Variable hours
Provides supervised computer laboratory experience for students who must use a computer to achieve the goals and objectives of a course in which they are enrolled. Open entry/ open exit. May be repeated. [ND]

NC 5.
Career Research Workshop
0 units

Lecture 3 hours
Designed to provide students with an overview of the career development process and an introduction to the information, skills, and resources necessary to conduct career research. How their preferred occupational interests and skills relate to the changing world of work. Hands-on opportunity to research occupations and labor market information utilizing a variety of materials including computer-based and printed resources. [NC]

NC 6.
Childbirth Education for Expectant Parents
0 units

Lecture 20 hours
Childbirth Education is designed to prepare parents for a positive childbirth experience. Includes instruction in the Lamaze method of prepared childbirth as well as demonstration and practice of essential and helpful exercises. Husbands are an integral part of the program and are encouraged to attend. [ND]

NC 7.
Building Self-Esteem for the Workplace
0 units

Lecture 6 hours
Designed to assist students in identifying those characteristics contributing to self-confidence in the workplace. Students will learn strategies to develop intrinsic and extrinsic support systems in preparation for the world of work. [ND]

NC 8.
Learning the 1, 2, 3's to Help Your Child in Mathematics
0 units

Lecture 24 hours
Prepares parents who want to assist their children in math work. Covers symbols; addition, subtraction, multiplication, and division; number, term, or factor; GCF, LCD, and LCM; fractions; variables; collecting like terms; simple equations; perimeter, area, and volume; interpreting word problems. [ND]

NC 9.
Physical Conditioning
0 units

Laboratory 48 hours
Develops and improves the student's cardiovascular endurance, flexibility, muscle strength/endurance, body composition, and attitude towards exercise in a personalized program. Features self-assessment, behavior modification, health discussion, calisthenics, walking, jogging, circuit training, and various resistance machines. Students will monitor and develop physical wellness, self-esteem, teamwork, and vocational camaraderie. [ND]

NC 11.
Hotel/Motel Clerk
0 units

Lecture 125 hours, laboratory 125 hours
Provides entry-level training for front desk services in a hotel/ motel. Covers basic front office operations including registration, reservations, cashiering, auditing, general office, and guest services. [ND]

NC 12.
Career Orientation
0 units

Lecture 16 hours, laboratory 1 hour
Designed to provide noncredit students with an understanding of the higher-education process. Includes basic skills, career, learning styles assessment, decision making, goal setting, career planning, research, and a one hour counseling appointment to develop a career and education plan. [ND]

NC 13.
Team Building Training Through Sandcastle Construction for Group Leaders
0 units

Lecture 3 hours, Laboratory 5 hours
Designed for program directors preparing to lead staff and clients participating in competitive sandcastle team building activities. Covers U.S. Open Sandcastle rules and coordination of team dynamics for competitive contests. Special emphasis is placed on planning and group problem solving. Students will participate in intraclass competition. [ND]

NC 14.
English as a Second Language (ESL) IV-Skills Practicum
0 units

Laboratory 54 hours
Provides development, maintenance, and reinforcement of English language skills in reading, writing, listening, and speaking—advanced-level students. [ND]

NC 15.
First Aid for Public Safety Personnel—Title 22
0 units

Lecture 12 hours, laboratory 4 hours
Contains first aid skills for public safety personnel as a first responder to provide initial care regardless of the emergency. Course is divided into four units: first responder assessment, specific injuries, muscle and bone injuries, and medical emergencies. Meets the skill and knowledge requirements of Title 22 of the California Code. [ND]

NC 16.
Healing Touch Level I
0 units

Lecture 16 hours
Includes concepts of the human energy field as they relate to modern scientific principles. Covers assessment of the energy field, principle, and practice of therapeutic touch, and selected modalities for self-care and health promotion. [ND]

NC 18.
Forensic Photography, Basic and Advanced
0 units

Lecture 24 hours, laboratory 24 hours
Provides training and practical experience in forensic photography. Focus on applications to criminal investigations, law enforcement, and evidence technology. Training provided in two segments. "Basic" covers elementary forensic photo-graphic knowledge and problems. "Advanced" covers specific crime scene difficulties and needs. [ND]

NC 18A.
Forensic Crime Scene Photography (Basic)
0 units

Lecture 12 hours, laboratory 12 hours
Provides training and practical experience in forensic photography. Focuses on applications to criminal investigations, law enforcement, and evidence technology. This is the first of a two part curriculum. "Basic" covers elementary crime scene photographic knowledge and problems. [ND]

NC 18B.
Forensic Crime Scene Photography (Advanced)
0 units

Lecture 12 hours, laboratory 12 hours
Provides training and practical experience in forensic photography. Focuses on application to criminal investigations, law enforcement, and evidence technology. Second of a two part curriculum. Requires the completion of NC 18A "Forensic Crime Scene Photography (Basic)" or instructor approval. "Advanced" covers specific crime scene difficulties and needs. Emphasis on forensic application. [ND]

NC 19.
College Readiness
0 units

Lecture 4 hours
Provides students with an overview of campus resources and academic strategies needed to succeed in college. Includes identification of supportive services, introduction to study skills, financial aid, budgeting, time management, and learning enhancement strategies. [ND]

NC 21.
Doing Business in México
0 units

Lecture 12 hours
Unlike the United States where a lawyer is needed for most serious business transactions, in México one uses a notary public. A dozen other major differences, other than culture, must be fully understood to do business in México. Explains and gives the confidence needed to open or expand business dealings in México. [ND]

NC 22.
Using Microsoft Word as a Desktop Publisher
0 units

Lecture 8 hours, laboratory 16 hours
Microsoft Word has become the standard in word processing software. Learn how to take it to the next level, as a desktop publishing program for creating newsletters, forms, and other documents. [ND]

NC 23.
Using the Web for Research
0 units

Lecture 3 hours, laboratory 9 hours
The World Wide Web has become the most effective way to do research in a timely manner. Learn to take advantage of this explosive new technology. [ND]

NC 24.
Developing High-Performance Charts in Microsoft Excel
0 units

Lecture 6 hours, laboratory 6 hours
Reviews the basics of spreadsheet use: structure, data entry, formulas, and functions. Focus on how to convert data into meaningful and high-impact charts. [ND]

NC 25.
Using Email Systems
0 units

Laboratory 6 hours
E-mail systems are becoming a prevalent means of communication, both business and personal. Sometimes e-mail can be overwhelming. Learn how to configure and manage your email. Basic use of an email program will be covered including logging on, setting software options, file types, automatic filtering, auto response, sending, and viewing attachments. [ND]

NC 26.
Project Management
0 units

Lecture 12 hours
From introducing new technology to starting a new venture; from driving corporate culture change to building a house; from inventing a new product to making it a world-known commodity—project management is key. Forget complicated computer software and thick books. The practical tools for project management are few, simple to use and have the power to change the world. The secret is in following a simple step-by- step process, which the students will learn in the first few hours of the course. [ND]

NC 27.
Supervisory Skills
0 units

Lecture 12 hours
When a key employee gets promoted to a supervisor's level, most companies lose a good worker and gain a poor supervisor. This need not happen. Learn the six fundamental principles of supervision and how to use them to create a true success spiral within the organization. [ND]

NC 28.
Goal Setting and Your Future
0 units

Lecture 12 hours
Flip Wilson said it many years ago: "What you see (in your mind's eye) is what you get." There is more truth to these words than can be found anywhere on earth. This course will prove that what the students create in their mind's eye is what they are most likely to get. The problem is in focus, action, and acceptance. The student will learn how to deal with each of these critical elements in the future. [ND]

NC 31.
Using Internet Browsers—Tips and Tricks
0 units

Laboratory 6 hours
Netscape Communicator and Microsoft Internet Explorer are the predominant Internet browsers. Covers the basics of browser setup and the basics of "surfing" including bookmarks, search engines, configuring a start-up page, setting fonts, colors, and more. [ND]

NC 32.
Tai Chi
0 Units

Laboratory 45 hours
Tai Chi (or taiji) is a slow, non-contact exercise stressing balance, coordination, and flexibility. Taught all over the world and practiced as a health exercise, it is very popular with people of all ages. [ND]

NC 33.
Nutrition and Health Issues—Older Adults
0 units

Lecture 12 hours
Planning and preparation of economical, well-balanced meals for one or two persons. Includes special diet considerations, budgeting and shopping tips, consumer education, and nutrition information. [ND]

NC 34.
Body Dynamics and Aging Process
0 units

Lecture 18 hours, laboratory 18 hours
Instruction and conditioning for the maintenance of physical well-being. Focus on deep breathing, circulation, flexibility, stamina, body awareness, and rhythmic movements. Techniques adapted for older adults. [ND

NC 35.
P.A.C.E. (People with Arthritis Can Exercise)
0 units

Laboratory 36 hours
Designed by the Arthritis Foundation specifically for people with arthritis. Covers gentle activities to help increase joint flexibility and range of motion and maintain muscle strength. Includes basic principles of arthritis exercise, correct body mechanics, and joint protection. Physician's approval recommended. [ND]

NC 36.
Discovering One's Spirituality
0 units

Lecture 12 hours
Explores and compares the traditional and non-traditional means of religious expression, rituals, cultural integration. [ND]

NC 37.
Personal Development for Older Adults
0 units

Lecture 36 hours
Designed to develop and enhance the emotional and/or psychological well-being in the older adult. Includes coping with the loss of significant others; disability and limited independence; loneliness; developing personal strength, confidence, and assertiveness. [ND]

NC 38.
Retirement Living
0 units

Lecture 12 hours
Exploration of health maintenance, consumer awareness, physical illness, estate planning, community resources, and leisure time activities. [ND]

NC 40.
Red Cross Basic First Aid
0 units

Lecture 4 hours, laboratory 4 hours
Meets Red Cross minimum standards. Designed as a basic overview for the general public; covers the fundamentals of first aid including care for fractures, wounds, poisoning, burns, exposure, infection, immobilization, and transfer of victims. [ND]

NC 41.
Quilting
0 units

Lecture 18 hours, laboratory 30 hours
Designed to teach storytelling through quilt making. Includes pattern making, special themes, and history of quilt making. [ND]

NC 43.
Raising Grandchildren
0 units

Lecture 18 hours
Overview of issues that grandparents encounter with parenting their grandchildren. Includes guardianship and custody legislation, making the transition, economic/financial support, community resources, and support groups. [ND]

NC 44.
Time Management for the Workplace
0 units

Lecture 6 hours
Designed to assist students in developing basic career management skills. Includes setting priorities, time management, effective decision making, and increasing productivity. [ND]

NC 45.
Effective Interpersonal Relationships in the Workplace
0 units

Lecture 6 hours
Provides students with the interpersonal skills needed for a variety of work settings. Students will learn appropriate interpersonal skills for the workplace. Includes active listening, verbal/nonverbal communication, team participation, and sociability skills. [ND]

NC 46.
Workplace Etiquette
0 units

Lecture 6 hours
Designed to assist students in identifying and employing appropriate workplace behavior. Includes office etiquette, punctuality, dress, conversation, and behavior. [ND]

NC 47.
Tutor Training: Level I
0 units

Lecture 18 hours
Offered online; introduces tutors to effective tutoring strategies and the role of the peer tutor. Includes guidelines for tutoring; how to plan, conduct, and evaluate a productive tutoring session; awareness of components for an effective inter-cultural tutoring; and ways to apply effective learning strategies to tutoring sessions. Applications of course exercises related to all disciplines. Emphasis on facilitating student independence in learning. Students recommended by faculty eligible for employment as peer tutors in the College Learning Assistance Services Program—Level I. [ND]

NC 48.
Tutor Training: Level II
0 units

Lecture 18 hours
Focus on increased knowledge and application of effective tutoring strategies and the role of the peer tutor through Tutor Special Projects. Includes understanding and modeling communication techniques based on knowledge of learning styles; tutoring in specific skill/subject areas; role modeling; critical thinking and learning strategies. Emphasis on facilitating student independence in learning. Upon course completion, students recommended by faculty eligible for employment as peer tutors or learning assistants in the College Learning Assistance Services Program—Level 2: Advanced. [ND]

NC 49.
Tutor Training: Level III
0 units

Lecture 18 hours
Focus on increased knowledge and application of effective tutoring strategies. Includes how to tutor targeted student populations; use of learning strategies specific to skill/subject areas; application of learning styles to cross-cultural tutoring sessions; advanced referral skills; mentoring of Level I tutors; handling students in crisis situations; and application of group facilitation skills. Emphasis on encouraging student independence in learning. Upon course completion, students recommended by faculty eligible for employment as peer tutors or learning assistants in the College Learning Assistance Services Program—Level 3: Master. [ND]

NC 51.
Office & Telephone Skills—Bilingual
0 units

Lecture 27 hours
Development of a professional attitude and image in a multicultural bilingual office. Emphasis on human relations, ethics in a multicultural work setting, time and stress management, sexual harassment, assertiveness training, telephone/receptionist activities, and mail processing. [ND]

NC 54.
Effective Grandparenting
0 units

Lecture 6 hours
Provides grandparents with a practical and helpful approach to present day parenting based on the principles espoused by the Systematic Training for Effective Parenting (STEP) educational program. (ND)

NC 55.
Parenting Young Children
0 units

Lecture 4.5 hours
Parent education program designed for parents with children from birth through five years. Covers basic child rearing principles geared especially to the challenge of parenting babies, toddlers, and preschoolers. [ND]

NC 56.
Career Planning Assessment
0 units

Lecture 18 hours
Identification through use of various assessment instruments and techniques, of one's interests, values, skills, aptitude, learning style, personality style, and goals, as they relate to careers and the workplace. [ND]

NC 58.
VESL—Basic Skills for Occupations
0 units

Lecture 60 hours, laboratory 60 hours
Designed to develop language and other basic skills required for participants to enter an initial job search or to begin training in one of several "fast track" occupational training programs offered at the college. [ND]

NC 61.
Keyboarding Speed and Accuracy—Bilingual
0 units

Recommended Preparation: *Ability to speak Spanish; read, write, and speak English at the ESL 40 level; or the equivalent skill level as determined by the Southwestern College Reading Assessment*
Lecture 18 hours, laboratory 9 hours
Students will learn to type using touch control of letter keys, develop correct typing techniques, and to build speed and control on one-minute, two-minute, and five-minute timed writings. IBM compatible PCs keyboarding software will be used. [ND]

NC 62.
Ten-Key by Touch—Bilingual
0 units

Recommended Preparation: *Ability to speak Spanish; read, write, and speak English at the ESL 40 level; or the equivalent skill level as determined by the Southwestern College Reading Assessment*
Lecture 18 hours, laboratory 9 hours
Proper keyboarding techniques on the 10-key printing calculator or number pad on computer keyboard. Develops speed and accuracy using the 10-key touch method on the electronic calculator or numeric keypad on computer keyboard. Includes solving efficiently and skillfully various types of business mathematical problems. [ND]

NC 63.
Business English I—Bilingual
0 units

Recommended Preparation: *Ability to speak Spanish; read, write, and speak English at the ESL 40 level; or the equivalent skill level as determined by the Southwestern College Reading Assessment*
Lecture 18 hours, laboratory 9 hours
English used in modern business communications. Review of spelling, parts of speech, punctuation, letter mechanics, effective sentence writing, proofreading, and development of vocabulary. [ND]

NC 64.
Business English II—Bilingual
0 units

Recommended Preparation: *Ability to speak Spanish; read, write, and speak English at the ESL 40 level; or the equivalent skill level as determined by the Southwestern College Reading Assessment*
Lecture 18 hours, laboratory 9 hours
English used in modern business communications. Review of spelling, parts of speech, punctuation, letter mechanics, effective sentence writing, proofreading, and development of vocabulary. [ND]

NC 65.
Word Processing—Bilingual
0 units

Recommended Preparation: *Ability to speak Spanish; read, write, and speak English at the ESL 40 level; or the equivalent skill level as determined by the Southwestern College Reading Assessment*
Lecture 18 hours, laboratory 9 hours
Introduction to word processing applications including basic text editing, document formatting, simple business letters, and spell checking via the computer. The software package is Microsoft Word. [ND]

NC 66.
Spreadsheet—Bilingual
0 units

Recommended Preparation: *Ability to speak Spanish; read, write, and speak English at the ESL 40 level; or the equivalent skill level as determined by the Southwestern College Reading Assessment*
Lecture 27 hours, laboratory 9 hours
Introductory course on electronic spreadsheets and their applications in the business office environment, utilizing Microsoft Excel to design and manipulate numeric data to create professional-looking reports. [ND]

NC 69.
Filing-Bilingual
0 units

Recommended Preparation: *Ability to speak Spanish; read, write, and speak English at the ESL 40 level; or the equivalent skill level as determined by the Southwestern College Reading Assessment*
Lecture 18 hours
Study of filing systems: alphabetic, geographic, numeric, and subject. Rules of indexing, filing methods, and procedures including records control retention and retrieval. [ND]

NC 70.
Lifeguard Training
0 units

Lecture 12 hours, laboratory 24 hours
Provides students with skills and information which will help them effectively prevent, recognize, and respond to aquatic emergencies including in-and-out of water skills, CPR for professional rescuer, first aid, open water experience, and cardiovascular & swim conditioning elements. Certifications include American Red Cross Lifeguard Training. (Includes First Aid and CPR/PR.) [ND]

NC 71.
Employment Training and Interviewing Skills—Bilingual
0 units

Recommended Preparation: *Ability to speak Spanish; read, write, and speak English at the ESL 40 level; or the equivalent skill level as determined by the Southwestern College Reading Assessment*
Application of the principles and skills learned in the Bilingual Business Office Systems program to on-the-job work assignments. Learn to evaluate employment opportunities and to prepare properly for a job interview. [ND]

NC 72.
Clerical Work Experience—Bilingual
0 units

Recommended Preparation: *Ability to speak Spanish; read, write, and speak English at the ESL 40 level; or the equivalent skill level as determined by the Southwestern College Reading Assessment*
Application of the principles and skills learned in the Bilingual Business Office Systems program to on-the-job work assignments. Requires attending a weekly one-hour coordinating class. Student's field performance will be evaluated by his employer and by the instructor. [ND]

NC 73.
Machine Transcription—Bilingual
0 units

Recommended Preparation: *Ability to speak Spanish; read, write, and speak English at the ESL 40 level; or the equivalent skill level as determined by the Southwestern College Reading Assessment*
Learn to transcribe machine dictation from English and Spanish business letters, memos, short reports including typing corresponding envelopes. [ND]

NC 74.
Spanish for the Healthcare Industry
0 units

Lecture 80 hours
Provides basic knowledge and fundamentals to facilitate the practical application of the Spanish language as it applies in healthcare settings. Emphasis on oral communication with vocabulary learning built around common words and phrases in the medical, dental, and nursing professions. [ND]

NC 75.
Spanish for the Manufacturing Industry
0 units

Lecture 80 hours
Provides basic knowledge and fundamentals to facilitate the practical application of the Spanish language as it applies in manufacturing settings. Emphasis on oral communication with vocabulary learning built around common words and phrases from manufacturing and production professions. [ND]

NC 76.
Introduction to MasterCam
0 units

Lecture 10 hours, laboratory 20 hours
Introduces the participant to MasterCam software and its interface with a three-axis milling machine. Covers the creation and conversion of 2- and 3-dimensional geometry using MasterCam, model analysis, tool path definition, and creation of a physical part. Familiarity with CAD software or machining is recommended. [ND]

NC 77.
Jazz Ensemble
0 units

Lecture 36 hours, laboratory 72 hours
Introduction to jazz ensemble performance including history, theory, aesthetics, and contemporary criticism of Jazz. Emphasis on performance techniques and stylistic interpretation in Basic Swing style. Performance required. [ND]

NC 78.
Small Performance Groups
0 units

Laboratory 108 hours
Opportunity to prepare and perform music for small groups (approx. 2-6). Groups are formed which fit standard instrumentations and may include rock bands, woodwind, brass, string or percussion groups, vocal groups, and commercial ensembles, etc. [ND]

NC 79.
Chamber Singers
0 units

Lecture 36 hours, laboratory 72 hours
Ensemble for the advanced choral musician, in which aural and score analysis of choral masterworks from classical eras to the present are analyzed, interpreted, and performed. Representative compositions are studied in terms of historical perspective, performance practice, and style. Audition and participation in public performance required. [ND]

NC 80.
Concert Choir
0 units

Lecture 18 hours, laboratory 90 hours
Choral ensemble for music students with aural and score analysis of choral literature from traditional classics to the present. Emphasis is on historical context, performance practice, style, and interpretation. Public performance required. [ND]

NC 81.
Music and Rhythms of Africa
0 units

Laboratory 54 hours
Observation and imitation of the participation in African music with emphasis on historical and contemporary music genres. Practical instruction in traditional African instruments and vocal techniques, historical and cultural aspects of indigenous musical traditions, and related art forms. [ND]

NC 82.
Jewelry and Metalwork
0 units

Lecture 72 hours, laboratory 144 hours
Fundamentals of design, construction and fabrication of jewelry and metalwork. [ND]

NC 83.
Beginning Ceramics
0 units

Lecture 72 hours, laboratory 144 hours
Design and construction of hand-built clay forms using a variety of techniques. Introduction to use of potter's wheel. Emphasis on form and its enhancement through surface enrichment of natural clay. [ND]

NC 84.
Printmaking
0 units

Lecture 72 hours, laboratory 144 hours
Design and production of original prints utilizing a variety of materials and techniques including intaglio, etching, relief printing, calligraphy, embossing, and lino printing. [ND]

NC 85.
Sculpture
0 units

Lecture 72 hours, laboratory 144 hours
Creative design in materials such as clay, wood, stone, plaster, plastics, and metal. Personal development of style, content, and symbolism. [ND]

NC 86.
Painting
0 units

Lecture 72 hours, laboratory 144 hours
Painting activity with emphasis on the study of color and structure. Includes techniques and materials, both traditional and experimental. [ND]

NC 87.
Mariachi Ensemble
0 units

Lecture 45 hours, laboratory 9 hours
An ensemble for all students interested in learning to play and sing mariachi. Emphasis on learning to play mariachi instruments (violin, trumpet, guitar, vihuela, guitarron, flute) in the proper style, playing well as part of a group, and learning to differentiate mariachi from other Mexican music. [ND]

NC 88.
Internet Career Research
0 units

Lecture 3 hours
Use of the Internet as an important tool in career planning, career research, and job search. Specific Internet sites, tips on the use of search engines, how to create a folder to keep track of the sites most useful, how to conduct career research, and how to apply for a job online. [ND]

NC 89.
Identifying and Showcasing Your Transferable Skills
0 units

Lecture 3 hours
Assist students in identifying viable skills from their education, work, life experiences, and shows them how those skills relate to their current career objectives. Includes identifying different types of skills, the traits and skills that lead to employment, how to effectively communicate traits and skills to an employer, and identifying alternative ways of showcasing those skills. [ND]

NC 90.
Retraining Readiness
0 units

Lecture 6 hours
Designed to help the adult learner who has been away from school to feel ready to face the demands and expectations of vocational training. Includes learning styles, time management, managing multiple roles and responsibilities, study and test preparation, skills, goal setting, and community resources and services. [ND]

NC 91.
Coping With Job and Career Change
0 units

Lecture 3 hours
Designed to provide students with an increased awareness of the change process, the positive and negative factors affecting responses to change, development of effective coping strategies, dealing with personal relationships when everything seems to be changing, and recognizing the opportunities change brings for personal and professional growth. [ND]

NC 92.
Using Your Foreign Degree in the United States
0 units

Lecture 3 hours
Designed to help graduates of foreign colleges and/or universities to explore their options for using their degrees in the U.S. Includes the U.S. educational system, how and when transcripts and/or diplomas need to be evaluated, state licensing and credentialing considerations, English language proficiency, professional networking, graduate study options, job search, and career planning services. [ND]

NC 93.
Handmade Greeting Cards and Stationary
0 units

Lecture 8 hours, laboratory 16 hours
Fee: $30. Basic tips and techniques to produce creative greeting cards and stationery. Covers collage and painting skills including the study of design basics and composition. Learn to marbleize paper, create unique rubber stamps and stencils, and Japanese paper folding. Includes a historical overview of American and European greeting cards and stationery. [ND]

NC 97.
Aging With Grace, Power, and a Plan: A Woman's Perspective
0 units

Lecture 12 hours
Designed to enhance a woman's transition beyond midlife. Participants will map their own journey, using active exercises to build skills in making choices. [ND]

NC 98.
The Circle of Life: Empowering Yourself
0 units

Lecture 12 hours
Method of facilitating personal growth and fostering wellness. A wide range of activities including stress management, self-esteem coaching, health counseling, goal setting and group discussion. Seeks to use inner processes for personal transformation. [ND]

NC 99.
Strength Training for Older Adults
0 units

Laboratory 36 hours
This training is specifically designed for older adults. Students can stand or sit while exercising. Strength training exercises will enhance and promote strength and balance skills, trunk, abdominal, back strength, mobility and agility skills, and awareness of proper body alignment and mechanics. [ND]

NC 1000.
Canoe Trip Leader Training
0 units

Lecture 4 hours, laboratory 4 hours
Designed for staff youth program leaders with basic canoeing skills who want to lead flat water canoe trips for youth or special interest groups. Covers the teaching of basic canoeing skills as well as practical teaching techniques using games and team-building skills. Also covers transportation and permit requirements, float plan, emergency response, and feeding/lodging issues. [ND]

NC 1001.
Creating Art From Everyday Objects
0 units

Lecture 6 hours, laboratory 12 hours
Fee: $18. Techniques to create gifts and decorations from common objects found around the home. Covers paper collage, basic stenciling, and some rubber stamping. [ND]

NC 1002.
Customer Service: Customer Appreciation
0 units

Lecture 6 hours
Explores key skills and attitudes necessary to effectively meet the needs of customers. Introduction to concepts and appropriate techniques for dealing with internal and external customers, enhancing customer satisfaction, increasing customer retention, and ensuring positive communication. [ND]

NC 1003.
Customer Service: Mastering Communication
0 units

Lecture 6 hours
Effective and positive communication is key to good customer service success. Understand the communication process including common barriers to effective communication. Covers verbal and nonverbal communication, as well as listening skills. Explore and practice the techniques of effective communication. [ND]

NC 1004.
Art of Mosaic
0 units

Lecture 10 hours, laboratory 4 hours
Fee: $20. Create unique mosaic art using found objects such as glass, ceramic, stones, and any interesting elements you find. Coordinate a variety of color and textures making some household items such as a tabletop, mirror, or vase. Introduces some world known artists who use mosaic as their expression. [ND]

NC 1005.
Self-Paced Career Assessment
0 units

Lecture 1.5 hours, laboratory 4.5 hours
Designed to help job seekers and those individuals considering a career change to assess their career interests, basic skills, and transferable skills. Self-paced format utilizing a combination of paper-pencil and online assessment measures with results presented in a way that is useful for job search or career planning purposes. Career counselor will provide the interpretation of the assessment results. [ND]

NC 1006.
Customer Service: Dealing With Difficult People
0 units

Lecture 6 hours
Conflict inhibits good business. Explore the causes and impact conflict can have on customer service. Learn strategies and techniques for resolving tough issues and how to turn a difficult customer into a loyal one. [ND]

NC 1007.
CPR for the Professional Rescuer
0 units

Lecture 4 hours, laboratory 5 hours
Provides the professional rescuer with the knowledge and skills to provide Basic Life Support (BLS) to a victim in an emergency. Necessary for anyone wishing to become a BLS instructor; follows the guidelines of both the American Red Cross and the American Heart Association. [ND]

NC 1008.
Strategic Planning: Proven Basics of Planning
0 units

Lecture 12 hours
Even if you have never planned a project before, these proven steps will ensure success. Planning can be used for work projects, to design career goals, for volunteer tasks, or for putting the pieces together for your next vacation. [ND]

NC 1009.
Mentor and Coach for Improved Performance in the Workplace
0 units

Lecture 16 hours
In today's workplace, the ability to train and coach others to maximize continuous improvement and on-the-job learning is a necessary skill and resource. Assess others' potential for growth and build strategies to improve performance and production goals. [ND]

NC 1010.
Automated External Defibrillation (AED)
0 units

Lecture 2 hours, laboratory 2 hours
Provides the student with the knowledge and skills necessary to recognize a victim in need of the Automated External Defibrillation (AED) device and to properly use the AED. Enrollment limited to those with a current adult CPR certification. [ND]

NC 1011.
Customer Service: It's a Winning Attitude
0 units

Lecture 17 hours
Build your reputation and increase credibility by training employees in effective customer service strategies. The secrets to success aren't secrets at all, but proven strategies that have gained renowned reputations for leader like Nordstrom, Southwest Airline, L.L. Bean, Disney, and Federal Express. [ND]

NC 1012.
Diversity in the Workplace
0 units

Lecture 12 hours
Workplace beyond 2000 is an increasingly changing and diverse place. Enhance your understanding of workplace trends that are changing the way business is conducted. Gain awareness and build understanding for the 21st century economy. [ND]

NC 1013.
Meetings That Work
0 units

Lecture 16 hours
Design meetings that work. Examine motivators and myths of meetings. Explore tips and avoid traps of team effectiveness. If you facilitate a team or chair a meeting, this class can increase your effectiveness. [ND]

NC 1014.
Oxygen Administration for the Professional Rescuer
0 units

Lecture 2 hours, laboratory 1 hour
Provides the student with the knowledge and skills necessary to provide care to victims of respiratory emergencies, by using breathing devices such as suction, oral and airway adjuncts, resuscitation masks, bag-valve masks, and supplemental oxygen. Follows both the American Red Cross and the National Safety Council (Green Cross) guidelines. [ND]

NC 1015.
Organize Your Life and Have More Time for Fun
0 units

Lecture 12 hours
Learn to organize your life so you have time to do the things you really want to do. Discover how to have more quality time by learning how to organize paperwork, clutter, and finances. Covers techniques for overcoming procrastination. [ND]

NC 1016.
Writing for Life
0 units

Lecture 13 hours, laboratory 23 hours
Designed to give individual help to students with everyday written correspondence, from seeking employment to letters to credit bureaus. Focuses on basic e-mail correspondence, proficiency and etiquette, and stylish concerns for business letters. [ND]

NC 1017.
Interactive Infant Play
0 units

Lecture 20 hours
Designed for parents to bring their 4–12 month old infants to class and see the different ways they learn about the world through play. Learn new ways to play with a baby and practice them together in class. [ND]

NC 1018.
Is the Media Raising Our Children?
0 units

Lecture 12 hours
Parents and professionals will learn about ways the media affects children. Discussion will include a focus on computers and video games. Includes suggestions on how to teach media literacy and critical viewing for children. [ND]

NC 1019.
Parent Strategies for the Working & Single Parent
0 units

Lecture 12 hours
Working and single parents will learn how to enhance the limited time spent with children by strengthening parenting skills and practices within the home and creating more effective coping strategies during the most difficult time. [ND]

NC 1020.
Introduction to Self-Defense Techniques Geared Toward Women
0 units

Lecture 10 hours, laboratory 8 hours
Designed to train and prepare women for social or professional physical harassment, unexpected sexual attacks, and other types of assaults. Covers prevention techniques, pressure point control tactics, and physical assault countermeasures. [ND]

NC 1021.
Micro-Enterprise: The Home-Based Business
0 units

Lecture 12 hours
Work from home. Learn how to develop the home-based business idea. Turn talent or hobby into an opportunity for financial success. Understand local laws and regulations for home based business. Develop your concept and approach. Draft a budget and an implementation plan. [ND]

NC 1022.
Pediatric Basic Life Support
0 units

Lecture 5 hours, laboratory 5 hours
Provides individuals with the knowledge and skills necessary to prevent, recognize, and provide basic care for respiratory and cardiac emergencies in children and infants. Follows both the American Red Cross and American Heart Association Basic Life Support (BLS) guidelines. [ND]

NC 1023.
Market Research for Your Small Business
0 units

Lecture 6 hours
Learn how market research can help to understand new or existing business opportunities, provide competitive information, create a marketing strategy, and assess customer service. Covers approaching, conducting market research, and accessing resources. [ND]

NC 1024.
Wellness Through Fitness Training
0 units

Laboratory 54 hours
Covers wellness strategies and how to achieve them. Includes Nautilus weight training and lifecycles to develop and maintain individual muscular strength, cardiorespiratory fitness, and flexibility. [ND]

NC 1028.
Electronic Resources for Nursing and Allied Health
0 units

Lecture 6 hours, laboratory 4 hours
Hands-on introduction to professional-level use of e-mail and Internet resources in the areas of nursing and allied health. Includes specialized search engines and medical databases. This course is eligible for one CEU under the Continuing Education Program of the California Board of Registered Nursing (Title 16, CCR, Section 1455(d)). [ND]

NC 1029.
Student Internship Program for Banking
0 units

Lecture 24 hours
Provides the student with an overview of the skills necessary to position himself as a marketable candidate in the workplace. The course will examine the evolution of employment; starting with preparation, successful on-the-job techniques, and a look at future considerations. This employment process will focus on the banking industry. [ND]

NC 1030.
Beans, Bread, and Rice on the Plate
0 units

Lecture 5 hours
The 21st Century has been called the Pacific Century. What is defining the emerging Pacific Rim regionalism? Is South County a potential hub for fostering closer ties between Japan, México, and the United States? Third of three courses in a diversity management certificate. [NC]

NC 1031.
Diversity Does not Equal Political Correctness
0 units

Lecture 5 hours
Diversity is a dilemma from campus classroom to corporate boardroom. What do "culture wars" and "one America" mean? Can diversity be managed? Is a borderless world order the future? First of three courses in a diversity management certificate. [ND]

NC 1032.
Simply Race and Sex
0 units

Lecture 5 hours
Latin-Asianization is creating a majority-minority California. What commodities are to be mediated in popular culture? How will "browning" affect public relations, advertising, and marketing? Second of three courses in a diversity management certificate. [ND]

NC 1033.
Success in Nursing
0 units

Lecture 24 hours
Designed to assist enrolled nursing students to be successful in the VN and ADN programs. Included are test-task taking strategies as well as basic mathematics, reading comprehension, time management, communication, and critical thinking as they apply to the nursing curriculum. [ND]

NC 1039.
Basic Life Support (BLS)
0 units

Lecture 12 hours, laboratory 4 hours
Designed to advance the Basic Life Support (BLS) provider to the position of instructor. Teaches the instructor candidate the components and delivery of cognitive and psychomotor skills training used for BLS training. [ND]

NC 1040.
Self-Awareness Safety Preparation
0 units

Lecture 2 hours, laboratory 16 hours
Reviews dangerous environments which could negatively affect personal safety. Covers the basic elements of self-defense, escapes, recognizing threatening situations, and diffusion techniques. Increases student's self-perceptions of self-awareness. [ND]

NC 1041.
It Figures—Sensible Meal Choices for Older Adults
0 units

Lecture 18 hours
No Credit. Lecture 18 hours. Teaches older adults the basics of planning a healthy menu. Students will learn how to eat healthy meals at minimum cost and with very little waste. [ND]

NC 1045.
Hostage Negotiations for Law Enforcement
0 units

Lecture 5 hours, laboratory 5 hours
Designed for current or potential law enforcement personnel. Provides training and practical experience in hostage negotiations and the dynamics of safely responding to and handling incidents involving hostages and barricaded suspects. Covers the roles of patrol officers, correctional officers, and commanders. [ND]

NC 1046.
Basic Boating and Water Safety
0 units

Lecture 4 hours
Provides the student with a basic understanding of the areas of personal boating safety, boating laws, navigational rules and aids, small vessel operation, boating accident prevention, and water rescue. Leads to certification from the California Department of Boating and Waterways. [ND]

NC 1047.
Senior Activity Director Training
0 units

Lecture 56 hours
Designed specifically for meeting the California Department of Aging requirements for activity director. Provides the necessary credential to meet Title 22 regulations. (a person having the responsibility for developing and implementing an activity program for institutions serving older adults or adults with disabilities). [ND]

NC 1048.
Improving Your Memory After 50
0 units

Lecture 12 hours
Learn the techniques to build a better memory as you grow older and thus improve the quality of your life. Learn to deal with mental roadblocks and distractions. Includes warm-up exercises, goal-setting, problem-solving tasks, and group discussion. [ND]

NC 1049.
Historical Perspectives in Ceramics
0 units

1 hours, laboratory 5 hours
Focuses on historical perspectives chosen from the wealth of historical world ceramics. Explores the development of ceramic technology and design. Through a research-based approach, stimulates the student's selection and transformation of stylistic elements from a given culture into works of personal expression. [NC]

NC 1050.
Community Resources for Older Adults
0 units

Lecture 8 hours
Designed to make the older adult aware of the many resources and opportunities available in the community. Resources covered include housing, employment, health and wellness, recreation, educational, cultural, transportation, legal services, social, and volunteer opportunities. [ND]

NC 1051.
Introduction to Microcomputers
0 units

Laboratory 3 hours
Covers computer start-up; the graphic user interface; use of mouse and keyboard commands; basic file management; formatting and using a floppy disk; creating, saving, and printing a document using word-processing software; and proper computer shutdown. [ND]

NC 1052.
Basic Water Rescue
0 units

Lecture 3 hours, laboratory 1 hour
Provides individuals such as public safety personnel, aquatic fitness instructors, and aquatic therapists with information and skills necessary to recognize, prevent, and respond to aquatic emergencies. Prepares individuals for aquatic emergencies by teaching them to protect themselves when assisting others. Student must be an experienced swimmer. [NC]

NC 1053.
Art Therapy
0 units

Lecture 12 hours
Focuses on the use of art as a therapeutic process for older persons in an institutional setting. A variety of art media to promote self-expression, develop coping skills, combat depression, improve mental and emotional status, and improve overall quality of life will be used. [ND]

NC 1054.
Family Childcare Business I
0 units

Lecture 12 hours
Examines the process of setting up an in-home day care business. Analysis and implementation of business plan including enrollment of children, contracts, bookkeeping, and legal considerations. Creative ways to use available space and materials for a developmentally appropriate environment. [NC]

NC 1055.
Family Childcare Business II
0 units

Lecture 12 hours
Identifies caregiver's responsibilities regarding health, safety, and nutritional needs of children. Focuses on providing a safe environment for children and procedures for dealing with illness, medications, and reporting suspected child abuse or neglect. [NC]

NC 1056.
Family Childcare Business III
0 units

Lecture 12 hours
Examines major theories in child development with an emphasis on practical application for the family childcare provider. Explores guidance techniques using negotiation, problem solving techniques, and positive reinforcement. [ND]

NC 1057.
Family Childcare Business IV
0 units

Lecture 12 hours
Provides information and practice in helping children express feelings of loss, separation, and anxiety. Examines community resources for families and children in crisis as specific resources for providers for program improvement (toy and material lending, provider support groups, field trips, free/low cost materials). [ND]

NC 1058.
Family Childcare Business V
0 units

Lecture 12 hours
Examines concept of developmentally appropriate practices as applied to home learning environment. Analysis of basic "whole child" approach to developing a curriculum for young children. Explores role of caregiver in providing an inclusive, multicultural, environment rich in diversity and acceptance of the individual. [ND]

NC 1059.
Enjoying Great Music—Symphony
0 units

Lecture 8 hours, laboratory 8 hours
Learn about the great symphonic literature by listening to the works of the masters. Learn the structure and movement of the classical orchestral symphonies. Examine the biographies of the great composers. Learn about the influence of the political and social changes of the eighteenth-twentieth centuries on the symphony. [ND]

NC 1060.
Introduction to Opera
0 units

Lecture 8 hours, laboratory 8hours
An overview of the great operatic works of the eighteenth-twentieth centuries. Includes the terminology of the opera and a biographical survey of some of the great composers. Learn what social and political events influenced opera. Enjoy listening to selections from European and American opera. [D]

NC 1061.
Nautilus Strength Training Instructor Certification
0 units

Lecture 10 hours, laboratory 10 hours
Provides complete scientific and applied principles to prepare the participant to teach individuals how to use Nautilus equipment (the Nitro and 2ST lines) effectively as well as promote member retention and motivation which results in a lifelong fitness routine. [ND]

NC 1062.
Emergency Responder Refresher for Marine Safety Personnel
0 units

Lecture 12 hours, laboratory 4 hours
Refresher course for previously trained marine safety personnel covering emergency care for victims of injury or sudden illness. Includes preventing disease transmission, legal and ethical issues, human body systems, transporting patients, patient assessment, management of bleeding and muscle/bone/spine injuries, behavioral emergencies, childbirth, poisoning and exposure. [ND]

NC 1063.
Emergency Medical Technician Refresher for Marine Safety Personnel
0 units

Lecture 20 hours, laboratory 4 hours
Refresher course for marine safety service personnel covering first aid with emphasis on emergencies involving artificial respiration, cardiopulmonary resuscitation, automated external defibrillation, oxygen therapy, care for fractures, bleeding, poisoning and burns. Additional topics include exposure, drugs, emergency rescues, childbirth and Body Substance Isolation (BSI) procedures. [ND]

NC 1064.
Boating Safety Paddle Sports Leader Training
0 units

Lecture 12 hours, laboratory 12 hours
Designed for those pursuing careers as recreation assistants in aquatic recreation programs. Covers small craft safety, general operations, basic rescue, skill development and instructional methods in teaching kayaking, canoeing, and outrigger canoeing. Successful completion leads to certification in small craft, basic rescue and paddle sports leader. Recommended for American Canoeing Association (ACA) instructor preparation. [ND]

NC 1065.
Using 4MAT for Corporate Training and Education
0 units

Lecture 60 hours
Provides Instructional methodology for corporate trainers, teachers, tutors, and administrators, using research on learning and teaching, a team of certified 4MAT trainers. Focuses on tools such as "4MAT" to plan concept-based instruction using the natural cycle of learning to increase mastery of training/education performance objectives. [ND]

NC 1066.
Careers in Marine Safety Service
0 units

Lecture 8 hours, laboratory 16 hours
Overview of career opportunities in marine safety service settings. Covers basic physical skills, equipment, and rescue training. Required of part-time or full-time personnel who provide protection along coastal waters, lakes, and rivers. Includes requirements for entry-level positions with federal, state or municipal government agencies, or private enterprises. [ND]

NC 1067.
Report Writing for Law Enforcement
0 units

Lecture 8 hours
Writing instruction on style, technique, and format for typical reports used in law enforcement. Includes interviewing techniques and note taking, planning the report, transcribing notes into formal documents, and providing proper evidentiary documentation. [ND]

NC 1068.
Introduction to Architectural Imaging and Animation
0 units

Lecture 8 hours, laboratory 22 hours
For individuals interested in the creation of three-dimensional architectural models using computer-aided drawing. Introduces the creation and use of architectural geometry, material applications to models, and motion simulation. A working knowledge of any CAD or imaging software is recommended. [ND]

NC 1069.
Customer Service: Managing Change
0 units

Lecture 6 hours
Explore our natural tendencies and the tendencies of our customers to resist change in the workplace. Learn techniques for handling change and how to introduce change to our customers. Practice change management techniques. [ND]

NC 1070.
Customer Service: Decision Making and Problem Solving
0 units

Lecture 6 hours
Explore techniques for making business decisions and solving problems. Learn decision-making styles and when each style might be applied. Review how to assess a situation, prioritize the urgency of tasks, and select the steps for successful completion. [ND]

NC 1071.
Customer Service: Time and Stress Management
0 units

Lecture 6 hours
Workplace demands efficiency and productivity. Manage our time and stress has an impact on our ability to perform above company standards. Juggle more work and changes with less time and still "keep your cool"? Explore time management techniques at work that will help you stay in balance. Be both more efficient and happier in the workplace. [ND]

NC 1072.
Customer Service: Business Ethics
0 units

Lecture 6 hours
Ethical behavior in our homes and with friends may be different than what we see and use in the workplace. Explore business attitudes and ethics and how our perceptions differ. Evaluate samples of ethical behavior. Practice using the 3-Step Checklist. [ND]

NC 1073.
Customer Service: The Right Attitude
0 units

Lecture 6 hours
Having the right attitude has a positive impact on the workplace and our interactions with customers. Explore how attitudes at work positively and negatively affect customer service, the company image, productivity, employee retention and company growth. Explore techniques for maintaining a professional attitude. [ND]

NC 1074.
Customer Service: Team Building
0 units

Lecture 6 hours
Working as teams in business can increase productivity, enhance project management, reduce business conflicts, and create superior customer service. Identify team opportunities in your company. Learn the "roles" in a team and how to be both a leader and team player. Practice new skills in typical business scenarios. [ND]

NC 1075.
Jazz Improvisation Workshop
0 units

Lecture 50 hours, laboratory 60 hours
Provides students with the opportunity to develop performing experience in a small jazz ensemble, and to cultivate skills, techniques, and ideas relating to solo and group improvisation. Includes elements of jazz theory, history and instrumental techniques. [ND]

NC 1077.
Arts and Crafts: Doll Making
0 units

Lecture 2 hours, laboratory 4 hours
Simple basic techniques to produce and create whimsical dolls without sewing. Includes doll pins as wearable art made out of paper, fiber, fabric, wire, and rubber stamps. Covers collage techniques for use on dolls and doll pints. Need basic skills of cutting, gluing, and coloring or painting on fabric and paper. [ND]

NC 1078.
Arts and Crafts: Scrapbooking
0 units

Lecture 2 hours, laboratory 4 hours
Simple basic techniques to produce and create family photo albums known as "Scrapbooking." Use of paper and templates for creating designs around themes such as a vacation, birthday party, and a wedding. Simple calligraphy flourishes to enhance the over all design of the theme page. Introduction of rubber stamps and decorative rulers to create effects on the background of the pages. [ND]

NC 1079.
Arts and Crafts: Creating Art for Journals
0 units

Lecture 2 hours, laboratory 4 hours
Creation of a journal by taking an existing hardback book and decorating it as a personal journal. Creation of journals for writing thoughts, feelings, and recording memories while incorporating art in the pages through the use of mixed media. [ND]

NC 1080.
Arts and Crafts: Rubber Stamping
0 units

Lecture 2 hours, laboratory 4 hours
Simple basic techniques to produce and create bookmarks, invitations, cards, and to embellish a T-shirt as wearable art using pre-made rubber stamps. How to ink and position the stamp to get a clear impression. Use of masking to create a foreground and background. Layering of paper and other materials to create a frame effect. Use of markers and colored pencils to enhance the stamped image. [ND]

NC 1081.
First Responder Swift Water Rescue Training I
0 units

Lecture 2 hours, laboratory 2 hours
Designed for first responder personnel. Covers basic water rescue, victim retrieval, use of rescue equipment and personnel protection protocols. Special emphasis on the hazards of swift water dynamics. [ND]

NC 1082.
Fire-Marine Safety Service Automated External Defibrillator/Esophageal-Tracheal Airway Training
0 units

Lecture 8 hours, laboratory 14 hours
Students pursuing a career in the fire-marine safety service field. Provides background information, treatment procedures, and case management of the sudden cardiac arrest victim, using an Automated External Defibrillator (AED) and Esophageal-Tracheal Airway (ETAD) in a marine setting. [ND]

NC 1083.
Leadership Training in Marine Aquatic Activities
0 units

Lecture 3 hours, laboratory 5 hours
Provides vocational training for those pursuing careers in beach-front aquatic recreation activities. Covers basic knowledge and introductory skills, and methods of instruction in a variety of marine aquatic activities. Special emphasis is placed on instructional safety, risk management and emergency response, environmental concerns, and equipment management and maintenance. [ND]

NC 1084.
Calligraphy
0 units

Lecture 15 hours, laboratory 39 hours
Explores the history, theory , and techniques of calligraphy, which shape letterforms, past, and present. Covers linear forms, broad-pens, Sans Serif ,and Serif forms. Learn Roman, formal Roman, italic, Uncial, Gothic, decorative scripts, brush, and copperplate styles. Tips on business and bookbinding also included. [ND]

NC 1085.
Fundamentals of Instructional Evaluation and Training
0 units

Lecture 4 hours, laboratory 6 hours
Provides the teaching assistant candidates in marine and public safety service settings with knowledge and training required to communicate, demonstrate, and remediate skills performance in training settings. Core curriculum includes instruction on maintaining a safe, professional learning environment, demonstration and evaluation of manipulative skills, equipment maintenance and inventory control systems, and knowledge of the guidelines of authorizing agencies. [ND]

NC 1087.
A Teacher's Guide to Computers in the Classroom
0 units

Lecture 8 hours, laboratory 4 hours
Provides educators, and others, with tools and resources that help facilitate the integration of computers and technology into the classroom, with a particular emphasis on the Internet. Covers the recent explosion of computers into our mainstream lives, and why the field of education has felt the necessity to integrate technology into the classroom. [ND]

NC 1088.
Build Your Own Web Site
0 units

Laboratory 12 hours
Basic skills needed to build and publish a simple Web site. Create and upload Web sites to free online hosting companies. [ND]

NC 1089.
Human Resources Management Seminar
0 units

Lecture 16 hours
Overview of human resource management in the United States, including assessment, information systems, compensation, job analysis and design, training, evaluation, and employee relations. [ND]

NC 1090.
History of the Internet
0 units

Lecture 6 hours
The Internet has quickly become a common part of modern society. But what exactly is the Internet? How did it start? And how did it become so popular? History of the Internet is a lecture course covering the evolution of the Internet from its beginnings, noting key turning points and milestones that have contributed to its growth. [ND]

NC 1091.
Money Saving Resources Available on the Internet
0 units

Lecture 2 hours, laboratory 1 hour
With the cost of living continuously rising, the Internet provides some welcome resources in helping not only make ends meet, but provide a bit of cushioning. Covers an overview of some of these resources including, coupon clipping sites, free sites, frugal living resources, and where to find them on the Internet. [ND]

NC 1092.
Introduction to Educational Technology
0 units

Lecture 9 hours, laboratory 3 hours
Introduction to the field of Educational Technology and the theory and practice of instructional design. Intended for individuals planning on incorporating technology into their classrooms; those interested in pursuing their studies through technological means (i.e. online education); or those simply interested in learning more about the current trends in the educational and training fields. Includes educational games, simulations and virtual reality, as well as the future of the Internet in the everyday classroom. [ND]

NC 1093.
Fundamentals of Instructor Training
0 units

Lecture 6 hours
Designed for instructor candidates to learn fundamental teaching skills. Course covers learning theory, characteristics of learners and instructors, information on how to conduct a course for the American Red Cross, planning to teach a course using Red Cross forms, evaluating the training process, and representing the Red Cross. [ND]

NC 1094.
Internet Safety for Parents and Kids: Being 'Street Smart' on the Internet
0 units

Lecture 2 hours, laboratory 1 hour
Potential of the Internet to provide us with unlimited resources and access to information, our families are exposed to new dangers and alerts from which we must protect ourselves. Designed to provide information and resources for protecting ourselves from unwanted attention, identity theft and potentially dangerous contacts. [ND]

NC 1095.
I'll Take the Gold Watch, But you can Keep the Rocking Chair
0 units

Lecture 2 hours, laboratory 4 hours
Assist new retirees, and those individuals planning for retirement, to design a post-retirement career and life plan. Utilizes information about their skills, interests, values, personality, personal needs and circumstances, education, and employment history. Students gain vital self-knowledge from a variety of assessments and have the opportunity to conduct career and labor market research, and volunteer opportunities in the community. A career counselor will provide an interpretation of the assessment results. [ND]

NC 1097.
Protecting Your Computer
0 units

Lecture 2 hours, laboratory 1 hour
Provides information and resources for protecting our computers from damaging viruses and unauthorized entry. Identifies potential computer safety concerns and how to eliminate and prevent them. [ND]

NC 1098.
Lifeguard Training Instructor
0 units

Lecture 32 hours
Vocational recreation leadership class meeting all requirements to become a certified lifeguard instructor, for those pursuing employment in aquatic recreation. Instructional emphasis on development of instructional materials, methods of presentation, techniques of evaluation, and rescue skill requirements associated with professional life guarding in confined and waterfront settings. [ND]

NC 3000.
Penal Code 832—Arrest and Firearms
0 units

Lecture 72 hours, laboratory 18 hours
Orientation and basic training in such matters as laws of arrest, search and seizure, discretionary decision making, police ethics and other matters required under Penal Code 832. [ND]

NC 3001.
Latent Fingerprinting Examiner
0 units

Lecture 54 hours, laboratory 54 hours
History and application of fingerprint identification, fingerprint comparison, and classification. The course includes recognition of patterns, use of the Henry classification system and national systems for recording and storing fingerprints. This course is part one of a two-part offering beginning with "Known" prints. [ND]

NC 3002.
First Responder
0 units

Lecture 54 hours
Fundamentals of first aid with emphasis on emergencies requiring knowledge and skills in artificial respiration, cardiopulmonary resuscitation, automated external defibrillation, oxygen therapy, care for fractures, bleeding, poisoning and burns. Additional material covers problems of exposure, drugs, emergency rescues, childbirth and Body Substance isolation procedures (BSI). [ND]

NC 3003.
Introduction to Administration of Justice
0 units

Lecture 54 hours
History and philosophy of Criminal Justice; a survey of the Criminal Justice System; identification of various segments, roles, and interrelationships; overview of crime, criminals, and causal theories; jurisdiction of local, state, and federal criminal justice agencies; survey of professional career opportunities; ethics and professionalization. [ND]

NC 3004.
Certified Nurse Assistant
0 units

Lecture 81 hours, laboratory 135 hours
Provides entry-level skills for employment and awareness of opportunities in health care occupations, and promotes quality of patient care. The curriculum, based on State regulations, provides theory and practical application of skills needed to function as a CNA in a long-term care facility. [ND]

NC 3006.
Fire Protection Organization
0 units

Lecture 54 hours
Provides an introduction to fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics. [ND]

NC 3007.
Specifications and Blueprint Reading for Construction
0 units

Lecture 54 hours
Reading and interpretation of blueprints used in building construction; reviewing site lay-out plans; architectural, mechanical and electrical drawings. [ND]

NC 3008.
Introduction to Environmental Technology
0 units

Lecture 54 hours
Designed to give students a general overview of environmental hazardous materials technology. History of pollution leading to current legislation, environmental effects of pollution, and an overview of the regulatory framework will be presented. Career opportunities in the areas of handling and management of hazardous substances will be discussed. [ND]

NC 3009.
Freehand Drawing
0 units

Lecture 35 hours, laboratory 73 hours
Drawing in graphite pencil, felt marker, pen and ink. A study of light, form, value, composition, proportion, and scale drawing from elements found in the built environment and from nature. [ND]

NC 3010.
Introduction and Basic Automotive Services
0 units

Lecture 35 hours, laboratory 73 hours
Introductory course with a laboratory for all automotive enthusiasts. The course details preventative maintenance and fluid replacement service. Also, covering engine service, drive line, function, electrical system diagnosis, and repair. General safety practice defined for wheels, tires, brakes, and suspension service. [ND]

NC 3011.
Helping Children Cope with Crisis and Change
0 units

Lecture 18 hours
Developing coping skills in young children; provide information and practice in helping children express feelings and adjust positively to crisis and change. Topics include: separation and loss, death, divorce, and blended families. [ND]

NC 3012.
Health and Safety in Family Day Care
0 units

Lecture 18 hours
Focuses on key aspects of children's health and safety needs. Included will be understanding ways to encourage and promote good health in children, identifying the caregiver's responsibilities in dealing with illness, medications, and suspected child abuse or neglect. Creating a safe environment for children and utilizing emergency resources. [ND]

NC 3013.
Family Day Care Resources
0 units

Lecture 18 hours
Focus on community resources for children and families referral techniques; sources for free/low cost materials for children; specific resources for children; specific resources for family day care providers; toys and materials lending; field trips and community experiences for families and children. [ND]

NC 3014.
Family Day Care: Guidance and Discipline
0 units

Lecture 18 hours
Major theoretical positions on disciplines; practice in choosing appropriate guidance techniques; demonstration and simulations of P.E.T., positive reinforcement, logical consequences, and behavior modification techniques to resolve aggression among children; role of diet in child behavior. [ND]

NC 3015.
Family Day Care: Home as a Learning Environment
0 units

Lecture 18 hours
Home as a teaching and learning environment; includes analysis and implementation of professional day care provider standards; television controversies; play as a mode of learning; language development; language delays, disorders, and problems. [ND]

NC 3016.
Math for Young Children
0 units

Lecture 18 hours
Principles and practices for presenting activities in a developmental sequence to support young children's basic understanding of mathematics. Emphasis on the three types of learning: naturalistic, informal, and structured. [ND]

NC 3017.
Science for Young Children
0 units

Lecture 18 hours
Exploration of developmentally appropriate science activities for young children. Students will create science experiences, select appropriate materials, learn scientific techniques for working with young children, and learn how to integrate science across the curriculum. [ND]

NC 3018.
Technology for Young Children
0 units

Lecture 18 hours
Designed to introduce students to technology utilized in child development settings, including computer applications and introduction to software that will enhance instruction in early childhood. Software programs for behavior management, developmental assessment, multicultural, language development, creativity, math and science, problem solving, and thematic focus. [ND]

NC 3019.
Principles of Family Development
0 unit

Lecture 54 hours
Discussion of historical and modern family lifestyles, their functions, values which influence behavior, and patterns which result from male-female interaction. Male, female, and family images in literature and the mass media will be analyzed. [ND]

NC 3020.
Developing and Starting a New Business
0 units

Lecture 54 hours
Class is aimed at creating knowledge, skills, awareness and involvement in the process and the critical aspects of creating a new venture and then making it grow. Students discover the attitudes, resources, and networks that are sufficient to pursue entrepreneurial opportunities. [ND]

NC 3021.
Operating and Managing a Small Business
0 units

Lecture 54 hours
Study of the basic problems of managing and operating a small business, developing the necessary physical and paper systems, and initial conduct of the business including record keeping, sales and other operation necessities. [ND]

NC 3022.
Principles of Electronic Commerce
0 units

Lecture 54 hours, laboratory 18 hours
Provides an overview of electronic commerce and examines basic principles. Provides students with the understanding and knowledge of important factors involved in the overall process of electronic commerce. Topics include the infrastructure, software availability, buyer behavior patterns, security issues, and future trends. [NC]

NC 3023.
Human Relations in Organizations
0 units

Lecture 54 hours
Designed to help students develop and promote skills to achieve good relations with coworkers, supervisors, subordinates, customers and other business associates. Among the topics to be covered are: understanding self and others, communications, motivation and leadership. [ND]

NC 3024.
Principles of International Business
0 units

Lecture 54 hours
Surveys nature and dimension of international business, environmental frameworks, international trade policies, international alliances, international financial markets, various forms of foreign involvement in international trade and discussion of the role of the multi-national corporation in world trade. [ND]

NC 3025.
Fundamentals of Importing
0 units

Lecture 18 hours
An introduction to importing, from start to finish, covering regulations, documentation, financial instruments of trade, U.S. Customs procedures for importing, customs brokers duties and responsibilities; emphasis on practical application. [ND]

NC 3026.
eCommerce Miva Merchant Online Stores
0 units

Lecture 36 hours, laboratory 54 hours
Build dynamic Web Applications for eCommerce and online stores, at a fraction of the typical development time and expense. Students will use Miva Merchant and Macromedia Fireworks to build fully customized eBusiness catalog storefront with simple point, click and fill in the blanks technology. Learn to use a browser based management tool to control all aspects of your storefront, from product maintenance to category management to order and credit card processing. [ND]

NC 3027.
Network Associate Specialist
0 units

Lecture 90 hours, laboratory 162 hours
Program introduces students to key concepts of data communications, telecommunications, and computer networking as well as concepts, technologies, components, and protocols inherent in local and wide area networking. Students are introduced to technologies used to move voice and data across long distances and the underlying applications and troubleshooting methodologies of Transport Control Protocol/ Internet Protocol (TCP/IP) services as a primary enabler of the Internet. Students will be provided with an opportunity to test for the Network Associate Specialist Certification Exam (NASCE). [ND]

NC 3028.
Introduction to Programming Using C++
0 units

Lecture 54 hours, laboratory 54 hours
Introduction to C++ programming methods using structured and object-oriented methodology. Theory and technology of control, data and object structures using the Turbo C++ software package. [ND]

NC 3029.
Introduction to CAD/CAM Systems
0 units

Lecture 36 hours, laboratory 36 hours
Introduction to the field of Computer Aided Design and Drafting (CADD) and engineering. Provides the student with an overview of personal computers and the use in development of drawings or engineering related fields. [ND]

NC 3030.
Introduction to Travel and Tourism
0 units

Lecture 54 hours
Introduction to the extensive world of travel. Includes: tourism as a bridge between people, basic concepts of tourism and the people affected, economic and sociological importance of tourism, how tourism is organized, the history of the industry, the industry segments, and career possibilities. [ND]

NC 3031.
Worldwide Cruise Travel
0 units

Lecture 54 hours
Instruction in the modes of travel by ship. Study of the major cruise lines and use of cruise reference guides. Ports of call worldwide differences between cruise lines, river cruises, and barge travel. [ND]

NC 3032.
Introduction to Electronics Technology
0 units

Lecture 54 hours
Survey course covering the basic electrical/electronic concepts in modern electronics systems. Topics covered include: DC circuits, magnetics, AC circuits, audio and radio, digital electronics, computers, small appliances, and automotive electronics. Intended for non electronics majors who want to know how these systems work. The course is designed to support other disciplines by supplying the basic knowledge in a non mathematical manner. [ND]

NC 3033.
DC Circuit Principles
0 units

Lecture 27 hours, laboratory 27 hours
Introduction to DC components and basic circuit configurations. Topics covered will include current, voltage, power, resistors, fuses, switches, batteries, thermistors, photo resistors, series and parallel circuits, multimeters, and power supplies. Students with high school tech prep credit should not take this course. [ND]

NC 3034.
DC Circuit Analysis and Computer Simulation
0 units

Lecture 27 hours, laboratory 27 hours
Continuation of DC circuits through complex series/parallel circuits using computer software to simulate circuits. Trouble shooting techniques for open and short circuits. Practical applications of whetstones bridges, voltage dividers, current dividers, thermistors and photo resistor circuits. Laboratory experiences include both hands-on circuit construction and computer simulation. [ND]

NC 3035.
Digital Electronics Principles
0 units

Lecture 27 hours, laboratory 27 hours
Digital fundamentals, basic gates, integrated circuits, test equipment, and Boolean logic will be covered. Students will construct and test circuits using digital trainers, logic probes, logic pulsers and oscilloscopes. [ND]

NC 3036.
Introduction to Word Processing (MOS Core Preparation)
0 units

Lecture 54 hours, laboratory 18 hours
Designed to prepare students for entry-level positions in the area of word processing as well as to prepare students for the Microsoft Office Specialist (MOS) CORE certificate exam. [ND]

NC 3037.
Legal Terminology
0 units

Lecture 36 hours
Course designed to prepare students who desire to work as a legal clerk/secretary/transciptionist. Student will learn terminology commonly used in civil, probate, family, criminal law pleadings and documentation. [ND]

NC 3038.
Office Automation Concepts—MOS Outlook Certification Preparation
0 units

Lecture 54 hours, laboratory 18 hours
Introduction to the concepts of office automation in today's modern office as it relates to communication, computers, and networks. Includes email with various attachments, online calendar, messaging, faxing, and contacts. Prepares students for the MOS Proficiency Certificate in MS-Outlook. [ND]

NC 3039.
Legal Office Procedures
0 units

Lecture 54 hours, laboratory 18 hours
Introductory course designed for persons wishing to pursue a career as a legal office professional or persons currently working in a law office who wish to improve their skills and gain a better understanding of the state and federal courts, legal terminology, preparation of court documents, and the concepts of civil procedures in various areas of the law operative in California. Three projects using Microsoft Word or WordPerfect. [ND]

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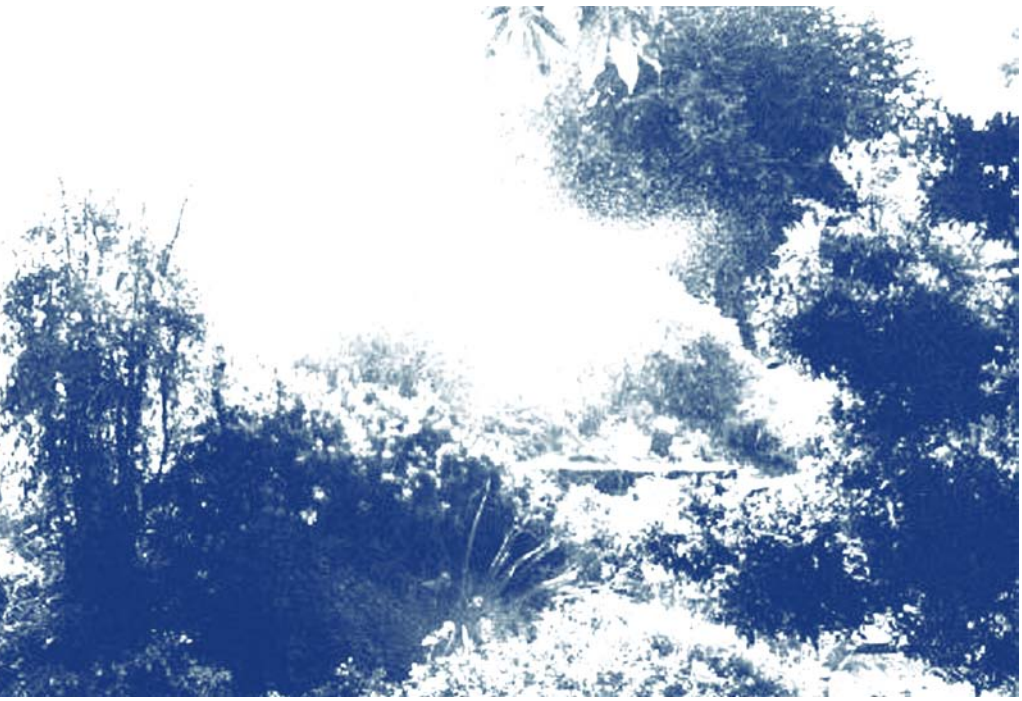

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M.A., Art History

MARIE VICARIO
Environmental Hazardous Materials Technology
B.S., University of California
M.P.H., San Diego State University

VIVIEN VAUGHAN
Humanities
B.A., Montclair State College
M.F.A., San Diego State University

JEFFREY VEAL
Astronomy
B.S., San Diego State University
Ph.D., University of Illinois, Urbana-Champaign

RONALD VESS
Librarian
B.A., M.L.S., California State University, Fullerton

CLAIRE VILLALPANDO-UTGAARD
English
B.S., California Polytechnic State University
M.A., Washington State University

DICK WASSON
Accounting
B.S., M.B.A., Portland State University
CPA

VIRGINIA WATSON
Child Development
B.A., San Francisco State University
M.A., California State University, Los Angeles

SUSAN WING
Biology
A.A., Orange Coast College
B.A., California State University, Long Beach
M.S., San Diego State University

REBECCA WOLNIEWICZ
Communication
A.A., Southwestern College
B.A., San Diego State University
M.A., Ph.D., Southern Illinois University, Carbondale

MARY WYLIE
Dean, Economic Development and Customized Training
B.A., M.A., San Diego State University

KEN YANOW
Geography
B.A., University of California, Santa Barbara
M.S., M.S., San Diego State University

LESLIE YODER
English
A.A., San Diego City College
B.A, San Diego State University
M.A University of California, San Diego

BEATRICE ZAMORA-AGUILAR
Interim Dean, School of Counseling and Personal Development
A.A., Mt. San Antonio Community College
B.A., California State University, Fullerton
M.S., San Diego State University

EILEEN ZAMORA
English
B.A., M.A., San Diego State University

LAUREN ZINOLA
Engineering
B.S., Santa Clara University
M.A., Stanford University

Faculty Emeriti

ALLAN ACCOMANDO
Mathematics
Appointed 1970–Retired 1998

WAYNE ALLEN
Dean, Student Activities
Appointed 1962–Retired 1977

GARY ANDERSON
Spanish
Appointed 1967–Retired 1999

JERROLD ANDERSON
Speech
Appointed 1967–Retired 1997

LUTHER ARMSTRONG
Engineering
Appointed 1964–Retired 1976

VIRGINIA ARMSTRONG
Family Consumer Studies
Appointed 1971–Retired 1991

DONALD BAIRD
English
Appointed 1965–Retired 1992

PETER BAREND
Director of Admissions, Evening & Extension
Appointed 1970–Retired 1981 *

JERRY BARTOW
Athletics
Appointed 1975–Retired 2001

RAY BENKENDORF
Communication
Appointed 1971–Retired 1999

JOHN BIBBO
Mathematics
Appointed 1966–Retired 1998

BARBARA BLOUROCK
Speech and Psychology
Appointed 1976–Retired 1988

RICHARD BRANNEN
Aeronautics
Appointed 1969–Retired 1990 *

CAROLYN BRADY
Athletics
Appointed 1971–Retired 2001

JANEY BROWN
Nursing
Appointed 1973–Retired 2003

THOMAS BRUN
Health
Appointed 1968–Retired 2002

WESLEY BURNETT
History
Appointed 1965–Retired 1972

CLARENCE BURTON
Counselor
Appointed 1965–Retired 1976 *

MARTIN CARLSEN
Administration of Justice
Appointed 1965–Retired 1978

FRED CARVELL
Special Assistant to the Superintendent/President
Appointed 1988–Retired 1998

LLOYD CASSADY
Counselor
Appointed 1959–Retired 1987

RICHARD CHAVEZ
Automotive Technology
Appointed 1975–Retired 1994

ROBERT CIZEK
Physics
Appointed 1990–Retired 2001

JOHN D. CLARK
Art
Appointed 1955–Retired 1990

FRANCIS CLARKE
English
Appointed 1956–Retired 1992 *

MARY K. CONIFF
Nursing
Appointed 1966–Retired 1979

JOHN CONNELLY
Philosophy
Appointed 1971–Retired 2000

NANCY CONRAD
Nursing
Appointed 1986–Retired 2000

JOSEPH CONTE
Superintendent/President
Appointed 1986–Retired 1997 *

JEAN COOKE
Anthropology
Appointed 1962–Retired 1987 *

ELVIRA CORDOVA
ESL
Appointed 1977–Retired 2000

JOHN COUFAL
Communication
Appointed 1964–Retired 1998

LOIS COWAN
Music
Appointed 1970–Retired 1990

THOMAS CRESCENZO
Economics
Appointed 1975–Retired 1997 *

M. JEAN CURTIS
Nursing
Appointed 1969–Retired 1999

MARYELLENE DEASON
Counselor
Appointed 1987–Retired 1998

WADIE DEDDEH
Political Science
Appointed 1962–Retired 1994

AL DEBACA
Business
Appointed 1968–Retired 1997 *

LOURDES DE PERIO
Nursing
Appointed 1982–Retired 1998

CHESTER S. DEVORE
Superintendent/President
Appointed 1946–Retired 1981

STELLA DICKINSON
English
Appointed 1970–Retired 1983

MARY-NONA DORN
English
Appointed 1965–Retired 1983 *

MIRIAM DORNBIRER
Nursing
Appointed 1973–Retired 1996

FELIX DUGGER
Computer Information Systems
Appointed 1956–Retired 1987

WILLIAM DUNCAN
Physical Education
Appointed 1965–Retired 1990

CHRISTINE R. ELDRED
Vice President, Administrative Affairs
Appointed 1967–Retired 1993

JEANNE ELYEA
Campus Nurse
Appointed 1974–Retired 1998

WILBUR ENDERUD
Business
Appointed 1962–Retired 1979

DEAN ENDRES
Automotive Technology
Appointed 1969–Retired 1998

CHARLOTTE ERDAHL
Nursing
Appointed 1986–Retired 2001

ROBERT ERQUIAGA
Spanish
Appointed 1971–Retired 1991

ART FILSON
Physical Education
Appointed 1951–Retired 1987

DONALD FIREBAUGH
Philosophy/Spanish
Appointed 1969–Retired 1999 *

EDWIN FIX SR.
Data Processing
Appointed 1965–Retired 1983

DENNIS FOREMAN
History
Appointed 1966–Retired 1991

DONALD D. FREDERICK
Mathematics
Appointed 1962–Retired 1983

JULIO GARCIA
Psychology
Appointed 1976–Retired 1999

LAWRENCE GARDNER
Mathematics
Appointed 1963–Retired 1987

M. RICHARD GEHRING
Physical Education
Appointed 1964–Retired 1996

JUDY GENNETTE
Vocational Nursing
Appointed 1979–Retired 1997

FRANK GIARDINA, JR.
English
Appointed 1977–Retired 2003

BERNARD W. GORMAN JR.
Mathematics
Appointed 1956–Retired 1983

HENRIQUE GUERREIRO
Spanish
Appointed 1970–Retired 1995

MAYNE HARRINGTON
Political Science
Appointed 1961–Retired 1972 *

THOMAS HAHN
Vice President, Academic Affairs
Appointed 1965–Retired 1998

CARROL HAUENSTEIN
Health and Physical Education
Appointed 1961–Retired 1983

JAMES HEINRICH
Math and Chemistry
Appointed 1970–Retired 1992

DALE HENDERSON
History
Appointed 1956–Retired 1990

TONY HERNANDEZ
Counselor
Appointed 1970–Retired 2001

PAMELA C. HILL
Vocational Nursing
Appointed 1981–Retired 1996

ROSANNE HOLLIDAY
Child Development
Appointed 1971–Retired 1998

WILMA M. HOWARD
English
Appointed 1951–Retired 1982 *

HUGH HYDE
English
Appointed 1968–Retired 1991

WILLARD E. JOHNSTON
Sociology and Social Psychology
Appointed 1965–Retired 1984 *

URSULA KANTOR
Counseling
Appointed 1971–Retired 2001

JOHN KEETCH
Chemistry
Appointed 1962–Retired 1998

DOROTHY KIRKPATRICK
Nursing
Appointed 1967–Retired 1977

RONALD LAWSON
Photography
Appointed 1955–Retired 2000

EILEEN LINDSAY
Counselor
Appointed 1966–Retired 1991

NORMA LITTLE
Reading
Appointed 1991–Retired 2002

GEORGE LIVERMORE
Mathematics
Appointed 1965–Retired 1975 *

WILLIAM LOPEZ
Physics
Appointed 1972–Retired 1987 *

***DECEASED**

LORRAINE F. LOWERISON
Business
Appointed 1950–Retired 1984

DONALD LYNN
Chemistry
Appointed 1966–Retired 1997

WILLIAM LYNN
Automotive Technology
Appointed 1971–Retired 2001

SUZANNE MCKEWON
Reading/ESL
Appointed 1988–Retired 2003

DONALD R. MACQUEEN
Social Sciences
Appointed 1966–Retired 1983

ROBERT MADDEN
Business
Appointed 1966–Retired 1983

DANIEL MAHONEY
History
Appointed 1959–Retired 1991

VINCENT MARTIN
Business
Appointed 1969–Retired 1992

JOHN MARTINEZ
Spanish
Appointed 1965–Retired 1990

ROBERT MATHENY
Art
Appointed 1961–Retired 1991

CHARLOTTE MCGOWAN
Anthropology
Appointed 1971–Retired 1998

GEORGE MC MARTIN
Administration of Justice
Appointed 1968–Retired 1990 *

LOIS MARRIOTT
Assistant Dean, Instructional Resources
Appointed1976–Retired 1994

ROBERT MEARS
Physical Education
Appointed 1970–Retired 1997

SARA MEGLING
Journalism
Appointed 1989–Retired 2003

MARION MENZEL
Geography
Appointed 1962–Retired 1974

JAMES MERRILL
Music
Appointed 1953–Retired 1983

GEORGE MILKE
Physical Education
Appointed 1951–Retired 1992

ROBERT MILLS
Counselor
Appointed 1963–Retired 1976

LIONEL MORDECAI
Mathematics
Appointed 1989–Retired 2001

JOHN NEWHOUSE
Dean, Academic Information Services
Appointed 1977–Retired 2002

LEO NICHOLS
Counselor
Appointed 1970–Retired 1994

JAMES NOLFI
English
Appointed 1955–Retired 1982

LEROY OLSON
Biology
Appointed 1972–Retired 2000 *

VANE OLINGER
Counselor
Appointed 1967–Retired 1979

ERNES OROZ
Accounting
Appointed 1975–Retired 1998 *

ELIZABETH OTTEN
Dean, Mathematics
Appointed 1962–Retired 1985

JOHANNA PALADINO
English/Speech
Appointed 1964–Retired 1995 *

THOMAS F. PARKER
Health and Physical Education
Appointed 1950–Retired 1982

THOMAS PASQUA
Political Science and Journalism
Appointed 1965–Retired 1998 *

JON R. PITTMAN
Visual Arts
Appointed 1969–Retired 2002

WAYNE PRESSLER
Librarian
Appointed 1967–Retired 1990

MARY QUIMBY
Business
Appointed 1979–Retired 2000

PAM REIVES
English
Appointed 1991–Retired 2000 *

RAY RIESGO
Electronics
Appointed 1971–Retired 1994

JOSEPH RINDONE JR.
District Superintendent
Appointed 1960–Retired 1967 *

RICHARD ROBINETTE
Music
Appointed 1969–Retired 1999

RICHARD ROBINSON
Art
Appointed 1954–Retired 1992

VALERIO RODRIGUEZ
Spanish
Appointed 1968–Retired 1990

CHARLES RUCKER
Administration of Justice
Appointed 1971–Retired 1991 *

ELLABLANCHE SALMI
English
Appointed 1985–Retired 1991

MARY SAMARAS
English as a Second Language
Appointed 1975–Retired 1990

PERCY SAYERS
Electronics
Appointed 1962–Retired 1983

NORMAN SCHAFFNER
Accounting
Appointed 1959–Retired 1991

FRED SCHWEND
Computer Information Systems
Appointed 1982–Retired 2002

CHARLES SCHULTZ
Counselor
Appointed 1948–Retired 1982 *

NED S. SEWELL
English
Appointed 1964–Retired 1983

PAULINE SEWELL
Biology and Zoology
Appointed 1961–Retired 1982

JOCELYN SHEPPARD
French
Appointed 1969–Retired 2000 *

MARION D. SHULTZ
Nursing
Appointed 1968–Retired 1991

AIDA SIRIOS
Nursing
Appointed 1972–Retired 1993

DAYTON SMITH
Aeronautics and Appliance Maintenance/Repair
Appointed 1978–Retired 1997

WILLIAM SNYDER
English
Appointed 1964–Retired 1990 *

ALICE STAPCZYNSKI
Computer Information Systems
Appointed 1976–Retired 1990

JOSEPH STAPCZYNSKI
Electronics
Appointed 1967–Retired 1990

IRENE STEINLE
German
Appointed 1964–Retired 1983

LEON STEWART
Counselor
Appointed 1959–Retired 1990

KEITH STILES
Physics
Appointed 1961–Retired 1990

KATHLEEN Q. SUMPTION
Nursing
Appointed 1967–Retired 1983

RUTH SWANSON
Vocational Nursing
Appointed 1964–Retired 1981 *

WILBUR SWITZER
Geography
Appointed 1965–Retired 1996

LORETTA TAYLOR
Physical Education
Appointed 1965–Retired 1990

ORVILLE L. THOMAS
Business
Appointed 1961–Retired 1984

EDWARD THORNTON
Vice President, Administrative Affairs
Appointed 1956–Retired 1990

ROBERTA TUGENBERG
Mathematics
Appointed 1974–Retired 1990

RUTH TUCKER
Learning Disabilities
Appointed 1979–Retired 1992

ROBERT UTTERBACK
Librarian
Appointed 1967–Retired 1983 *

ELIZABETH A. VADEN
Business
Appointed 1961–Retired 1983 *

WARREN VEIS
English
Appointed 1972–Retired 1990

WILLIAM VIRCHIS
Theatre Arts
Appointed 1973–Retired 2002

JOSEPH WAGNER
Music
Appointed 1961–Retired 1977

CAROLYN WARDELL
Office Administration
Appointed 1968–Retired 1990

PETER WATRY
Economics
Appointed 1961–Retired 1996

ERIC WEDBERG
Biology
Appointed 1969–Retired 1980

JOHANNA WEIKEL
Dance
Appointed 1975–Retired 1990

RICHARD WELSH
Architecture
Appointed 1961–Retired 1983 *

GEORGE WESTON
Counselor
Appointed 1966–Retired 1991 *

GEORGE P. WOLF
Accounting
Appointed 1965–Retired 1984 *

ELWYN WONG
Psychology
Appointed 1964–Retired 2001

SAXON WRAITH
Political Science
Appointed 1961–1988 *

LE ROY WRIGHT
English
Appointed 1959–Retired 1988

***DECEASED**

Classified Professionals

Classified Confidentials

ASHABRANER, TERI
Human Resources Technician—Academic

BLEVINS, PATTI
Legal Affairs Assistant

CLARKE, LORRIE
Secretary to the Superintendent/President

CROFT, MARGARITA
Legal Affairs Secretary

GANIO, MARY
Executive Assistant to the Superintendent/President

GARCIA, ROSALVA
Secretary to the Superintendent/President

GERENA, ELSA C.
Human Resources Secretary

RADER, KIMBERLIE
Administrative Assistant

RENDON, LORRAINE
Human Resources Technician—Classified

RUIZ, JANELL
Administrative Assistant

WILLEY, YULIE
Administrative Assistant

Classified Bargaining

ACOSTA, CLAUDIA
Lead Food Service Worker

ADA, TERESITA
Senior Account Clerk

ALATORRE, LAURA
Evaluator

ALDEN, SANDRA
Assessment Technician

ALEMAN, MARIA
Food Service Worker

ALLEN, RICHARD
Vehicle and Equipment Mechanic

ALLEN JR., RICHARD
Custodian

ALVAREZ, JOSE
Marketing Communications Associate

ALVAREZ, MARIA
Clerical Assistant II

AMBRIZ, FRANCISCO
Warehouse Worker

ANDERSON, BARBARA
Help Desk Technician

APELO, CHRISTOPHER
Programmer Analyst

ARANA, LAURA
Financial Aid Technician

ARBENZ, HEATHER
Systems Support Specialist

ARIETTI, ANGELA
Clerical Assistant III

ARNIERI, BRANDON
Research Analyst

ARZAGA, DEBORAH
Transfer Center Specialist

AUSTIN, JACQUELINE
Clerical Assistant II

AYALA, ALBERTO
Student Employment Services Specialist

BACHMAN, JAMES
Lead Painter

BACHMAN, JANIE
Computer Support Technician

BAIER, LEONILA
Administrative Secretary II

BAKER, LAURA
Campus Police Officer-Day

BANDA, ANNA
Administrative Secretary I

BANDA-RAMIREZ, SYLVIA
Clerical Assistant III

BARRERA, EFREN
Clerical Assistant III/Technical Support

BAUTISTA, ARACELY
Senior Account Clerk

BEJASA, AMBER
EOPS Technician

BELTRAN, BERNARDO
Senior Project Clerk

BELTRAN, MARIA
Clerical Assistant II

BERRIOS, CARLOS
Custodian

BILLINGS, JANET
Bookstore Buyer

BLANCO, RENE
Financial Aid Specialist

BOCALAN, SID
Lead HVAC Mechanic

BOISONEAU, ZAC
Senior Gardener/Weekend Coordinator

BOMAN, BRUCE
Lead Gardener

BOND, JAMES
Clerical Assistant II

BRADY, DAVID
Instructional Lab Technician-Science

BREESE, JACK
Locksmith

BROWN, EBBA
Clerical Assistant III

BROWN, MARK
Senior Financial Aid Specialist

BROWNSTEAD, GREGORY
Custodian

BRUCELAS, JOCELYN
Administrative Secretary I

BUCH, FEDERICO
Custodian

BUCHHOLZ, LINDA
Library Assistant

BUGZAVICH, THOMAS
Graphics Lab Specialist

BUNCH, KEITH
PC Systems Technician

BURNS, JUDITH
Senior Systems Analyst

BYNUM, JANET
Administrative Secretary II

CADENA, VERONICA
Administrative Secretary I

CALDERON, CARLOS
Custodian

CALDERON, SANDRA
Outreach Technician

CALDWELL-THOMAS, PAMELA
LRC Operations Technician

CAMPA, MARTHA R
Administrative Secretary II

CARBAJAL, ROSA A
Student Services Assistant

CARBONILLA, MATRONILLO
Custodian

CARRINGTON, TORRANCE
Campus Police Sergeant—Evening

CASTILLO, RUBEN C
Custodian

CASTILLO, VIRGINIA
Clerical Assistant III

CASTRO, GLORIA
Instructional Operations Technician

CATO, ADAM
Campus Police Officer—Day

CERVANTES, DEBBIE
Clerical Assistant II

CHAIREZ, CAROLINA
Account Clerk

CHOPP, MERRILY
Senior Project Clerk

CHRISTOPHER, TIFFANY
Instructional Lab Technician—Science

CHUN, ADRIANNE
Student Services Assistant

CHURLEY, JUDY
Instructional Lab Technician—Fine Arts

CLARK-FENLON, MICHELE
Clerical Assistant III

COGSWELL, CHARLES
Custodian

CONRAD, JEROLD
Carpenter/Lead Trades Person

COOK, KAREN
Clerical Assistant II

CORTES, MYRNA
Student Services Assistant

CORTEZ, CARMEN
Word Processor

CUMMINGS, GUADALUPE
Clerical Assistant II

BROWN, LAURA
Athletic Trainer/Equipment Attendant

CUSTODIO, CESAR
Custodian

DAVID, GAEA
Clerical Assistant II

DAVIES, NICHOLAS
Programmer Analyst

DAVIS, CLARA
Translator/Word Processor

DAWSON, MICHELE
Student Employment Services Specialist

DAY, JOHN
Custodian

DELEON, GLORIA
Senior Library Assistant

DEALBA, JOSEFINA
Account Clerk

DELARA, BEVERLY
Admissions and Records Technician

DENTON, WILLIAM
Bookstore Operations Specialist

DEYOUNG, RICHARD
Lead Vehicle and Equipment Mechanic

DISHON, ERICA
Communications Clerk

DUENAS, DOLORES
Clerical Assistant II

DUNN, PHILIP
Production Assistant

EARLEY, THOMAS
Carpenter/Cabinetmaker

EKLUND, CAROLE
Small Business Assistant

ESSEX, GEORGE
Instructional Lab Technician—Fine Arts

ESTRADA, MARTHA
Account Clerk

ETHINGTON, NANCY
Lead Food Service Worker

EVANGELISTA, JOHN
Web Designer

FAGAN, KATHLEEN
Clerical Assistant III

FELIZARDO, GUILLERMA
Clerical Assistant II

FIERRO, ANGELICA
Clerical Assistant III

FIERRO, YLEANNA
Food Service Worker

FISHEL, LI-LAN
Instructional Lab Technician

FLAKE-WILEY, CAROLYN
Senior Project Clerk

FLORES, ALICIA
Instructional Assistant I

FORBES, JO ANN
Microcomputer Lab Coordinator

FORD, MICHAEL
Research Analyst

FRANCO, GUADALUPE
Food Service Worker

FRIAS, ANA
Food Service Worker

FRIAS, ENEDINA
Lead Food Service Worker

GAMBOA, ALICIA
Teacher, Child Development Center

GARCIA, LUPITA P
Senior Project Clerk

GARCIA-NAVARRETE, SYLVIA
Reading Lab Technician

GARGANO, MICHAEL W.
PC Systems Technician

GARRETT, ALLAN
Network Support Specialist

GASSAWAY, JOSEPH
Print Shop Technician

GASSAWAY, KATHERINE
Clerical Assistant II

GATES, KATHRYN
Teacher, Child Development Center

GAYTAN, JESUS ANTONIO
Admissions and Records Assistant

GIL, PATRICIA
Instructional Services Specialist

GIL-SCHMID, PEARL
Education Center Technician

GODOY, RICARDO
Lead Food Service Worker

GOMEZ, JUNE
Library Assistant

GOMEZ, MARIANA
Clerical Assistant II

GOMEZ, RAFAEL
Computer Operator

GONZALES, PATRICIA
Evaluator

GONZALEZ, DIANA
Account Clerk

GONZALEZ, GERARDO
Senior Programmer Analyst

GONZALEZ, ROSA
District Buyer

GORTON, LORI
Senior Account Clerk

GOVEA, BERTHA
Administrative Secretary II

GOVEA, VIVIANA
Clerical Assistant III

GUERRERO, EDMUND
Instructional Lab Technician—Microcomputer

GUERRERO, GUSTAVO
International Trade Specialist

GUERRERO, JOSEPHINE
EOPS Employment Technician

GUIDO, NORA
Instructional Lab Technician—Microcomputer

GUTIERREZ, MARK
Custodian

HAMMOND, JAMES
College Trainer

HAMPSON, BARBARA
Instructional Lab Technician—Science

HARO, RAUL
Food Service Worker

HARRIS, ANDRE
Administrative Secretary II

HASEGAWA, JULIE
Account Clerk

HATZ, JULIETA
Lead Food Service Worker

HAVEY, BETTY
Clerical Assistant III

HERNANDEZ, DIANA
Education Center Technician

HERNANDEZ, ROSALINDA
Planning and Facilities Assistant

HETTICH, RICHARD
Maintenance Air Filter Technician

HICE, SARA
EOPS Technician

HICKS, CHRISTINA
Office Support Services Technician

HILL, DANIEL
Senior Systems Analyst

HIRST, PATRICIA
Financial Aid Technician

HOLST, TOM
Plumber

HOM, VALERIE
Administrative Secretary II

HORTON, GISEL
Nurse Associate

HUBBELL, TORREY
Bookstore Warehouse Worker

HUDSON, NICOLE J.
Print Shop Technician

IBANEZ, FRANCISCO
Custodian

IBARRA, CARMEN
ROP Technician

INGHAM, STACY
Evaluator

ISLAS, JOSEPH
Administrative Secretary II

JIMENEZ, EFRAIN
Gardener

JIMENEZ, JAVIER
Irrigation Technician

JOHNSON, KATHERINE
Financial Aid Specialist

JOHNSON, PAUL
Painter

JONES, LOUIS
Instructional Lab Technician—Fine Arts

JONES, WILLIAM
Veterans Services Technician

JUAREZ, SERGIO
Custodian

KAMATH, RASHMI
Programmer Analyst

KANE, JOCELYN
Lead Food Service Worker

KANNEGIESSER, LANCE
Custodian

KANNING, FREDERICK
Electrician

KELLY, PATRICIA
Administrative Secretary II

KEYS, BETTY
Account Technician

KITTS, DENISE
Senior Account Clerk

KLISCH, MARY CAROLYN
Library Assistant

KOZEL, ELIZABETH
Tutorial Center Coordinator

LAMBERT, LARRY
Training Services Coordinator

LAWSON, SHARON
Senior Account Clerk

LEE, ALICIA
Nurse Associate

LEON, JORGE
Custodian

LINDSHIELD, ANN
Instructional Assistant I

LLORENS-ACOSTA, THELMA
Clerical Assistant II

LOGAN, SHIRONDA
Clerical Assistant III

LOPEZ, HOMER
Instructional High Tech Center Lab Technician- DSS

LOZANO, LOURDES
Admissions & Records Assistant

LUGO, SILVIA
Performing Arts Coordinator

LUQUE, MARIA
Instructional Assistant I

MACARAEG, SAMUEL
HVAC Mechanic

MACNINTCH, BRUCE
Library Technician

MARTIN, NANCY
Food Service Worker

MARTINEZ, EMMA
Clerical Assistant II

MARTINEZ, JEANNE
Clerical Assistant II

MARTINEZ, JOE
Tool Room Attendant

MARTINEZ, PAUL
Inventory Control Technician

MARTINEZ, VIRGINIA
Administrative Secretary II

MAXWELL, WANDA
Financial Aid Technician

MCCLEARY, TERRI
EOPS Technician

MCHORNEY, DEBRA
Athletic Equipment Tech/Physical Ed. Attendant

MELCHOR, ANTONIO
Student Services Assistant

MENDEZ, SONIA C.
Senior Project Clerk

MENDOZA, ANTONITA
Administrative Secretary II

MIRANDA, PATRICIA
Financial Aid Specialist

MOFFAT, CRAIG
Student Activities Coordinator

MORA, AIDA
Admissions and Records Technician

MORAN, SHEILA
Instructional Lab Technician—Fine Arts

MORENO, AMY
Grants Technician

MORENO, ARACELI
Instructional Assistant I

MORRELL, MARIA
Clerical Assistant II

MORRIS, URSULA
Office Support Services Coordinator

NAKATANI, NANCY
Clerical Assistant II

NEISWONGER, THOMAS
Welder/Metal Fabricator

NEWHOUSE, HEIDI
Senior Instructional Services Specialist

NIEKRASZ, CAROL
Administrative Secretary I

NORTHOVER, LYNNE
Clerical Assistant III

OCHOA, YOLANDA
Senior Account Clerk

ONTIVEROS, JONI
Articulation Technician

ORIHUELA, OMAR
Financial Aid Technician—BOGG

ORNELAS, GENARO
Instructional Lab Technician—Microcomputer

ORVICK, GOLDIE
Clerical Assistant III

OSUNA, JESSE
Campus Police Officer—Day

PALMER, DOROTHY
Intake and Eligibility Assistant

PANGELINAN, GLORIA
Project Clerk

PARKER, JULIETTE
Counseling Specialist

PASANA, PRISCILLA
Administrative Secretary II

PASTRANA, ARTURO
Bookstore Operations Assistant

PEDROZA, ROSANA
Instructional Lab Technician—Science

PEINADO, EVANA
Education Center Technician

PEINADO, MARTINA
CalWorks Program Technician

PEREZ, DAWN
Advancement Specialist

PEREZ, VINCENT
Senior Programmer Analyst

PLUMMER, MARTHA
Administrative Secretary II

POISSON, DARLENE
Disabled Student Services Technician

POLITE, JANET
District Buyer

PRECIADO, ANGELICA
Account Clerk

RAMERT, PATRICIA
Web ASP Programmer

RAMIREZ, ENRIQUE
Food Service Worker

RAMIREZ, MARGARITA
Administrative Secretary I

RAMIREZ, SALVADOR
Tool Room Attendant

RATNER, RICHARD
Teacher, Child Development Center

RAY, TAMMY
Theater Operations Technician

REYES, HECTOR
Microcomputer Lab Coordinator

REYES, JESSIE
Clerical Assistant II

REYES, MANUEL
Gardener

RIBERTO, VALLO
Instructional Lab Technician—Fine Arts

RICH, NORMA
Clerical Assistant II

ROBERTS, DANA
Learning Resource Assistant

ROCHA, YOLANDA
Senior Project Clerk

RODRIGUEZ, CARLOS
Print Shop Coordinator

RODRIGUEZ, PATRICIA
Account Clerk

ROJAS, JORGE
Campus Police Officer—Evening

ROMERO, BURK
Custodian

ROMERO, RAMSEY
Lead Custodian

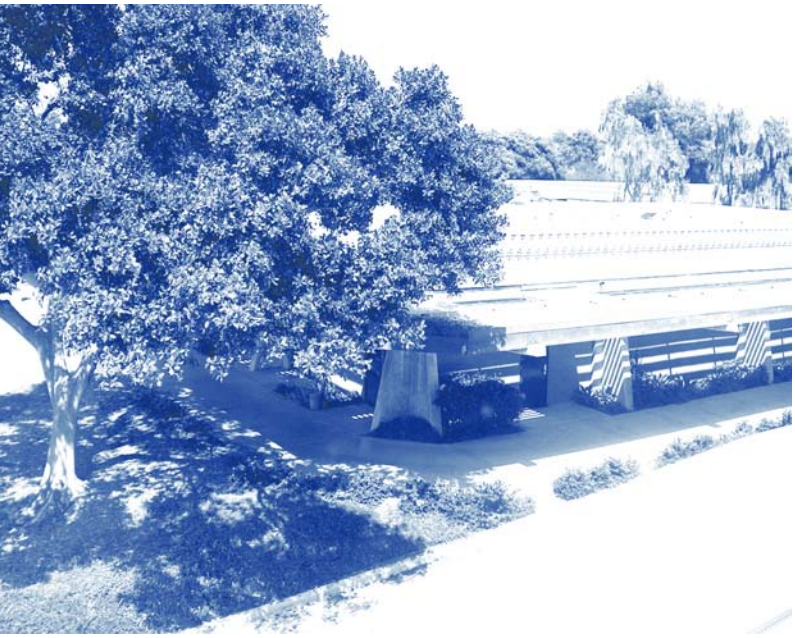
RUELAS, ARMANDO
Senior Gardener

RUIZ, RHONDA
Communications Clerk

RUVALCABA, EDITH
Career Center Technician

SALES, LAURA
Accountant

SANDOVAL, LUIS
Custodian



SANDS, SANDRA
Instructional Assistant I

SANTAMARIA, ANISABEL
Administrative Secretary II

SANTOS, JAIME
Purchasing Assistant

SAUCEDO, MONIKA
Clerical Assistant III

SCHWEIGERT, MARK
Lead Electrician

SELBY, MICHAEL
Senior Gardener

SEVILLA, LOURDES
Administrative Secretary II

SHAW, GERALDINE
Community Education Liaison

SIFUENTES, JAMES R.
Campus Police Officer—Evening

SINGH, ELISANDRA
Web Technologist

SORIANO, SERGIO
Student Employment Services Specialist

SOTO, PATRICIA
Clerical Assistant II

SOY, SUSAN
Instructional Operations Technician

TAFT, DAWN
AmeriCorps/Service Learning Coordinator

TAIJERON, PORFIRIA
Admissions and Records Assistant

TAIJERON, VICENTE JR.
Day/Evening Custodian

TAPIA, JUAN
Outreach Specialist

TASSI, JANE
Instructional Assistant II

TAYLOR, CRYSTAL
Admissions and Records Techician

THELE, BARRY
Instructional Lab Technician—Microcomputer

TORRES, ALEJANDRA
Education Center Technician

TORRES, GUADALUPE
Chef/Lead Food Production

TOTH, REBECA
Facilities Leasing and Events Coordinator

VALDEZ, ELIZABETH
Clerical Assistant III

VELASCO, LUZ
Senior Project Clerk

VERGARA, SUZANNA
Admissions and Records Technician

VIDAL, KINDU
Admissions and Records Technician

VIDAL, MARIBEL
Clerical Assistant II

VINSON, JOHN
Instructional Lab Technician—Microcomputer

VOLLRATH, WILLIAM
PC Systems Technician

WALES, CARLOS
LRC Operations Assistant

WALWICK, DAVID
Audio Visual Repair Technician

WASHINGTON, PEGGY
Administrative Secretary I

WATTERS, MARY
Vocational Education Technician

WAYCHOFF, SAMUEL
Instructional Lab Technician—Microcomputer

WILLIAMS, BERTHA
Administrative Secretary II

WILSON, ARTHUR
Instructional Lab Technician—Microcomputer

WILSON, ROBERT
Communications Energy Management Specialist

WONG, JEANINE
Clerical Assistant II

WYMORE, BARRY
Aquatic Equipment Technician

YBARRA, GEORGE
Custodian

ZASUETA, RICHARD
Instructional Lab Technician—Horticulture

ZWIERSKI, EILEEN
Clerical Assistant II

A to Z Guide—Important Terms

ACADEMIC RENEWAL
Process by which a student may Petition Southwestern College (SWC) to eliminate substandard work from grade point calculations and credit.

ADDING A CLASS
To add a class, check the status of the class (open/closed/waiting list). Complete an Add slip obtained from Admissions Center or Counseling. If the class is closed, you must go directly to the class when it is scheduled to meet in order to obtain the instructor's signature. Turn in the Add slip to the Admissions and Records Office.

ADVANCED PLACEMENT INTERNATIONAL BACCALAUREATE CREDIT
Southwestern College will give credit for Advanced Placement and International Baccalaureate Credit scores. Check with a college counselor for details.

ARTICULATION
The process of developing a formal written and published agreement that identifies courses (or sequences of courses) on a "sending" campus that are comparable to, or acceptable in lieu of, specific course requirements at a "receiving" campus. It is important to note that articulated courses are not to be construed as "equivalent".

ASSOCIATE IN ARTS/SCIENCE (A.A./A.S.)
The graduation degrees issued by SWC for completing 60 units with a minimum grade point average of 2.0, including requirements in general education and a major field of study.

ATTENDANCE
Students have the responsibility to attend classes regularly and apply themselves to the college classes in which they are enrolled. When you have been absent due to illness, you should advise your instructor. An instructor may drop a student for excessive absences. Students must attend the first class meeting or they may be dropped from the class. If you must miss the first day of class, notify the instructor by telephone.

BACHELOR OF ARTS/SCIENCE DEGREE (B.A./B.S.)
Degrees awarded by a four-year college or university upon satisfactory completion of an organized program, usually requiring four/five years of full-time study.

CERTIFICATE OF ACHIEVEMENT
The document awarded by SWC in occupational/career programs for completing requirements for a major, as specified in the college catalog.

COLLEGE CATALOG
College publication describing academic programs, student services, general regulations, requirements and procedures. All classes offered by the College are described, including information as to unit value, transferability, and prerequisites. The catalog is available in the bookstore.

COOPERATIVE WORK EXPERIENCE (CWE)
Internship opportunities are available through CWE. You can earn up to 4 units of college credit.

COREQUISITE
A corequisite course is a course that must be taken at the same time as another course. Students who do not take corequisites can be dropped from the courses requiring the corequisites.

COREQUISITE ENFORCEMENT
Corequisites are enforced at Southwestern College.

COURSE CLASSIFICATION, CALIFORNIA ARTICULATION NUMBER (CAN) SYSTEM
Southwestern College participates in the California Articulation Number System. CAN is a system designed to identify the transferable, lower-division, introductory, and preparatory courses commonly taught within each academic department on our campus and to assign them a California Articulation Number (CAN). The basic premise of the CAN system is that, for example, a CAN 2 course on one campus will be accepted in lieu of a CAN 2 course on a participating campus.

CREDIT
Certification of a student's successful completion of a course usually expressed in number of units of coursework.

DEGREE COURSE
A degree course is a course classified as meeting the standards of academic rigor set forth by the State of California and WASC accreditation and can be used for the associate degree requirements.

DUE PROCESS
Students who have been accused of violating the Southwestern College Student Conduct Code (available in the Student Activities Office) will be afforded the due process via that code.

ELECTIVES
Courses that are not required subjects, but are of personal interest for unit credit.

GENERAL EDUCATION (BREADTH) REQUIREMENTS
A specific group of graduation course requirements that provide a well rounded body of knowledge.

GENERAL EDUCATION PLANS
Plan A—Required for AA/AS Degree
Plan B—Acceptable for CSU
IGETC—Acceptable for CSU or UC
TAG—Transfer Guarantees. See your counselor for details.

GOOD STANDING
Students are considered to be in good standing when their cumulative grade point average is 2.0 or higher for all course work attempted.

GRADE POINT AVERAGE (G.P.A.)
G.P.A. stands for grade point average. Letter grades are given the following point values:
A=4, B=3, C=2, D=1, and F=0
Each class has a specific unit value. Multiplying the letter grade value by the unit value equals the grade points. Divide the unit total into the grade points to determine the G.P.A.

GRADING
Accomplishment in course work is indicated by the following symbols:
A= Excellent
B= Good Standing
C= Satisfactory
D= Passing, less than satisfactory
F= Failing
CR= Credit (at least satisfactory, the equivalent of a C; units awarded are not counted in G.P.A.)
NC= No Credit (less than satisfactory or failing; units not counted in G.P.A.)
I= Incomplete
W= Withdrawal

HYBRID ONLINE COURSE
A hybrid online course has a limited, but regular, number of classroom meetings and also requires participation online (via the Internet). Students enrolled in hybrid classes must have access to a computer with reliable Internet connection as well as a valid personal email address.

IGETC—INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM
Completion of all the requirements in the Intersegmental General Education Transfer Curriculum (IGETC) will permit a student to transfer from a community college to a campus in either the California State University or University of California system with lower-division, general education completed.

INCOMPLETE (I)
An "I" grade is given only in cases of emergency and/or when the student is unable to complete the course due to circumstances beyond his/her control. Arrangements to receive an "I" must be made with the instructor. To clear an "I" grade, a student must make arrangements with the instructor to make up missed class assignments. Failure to clear an "I" grade can result in an "F" grade if two semesters have passed. An incomplete grade cannot be changed to a "W" or to "NC".

LIMITATION ON ENROLLMENT
Performance courses may require students to try out for intercollegiate athletic teams or to audition for courses involving public performances (for example, band, chorus, competitive speech, and theatre) prior to enrollment.

BLOCKS OF COURSES
Enrollment in blocks of courses or sections may be a requirement so that a group of students will enroll together in that set of classes. Typically the students are part of a special program such as PUENTE or Future Teachers.

LIMITATION ON ENROLLMENT—ENFORCEMENT
Limitations on Enrollment are enforced at Southwestern College.

LIMITATION ON ENROLLMENT—LEGAL REQUIREMENTS
Enrollment may be limited due to legal requirements (imposed by statute, regulation, and/or contract). For example, some courses may require that the student have a valid driver license, a health clearance, a nursing license or certificate, etc.

LOWER DIVISION
Refers to college course work at the freshman and sophomore levels. All SWC courses are lower-division.

MAJOR
A group or series of required courses designed to provide intensive education or training in a specialized area.

MATRICULATION
A process designed to enhance access and promote student success at California Community Colleges. It includes: admissions, assessment, orientation, and educational planning.

NONDEGREE COURSE
A nondegree course cannot be used for the associate degree requirements but has academic standards set forth by the State of California and WASC accreditation.

ONLINE COURSE
An online course provides all of the course content and class communication over the Internet. There are no regular classroom meetings, participation is required online (via the Internet). Access to a computer with Internet service is required.

PLACEMENT TEST
The placement test is a tool the College uses to determine the student's ability in reading, writing, and math.

PREREQUISITE
Refers to a course or qualification required before a student may enroll in a subsequent course. A minimum grade of "C" or "Credit" must be earned in the prerequisite course before the next course may be taken.

PREREQUISITE ENFORCEMENT
Prerequisites are enforced at Southwestern College. Students who do not take the prerequisites can be dropped from the courses requiring the prerequisites. Prerequisites may be met by satisfactory completion of equivalent coursework at another college or university. Some prerequisites may also be fulfilled by satisfactory results of the appropriate validated Southwestern College Assessment. Students may challenge prerequisites.

PROBATION (ACADEMIC AND PROGRESS)
Academic probation occurs when the cumulative G.P.A. falls below 2.0. Progress probation occurs when the percentage of all units at SWC in which the students have enrolled and for which entries of "W", "I", and "NC" are recorded reaches or exceeds 50 percent equals G.P.A.

RECOMMENDED CONCURRENT ENROLLMENT
Refers to a course that a student should complete—but is not required to complete—while enrolled for another course. Enrollment in such a course improves student success.

RECOMMENDED PREPARATION
Refers to previous training or courses that help a student successfully complete a subsequent course. Completion of the recommended preparation course with a grade of "C" or better increases student success.

REGISTRATION
Official process of enrolling in classes. The process must be repeated each semester and summer session in which the student wishes to be enrolled.

REINSTATEMENT AFTER DISMISSAL
Ordinarily, at least one semester must pass before a student may petition for readmission to the College. Consideration for readmission is given on the basis of evidence of constructive achievement during the student's absence from the college. In extraordinary cases and in serious and compelling circumstances, as determined by the Dean of Student Support Services, a dismissed student may petition for immediate reinstatement.

REMOVAL OF PROBATION
Students must clear academic probation by earning sufficient grade points to raise the cumulative grade point average to 2.0 or higher in the next semester of attendance. Students may clear progress probation by decreasing the percentage of "W", "I", or "NC" entries to less than 50 percent of all units in which they have enrolled.

SCHEDULE OF CLASSES
Issued prior to each semester's registration period, this college publication lists the days and hours of each class offered, its location and instructor.

SEMESTER (18-WEEK TERM)
A full-term semester normally constitutes one half of the academic year. At SWC, the fall semester usually begins in August; the spring semester usually begins in January.

TRANSCRIPT
An official listing of the student's academic record at a college, including units and grades earned in all terms of attendance.

TRANSFER COURSES
Classes taken at SWC that are accepted for credit at four-year colleges towards a bachelor's degree. The SWC catalog specifies whether a course is transferable to the California State University system and/or the University of California.

TRANSFER INSTITUTION
A college or university to which one plans to transfer for advanced education or training after attending a community college.

UNIT
A value which indicates the amount of credit given to a class. It often reflects the amount of time required for class attendance. For example, a three unit lecture class requires class attendance for three hours per week.

UPPER DIVISION
Refers to students and courses at the junior and senior level of college work at a four-year college or university.

WITHDRAWAL FROM CLASS
If it becomes necessary to withdraw, you should request withdrawal by presenting a signed drop form to the Admissions Center Office. W's shall not be used in calculating grade point averages, but excessive W's shall be used as factors for probation and dismissal procedures. Check the deadline for withdrawal published in the Schedule of Classes each semester. After the drop deadline, students are not permitted to drop a class and are subject to a grade (usually an "F").

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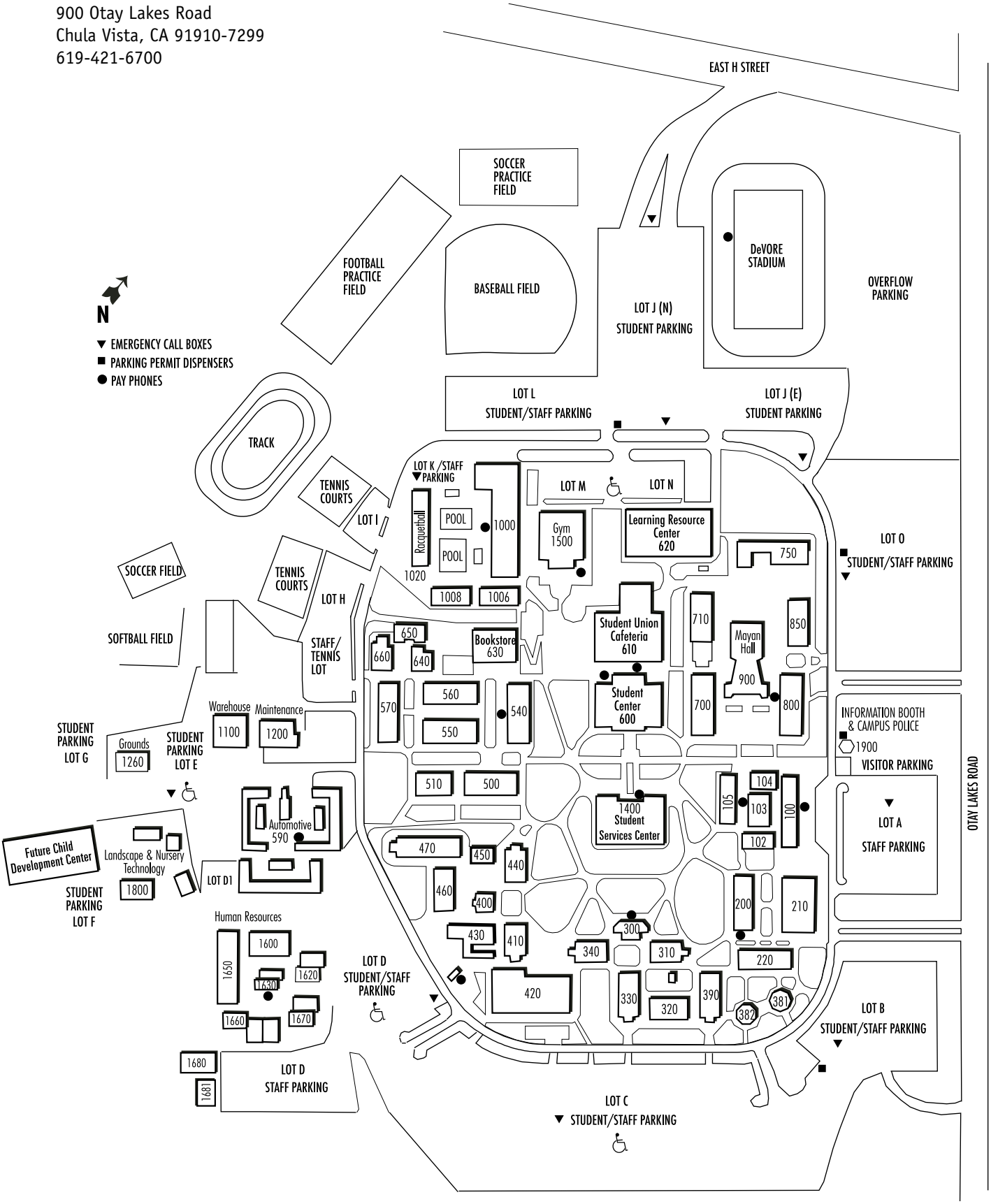

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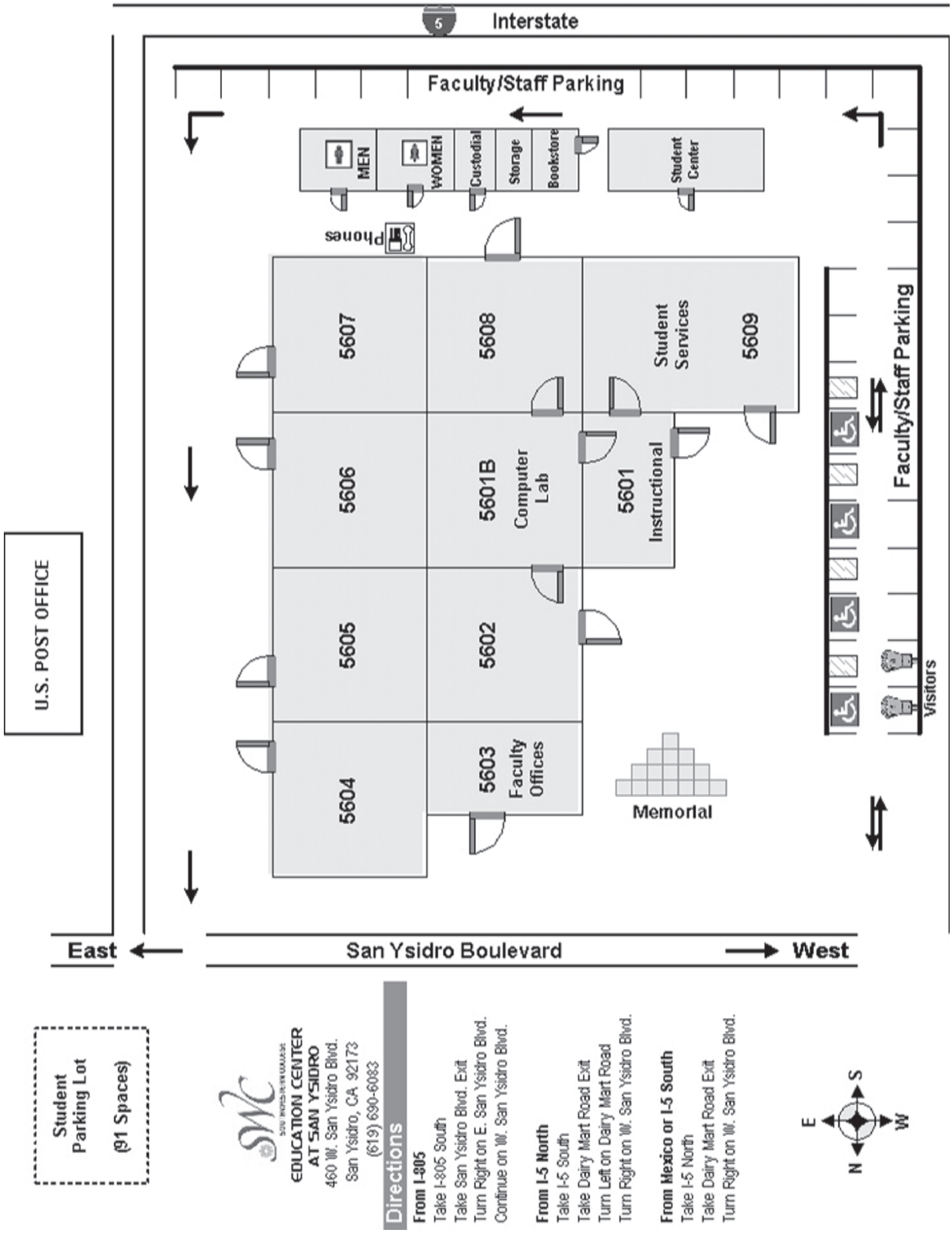

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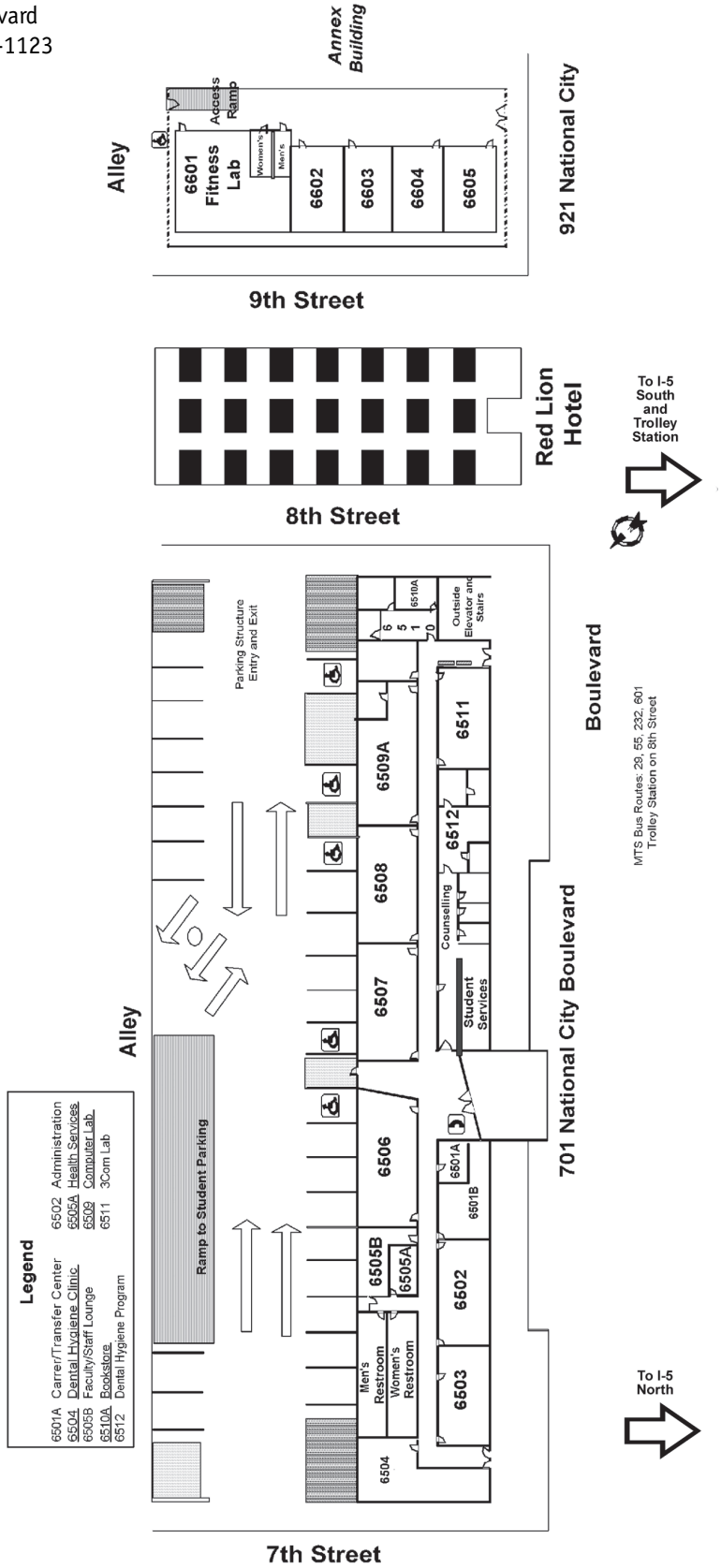
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