



2007–2008

Catalog

Southwestern College

ENROLL TODAY. SUCCEED TOMORROW.



www.swccd.edu

How do I get on the path to success at Southwestern College?

If

Then

You want to learn all about Southwestern College, Student Rights and Responsibilities, majors, and course descriptions

review appropriate sections in this catalog

You want to enroll in classes

visit Admissions or go online to fill out a Southwestern College application

You want to take English, math, and reading tests

visit the Assessment Office

You want to plan your first semester and learn about campus resources

visit the Counseling Center or attend preregistration/orientation workshops

You need money for educational expenses

apply for the BOGFW and for FAFSA in Financial Aid

You are unsure of your major and need more information

visit the Career Center to research career options, or enroll in Personal Development (PD) 100—Lifelong Success

You know what your major is, but are unsure of the requirements for graduation or transfer

visit the Counseling Center or the Transfer Center to schedule a counseling appointment once you are enrolled

You suspect you have a learning disability

visit Disability Support Services

You are facing a personal problem that interferes with your college success

visit the Counseling Center to schedule an appointment for personal counseling

You feel ill and need medical attention

visit Health Services in the Student Center to see a campus nurse

Your classes seem difficult and you do not understand the material

visit the Academic Success Center for tutorial services

You want to get involved with campus activities

visit the Associated Student Organization office located in the Student Center

You want to find out about all of the above information online

search www.swccd.edu

Catalog Credits

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Diversity Initiative

Southwestern Community College District seeks to foster and engage diversity as integral to our learning community and in educational excellence. Diversity is valued as an essential cornerstone to civility, dignity, fairness, respect, and trust.

Nondiscrimination Statement

Southwestern Community College District does not discriminate on the basis of race, color, religion, national origin, gender, sexual orientation, disability, age, or marital status in any of its policies, procedures, or practices. This nondiscrimination policy covers admission, employment, and access to all college programs and activities. Questions about the Rehabilitation Act of 1973, Section 504 and student grievances should be directed to the Dean of Student Activities, 619-482-6369. Inquiries regarding Equal Employment Opportunity policies should be directed to the Director of Human Resources, 619-482-6330

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Academic Calendar

Fall Semester 2007

August 20.....	Instruction Begins
September 3.....	*Labor Day
November 12.....	*Veterans Day
November 11.....	No Sunday Classes
November 21.....	No Evening Classes
November 22.....	*Thanksgiving
November 23–25.....	No Classes
December 13–19.....	Final Examinations
December 19.....	End of Fall Semester

Spring Semester 2008

January 14.....	Instruction Begins
January 21.....	*Martin Luther King, Jr. Day
February 15.....	*Lincoln's Birthday
February 16–17.....	No Weekend Classes
February 18.....	*Washington's Birthday
March 17–23.....	Spring Break
March 30.....	No Sunday Classes
March 31.....	*Cesar Chavez Day
May 17–23.....	Final Examinations
May 23.....	End of Spring Semester
May 23.....	Graduation
May 26.....	*Memorial Day

Summer Sessions 2008

June 4–July 5.....	5-week session
June 9–July 10.....	5-week session
June 9–August 14.....	10-week session
June 23–August 7.....	7-week session
July 14–August 14.....	5-week session
July 4.....	*Independence Day

* Legal Holiday

Note: 2007–2008 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, listing 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 2007–2008

Effective fall 2007 through summer 2008

Southwestern College

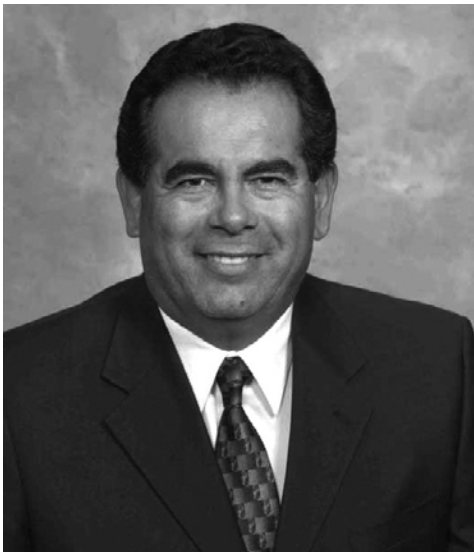
900 Otay Lakes Road
Chula Vista, CA 91910-7299

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 Success Center.....	482-6348	
Adjunct Faculty Voicemail.....	482-6565	
Admissions.....	482-6550	
Associated Student Organization (ASO).....	482-6443	
Assessment (Placement Testing).....	482-6385	
Athletics.....	482-6370	
Basic Police Academy.....	482-6462	
Bookstore.....	482-6416	
Cafeteria.....	482-6359	
Career Center.....	421-6700.....	5247
Cashier's Office.....	482-6307	
Center for Technical Education and Career Success (CTECS).....	421-6700.....	5805
College Police.....	482-6380	
Community and Media Relations.....	482-6304	
Continuing Education.....	482-6376	
Counseling.....	482-6317	
Customized Training.....	482-6376	
Disability Support Services.....	482-6512	
Economic Development.....	482-6479	
Evaluations.....	482-6326	
Evening Administrator.....	216-6640	
Extended Opportunities Programs and Services (EOPS).....	482-6456	
Facilities Use.....	482-6319	
Financial Aid.....	482-6357	
Fiscal Services.....	482-6312	
Grade Information.....	482-6550	
Health Services.....	482-6354	
Higher Education Center at National City.....	216-6665	
Higher Education Center at Otay Mesa.....	216-6750	
Higher Education Center at San Ysidro.....	690-6083	
Instructional Support Services.....	482-6442	
Learning Resources.....	482-6373	
Learning Resource Center.....	482-6397	
Nurse (Campus).....	482-6354	
Nursing Programs/Courses.....	482-6427	
Online Learning Center.....	482-6595	
Outreach.....	421-6700.....	5227 or 5633
Prerequisite Review.....	216-6659	
Registration Information.....	482-6550	
Regional Occupational Program (ROP).....	482-6377	
Schools:		
Arts and Communication.....	482-6372	
Business and Information Systems.....	482-6457	
Continuing Education, Economic and Workforce Development.....	482-6479	
Counseling and Personal Development.....	482-6471	
Health, Exercise Science, and Athletics.....	216-6626	
Languages and Humanities.....	482-6461	
Learning Resources.....	482-6373	
Mathematics, Science, and Engineering.....	482-6459	
Social Sciences and International Studies.....	482-6582	
Technology and Human Services.....	482-6460	
Security.....	482-6380	
Student Accounts.....	482-6307	
Student Activities.....	482-6568	
Student Employment Services.....	482-6356	
Student Newspaper (Southwestern Sun).....	482-6368	
Superintendent/President.....	482-6301	
Telephone Registration and Grades by Phone.....	482-9057	
Tennis Courts and Tennis Center.....	482-6622	
Theatre Box Office.....	482-6367	
Transfer Center.....	482-6472	
Veterans.....	482-6324	
Women's Resource Center.....	421-6700.....	5625

President's Message



Welcome to Southwestern College!

As the only public institution of higher learning in the South Bay region, we take very seriously our role to provide educational opportunities to the expansive District we serve. Whether you are preparing to transfer, looking to receive career or job-related training, or simply want to take a class for fun, Southwestern College can help you reach your educational goal.

Within the pages of the 2007-2008 catalog, you will find all the pertinent information for success at our institution. Our comprehensive student services are outlined in this publication and we encourage you to utilize these resources to ensure your experience at the College is enjoyable.

Detailed descriptions of our programs and courses are also provided. This information is useful in preparing an educational plan that meets your needs. Don't hesitate to visit our Counseling Center for one-on-one assistance.

Thank you for your interest in Southwestern College. It is my hope that the education you receive here prepares you for your future.

A handwritten signature in black ink that reads "Greg R. Sandoval". The signature is written in a cursive, flowing style.

Greg R. Sandoval
Interim Superintendent/President

Governing Board of the Southwestern Community College District

David J. Agosto

Jorge Dominguez, Ph.D.

Jean Roesch, Ed.D.

Yolanda Salcido

Terri Valladolid

Greg Sandoval,
Interim Superintendent/President

Student Trustee, Term of Office
(June 2007–May 2008)

Getting to Know 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.

Disclaimer

Southwestern College's catalog describes the courses, programs and services of the college that are planned for the 2007-2008 academic year. You may obtain more current or complete information regarding policies or curriculum changes from the current schedule of classes, the updated online version of the catalog, or appropriate administrative office.

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 study 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 Chula Vista 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 465–474. 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 72 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 Higher 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 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 44 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

Higher Education Center at San Ysidro

Academic excellence, growth, success, and learning typify the educational operations at the Southwestern College Higher Education Center at San Ysidro (SCEC, SY). 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

The Higher Education Center at National City (HEC, NC) is located at 880 National City Boulevard, which is approximately 10 miles from the Chula Vista campus. It houses 16 classrooms, including a computer lab and a biology lab, a bookstore, health services, library, Career/Transfer Center, Family Resource Center, a one-stop Student Services Department, Dental Hygiene Program, as well as offices for the administration, and faculty.

The HEC, NC, which opened in Fall 1998, represents Southwestern College's first permanent presence in the most northerly area of the District. Proposition AA funding allowed for the development of the Center. Built through a partnership with the City of National City and the San Diego County Office of Education (SDCOE) has resulted in an innovative new "educational village" that Southwestern College anchors.

The academic focus of the Center serves the needs of a diverse student population seeking personal enrichment, professional development, technical certification, and university transfer courses, by offering a wide spectrum of credit and noncredit offerings designed to prepare them for numerous educational and career opportunities. Class offerings include full-semester and fast track courses. Classes are available day and evening. Courses offered include general education, English as a Second Language, business, administration of justice, child development, and computer information systems.

The HEC, NC is the home of the nationally acclaimed Dental Hygiene Program, which houses a twenty-two chair state-of-the-art clinic where students offer free dental hygiene services to the community. Since the program's inception in 2000, over 100 students have graduated, and passed rigorous State and National Dental Hygiene Board examinations to become licensed in California. Most of them are employed as registered dental hygienists in San Diego County.

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
<http://www.post.ca.gov>

State of California Department of Consumer Affairs

C/O Bureau for Private Postsecondary and Vocational Education
400 R Street, Suite 5000
Sacramento, CA 95841-3517
916-445-3427
<http://www.dca.ca.gov/>

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
<http://www2.sdcounty.ca.gov/hhsa/ServiceCategoryDetails.asp?ServiceAreaID=39>

International Association of Healthcare Central Service Materiel Management (IAHCSSM)

213 West Institute Place, Suite 307
Chicago, IL 60610-9432
312-440-0078
<http://www.iahcssm.org/>

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 ext. 153
<http://www.nlnac.org>

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.

Foundation Officers

President—Adela C. Garcia
IBM Corporation

Vice President—J.R. Chantengco
The Triwest Group

Secretary—Dan Hom
Porter Novelli

Treasurer—Jose Garcia
USE Credit Union

Ex-Officio—Jean Roesch, Ed.D.
Governing Board Member
Southwestern College

Ex-Officio—Greg R. Sandoval
Interim Superintendent/President
Southwestern College

Foundation Directors

Bill Abasolo
Attorney at Law

David Bejarano '81
President, Millenia Security

Holly Hidinger
CPA and SWC Adjunct Faculty

Peter Mabrey
Scripps Mercy Hospital

Susan O'Shaughnessy
Atria Bonita

Mary Anne Stro
Educator

Irene Wells
Wells Consulting Group

Honorary Director

Harry Shank
Southwest Community Bank

How to Apply and Register

Steps to Success—Matriculation Overview

Matriculation services are coordinated by the Dean of the School of Counseling and Personal Development. The Matriculation process starts with services you will receive before you attend your first class and will continue throughout your educational experience. The process can be considered your steps to success to ensure that you get started and stay on the right track.

Matriculation Rights and Responsibilities

Matriculation is a process that assists you in choosing, planning, and achieving your educational and career goals. It is Southwestern's way of supporting your right to succeed in college. Matriculation is a partnership between you and Southwestern College.

Southwestern College agrees to"

- Evaluate your English, math, and reading skills
- Help you register for appropriate classes
- Provide you with an orientation, and information on services available, and possible majors and/or careers
- Provide access to counselors and instruction

You agree to:

- Decide upon your major and goal
- Attend an orientation and assessment session
- Work with us to develop an educational plan by the time you have completed 15 units
- Attend and complete courses to make the best use of the time you spend at Southwestern

The College may suspend or terminate services to any student who fails to fulfill his/her responsibilities. However, the College may never suspend or terminate any service for which a student is otherwise entitled under any other provision of law. In addition, students may challenge any matriculation requirement or regulation using the petition process. Petitions are available in the Assessment Center.

Matriculation Process

Prior to registration, all non-exempt students must complete the following steps that apply:

- Submit an application for admission
- Send in all transcripts or previous assessment scores for consideration
- Sign up for, and attend, an assessment and orientation session

New, returning, or transfer students who may be exempted from the matriculation process are students who:

- Already have an associate's or bachelor's degree
- Are attending Southwestern for personal enrichment
- Are enrolled only in non-credit community education courses
- Are taking classes only to upgrade job skills
- Are enrolled in apprenticeship or other special vocational education programs
- Are concurrently enrolled in another college or university

Exempt students are not required to participate in the matriculation process, but are encouraged to see a counselor at any time.

Step 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 Admissions at the Chula Vista campus, the Education Center at Otay Mesa, the Higher Education Center at National City, or online at www.swccd.edu (click on apply online).

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. Online applicants will receive their student ID number through email.

Step 2.

Assessment—Take the College Assessment

Take placement tests prior to orientation and advisement session. 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.

Step 3.

Orientation and Advisement

All new students are required to attend pre-registration orientation and advisement sessions before enrolling in classes. Once you have scheduled an appointment for assessment, go to or call the Counseling Center to schedule an orientation and advisement session. Orientation and advisement sessions will help you to begin a successful college career. You will receive assessment results, a college catalog, a college schedule of classes, and an overview of college resources, services, and regulations. College counselors will assist you in selecting classes for your first semester. Bring a pencil.

An online orientation is available on the College Web site, Counseling and Guidance link.

Step 4.

Registration

Complete registration and pay all required fees.

Step 5.

Follow-up Counseling Services

After you have registered for classes, stop by the Counseling Center, located on the second floor of the Student Services Center in the Cesar E. Chavez Building to schedule an individual counseling appointment with a college counselor. Here you will begin to develop your education plan and set future academic, career, and personal goals. Individual appointments are available starting with the third week of the semester.

The following pages provide greater detail for each step of the matriculation process.

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 if qualified 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.swccd.edu or in person at the Admissions Office at the Chula Vista campus, the Southwestern College Education Center at Otay Mesa, 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 official transcripts from those institutions.

Note: Official transcripts must be sent directly from the other school to Southwestern College Admissions. 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

High school students who are in the 9th through 12th grades may be admitted for concurrent enrollment at Southwestern College with the approval of their high school principal or counselor, provided the student is also enrolled in the high school for a minimum day. The high school principal or designee shall determine and recommend classes that the student is approved to enroll in. 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.

Students are required to have a minimum overall high school grade point average of 2.5 and are limited to taking no more than two classes or six (6) semester units per semester or summer session. Southwestern College does not permit enrollment in more than two classes unless the student submits a petition to enroll in up to a maximum of 11 units. A high school student may petition to attend Southwestern College on a full-time basis only if the student submits a letter from their high school releasing them to attend Southwestern College full-time instead of attending their respective high school. Students enrolled in home school programs must meet one of the following criteria:

1. the home school program must be affiliated with a county department of education program,
2. must be taught by a person holding a California teaching credential, or
3. must hold a current private school affidavit filed with the State Superintendent of Public Instruction. Documentation must be provided at the time of application.

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 paper based or 140 for the computer based 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; in the estimated amount of \$18,032 per academic year (including summer); 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 and Records;
- Pay the nonresident tuition and other fees as required at registration. (International students may not work off campus 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: *Health insurance is required of international students.*

Each student and/or spouse 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 application fee 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 application fee 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 go online at www.swccd.edu, click on Admissions and Registration, then click on International Students or call the International Student Advisor at 619-482-6531.

Mexican Nationals/Communting from Mexico to the United States

Admissions Requirements:

(Enrollment limited to 11 units maximum per semester)

- Must verify permanent residence in Mexico within 75 miles of the college and once approved as an international student, must maintain residency in Mexico
- Must verify residence address in Mexico (ex: driver's license, utility bill, voter's registration)
- Must have a declared educational goal (from attached academic program list)
- Must determine and verify funds for tuition and other fees \$7,000.00 per term

General Information:

- Students will only be admitted for the start date of the full semester or the start date of the second nine-week session
- Students wanting to be admitted for the second 9 (nine) week session, must apply a minimum of one month prior to the beginning of the session
- Students will be admitted for the first summer sessions only (no one admitted for late start summer sessions)

Application Deadline:

- Must apply a minimum of 1 month prior to the beginning of term (Please foresee that there maybe delays when scheduling an appointment with the U.S. Consulate.)

For more information go online at www.swccd.edu, click on Admissions and Registration, then International Students or call the International Student Advisor at 619-482-6504.

International Programs

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 Web site www.swccd.edu 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 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 4315, 619-482-6462

Dental Hygiene Program
Higher Education Center at National City
619-216-6665, extension 4875.

Surgical Technology Program—ROP
Room 213B, 619-482-6377

Other Health Programs Listed
Higher Education Center at Otay Mesa
Room 4401, 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.

SWC Learning Communities

Learning communities are linked courses that use common themes, readings, and assignments. These classes meet a variety of requirements for a degree or for graduation while promoting learning in a friendly, supportive environment that encourages success and better teacher-student relationships. Learning community courses not only offer opportunities for greater academic success, they also provide more student-teacher and student-student interaction. Students who have completed such courses have developed lasting friendships with other students from their learning community cohort.

For more information on Southwestern College Learning Communities, contact the Counseling Center at 619-482-6317.

Spanish-to-English Associate Teacher Certificate Program

This program meets the academic requirements for the associate teacher certificate 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 child development courses will begin with predominantly Spanish instruction. The program is for students that have not taken child development classes in English, are eligible to take ESL 27 (The ESL assessment test is highly recommended), and have not taken ESL courses higher than the level ESL 40, 41, 104 or reading higher than the level 56. For more information, call 619-421-6700 extension 5746.

Note: A separate application is required for this program.

Programa para el Certificado de Maestro Asociado de Español a Inglés

Este programa cubre todos los requisitos académicos para el permiso de maestro asociado del Departamento Estatal de Educación y la División de Desarrollo Infantil. Este certificado comprende cuatro cursos obligatorios de desarrollo infantil, los cuales están unidos a cuatro cursos de Inglés como segundo idioma. Los cursos de desarrollo infantil empezarán siendo impartidos en español. Los cursos son para estudiantes que no han cursado clases de Child Development en inglés, que son elegibles para ESL 27 (se recomienda hacer el examen de ESL) y que no hayan tomado inglés más avanzado del nivel ESL 40, 41, 104 or reading (lectura) más avanzado del nivel 56. Para más información llame al 619-421-6700 extensión 5746.

Nota: Se requiere una solicitud de admisión adicional para este programa

Mathematics, Engineering, Science Achievement (MESA)

The mission of the Southwestern College Mathematics, Engineering, and Science Achievement (MESA) Program is to promote academic achievement and leadership development. MESA's goal is to increase the transfer rate and academic success of economically and educationally disadvantaged students who are majoring in math, engineering, or science. The Program provides academic enrichment opportunities, mentoring, and leadership experiences that facilitate transfer to four-year colleges and universities.

For more information call the Southwestern College MESA Office at 619-482-6381.

Puente Project

The mission of the Puente Project is to increase the number of educationally underrepresented students who enroll in four-year colleges and universities, earn degrees, and return to the community as leaders and mentors of future generations. Puente students commit to two consecutive semesters of English instruction, academic counseling and mentoring. Classroom instruction features Mexican-American/Latino literature and opportunities for self-exploration.

For more information call the Counseling Center at 619-421-6700, ext. 5240.

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 be eligible to establish residency, a student must first be a citizen of the United States, a permanent resident or an approved applicant for permanent residency, or on visa status that does not preclude him/her from establishing domicile in the United States. It is 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 Admissions.

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 Admissions 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.
- Having an alien status which is precluded by the Immigration and Nationality Act from establishing a residence in the United States

For a listing of precluded visas or statuses contact Admissions.

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

These conditions apply unless the minor is precluded by the Immigration and Nationality Act from establishing residency in the United States:

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. For more information please see page 18, Nonresident Fee Exemption.

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 proceeding 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 Admissions located in the Student Services Center in the Cesar E. Chavez Building.

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 Admissions. 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 Dean of Enrollment Services or designee. If the student is not in agreement with that decision, a written appeal may be made to the Vice President of Student Affairs 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

Take the college assessment

Computerized and paper-and-pencil assessment (basic skills placement testing) is available at the Assessment Center located in Room 107 in the Student Services Center in the Cesar E. Chavez Building. You should plan to take the assessment at least two days before your orientation and preregistration session.

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 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 Prerequisite Evaluation Request form to the Assessment Center).
- assessment results from other colleges or universities (proof of assessment results must be submitted with a Prerequisite Evaluation 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 Reading 158 (RDG 158) or English 116 (ENGL 116) or credit in Reading 12 (RDG 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 Business 183 (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). This exemption from the college's proficiency requirements does not extend to prerequisites unless the appropriate coursework or assessment was successfully completed at the other college(s). See page 36 for 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 (HLTH 101) or Health 116 (HLTH 116) or satisfactory performance on the Health Inventory Test. Information about the Health Inventory Test is available in the School of Health, Exercise Science, and Athletics.

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 in the Cesar E. Chavez Building. 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). An Online Orientation is available at www.swccd.edu, Counseling and Guidance link.

Orientation and Advisement Sessions

Orientation, preregistration, and advisement sessions will last one and one half (1.5) hours. You will receive assessment results and a college catalog. 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
- Student Rights and Responsibilities

Information on Orientation

For information regarding dates and times or to schedule an appointment for orientation, please contact one of the following: the Counseling Center, located at the Chula Vista campus in the Student Services Center in the Cesar E. Chavez Building, 619-421-6700, ext. 5240, the Higher Education Center at National City, 619-216-6665, or the Higher Education Center at Otay Mesa at 619-216-6750.

An online orientation is available on the College Web site, www.swccd.edu, Counseling and Guidance link.

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 Admissions located in the Student Services Center in the Cesar E. Chavez Building at the Chula Vista campus, the Education Center at Otay Mesa, the Higher Education Center at National City, or online at www.swccd.edu. 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 (SEP) 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 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.

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 to the Assessment Center copies of appropriate transcripts/grade reports and/or assessment results and clear the requirements prior to registration. Assessment is located in the Student Services Center in the Cesar E. Chavez Building. Students may challenge prerequisites; see Requisite/Corequisite Challenge on page 20.

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's 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 during the same semester 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 Requisite/Corequisite Challenge on page 20.

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 improve your success in Southwestern College courses. Enrollment may not be denied to any student not meeting a recommended preparation or recommended concurrent enrollment.

Matriculation Petitions

Requisite Challenge Form

The Requisite Challenge Form allows students to challenge any course requisite. You may file a challenge based on one or more of the following reasons:

- You have the knowledge or ability to succeed in the course despite not meeting the course requisite. You must provide documentation that explains/demonstrates that you have the background, skills, or abilities to succeed in the desired course.
- You believe you will be subject to undue delay in attaining the goals of your educational plan due to a limitation on enrollment or because the prerequisite or corequisite course has not been made reasonably available. Consideration is typically given only when either (1) the prerequisite/corequisite has not been offered for two consecutive semesters or (2) the prerequisite/corequisite is necessary for graduation, transfer, or a certificate, but the requisite is unavailable due to the number of course sections offered.
- You believe the prerequisite, corequisite, or limitation on enrollment has been established in violation of Title 5 regulations and/or the Southwestern Community College District's process for establishing prerequisites, corequisites, and limitations.
- You believe the prerequisite, corequisite, or limitation on enrollment is discriminatory or is being applied in a discriminatory manner.

Students may file a Requisite Challenge Form through the Assessment Center. You must provide compelling evidence to support your challenge; attach documents (transcripts, evidence of work experience, etc.), and information necessary to support the challenge. The Requisite Challenge Form will be forwarded to the appropriate School dean or designee for determination. Five working days (ten days during summer) subsequent to your submitting the challenge form, results may be picked up at the Assessment Center or, at your request, the results will be emailed to you.

A student wishing to appeal the decision of the dean may request a meeting with the appropriate School Dean or the Vice President for Student Affairs or designee. The student shall receive a response within five days.

Matriculation Appeals Petition—Complaint of Unlawful Discrimination

A Matriculation Appeals 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 Enrollment Services
- If a formal hearing procedure is necessary, the Matriculation Appeals Committee membership shall consist of the Dean Enrollment Services, the Affirmative Action Officer, an Associated Student Organization (ASO) representative, and a member of the Matriculation Advisory Committee.

Students may file a Matriculation Appeals Petition through the Assessment Center. You must provide compelling evidence to support the petition.

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 or higher degree.

Other

Attained an associate 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.

Change of Records

Change of Address

Any change of a student's address or residence should be reported immediately to Admissions. Students may also change their contact information (mailing address, email address, and telephone number) online at www.swccd.edu (click on WebAdvisor) then select "update your email, telephone number, and address." Failure to comply with this may result in an administrative hold.

Change of Name

Any change of the student's name should be reported to Admissions. Contact Admissions for acceptable forms of identification to submit for verification of the name change. 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 for 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. For online courses, students must email the instructor to obtain an add code. Students may register with the add code by going online, by calling the telephone registration, or by submitting the Class Add form with add code or instructor signature at Admissions on the Chula Vista campus, at the Higher Education Center at National City, or at the Higher Education Center at Otay Mesa 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 does not enroll the student. The instructor, after granting approval to the student to add, must direct the student to add the class online, by telephone, or in Admissions located in the Student Services Center in the Cesar E. Chavez Building.

Note: The student should present, by the next class meeting, a registration statement 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 online, by calling telephone registration or by filing a Class Withdrawal form in Admissions on the Chula Vista campus, the Higher Education Center at National City, or the Education Center at Otay Mesa.

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, E, 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 Dean of Enrollment Services. Petitions are available in Admissions.

Dropping Students from Classes

- Instructors may drop any student who fails to attend the first class meeting if the class is at maximum enrollment and other students are waiting to enroll.
- Students will be dropped from a class for a lack of a prerequisite.
- During the add period of the term, instructors must drop a student from a class with or without an explanation for never attending class, unless the student has contacted the instructor and the instructor has granted an excused absence.
- After the add period of the term, instructors may drop a student from a class 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.
- Instructors must drop from class any student who has not been in attendance during a period of 14 consecutive calendar days unless an approved leave of absence petition has been filed with Admissions.
- Instructors may drop a student 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.

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 from the current class and one subsequent meeting pursuant to a 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.

Please contact Office of Student Activities for complete list of student misconduct violations at 619-482-6568 or in the Student Center

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 Admissions. Petitions for a Leave of Absence are available from Admissions at the Chula Vista campus, the Higher Education Center at National City, or the Higher Education Center at Otay Mesa or online at www.swccd.edu (click on Admissions and Registration, then on printable forms.). 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.....	\$10
1 unit or more.....	\$20 per unit

Nonresident Tuition

In addition to Enrollment Fees

Fee per unit	\$ 163
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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 Admissions.

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 or by the end of the second calendar week (Saturday) of the semester for full-semester classes. No refunds will be issued after the second calendar week of instruction.

Dates vary for fast track courses. Fast track classes have a refund period of 10% of the actual class meeting days which in many cases is the first day of class. Check with Admissions for specific deadlines to drop with a refund for fast track courses.

Note: It is the responsibility of the student to officially withdraw from classes to be eligible for refunds. Fee refunds will be mailed and may take up to four weeks.

Additional Fees

Student Center Fee

Chula Vista Campus Classes Only

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

* Beginning summer session extending through following spring semester.

Parking Fee

Chula Vista campus, Higher Education Center at Otay Mesa, and Higher Education Center at National City

Fall/Spring Semester

Multi vehicle/car	\$40
Motorcycle	\$20
Daily parking	\$3 per day
Eligible Financial Aid BOGFW Recipients	\$20

Summer Sessions

Multi vehicle/car	\$22
Motorcycle	\$12
Daily parking	\$3 per day
Eligible Financial Aid BOGFW Recipients	\$20

Health Fee/Accident Insurance/Liability Fee

Health Fee (includes the accident insurance/liability fee)

Fall/Spring Semester

.5 unit to 5.5 units	\$11
6 units or more	\$14
Summer Session	\$11

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 Admissions).
- Students who qualify for a Board of Governors Fee Waiver (BOGFW) A 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.
- Exclusive online classes that do not meet on campus.

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 Chula Vista 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, textbook rental program, 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 can be picked up at the Information counter in the Student Center.

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

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.

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.

Course Materials Fees for 2007–2008

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 in the Cesar E. Chavez Building, 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 Fee Waiver (BOGFV) 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 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 \$4,050 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, or if you are a veteran, contact Veterans Services, both located in the Student Services Center in the Cesar E. Chavez Building, at the Chula Vista Campus.

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 in the Cesar E. Chavez Building. Selection criteria, award amounts, and application deadlines are determined by the donors and vary.

Students are encouraged to stop by the Student Services Center in the Cesar E. Chavez Building, second floor 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.

Step 5 Follow-up Counseling Services

The Counseling Center schedules appointments on a weekly and daily basis. After you have registered for classes, stop by the Counseling Center to schedule an individual appointment with a college counselor starting the third week of each semester. Before that, counselors are available for students through orientation sessions, walk-in services, and online at Counseling and Guidance link, E-Counselor.

During your individual appointment, counselors will assist you in developing a Student Educational Plan, exploring career options, and discussing personal issues and challenges you may encounter. All students are recommended to meet with counselors at least once per academic year to keep informed of program and general education changes, and to ensure timely completion of goals.

How to Maintain Good Academic Standing

SWC is governed by Title 5 of the Education Code that requires that you maintain Good Academic Standing.

Good Academic Standing includes:

1. Good Academic Progress, which requires that you maintain a 2.0 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.

Probation

If you do not meet the standards for Good Academic Standing for one semester, you will be placed on Probation. All students placed on Probation, are required to attend an Academic Success Seminar during the semester of Probation, and can schedule this in the Counseling Center. If students fail to attend the seminar, registration for the subsequent semester will be placed on hold.

Disqualification

If you do not meet the good academic standarding 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.
- be disciplined, complete your assignments.
- attend class regularly.

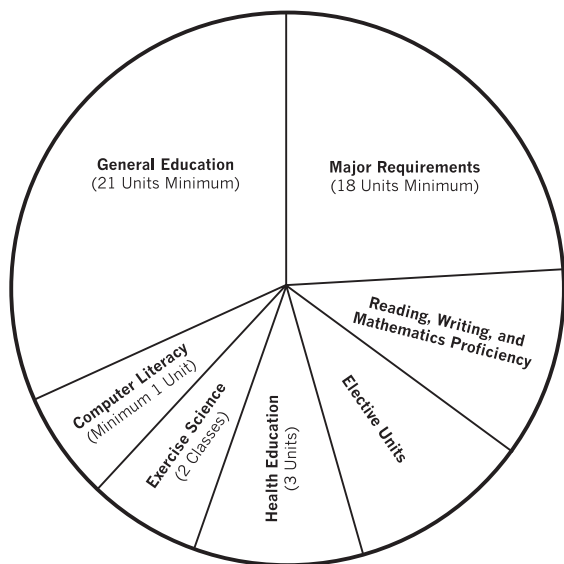
For more assistance in strengthening study skills strategies, enroll in Learning Skills 110, or visit the Academic Success Center in building 420.

How to achieve an AA/AS Degree

An AA/AS Degree includes:

Major
Graduation Requirements
General Education
Electives

AA/AS Degree—SWC: 60 units
Transfer Preparation—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 2.0 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 page 36.
 - 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 minimum—1 unit
- Exercise Science—2 classes
- Health Education—3 units
- Meet 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 counselor located in the Student Services Center in the Cesar E. Chavez Building to develop an educational plan that will ensure that you meet all degree requirements and educational goals. Counselors are also available at the Higher Education Center at National City and Otay Mesa.

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 in the Cesar E. Chavez Building, or in the library.
- Schedule a counseling appointment to discuss options in the Transfer or Counseling Center located in the —Student Services Center in the Cesar E. Chavez Building,
- 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:

- consider the geographic location of the university.
- consider the setting of the university (urban/rural).
- consider the size of the university.
- consider the ranking of the university.
- 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.
- Participate in college fairs and university tours sponsored by the Transfer Center.

Step 4.

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

- Schedule an appointment with a counselor located in the Student Services Center in the Cesar E. Chavez Building to develop a Student Educational Plan and a Semester-by-Semester Plan.
- Identify course requirements for your major and for admission criteria.

Step 5.

Stay on Track.

- Follow your student educational plan.
- Maintain the necessary grade point average.
- Complete all course requirements.
- Stay in contact with your college counselor to stay informed about changes coming forth from universities.
- Enhance your transfer potential with internships, leadership experience, volunteer service, etc.

Step 6.

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.
- applying for financial aid and scholarships.

Step 7.

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.
- Inform your family and significant friends about your plans—ask them for encouragement and support.

Step 8.

Congratulations!

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

Academic Freedom Policy

Southwestern Community College District recognizes that academic freedom is essential in maintaining the academic integrity of the institution and in protecting the rights of both the faculty and the students in the learning process. Each individual is obliged by scholarly ethics and academic freedom to speak openly. So too are others obliged to listen with courtesy and to respond with respect and decency to any statement made with conviction and sincerity. Responding with cordiality and respect does not deny the academic freedom of any party, but rather ensures the free and open exchange of all opinions. It is consistent with these ideals that no one may be compelled to adopt the opinions of others offered in dissension, yet all must honor the right of dissenters to bear true faith in their expressions.

Each faculty member has the right and the responsibility to introduce materials and controversial topics into classroom discussion and to provide opportunity for the expression of diverse points of view. The subject matter must be relevant to the discussion.

Members of the faculty are also private citizens and are not only entitled to express their own opinions in public but are encouraged to do so. When they speak or write as citizens, they must be free from institutional censorship and discipline, but their special position in the community imposes special obligations. Hence, as scholars they should at all times be accurate, should exercise appropriate restraint, should show respect for the opinions of others, and should make every effort to indicate that they are not speaking for the institution.

The District recognizes the right of the faculty to privacy of communication in accordance with the First Amendment. When executing their duties in an appropriate manner, faculty must be able to communicate with their colleagues without restraint. The District further recognizes that censorship and fear of reprisal do not promote scholarly interaction.

The District honors the freedom of expression guaranteed by the First Amendment of the Constitution of the United States of America and does not restrict the contents of any form of faculty expression.

[Parts of this policy are adapted from the American Association of University Professors 1940 Statement of Principles on Academic Freedom and Tenure, which has been reaffirmed annually thereafter.]

Note: An Academic Freedom policy is mandated in the California Code of Regulations, Title 5, §51023(a).

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. 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. Inasmuch as the semesters at Southwestern College are approximately 17.5 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 two hours of homework) equals one unit.
- Three hours of laboratory (plus one hour of homework) equals one 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 neither 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 Admissions during the first three weeks of the semester or the first week of summer session. See page 26 for additional eligibility requirements information.

Online Courses

Online learning is defined as any teaching-learning environment where the student and the teacher are not located in the same place at the same time. Technology is used to bridge the learning space. Online learning provides an opportunity for greater diversity in the means of instruction and in the delivery of educational and training services. It also lends itself to addressing a wide variety of learning styles.

To determine if online learning is right for you, review the following statements:

- I am very comfortable with using my computer for email, Internet, and word processing.
- I have access to a computer most of the time.
- I have Internet access at a fast speed.
- I have very strong time management and organization skills.
- I have very strong study skills.

If you agree with all five statements, online courses may be for you!

Online Courses:

- are academically equivalent to traditional on-campus courses.
- allow students to fit work and school into their busy schedules.
- offer the flexibility to choose where, when, and how often students complete lessons at home.
- save time and expense of traveling to campus.

Types of Online Courses

Hybrid

These courses have class meetings online as well as in traditional settings, such as a lab or classroom. Students are required to participate in Internet-based activities and attend on-campus course meetings.

Online

These courses deliver all of the course content and class communication over the Internet. There are no on-campus meetings and student participation is required online.

***Note:** For hybrid and entirely online courses, students must have access to a computer with reliable Internet connection and a valid email address.*

Web-Enhanced

These courses have traditional, face-to-face meetings; however, at the discretion of the instructor, some or all of the course content may be available on the Internet.

Online Course Orientations

Students may be asked by their instructors to participate in an orientation. The following options include but are not limited to what students may be asked to do.

Option 1:

The following link will allow students to complete an interactive online orientation. <http://swccd.edu/OrientationOnline>

Option 2:

Attend an optional on-campus orientation, if scheduled by the individual instructor. <http://swccd.edu/OrientationOnline>

Option 3:

Read the Student Orientation Packet on the Student Information section of the Online Learning Pages.

<http://swccd.edu/OrientationInformation>

Online Learning Center

This center is for support of students, faculty, and staff who work, learn, or teach in an online environment.

Email: BBhelp@swccd.edu

Telephone: 619-482-6595

Location: Room L103 located on the first floor of the LRC, Building 620

Hours: Monday–Thursday: 8 a.m.–8 p.m.

Friday: 8 a.m.–3 p.m.

Saturday: 8 a.m.–Noon

Note: Hours are subject to change based on the academic calendar.

Prior to the start of each term, online information cards will be mailed to students registered in online courses. These cards contain detailed log-in information.

For more information on online courses, please contact Southwestern College Admissions at 619-482-6550.

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 (CSU/IGETC) and the University of California (IGETC) systems are provided on page 46. All students 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 (\$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.

Audit petitions are available in Admission at the Chula Vista campus, the Higher Education Center at National City, the Higher Education Center at Otay Mesa, or online at www.swccd.edu (click on Admissions and Registration, then on printable forms.)

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 Instructional Support Services Office, the appropriate school office, and Admissions. Petitions are available in Admissions at the Chula Vista Campus, the Higher Education Center at National City, or the Higher Education Center at Otay Mesa, or online at www.swccd.edu (click on Admissions and Registration, then click on printable forms.)

Eligibility Requirements—Credit by Challenge Examination

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 Admissions prior to the end of the sixth week of the semester or the second week of the summer session.
- Return to Admissions 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.

CWEE requires 60 hours of work experience (75 hours if paid) per each unit earned. For further information or enrollment procedures, contact the Cooperative Education Office located in Student Employment Services located in the Student Services Center in the Cesar E. Chavez Building, 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 Work Experience should contact Student Employment Services, located in the Student Services Center in the Cesar E. Chavez Building, by telephone 619-482-6356, or email ses@swccd.edu.

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 Admissions at the Chula Vista campus, the Higher Education Center at National City, the Higher Education Center at Otay Mesa, or online at www.swccd.edu (click Admissions and Registration, then click on printable forms.)

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 Admissions.

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 Exercise Science 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 Admissions.
- 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, shortens 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 in the Veteran Services Office located on the second floor of the Student Services Center in the Cesar E. Chavez Building.

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 Admissions. Credit will not be posted to the student's permanent record.

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

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

International Baccalaureate Credit

Examination	Score Awarded	Semester Units	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	
Historia 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	

Note: Students planning to transfer to a four-year college or university must consult with a counselor because the criteria for awarding IB/AP credit may be different from Southwestern College.

Advanced Placement Credit

Southwestern College grants Advanced Placement (AP) credit towards its Associate Degree, California State University (CSU) certification for scores of 3, 4, or 5. To obtain credit, students should complete a petition with Admissions. Credit may not be earned at Southwestern College for courses which duplicate credit already allowed for examination as listed under course equivalents. Credit will not be posted to the student's permanent record.

Official scores must be sent to Southwestern College and can be obtained by writing or calling the following: The College Board, SAT Program, Princeton, NJ 08541 or 888-225-5427. Information on the AP Examination can also be accessed by visiting the Web site at <http://www.collegeboard.com>.

Advanced Placement Credit

Examination	Score	Southwestern College Credit Allowed Toward Degree	Southwestern College Course Equivalents	CSU—GE Credit Allowed
Art History	3, 4, 5	6 semester units	ART 150, 151	3 units toward Area C1
Art Studio:				
General	3, 4, 5	6 semester units	ART 100, 101	
Drawing	3, 4, 5	6 semester units	ART 100, 101	
General, Drawing	3, 4, 5	12 semester units	ART 100, 101, 102, 103	
Biology	3, 4, 5	4 semester units	BIOL 100, 101, free electives	3 units toward Area B2
Chemistry	3, 4, 5	6 semester units	CHEM 200, 210	6 units toward Area B1 and B3
Computer Science				
A**	3	3 semester units	free electives	
	4, 5	3 semester units	MATH 130	
AB**	3	6 semester units	MATH 130, free	
	4,5	6 semester units	electives	
		MATH 130, 140		
Economics:				
Macro	3, 4, 5	3 semester units	ECON 101	3 units toward Area D2
Micro	3, 4, 5	3 semester units	ECON 102	3 units toward Area D2
English:				
Language and Composition	3, 4, 5	6 semester units	ENGL 115, 116	3 units toward Area A2
Composition and Literature	3, 4, 5	6 semester units	ENGL 115, 220 or 270	6 units toward Area A2 and C2
French Language	3	6 semester units	FREN 220	6 units toward Area C2
	4, 5	6 semester units	FREN 230	

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

Note: Students planning to transfer to a four-year college or university must consult with a counselor because the criteria for awarding IB/AP credit may be different from Southwestern College.

* Please see next page for continuation of Advanced Placement scores

Advanced Placement Examination Program (continued)

Examination	Score	Southwestern College Credit Allowed Toward Degree	Southwestern College Course Equivalents	CSU-GE Credit Allowed
History:				
American	3, 4, 5	6 semester units	HIST 100, 101	3 units toward Area D6
European	3, 4, 5	6 semester units	HIST 105, free elective	3 units toward Area D6
Mathematics:				
Calculus AB	3, 4, 5	5 semester units	MATH 250	3 units toward Area B4
Calculus BC	3, 4, 5	9 semester units	MATH 250, 251	3 units toward Area B4
Calculus AB and BC	3, 4, 5	9 semester units	MATH 250, 251	3 units toward Area B4
Music	3, 4, 5	4 semester units	MUS 101, 102	3 units toward Area C1
Music Listening and Literature	3, 4, 5	6 semester units	MUS 105, NE	
Physics:				
B	3, 4, 5	None	no course	6 units Areas B1 and B3
C (Mechanics)	3 or 4	3 units	PHYS 170	3 units Areas B1 and B3
	5	3 units	PHYS 270	3 units Areas B1 and B3
C (Electricity and Magnetism)	3 or 4	3 units	PHYS 172	3 units Areas B1 and B3
	5	3 units	PHYS 272	3 units Areas B1 and B3
Political Science:				
Govt./Politics: American	3, 4, 5	6 semester units	PS 101, 102	3 units toward Area D8
Govt./Politics: Comparative	3, 4, 5	6 semester units	PS 101, 102	3 units toward Area D8
Govt./Politics: American, Comparative	3, 4, 5	12 semester units	PS 101, 102, 103, NE	3 units toward Area D8
Psychology	3, 4, 5	3 semester units	PSYC 101	3 units toward Area D9
Spanish Language	3	6 semester units	SPAN 201, 225	6 units toward Area C2
	4, 5	6 semester units	SPAN 202, 226	
Statistics	3, 4, 5	3 semester units	MATH 119	3 units toward Area B4

Note: Students planning to transfer to a four-year college or university must consult with a counselor because the criteria for awarding IB/AP credit may be different from Southwestern College.

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 Student Petition in Admissions and attach a copy of their CLEP test results.

To request an official CLEP transcript:

Address: Educational Testing Service, P.O. Box 6604, Princeton, NJ 08541

Phone: 800-257-9558

www.collegeboard.com/clep

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

College Level Examination Program General Examinations

Examination	Passing Score (test results through June 2001)	Passing Score (test results beginning July 2001)	Maximum Credit Granted	General Education Credit (AA/AS)
Calculus with Elementary Functions	41	50	3 units	MATH 121
College Algebra Trigonometry	45	50	3 units	Yes
General Chemistry	47	50	6 units	CHEM 200
Humanities	420–500	50	6 units	3 units in Cultural Studies 3 units in Fine Arts
Mathematics	420–500	50	3 units	Partial Credit for MATH 65 Satisfies Math Proficiency
National Science	420–500	50	6 units	3 units in Life Science 3 units in Physical Science
Social Science and History	420–500	50	6 units	3 units in Social Science 3 units in History
Spanish Language, Level I		50	5 units	SPAN 101
Spanish Language, Level II		50	5 units	Span 102

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 Admissions or by completing a transcript request form available in Admissions. 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*	\$20

(includes emergency fee)

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 19. Anyone wishing to enroll for more than the maximum per semester must petition for exception with the Dean of Counseling and Personal Development 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 Admissions 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 of 15 to 30 minutes occur, an overlay petition may be submitted indicating specifically when the time will be made up with instructor signature for approval by Admission. Petitions and information are available in Admissions at the Chula Vista campus, the Higher Education Center. at National City, the Higher Education Center at Otay Mesa, or online at www.swccd.edu (click on Admissions and Registration, then click on printable forms.)

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, and 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 Admissions at the Chula Vista campus, the Higher Education Center at National City, the Higher Education Center at Otay Mesa, or online at www.swccd.edu (click on Admissions and Registration, then click on printable forms.)

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. A substandard grade will not be removed when the repeated course is taken on a 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 academic 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 academic year, some college activities and classes may meet at off campus locations. The College will not provide 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 Admissions.
- 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 Admissions must be done within one year following the end of the term in which the grade was assigned.

Note: When a course is repeated pursuant to an approved petition, the first grade assigned will be used for computation of grade point average (GPA); the second grade will not be calculated.

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.

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, fast track, 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 (end of the fourth week) of the semester, or the first week of a short session or summer session. Request forms are available in Admissions at the Chula Vista campus, Higher Education Center at National City, Higher Education Center at Otay Mesa, or online at www.swccd.edu (click on Admissions and Registration, then on printable forms.).

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).

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 and the “I” grade cannot be changed to a “W” (withdrawal) grade. The “I” may be made up no later than one year following the end of the term in which it was assigned.

Instructors are required to complete an Incomplete Grade report and indicate the student’s last date of attendance. Instructors must also state the requirements for removing the “I” and the criteria for determining a new final grade if the work is completed during the one year period. The Incomplete Grade Report forms are to be turned in to Admissions. If a written test is required, a copy of the test and scoring key must be submitted with the form.

A copy of the Incomplete Grade Report will be mailed to the student with a copy on file in Admissions. Incomplete Grade Reports and attached documents will be forwarded to the Instructional Support Services Office. It is the student’s responsibility to contact the instructor before the one year time limit to complete the course requirements for removal of the “I” grade. Arrangements must be made with the Instructional Support Services Office for completion of course requirement(s) for removal of the “I” grade in the absence of the instructor. 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. Instructors must complete a Record Change form in order to change the “I” grade to a letter grade and submit it to Admissions. If a Record Change form is not submitted by the instructor to Admission or if the work stipulated is not made up by the student, the “I” grade will revert to the default grade 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 Instructional Support Services Office, Room 213.

In Progress (IP)

The In Progress (“IP”) 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. This option is not available for the variable Mathematics courses.

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 Admissions. 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 Admissions. 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).

Report Delayed Grade (RD)

The "RD" is used to indicate that the grade(s) was/were not turned in to Admissions 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:

4.0 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 course work 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. All students placed on academic probation will be required to attend an academic success seminar prior to registering for subsequent semesters.

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. All students placed on progress probation will be required to attend an academic success seminar prior to registering for subsequent semesters.

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.

Petitions are available in the Counseling Center and may be submitted prior to the beginning of the semester.

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 (below "C" grade) completed at Southwestern College 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:

- Two years must have elapsed since the most recent work to be disregarded was completed;
- The student must have completed at any accredited institution at least 24 units of subsequent course work with a 2.5 (C+) grade point average;
- The student must submit a student petition or request in writing and present official transcripts from accredited institutions as evidence that the requirements of academic renewal have been met.

For students with previously earned degrees, courses used to fulfill requirements of a degree are not eligible for academic renewal.

When academic renewal is approved, the permanent academic record shall be annotated in such a manner that all work remains legible, ensuring a complete academic history.

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. Academic renewal by the Southwestern Community College District does not guarantee that other institutions will approve such action. The determination will be made by the respective transfer institutions. 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 Admissions at the Chula Vista campus, the Higher Education Center at National City, the Higher Education Center at Otay Mesa, or online at www.swccd.edu (click on Admissions and Registration, then click on printable forms.).

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 Admissions. Petitions for graduation may be filed at any time; however, students wishing to graduate in a specified semester (fall, spring, or 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 Admissions. 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 compliment 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 one of the following transfer general education patterns:

- California State University (CSU) General Education Breadth Requirements
- University of California, San Diego (UCSD) TAG,
- Intersegmental General Education Transfer Curriculum (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. This 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
CHEM 180	Computational Methods in Chemistry
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 or a student who is fulfilling requirements for the Transfer Studies degree will not be required to meet proficiency requirements for graduation.

Exercise Science Requirements

Students must satisfactorily complete (grade of “C” or better or “Credit”) two classes of exercise science or 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 exercise science 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 exercise science.
- 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 exercise science requirement for graduation:

DANC 200	Dance History and Appreciation
ES/A 109	Fitness Assessment and Laboratory
ES/T 200	Physical Education for Elementary School
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 206AB	Theory and Technical Analysis of Offensive Basketball
ES/T 207AB	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”) HLTH 101, 116, or 204 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 nursing (ADN and VN) and dental hygiene (DH) majors the health education requirement is met by completion of courses for the major.

Note: The health inventory test may not be taken after HLTH 101 has been completed with an unsatisfactory grade.

Note: A student who has received a college degree from an accredited U.S. institution or a student who is fulfilling requirements for the Transfer Studies degree will not be required to meet proficiency requirements for graduation.

Proficiency Requirements

Mathematics Proficiency Requirement

Students are encouraged to satisfy the mathematics proficiency through coursework 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 Intermediate Algebra (Math 65), or a higher-numbered mathematics course; or
- Satisfactory completion (Credit or grade of “C” or better) of BUS 183.

The Southwestern College Mathematics Assessment may be taken throughout the year. It is advised that students take these assessments 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 assessments, review his/her assessment results, and meet with a counselor regarding his/her results. Review material will be available upon request.

Part of the calculation used in the Southwestern College Assessment process to determine satisfaction of the mathematics proficiency requirement is high school grade point average. A student, however, may petition to substitute the college grade point average 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 Assessment Center to be considered for this substitution.

Note: A student who has received a college degree from an accredited U.S. institution or a student who is fulfilling requirements for the Transfer Studies degree will not be required to meet proficiency requirements for graduation.

Reading Proficiency Requirement

The Southwestern College reading proficiency requirement is met by satisfactory performance on the Southwestern College Reading Assessment. The requirement may also be met by satisfactory completion (grade of “C” or better or “Credit”) of RDG 158 or ENGL 116 or credit in RDG 12 is required.

Part of the calculation used in the Southwestern College Assessment process to determine satisfaction of the reading proficiency requirement is high school grade point average. A student, however, may petition to substitute the college grade point average for the high school grade point average. The student must have completed a minimum of 24 degree 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 Assessment Center to be considered for this substitution.

Note: A student who has received a college degree from an accredited U.S. institution or a student who is fulfilling requirements for the Transfer Studies degree will not be required to meet proficiency requirements for graduation.

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 English
ENGL 114	Introduction to Composition
ENGL 115	Reading and Composition: Exposition and 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 SWC General Education, 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.

General Education Plans

Associate Degree (A.S. or A.A.) General Education Requirements 2007–2008

This plan meets the 21-unit general education requirement for an associate degree awarded by Southwestern College. A minimum of 60 total units, general education courses, degree program course requirements and elective courses, is required to earn an associate degree. Students are strongly advised to see a counselor for assistance in developing an educational plan.

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 English
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
RDG 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 Psychology/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.

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	Modern 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 160	Marine Biology
# BIOL 170	Field Botany
BIOL 180	Human Heredity, Evolution, and Society
BIOL 185	Biology of Alcohol and Other Drugs
# BIOL 190	Human Anatomy and Physiology
BIOL 193	Principles of 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 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
EHMT 100	Introduction to Environmental Technology
GEOG 100	Introduction to Geography—Physical Elements
GEOG 130	Weather and Climate
GEOG 160	Geography of California
GEOL 100	Principles of Geology
LNT 100	Plant and Horticultural Science
PHS 101	Introduction to the Physical Sciences
PHS 110	Introduction to Oceanography
PHS/PS 250	Our Global Future: Values for Survival
# 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	Darkroom and Digital Photography I
ART 129	Asian Art
ART 149	Women in Western Art History, 1550–Present
ART 150	Art History Survey—Stone Age to the Ages of Faith
ART 151	Art History—Renaissance to Modern
ART 156	History of Photography

ART 157	Nineteenth Through Twenty-First 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 Production
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 and Communication
+ DANC 121	Dance Choreography I
DANC 200	Dance History and Appreciation
JOUR 171	Writing for Publication
MUS 105	Introduction to Music
MUS 106	Introduction to Jazz
MUS 107	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 195	World Music
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 I
TA 117	Pantomime and Stage Movement I
TA 120	Theatre Workshop—Performance I
TA/TELE 115	Acting for Television 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 Film and Electronic Media
TELE 116	Media Performance
TELE 163	Video Post-production and Special Effects
TELE 183	Video Studio Production
TELE 233	Film Production
TELE 234	Documentary Video 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 Television and Film
TELE/TA 150	Technical Design and Production
TELE/TA 152	Lighting and Sound Techniques
TELE/TA 153	Sound Reinforcement
TELE/TA 242	Television and Film Directing

Group 2: Cultural Studies

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
^ ENGL175A	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
^ FARS 101	Elementary Farsi I
+ FARS 102	Elementary Farsi II
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/TELE 112	Culture and the Media
^ ITAL 101	Elementary Italian I
^ ITAL 102	Elementary Italian II
^ ITAL 201	Intermediate Italian I
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
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
SOC/MAS 150	Mexican and Latino Culture in the United States
^ SPAN 101	Elementary Spanish I
^ SPAN 101A	Introduction to Elementary Spanish
^ SPAN 101B	Continuation of Elementary Spanish
^ SPAN 102	Elementary Spanish II
^ SPAN 201	Intermediate Spanish I
^ SPAN 202	Intermediate Spanish II
SPAN 205	Intermediate Conversation and Writing on Baja California
SPAN 215	Spanish for Bilinguals I
SPAN 216	Spanish for Bilinguals II
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
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/SOC 115	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
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Group 5: Geography

+ GEOG 106	World Regional Geography
GEOG 120	Introduction to Geography: Cultural Elements
+ GEOG/BIOL 143	Biology, Oceanography, and Geoscience of Baja California

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
CD 284	Child, Family, and Community
+ 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 Administration of Justice
AJ 111	Introduction to 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 211	Learning
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
	<hr/>
	21

Legend

- / Same as course
- ^ Modified course name or number
- + New Courses
- # Courses include lecture and laboratory

California State University (CSU) General Education Breadth Requirements 2007–2008

(Transfer Information)

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

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. 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.

A. COMMUNICATIONS 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
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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	Modern 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 I
# 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
GEOG 100	Principles of Geology
PHS 101	Introduction to the Physical Sciences
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 160	Marine Biology
# BIOL 170	Field Botany
BIOL 180	Human Heredity, Evolution, and Society
BIOL 185	Biology of Alcohol and Other Drugs
# BIOL 190	Human Anatomy and Physiology
BIOL 193	Principles of 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 161	Marine Biology Laboratory
# BIOL 170	Field Botany
# BIOL 190	Human Anatomy and Physiology

BIOL 193	Principles of 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 I
# 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 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)

BIOL 215	Biostatistics
MATH 100	Mathematics for General Education
MATH 101	College Algebra
MATH 104	Trigonometry
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/Sociology

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 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	Darkroom and Digital Photography I
ART 129	Asian Art
ART 130/ TELE 113	History of Film as Art
ART 149	Women in Western Art History, 1550–Present
ART 150	Art History Survey—Stone Age to the Ages of Faith

ART 151	Art History—Renaissance to Modern
ART 156	History of Photography
ART 157	Nineteenth Through Twenty-First 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 and Communication
* DANC 121	Dance Choreography I
DANC 200	Dance History and Appreciation
MUS 105	Introduction to Music
MUS 106	Introduction to Jazz
MUS 107	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—Individual Study 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 180–182	Chamber Singers I–III
* MUS 185–187	Concert Choir I–III
* MUS 189–192	Music and Rhythms of Africa I–IV
MUS 195	World Music
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 Television and Film
TA 120	Theatre Workshop—Performance I
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 Television and Film

Group 2: Humanities

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 274	Literature of the Border and Baja California

ENGL 280	Literature by Women
ENGL 281	Horror, Madness, and the Macabre
^ FARS 101	Elementary Farsi I
+ FARS 102	Elementary Farsi II
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/TELE 112	Culture and the Media
HUM 140	World Mythology
^ ITAL 101	Elementary Italian I
^ ITAL 102	Elementary Italian II
^ ITAL 201	Intermediate Italian I
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 130	Elementary Tagalog II
PIL 220	Intermediate Tagalog I
PORT 120	Elementary Portuguese I
PORT 130	Elementary Portuguese II
PORT 220	Intermediate Portuguese I
^ SPAN 101	Elementary Spanish I
^ SPAN 101A	Introduction to Elementary Spanish
^ SPAN 101B	Continuation of Elementary Spanish
^ SPAN 102	Elementary Spanish II
^ SPAN 201	Intermediate Spanish I
^ SPAN 202	Intermediate Spanish II
SPAN 205	Intermediate Conversation and Writing on Baja California
SPAN 215	Spanish for Bilinguals I
SPAN 216	Spanish for Bilinguals II
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

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/SOC 151	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
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Group 5: Geography

GEOG 106	World Regional 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
CD 284	Child Family/ Community
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	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 211	Learning
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/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 170	Principles of Child Development
HLTH 101	Principles of Healthful Living
HLTH 102	Border Health Issues: HIV
HLTH 116	Women's Health and Well Being
HLTH 204	Fundamentals of Nutrition
PD 100	Lifelong Success
+ PD 114	Transitions in Higher Education
PSYC 106	Human Sexuality
PSYC 109	The Psychology of Death and Dying

Note: 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, 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 121	Comparative History of the Americas I
HIST/MAS 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 122	Comparative History of the Americas II
HIST/MAS 142	Mexican-American History II
PS 102	Introduction to American Government and Politics

Group 3:

PS 102 and one of the following:

AFRO/HIST 111	African-American History II
HIST 101	American Civilization II
HIST 122	Comparative History of the Americas II
HIST/MAS 142	Mexican-American History II

NOTE: A minimum of 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
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	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

University of California (UC) and California State University (CSU) Intersegmental General Education Transfer Curriculum (IGETC) 2007–2008

This plan is a 37- to 39-unit, general education pattern which meets all lower-division general education requirements at most California State University (CSU) or University of California (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.

AREA 1: ENGLISH COMMUNICATION

CSU—3 courses required, one each from Group A, B, and C.
UC—2 courses required, one from Group A and B.

Group A: English Composition

ENGL 115	Reading and Composition: Exposition and Argumentation
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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 244	Pre-Calculus wwith 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/Sociology

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
ART 149	Women in Western Art History, 1550 to Present
ART 150	Art History Survey—Stone Age to the Ages of Faith
ART 151	Art History—Renaissance to Modern
ART 156	History of Photography
ART 157	Nineteenth Through Twenty-First 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 195	World Music
MUS 202	Development of Mariachi: Style and Culture
TA 100	Survey of Drama
TA 101	Introduction to the Theatre
TELE 113/ART 130	History of Film as Art

Group B: Humanities

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 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 274	Literature of the Border and Baja California
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	Introduction to Humanities: Arts and Ideas
HUM 140	World Mythology
** HUM/TELE 112	Culture and the Media
^ ITAL 201	Intermediate Italian I
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 130	Elementary Tagalog II
PIL 220	Intermediate Tagalog I
PORT 130	Elementary Portuguese I
^ SPAN 102	Elementary Spanish II
^ SPAN 201	Intermediate Spanish I
^ SPAN 202	Intermediate Spanish II

SPAN 205	Intermediate Conversation and Writing on Baja California
SPAN 216	Spanish for Bilinguals II
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
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
+ AFRO/SOC 151	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

Group D: Gender Studies

* HIST 132	Herstory—Women in Historical Studies
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Group E: Geography

GEOG 120	Introduction to Geography: Cultural Elements
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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 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 G: Interdisciplinary, Social and Behavioral Sciences

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

Group H: Political Science, Government and Legal Institutions

AJ 111	Introduction to 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 I: Psychology

PSYC 101	General Psychology
PSYC 106	Human Sexuality
PSYC 116	Introduction to Social Psychology
+ PSYC 211	Learning
PSYC 230	Developmental Psychology
PSYC 250	Abnormal Psychology
PSYC 260	Introduction to Physiological Psychology

Group J: Sociology and Criminology

* COMM 200/	Introduction to Mass Communication
* JOUR 101	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 and 101 or GEOG 100 and 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	Modern 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 250	Analytical Chemistry
GEOG 100	Introduction to Geography—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
+ PHS/PS 250	Our Global Future: Values for Survival
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 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 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
*** BIOL 261	Principles of Human Physiology
# BIOL 265	General Microbiology

AREA 6A: 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 of courses with a grade of “C” or better. The following courses (or higher level course) at Southwestern College fulfill the requirement.

+ ASL 120	American Sign Language I
+ ASL 130	American Sign Language II
CHIN 120	Mandarin Chinese I
CHIN 130	Mandarin Chinese II
FREN 120	Elementary French I
FREN 130	Elementary French II
FREN 220	Intermediate French I
FREN 230	Intermediate French II
^ ITAL 102	Elementary Italian II
^ ITAL 201	Intermediate Italian I
JPN 120	Beginning Japanese I
JPN 120A	Introductory Elementary Japanese
	and
JPN 120B	Continuation of Elementary Japanese
JPN 130	Beginning Japanese II
JPN 220	Intermediate Japanese I
PIL 120	Elementary Tagalog I
PIL 130	Elementary Tagalog II
PORT 120	Elementary Portuguese I
PORT 130	Elementary Portuguese II
SPAN 102	Elementary Spanish II
SPAN 201	Intermediate Spanish I
SPAN 202	Intermediate Spanish II
SPAN 215	Spanish for Bilinguals I
SPAN 216	Spanish for Bilinguals II
SPAN 221	Introduction to Literature for Bilinguals

OTHER: CALIFORNIA STATE UNIVERSITY (CSU) GRADUATION REQUIREMENT

CSU Graduation Requirement: Courses in American Institutions (United States History, Constitution and American Ideals) are required for graduation by the CSU. Although the American Institutions requirement is not part of 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/HIST141	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

Group 3:

PS 102 and one of following courses:

AFRO/HIST 111	African-American History II
HIST 101	American Civilization II
HIST 122	Comparative History of the Americas II
HIST/MAS 142	Mexican-American History II

NOTE: IGETC minimum required General Education units for transfer

A. English Communication	9
B. Mathematical Concepts and Quantitative Reasoning	3
C. Arts and Humanities	9
D. Social and Behavioral Sciences	9
E. 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)

General Education Courses Common to All Patterns 2007–2008

The following courses appear in all three General Education Patterns, Southwestern College Associate Degree (A.S or A.A), California State University (CSU) Breadth Requirements and Intersegmental General Education Transfer Curriculum (IGETC):

Administration of Justice AJ 111	BIOL 190 BIOL 210 BIOL 211 BIOL 212	ENGL 272 ENGL 273 ENGL 274 ENGL 280	Italian ITAL 102 ITAL 201	Portuguese PORT 120 PORT 130 PORT 220
African–American Studies AFRO/HIST 110 AFRO/HIST 111 AFRO/HIST 151	BIOL 260 BIOL 261 BIOL 265	French FREN 120 FREN 130 FREN 220 FREN 230	Japanese JPN 120 JPN 120A JPN 120B JPN 130 JPN 220	Political Science PS 101 PS 102 PS 103 PS 104 PS/PHS 250
Anthropology ANTH 101 ANTH 102 ANTH 103 ANTH 110 ANTH 112	Chemistry CHEM 100 CHEM 110 CHEM 170 CHEM 200 CHEM 210 CHEM 240 CHEM 250	Geography GEOG 100 GEOG 120 GEOG 130	Mexican-American Studies MAS/HIST 141 MAS/HIST 142	Psychology PSYC 101 PSYC 116 PSYC 211 PSYC 230 PSYC 250 PSYC 260 PSYC/SOC 270
Art ART 104 ART 112 ART 113 ART 129 ART 130/TELE 113 Art 149 Art 150 Art 151 Art 156 Art 157	Chinese CHIN 120 CHIN 130	Geology GEOL 100	Music MUS 105 MUS 106 MUS 107 MUS 108 MUS 195 MUS 202	Sociology SOC 101 SOC 110 SOC 116 SOC 135
Asian American Studies ASIA/HIST 112 ASIA/HIST 113 ASIA/HIST 114 ASIA/SOC 115	Child Development CD 170	History HIST 100 HIST 101 HIST 104 HIST 105 HIST 106 HIST 107 HIST 121 HIST 122 HIST 132 HIST/AFRO 110 HIST/AFRO 111 HIST/ASIA 112 HIST/ASIA 113 HIST/ASIA 114 HIST/MAS 141 HIST/MAS 142	Philosophy PHIL 101 PHIL 103 PHIL 106 PHIL 107 PHIL 120	Spanish SPAN 102 SPAN 201 SPAN 202 SPAN 205 SPAN 215 SPAN 216 SPAN 221 SPAN 225 SPAN 226
Astronomy ASTR 100 ASTR 120 ASTR 150 ASTR 170 ASTR 180 ASTR 205	Communication COMM 103 COMM 104 COMM 176 COMM 200/JOUR 101	Physical Science PHS 110 PHS/PS 250	Physics PHYS 120 PHYS 170 PHYS 171 PHYS 172 PHYS 173 PHYS 174 PHYS 175 PHYS 270 PHYS 272 PHYS 274	
Biology BIOL 100 BIOL 130 BIOL 140 BIOL 145 BIOL 160 BIOL 180 BIOL 185	Economics ECON 101 ECON 102	Humanities HUM 101 HUM 102 HUM 104 HUM 140 HUM/TELE 112 HUM 140		Theatre Arts TA 100 TA 101 TA 105
	English ENGL 115 ENGL 116 ENGL 220 ENGL 225 ENGL 230 ENGL 231 ENGL 240 ENGL 241 ENGL 250 ENGL 251 ENGL 255 ENGL 256 ENGL 260 ENGL 265 ENGL 270 ENGL 271			Telemedia TELE 113/ART 130

Note: Course common to all three patterns effective Fall 2007.

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 submit an 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. In addition, having received a bachelor's degree or higher a student cannot qualify for an associate degree in General Studies or Transfer Studies

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: IGETC, or TAG; and
- Achieve a cumulative "C" grade point average (2.0) or better for all course work used for the degree.

Students seeking an associate degree in Transfer Studies are not required to fulfill proficiency requirements.

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, E, 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 Other Services

Services for Students

Academic Success Center

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 (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. The hours vary during the week at the Higher Education Center at Otay Mesa and the Higher Education Center at National City. 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, or fee-funded courses.

Learning Resource Center

The new three-level Learning Resource Center is located on the Chula Vista campus. The Learning Resource Center houses library resources and services, a computer commons, meeting rooms, staff development services, and a telemedia center.

Library

The library, located in the new Learning Resource Center, is open Monday through Saturday. Its resources, including in excess of 80,000 books and approximately 300 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 library Web site <http://www.swccd.edu/~library>.

In addition students have access to online databases of full text articles from thousands of magazines, journals, newspapers and other information resources. Students may also obtain passwords at the Library Reference Desk to gain access to the online databases for off-campus use. Internet access is available for research purposes. Interlibrary Loan Services are available for students needing materials from other collections.

Students can access video cassettes, CDs, CD-ROMs, DVDs, audio cassettes, and sound filmstrips by searching the library's automated catalog. They may use these media in private listening carrels or in group viewing rooms on the second floor.

Professional librarians are always on duty during open hours to assist library users. Appointments may be made for individual reference service. Instructors may make appointments for customized orientations for their classes and are encouraged to do so early in the semester. These orientations are available in the library or the professor's classroom. The librarians also teach credit courses on college-level research skills (LIB 110) and on research using the Internet (LIB 151).

Located on the top floor of the library, the computer commons offers students access to standard computer tools for class work and research. Students have access to the online databases, the Internet, the Microsoft Office Suite (Word, Excel, Access and PowerPoint), the library catalog, and electronic books. Scanners, assistive technology hardware and software, copy machines, and a typewriter are available in the library.

The student ID card is used to borrow library materials. Students can borrow library materials after placing their registration sticker on their ID card. Students are responsible for all library materials borrowed with their cards. Lost ID cards should be reported immediately to the staff at the library circulation desk.

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

Student Services Center in the Cesar E. Chavez Building

The Student Services Center in the Cesar E. Chavez Building 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 houses 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 center are: Outreach, Transfer Center, Career Center, Assessment Office, Student Employment Services (SES), Extended Opportunity Programs and Services (EOPS), Women's Resource Center, Center for Technical Education and Career Success (CTECS), Evaluations and Veterans, and Cashiers Office. The Office of the Vice President for Student Affairs is also located on the first floor of the Center.

Admissions

Admissions assists students applying for admission to the college and enrollment in classes. Admissions also refers students to other student services, provides students with assistance with transfer transcripts (incoming and outgoing) and petitions for exceptional actions. Email Admissions with questions about how to register, questions about WebAdvisor, or how to request your transcripts to admissions@swccd.edu.

AmeriCorps/Service Learning

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.

Articulation

Articulation is the process of developing a formal (i.e. written) agreement for course transfer to colleges and universities throughout the state of California. It also can include out of state institutions as well. The Articulation Officer at Southwestern College develops and implements articulation agreements for the purpose of ensuring a smooth transfer process for students. Agreements can be accessed in the Counseling and Transfer Centers, the Higher Educational Center in Otay Mesa or the Higher Education Center in National City.

For the most recent information on course articulation, please visit www.assist.org. This Web site is the official repository for course articulation. Please consult with a counselor regarding any questions or concerns.

Assessment Center

Assessment services improve student's 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. Computerized assessment is available in the center's Assessment Lab. 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 without taking 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;
- Computerized career assessments including interests, personality type skills, and values;
- Monthly workshops focusing on various career and job preparation topics;
- Major day and annual career fairs;
- Job shadowing opportunities; and
- Extensive video library, software programs, hardback resources, and Internet resource directories.

Cashier's Office

The Cashier's Office assists students with student account balance inquiries. It receives student payments for processing billed fee charges. Disburses financial aid grant and student loan checks to students and processes student reimbursement checks as applicable.

Center for Technical Education and Career Success (CTECS)

CTECS is a specialized support services program for students enrolled in vocational and technical classes. Southwestern College's career education programs include vocational and technical courses that enable students to acquire job skills or prepare for transfer to a four-year institution. Career programs support the principle of gender equity. Male and female students are encouraged and supported to enter and complete any career program they are interested in.

CTECS sponsors workshops, discussions and special events conducted by speakers from non-traditional careers (occupations or fields of work, including careers in computer science, technology and other emerging high skill occupations, for which individuals from one gender comprise less than 25% of the individuals employed in each such occupation or field of work).

CTECS counselors provide personal, academic and career counseling and are available to present workshops on topics related to self-esteem and career success. CTECS also sponsors the Women's Math Network, through the Academic Success Center, which provides free group math tutoring to students enrolled in a college math course.

Counseling

The Counseling Center, part of 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. Students encountering personal problems that affect their ability to study may schedule appointments to meet with marriage and family therapist interns or the college psychologist for personal counseling. 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 scheduled with a counselor to discuss the student's goals and develop the plan after admission to the College.

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 student's 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 in the Cesar E. Chavez Building, by telephone 619-482-6512 or TTY 619-482-6470 or email dss@swccd.edu, 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 in the Cesar E. Chavez Building 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 Exercise Science

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

The 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 (including course work completed at all colleges previously attended);
- Are qualified to receive a Board of Governors Fee Waiver (BOGFW) 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 2.5 on a 4.0 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 in the Cesar E. Chavez Building, by telephone 619-482-6456, or email eops@swccd.edu.

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 in the Cesar E. Chavez Building for information and application forms. See page 19 for additional financial aid information.

Outreach

The Outreach Office serves as an initial source of information about Southwestern College programs, available services, enrollment procedures, and costs. It conducts an Early Admissions program and other outreach activities for seniors at local high schools and coordinates support activities with Outreach peer advisors.

Personal Wellness

Personal Wellness Services are offered by the college, free of charge, to enrolled students in order to help support student academic success and retention. These services include individual and group personal counseling provided by Marriage, Family Therapist Interns and supervised by a licensed Psychologist. For more information contact the Counseling Center.

Student Employment Services (SES)

SES assist students in the pursuit of 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 in the Cesar E. Chavez Building, telephone 619-482-6356, email ses@swccd.edu or Web site www.swccd.edu/~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.

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

Services- include academic advising by transfer counselors, university advisors, and organized tours to various colleges and universities. 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 located in the Student Services Center in the Cesar E. Chavez Building. Every student who plans to attend under veteran's benefits is required to complete and keep current the appropriate proper paper work for each semester of attendance at the 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.cdva.ca.gov/>
<http://www.va.gov>

Women's Resource Center (WRC)

WRC is committed to empowering, supporting, and motivating the developmental potential of women to ensure and maintain the health of the community at large. WRC is the doorway through which a woman can enter Southwestern College and find the support, encouragement, information and the help she is seeking. WRC was established to educate the college community on the value, rights and legal responsibilities of people regardless of gender, race, age, ethnicity, regardless of political and/or religious persuasion.

The primary goal of the Center is to serve as a referral service for all women and men on campus who are seeking information concerning academic matters, student services, crisis assistance including domestic violence, childcare, food, health, legal advising, housing, multicultural organizations, and employment.

Student Life

Students will find that the college experience is enhanced by active participation in some social or extracurricular phases 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; and 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 seven executive officers: president; executive vice president; who serves as senate chairperson; social vice president; vice president for club affairs; vice president for public relations; secretary; and treasurer. The Senate is the legislative branch and is composed of twelve elected and ten 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 Interclub 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; and 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 in 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 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, extension 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 2001 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. Based on the cohort defined above, 36.2 percent of the SWC cohort attained a certificate or degree or became transfer-prepared from fall 2000 to spring 2003. In addition, 18.1 percent transferred to another postsecondary institution (University of California, California State University, or other California community college) during the same three-year period.

Note: *The above 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. Additionally, 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 Web sites: <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, 1973De

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.

In compliance with state and federal laws and in order to create an educational environment where students with disabilities have equal access to instruction without compromising any course, educational program or degree, the procedures outlined below have been developed.

Academic Adjustment Procedures

1. The student bears the responsibility of presenting Disability Support Services (DSS) with professional disability verification that describes specific educational limitations before an academic accommodation will be authorized.
2. If the student does not have appropriate disability verification, DSS will direct the student to the appropriate professional who can determine disability, or will initiate an assessment to determine and document a disability if within the scope of assessment services provided by DSS and deemed necessary by a DSS professional.
3. The DSS professional, who meets the standards established by state regulations, will assess and document the extent and the effects of the current disability. Depending on the severity and educationally related functional limitations of the assessed disability, the DSS professional shall authorize accommodations immediately upon request of the student.
4. The student will submit to his/her instructors the authorized accommodations forms completed by the DSS professional.

Informal Resolution

- 4a. The College is charged with determining and providing what it believes to be the appropriate academic accommodation for a student. A student who disagrees with the academic accommodation(s) prescribed by DSS should discuss his/her concern with the DSS professional recommending the accommodation. If the student's concern continues to be unresolved, the student should discuss his/her concern with the DSS Coordinator. If the concern continues to be unresolved, the next step is to contact the 504 Compliance Office/Dean of Student Activities as outlined in number 5 below. Student must then file Academic Accommodation appeal with 504 Compliance Officer prior to the posting of the final grade.
- 4b. If an instructor has questions about an accommodation requested by a student with a verified disability, the instructor should promptly contact the DSS professional who authorized the accommodation(s). Informal meetings and discussion among the instructor, department chair or designee, the student, the appropriate members of DSS and/or other appropriate members of the college community are essential at the outset, and will be completed within five (5) instruction days following the student's request for the accommodation.
5. If no informal resolution can be found within five (5) instruction days and the accommodation is not allowed, the DSS professional, student or the instructor will refer the matter to the 504 Compliance Officer/Dean of Student Activities as soon as possible for review. The 504 Compliance Officer/Dean of Student Activities will conduct interviews with all involved parties, and will make a decision regarding the accommodation within seven (7) instruction days of having received the matter.
6. Following notification by the 504 Compliance Officer/Dean of Student Activities, if either the instructor or the student disagrees with the decision, they will notify the 504 Compliance Officer/Dean of Student Activities in writing within three (3) instruction days. Written notice must be hand-delivered or postmarked by the three (3) day deadline. The 504 Compliance Officer/Dean of Student Activities will then proceed with the Academic Accommodation Hearing process.

7. The accommodation originally authorized by DSS will be allowed for a maximum of four (4) instruction weeks during which time a resolution will be achieved. If the decision of the Committee is that the accommodation is not reasonable, the accommodation will either be modified or rescinded depending upon the Academic Accommodation Hearing Committee's recommendations.

Academic Accommodation Hearing Process

Students or instructors wishing to appeal a decision made by the 504 Compliance Office/Dean of Student Activities at the conclusion of the informal resolution process will file a formal written request for a hearing with the College's 504 Compliance Officer/Dean of Student Activities. The 504 Compliance Officer/Dean of Student Activities is located on campus, in the Student Center, Room 601C, 619-482-6369.

1. The 504 Compliance Officer/Dean of Student Activities is responsible for informing the complainant of his/her rights, responsibilities and procedures.
2. The accommodation originally authorized by DSS will be allowed for a maximum of four (4) instructional weeks during which time a resolution will be achieved.
3. An Academic Accommodation Hearing Committee will be scheduled by the 504 Compliance Officer/Dean of Student Activities within five (5) instructional days to review the complaint. The hearing will be convened within ten (10) instructional days. The committee will be comprised of the following voting members:
 - a. DSS Coordinator or his/her designee
 - b. ADA Compliance Officer or his/her designee
 - c. Appropriate Department Chairperson
 - d. Academic Senate President or his/her designee.
 - e. 504 Compliance Officer
4. The 504 Compliance Officer/Dean of Student Activities shall serve as Chairperson and will vote only in case of a tie and will be responsible for appointing a secretary or provide for a tape recording of the hearing.
5. All five (5) voting members, including the chair, shall constitute a quorum by which the hearing may proceed.
6. Both parties have the right to present witnesses, testimony, and evidence, but only as related to the case.
7. Both parties have the right to be accompanied by an advocate in the formal appeal hearing.
8. The hearing shall be closed to the public.
9. The Committee shall review both the written and oral testimony presented and shall render a written decision within three (3) instruction days following the conclusion of the hearing. Copies of the findings shall be sent to the student, instructor, committee membership, and other cognizant administrative officers. In addition, a copy of the Committee's findings shall be sent to the College Superintendent/President.
10. The 504 Compliance Officer/Dean of Student Activities shall inform the complainant of the Committee's action by certified mail within three (3) instructional days of the receipt of the Committee's findings.
11. Upon notification of the Committee's findings, either party may appeal the Committee's decision to the College Superintendent/President. Any appeal to the Superintendent/President must be made in writing, and shall be either hand delivered or postmarked within three (3) instructional days following notification of the Committee's findings.

12. The Superintendent/President will review the decision of the Committee and will either accept or modify the decision.
13. The Superintendent/President shall inform the complainant and the committee of his/her final action by certified mail within fifteen (15) instructional days of the receipt of the appeal request.
14. The Superintendent/President's decision shall be the final decision rendered and shall be implemented within five (5) instruction days.
15. The confidential tape recording of the proceedings shall be kept in a confidential file by the 504 Compliance Officer/Dean of Student Activities and a copy shall be available to the parties. All documents shall be filed separately from the personnel file of Southwestern College employees.

General Provisions

1. The time limits specified herein shall be considered under normal circumstances and every effort shall be made to expedite the process. Time limits may be extended only by mutual consent, in writing.
2. The complainant may withdraw the appeal at any time. However, the same appeal shall not be filed again by the same complainant.
3. Either party may consult with the 504 Compliance Officer/Dean of Student Activities regarding any of these procedures.

Other Complaints

Students wishing to file complaints or grievances based upon discrimination on the basis of physical or mental disability should contact the College's 504 Compliance Officer/Dean of Student Activities located on campus, in the Student Center, Room 601C in the Cesar E. Chavez building, 619-482-6369.

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)]

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 20.

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 Integrity

Southwestern College is a community of scholars and learners committed to the principles of honesty, trustworthiness, fairness, and respect for the learning process. Students share with faculty and staff the responsibility for promoting a climate of integrity. As members of this community, students are expected to adhere to these fundamental values at all times in their academic endeavors.

Violations of academic integrity include, but are not limited to, cheating, plagiarism, lying, stealing, submitting others' work as one's own, or permitting anyone else to do the same. The faculty should make their students aware of specific expectations related to academic integrity in every class and should define academic integrity within the context of the course. The faculty are encouraged to provide pertinent examples of plagiarism, cheating and other violations.

Students are required to conduct themselves with integrity and honor, and when violations of academic integrity occur, faculty members must address the violations quickly, judiciously, and fairly. They should document all incidents including any informal sanctions with their school dean. It is the prerogative of the faculty member whether to pursue formal sanctions related to violations of academic integrity. Formal sanctions shall be addressed through appropriate Student Conduct Standards and Discipline procedures (District Policy 7029).

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 the right to challenge and request a formal hearing.

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 Admissions.

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:

- 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 III, area 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 a 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 email, 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 email or 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 email, 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.

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:

A verbal 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 and Records. 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 32 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 Dean of Enrollment Services 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 Admissions 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

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A.A.=Associate in Art Degree

A.S.=Associate in Science Degree

Cert.=Certificate

Inter. Cert.=Intermediate Certificate

Bas. Cert.=Basic Certificate

Adv. Cert.=Advanced Certificate

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A.A.=Associate in Art Degree
A.S.=Associate in Science Degree
Cert.=Certificate
Inter. Cert.=Intermediate Certificate
Bas. Cert.=Basic Certificate
Adv. Cert.=Advanced Certificate

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• Wills, Trusts, and Estates Specialty		X	X				325, 329
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A.A.=Associate in Art Degree

A.S.=Associate in Science Degree

Cert.=Certificate

Inter. Cert.=Intermediate Certificate

Bas. Cert.=Basic Certificate

Adv. Cert.=Advanced Certificate

Majors	A.A. Degree	A.S. Degree	Cert.	Bas. Cert.	Inter. Cert.	Adv. Cert.	Page(s)
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Medical Assistant: Coding and Insurance				X	X		343
Medical Interpreter (English/Spanish)				X	X		343–344
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• Nursing		X					365–366
• Central Service Technology			X				368
• Certified Nursing Assistant (CNA)			X				368
• Operating Room Nursing			X				369
• Surgical Technology		X	X				367, 369
• Transfer Education/Preparation for Nursing	X						365
• Vocational Nursing		X	X				368–369
Office Information Systems Professional		X		X		X	377–378
Office Information Systems Professional—Bilingual		X		X		X	380–381
OIS: Microsoft Office Specialist (MOS)				X		X	378
Photography	X						100
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Paralegal Studies—Bilingual (English/Spanish)		X	X				385–386
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Physical Science		X					400
Physics		X					402
Political Sciences	X						406
Public Administration	X						407
Psychology	X						410
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• Broker License			X				415
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• Salesperson License			X				416
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Spanish Proficiency			X				426
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Telemedia Production Specialist		X		X		X	430–431
Telemedia Technology		X	X				430–431
Theatre Arts (Drama)	X						436
Transfer Studies	X						51
Travel and Tourism		X		X		X	440–441
Women's Studies	X						444

A.A.=Associate in Art Degree
A.S.=Associate in Science Degree
Cert.=Certificate
Inter. Cert.=Intermediate Certificate
Bas. Cert.=Basic Certificate
Adv. Cert.=Advanced Certificate

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Associate Degree, Certificate Programs, and Courses

Accounting

School of Business and Information Systems

Dean Irma Alvarez, M.A., Office 215, 619-482-6457

Faculty Vern F. Jorgensen, M.B.A. • Dick Wasson, M.B.A.

Department Chair 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

Below is a sample of the 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 bachelor's 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, offices, stock brokerage firms, tax accounting services, international trade organizations, transportation, high technology, marketing, savings and loans, human resources, and accounting firms.

Degree/Certificate Options

Associate in Arts Degree: Transfer Preparation

	Major Code
Accounting	01110

Associate in Science Degree: Career/Technical

Accounting	02011
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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/The Legal Environment of Business	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	4

Total units 29

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

* 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 41 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	3
	OR	
ACCT 109	Federal Income Tax	3
BUS 123	Introduction to Investments and Securities	3
BUS 140	Business Law/The Legal Environment of Business	3
BUS 142	Business Ethics—Corporate and Personal	1
BUS 150	Principles of Management	3
BUS 211	Communication in Business and Industry	3
	OR	
BUS 212	Business Communication	3
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 35.

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	3
	OR	
ACCT 109	Federal Income Tax	3
BUS 123	Introduction to Investments and Securities	3
BUS 140	Business Law/The Legal Environment of Business	3
BUS 142	Business Ethics—Corporate and Personal	1
BUS 150	Principles of Management	3
BUS 211	Communication in Business and Industry	3
	OR	
BUS 212	Business Communication	3
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 122B	Spreadsheet Software—Excel	1
CIS 133	Advanced 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: ACCT 101 or equivalent

Lecture 2 hours, laboratory 3 hours
Offered: Variable

Covers accounting applications using the microcomputer for general ledger, accounts payable, accounts receivable, payroll, depreciation recording, and reporting. Emphasizes electronic spreadsheet development in the recording of accounting data for records and decision making. Introduces computer income tax and inventory control programs. (ROP option) [D]

ACCT 7. Basic Business Bookkeeping

3 units

Recommended Preparation: RDG 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; RDG 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: \$3. 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; RDG 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 103. Hospitality Management Accounting

4 units

Grade only

Prerequisite: ACCT 102 or equivalent

Lecture 4 hours
Offered: Variable

Examines how hospitality managers use accounting information in decision-making, planning, directing, and controlling. Emphasizes concepts of cost management and costing methods, cost-volume profit analysis, profit planning and budgeting, standard absorption, and variable costing. Also reviews and applies concepts of responsibility accounting, capital expenditure decisions, and feasibility studies to various projects. [D; CSU]

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 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. • Gary Creason • Janet DeLay, Ph.D. • Edward Selby, A.S.

Department Chair Paul Azevedo, J.D.

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

Below is a sample of the career options available for the administration of justice or criminal justice majors. Many require an associate degree, some require a bachelor's 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
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Associate in Science Degree: Career/Technical

Administration of Justice—Corrections Emphasis	02521
Administration of Justice—Forensics Emphasis	02522
Administration of Justice—Law Enforcement Emphasis	02523
Crime Scene Investigator	B2705

Certificates of Achievement

Administration of Justice: Corrections Emphasis	02700
Administration of Justice: Forensics Emphasis	02713
Administration of Justice: Law Enforcement Emphasis	02710
Crime Scene Investigator	B2706

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 bachelor's 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 degree 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	3
	OR	
AJ 252	Constitutional Law	3
PS 102	American Government and Politics	3
SOC 101	Introduction to Sociology	3
SOC 110	Contemporary Social Problems	3
MATH 119	Elementary Statistics (4)	3-4
	OR	
PSYC 270	Statistical Methods of Psychology (3)	3
	OR	
SOC 270	Statistical Methods of Sociology (3)	3
Total units		27-28

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

* 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 41 for further information.

Note: For Police Academy, see Law Enforcement, page 311.

Associate in Science Degree

Administration of Justice

Career/Technical

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 graduation requirements in this catalog.

Common Core

AJ 110	Ethics and the 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	3
	OR	
AJ 252	Constitutional Law	3
AJ 167	Written Communication in Administration of Justice	3
AJ 181	Juvenile Law and Procedures	3
AJ 188	Community Relations	3
Total units		24

Plus at least one emphasis below.

Administration of Justice— Corrections Emphasis

Career/Technical (Major Code: 02521)

AJ 114	Fundamentals of Crime and Criminal Behavior	3
AJ 115	Adult Probation, Prison, and Parole	3
Plus Common Core courses for Administration of Justice		24
Total units		30

Recommended Electives: AJ 113, 290-293; MAS 141; PSYC 101 or SOC 101.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

Administration of Justice—Forensics Emphasis

Career/Technical (Major Code: 02522)

AJ 166	Principles of Investigation	4
AJ 171	Evidence Technology	4
Plus Common Core courses for Administration of Justice (*Excluding AJ 181.)		21
Total units		29

Recommended Electives: ANTH 101; BIOL 260; CAD 220; PHIL 103.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

Note: Students pursuing the 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: 02523)

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.”

AJ 166	Principles of Investigation (4)	3–4
OR		
AJ 288	Forensic Computer Investigation (3)	
Plus Common Core courses for Administration of Justice		24
Total units		27–28

Recommended Electives: AJ 216, 290–293; BUS 210; MAS 141; PSYC/SOC 101.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

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.

Crime Scene Investigator

Career/Technical (Major Code: B2705)

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 Crime Scene 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 Crime Scene 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 216	Latent Fingerprint Examiner	4
AJ 221	Forensic Photography	2.5
ART 121	Darkroom and Digital Photography I	3
BIOL 100	Principles of Biology	3
BIOL 101	Principles of Biology Laboratory	1
CHEM 100	Introduction to General Chemistry	4
Total units		37.5

Recommended Electives: AJ 288; 295; 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 35.

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 Criminal Behavior	3
AJ 115	Adult Probation, Prison, and Parole	3
Plus Common Core courses for Administration of Justice		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 Common Core courses for Administration of Justice (*Excluding AJ 181.)		21
Total units		29

* Students pursuing the 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)	
OR		3-4
AJ 288	Forensic Computer Investigation (3)	
Plus Common Core courses for Administration of Justice		24
Total units		27-28

Crime Scene Investigator

Career/Technical (Major Code: B2706)

Designed for students interested in careers as field evidence technicians/crime scene investigator.

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 216	Latent Fingerprint Examiner	4
AJ 221	Forensic Photography	2.5
ART 121	Darkroom and Digital Photography I	3
BIOL 100	Principles of Biology	3
BIOL 101	Principles of Biology Laboratory	1
CHEM 100	Introduction to General Chemistry	4
Total units		37.5

Recommended Elective: AJ 288.

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 Requalification

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 requalifying 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: RDG 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: RDG 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; and ethics and professionalism. [D; CSU; UC; CAN-AJ 2]

AJ 113.

Correctional Institutions

3 units

Recommended Preparation: RDG 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: RDG 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: RDG 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; RDG 54 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Variable

Fee: \$2. Historical development, philosophy of law and constitutional provisions; definitions, classification of crime, and application to the administration of justice system; and 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; RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Variable

Fee: \$2. Emphasizes origin, philosophy, development, and trends as constitutional basis of evidence. Focuses on the kinds and degrees of evidence, 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; RDG 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. Examines the adjudication process from arrest to release from prison. Studies constitutions of the United States and California and their relationship to the criminal justice system. [D; CSU]

AJ 166.
Principles of Investigation

4 units

Grade only

Recommended Preparation: AJ 111 or equivalent; RDG 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: \$2. 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; and 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: RDG 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: RDG 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

Focuses on an overview of the historical and present-day communications between the criminal justice system and the community. Emphasizes an understanding of the social and ethnic subcultures in our society, and their relationships with the administration of justice process. Includes a study of the interpersonal relations from an individual perspective. [D; CSU]

AJ 216.
Latent Fingerprint Examiner

4 units

Grade only

Lecture 3 hours, laboratory 3 hours

Offered: Fall

Covers history and application of fingerprint identification, fingerprint comparison, and classification. Includes the recognition of patterns, use of the Henry Classification system and national systems for recording and storing fingerprints. [D; CSU]

AJ 221.
Forensic Photography

2.5 units

Prerequisite: ART 121 or equivalent

Lecture 2 hours, laboratory 2 hours

Offered: Variable

Emphasizes training and practical experience in forensic photography. Focuses on crime scene investigation. Provides instruction in the use of 35mm film, digital and video photography under various circumstances, and lighting conditions. Includes a selection of film types, processing and use of accessories. [D; CSU]

AJ 252.**Constitutional Law**

3 units

Grade only

Recommended Preparation: RDG 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 288.**Forensic Computer Investigation**

3 units

Recommended Preparation: CIS 101 or equivalent; AJ 151 and 156, or equivalent

Lecture 3 hours, laboratory 1 hour**Offered:** Variable

Focuses on investigation of criminal activities associated with computers, computer technology and the Internet. Includes but is not limited to fraud, sex crimes, spamming, hacking, identity theft, and extortion. Emphasizes search warrants, investigative methods, investigative software, electronic communication devices, jurisdiction, privacy, and forensic methodology. [D; CSU]

AJ 290.**Administration of Justice Cooperative Work Experience I**

2–4 units

Limitation on Enrollment: Declared Administration of Justice major. Student must complete no fewer than seven units, including work experience, during each semester in order to receive credit

Lecture 1 hour, laboratory 5–15 hours**Offered:** Variable

Provides an opportunity for the students to maintain an internship or employment relating to the administration of justice field. Includes a corresponding 1.0 unit component focusing on employment related knowledge and skills. The student's field performance will be evaluated by the internship supervisor/employer and instructor. [D; CSU]

AJ 291.**Administration of Justice Cooperative Work Experience II**

2–4 units

Prerequisite: AJ 290 or equivalent

Limitation on Enrollment: Declared Administration of Justice major. Student must complete no fewer than seven units, including work experience, during each semester in order to receive credit

Lecture 1 hour, laboratory 5–15 hours**Offered:** Variable

Provides an opportunity for the students to maintain an internship or employment relating to the administration of justice field. Includes a corresponding 1.0 unit component focusing on employment related knowledge and skills. The student's field performance will be evaluated by the internship supervisor/employer and instructor. [D; CSU]

AJ 292.**Administration of Justice Cooperative Work Experience III**

2–4 units

Prerequisite: AJ 291 or equivalent

Limitation on Enrollment: Declared Administration of Justice major. Student must complete no fewer than seven units, including work experience, during each semester in order to receive credit

Lecture 1 hour, laboratory 5–15 hours**Offered:** Variable

Provides an opportunity for the students to maintain an internship or employment relating to the administration of justice field. Includes a corresponding 1.0 unit component focusing on employment related knowledge and skills. The student's field performance will be evaluated by the internship supervisor/employer and instructor. [D; CSU]

AJ 293.**Administration of Justice Cooperative Work Experience IV**

2–4 units

Prerequisite: AJ 292 or equivalent

Limitation on Enrollment: Declared Administration of Justice major. Student must complete no fewer than seven units, including work experience, during each semester in order to receive credit

Lecture 1 hour, laboratory 5–15 hours**Offered:** Variable

Provides an opportunity for the students to maintain an internship or employment relating to the administration of justice field. Includes a corresponding 1.0 unit component focusing on employment related knowledge and skills. The student's field performance will be evaluated by the internship supervisor/employer and instructor. [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 Behavioral and Social Sciences

Dean Viara Giraffe, Ph.D., Office 470K, 619-482-6582

Faculty Stanley James, M.A.

Department Chair Barry Horlor, 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, African-American 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

Below is a sample of the career options available for the African-American studies major. A few of these require an associate degree, most require a bachelor's 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

Associate in Arts Degree: Transfer Preparation

African-American Studies

Major Code

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 151	Introduction to African-American Culture	3
Select 9 units from electives		9
Total units		18

Electives: ASIA 112, 113; DANC 145, 146, 147, 148; 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 35.

* 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 41 for further information.**

African-American Studies Courses

AFRO 110. **African-American History I**

3 units

Grade only

Recommended Preparation: RDG 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: RDG 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 151. **Introduction to African-American Culture**

3 units

Recommended Preparation: RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Variable

Introduction to the origins and development of African-American culture in the United States between 1619 and the present. Emphasis on the critical analysis of the historical and sociological aspects of the African-American experience in the arenas of family, education, religion, and the arts. (Same as SOC 151.) [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. (May be repeated for additional credit with new content.)
[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 Joel M. Levine, Ed.D., Office 430F, 619-482-6349

Department Chair Esther Alonso, M.A.

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 Behavioral Social Sciences

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

Below is a sample of the career options available for the anthropology major. 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 bachelor's 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

Associate in Arts Degree: Transfer Preparation

Anthropology

Major Code

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 bachelor's 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 35.

* 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 41 for further information.**

Anthropology Courses

ANTH 101. **Biological Anthropology** 3 units

Recommended Preparation: RDG 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: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Fall, Spring

Introduces the social and cultural adaptations of various peoples around the world to geographic, historical, and socioeconomic conditions. Focuses on comparative systems of communications, economics, family/kingship, government, and religion. Emphasizes "culture" as a meaningful scientific concept. [D; CSU; UC; CAN-ANTH 4]

ANTH 103. **Archaeology and Prehistory** 3 units

Recommended Preparation: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Variable

Introduces the fundamentals of the archaeological method and theory and its application to the study of ancient civilizations. Uses a globally comparative, case-study approach. Covers the emergence, development and decline of ancient civilization, focusing on the unique character of selected cultures, and their major technological and cultural innovations. [D; CSU; UC CAN-ANTH 6]

ANTH 110. **Indians of North America** 3 units

Recommended Preparation: RDG 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: RDG 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, Huastec, 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., Office 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

Below is a sample of the career options available to the architecture major. A few of these require an associate degree, some require a bachelor's 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
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Associate in Science Degree: Career/Technical

Architecture Technology	02840
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Certificates of Achievement

Architecture Technology—Basic	02842
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Architecture Technology—Advanced	02841
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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, 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 35.

* 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 41 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 35.

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 of buildings. Study and practice in the use of various media (color marker, ink, and acrylic) 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

Fee: \$5. 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 AutoCAD. [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 AutoCAD. [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

Fee: \$5. 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

Fee: \$5. 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 270.**Architecture Laboratory**

1–3 units

Laboratory 3–9 hours

Recommended Preparation: RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment

Offered: Variable

Supplemental laboratory course to the architecture design studios and practice courses. Safe use of hand and power tools used in the model shop. Application of design principles and problem solving scenarios to directed projects. Presentation strategies as applied to directed projects. (Repeatable three times.) [D; CSU]

ARCH 290.**Architecture Cooperative Work Experience I**

2–4 units

Grade only

Prerequisite: ARCH 151 and 165, or equivalent

Limitation on Enrollment: Declared Architecture major. Student must complete no fewer 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 291.**Architecture****Cooperative Work Experience II**

2–4 units

Grade only

Prerequisite: ARCH 290 or equivalent

Limitation on Enrollment: Declared

Architecture major. Student must complete no fewer 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 292.**Architecture****Cooperative Work Experience III**

2–4 units

Grade only

Prerequisite: ARCH 291 or equivalent

Limitation on Enrollment: Declared

Architecture major. Student must complete no fewer 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 293.**Architecture
Cooperative Work Experience IV**2–4 units

Grade only**Prerequisite:** ARCH 292 or equivalent**Limitation on Enrollment:** Declared Architecture major. Student must complete no fewer 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]

Art

School of Arts and Communication

Interim Dean Donna Arnold, M.S., Office 702B, 619-482-6372

Faculty David Quattrociocchi, M.F.A. • Marisol Rendon Ober, M.F.A. • Michael W. Schnorr, M.A. • Elizabeth Sisco, M.F.A. • Matt Micajah Truitt, M.F.A. Mark Van Stone, Ph.D. • Perry Vasquez, M.F.A., A.B.

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, digital imagery, ceramics, new genres, sculpture, printmaking, and graphic design. Art analysis, theory, and criticism serve as the basis for problem solving.

Career Options

Below is a sample of the career options for art majors. Most require an associate degree, some require a bachelor's degree, and a few require a graduate-level degree. Possible career options include artist, graphic artist, computer technician, photographer, elementary school or high school teacher, college instructor, gallery director, museum technician, sales, museum director or curator, materials supplier, film/video maker, broker, 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
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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 from 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 Artists	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
Total units		30

*Art History Courses:

ART 150	Art History Survey—Stone Age to the Ages of Faith (3)
ART 151	Art History—Renaissance to Modern (3)
ART 157	Nineteenth Through Twenty-First Century Art (3)

Electives: ART 100L, 104, 105, 107, 110, 111, 112, 113, 116, 121, 127, 129, 130, 131, 137, 148A, 149, 156, 170, 173A, 182, 185A, 192, 200.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

* 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 41 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	Art History Survey—Stone Age to the Ages of Faith	3
ART 159	Graphic Design—Layout	3

Second Semester

ART 102	Drawing II	3
ART 103	Design II	3
ART 161	Graphic Design—Draw	3

Third Semester

ART 151	Art History—Renaissance to Modern	3
ART 160	Graphic Design—Typography	3

Fourth Semester

ART 164	Graphic Design—Production	3
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Total units **30**

Recommended Electives: ART 112, 116, 121, 148A, 157, 169, 192.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

* 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 41 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	Darkroom and Digital Photography I	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	Darkroom and Digital Photography II (3)	
ART 123	Darkroom and Digital Photography III (3)	
ART 127	Advanced Color Photography (3)	
OR		7-9

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)	
Total units		22-24

Recommended Electives:

For Group 1: ART 116, 118, 119, 120, 130, 151, 159, 199A; HUM 112.

For Group 2: ART 117, 120, 127, 130, 151, 157, 159; HUM 112.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

* 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 41 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 Courses

ART 100. **Drawing I** 3 units

Grade only
Recommended Concurrent Enrollment:
ART 101

Lecture 2 hours, laboratory 4 hours
Offered: Fall, Spring

Fee: \$5. Introduces materials, methods, and conceptual approaches to drawing. Emphasizes principles of contrast, perspective, movement, texture, and value combined with training in the use of diverse materials and offers a practical as well as theoretical appreciation for drawing. [D; CSU; UC; CAN-ART 8]

ART 100L. **Drawing Laboratory I** 1 unit

Credit/No Credit only
Laboratory 3 hours
Offered: Variable

Fee: \$5. Intended to substantiate the skill development for student 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. Introduces the visual form. Develops a comprehensive analysis and utilization of the elements and principles of two-dimensional design to create unified, vivid artworks. Emphasizes the function of design in art, contemporary culture, and mass media. Includes theoretical and practical exploration of design and color for fine and applied arts. [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. Continues the expansion of drawing concepts introduced in ART 100. [D; CSU; UC]

ART 102L. **Drawing Laboratory II** 1 unit

Credit/No Credit only
Laboratory 3 hours
Offered: Variable

Fee: \$5. 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 102. [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. Introduces the elements and principles of three-dimensional design, its functional application in art and society, the history of design, and the philosophies that influence the use of the three-dimensional space. Analysis of concepts and processes defining the use of three-dimensional space. Emphasizes technical solutions using diverse materials and methods. [D; CSU; UC; CAN-ART 16]

ART 103L. **Open Studio: Three-Dimensional Media Lab/Design II** 1 unit

Credit/No Credit only
Corequisite: ART 103
Laboratory 3 hours
Offered: Variable

Fee: \$5. Open lab course designed to augment comprehension of the principles of design and the application of appropriate utilization of tools and machinery in completing three-dimensional art projects assigned in ART 103. [D; CSU]

ART 104. **Introduction to Art** 3 units

Lecture 3 hours
Offered: Fall, Spring

Focuses on the function, interpretation, and evaluation of the visual arts. Provides the skills needed for the analysis of the history of art. [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. Emphasizes the application of gesture, proportion, balance, sighting, value, and perspective in drawing the human figure accurately. Includes the application of intellect and imagination to creative interpretation of the human form. [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. Emphasizes advanced practices in drawing the live human form 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. Emphasizes an introduction to material, methods, and conceptual approaches to painting, including the use of digital technologies as a creative tool for painters. Explores the historical and contemporary painting styles. [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. Explores advanced concepts and ideas in painting. Emphasizes composition, color, and a variety of materials and techniques, including the use of digital technology as a creative tool for artists. [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. Introduces volumetric space through the use of traditional processes and materials such as clay, plaster, wood, metal, plastic, and assemblage. Incorporates new experimental and contemporary procedures and techniques through personal development of imagery, content, and appropriation of social and human context. [D; CSU; UC; CAN-ART 12]

ART 110L.
Open Studio: Three-Dimensional Media Lab/Sculpture I
1 unit

Credit/No Credit only

Corequisite: ART 110

Laboratory 3 hours

Offered: Variable

Fee: \$5. Open lab course designed to provide extended instruction, augmenting, comprehension of the principles of design, and the application of appropriate utilization of tools and machinery in completing sculptural-art projects assigned in ART 110. [D; CSU]

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. Introduces advanced conceptual and creative assimilation of sculptural processes through the use of traditional and non-traditional materials, theoretical perspectives, refinement of personal imagery, and research on the field. [D; CSU; UC]

ART 111L.
Open Studio: Three-Dimensional Media Lab/Sculpture II
1 unit

Credit/No Credit only

Corequisite: ART 111

Laboratory 3 hours

Offered: Variable

Fee: \$5. Open lab course designed to provide extended instruction, augmenting comprehension of principles of design and the application of appropriate utilization of tools and machinery in completing advanced sculptural projects assigned in ART 111. [D; CSU]

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 I
1 unit

Credit/No Credit only

Corequisite: ART 121, 197, 199A, or 199B

Laboratory 3 hours

Offered: Fall, Spring

Fee: \$5. 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, 126, 138, or 192

Laboratory 3 hours

Offered: Fall, Spring

Fee: \$5. 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

Recommended Preparation: ART 137

Laboratory 3 hours

Offered: Fall, Spring

Fee: \$5. Designed for advanced photography students to work on portfolio preparation and presentation. [D; CSU]

ART 121.
Darkroom and Digital Photography I
3 units

Grade only

Lecture 2 hours, laboratory 4 hours

Offered: Fall, Spring

Fee: \$15 Focuses on photography as a creative art, emphasizing aesthetics, composition, content, and technical aspects of the medium. Introduces camera operation, darkroom techniques, and digital imaging techniques. Student must furnish an adjustable camera. [D; CSU; UC; CAN-ART 18]

ART 122.
Darkroom and Digital Photography II

3 units

Grade only

Prerequisite: ART 121 or equivalent

Corequisite: ART 119

Lecture 2 hours, laboratory 4 hours

Offered: Fall, Spring

Fee: \$15. Focuses on creative assignments in a variety of photographic styles. Continues the technical, aesthetic, and conceptual information covered in ART 121. Advanced techniques of exposure control and printing in the chemical and digital darkroom. Introduces studio lighting and various camera formats. Student must furnish an adjustable camera. [D; CSU; UC]

ART 123.
Darkroom and Digital Photography III

3 units

Grade only

Prerequisite: ART 122 or equivalent

Corequisite: ART 120

Lecture 2 hours, laboratory 4 hours

Offered: Fall, Spring

Fee: \$15. Focuses on advanced problem solving in the photographic medium with the production of an individual student portfolio. Concepts and techniques from ART 121 and ART 122 will be expanded. Student must furnish an adjustable camera. [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 129.
Asian Art

3 units

Lecture 3 hours

Offered: Variable

Emphasizes an introduction to the art of China, Japan, India, Central Asia, Southeast Asia, and Indonesia viewed within the social, political, religious, and philosophical framework that shapes Eastern sensibilities. The influences of Eastern art on Western art will also be addressed. [D; CSU; UC]

ART 130.
History of Film as Art

3 units

Lecture 3 hours

Offered: Fall, Spring

Provides a survey of cinema with an emphasis on the chronological development of styles and techniques in the medium. Focuses on aesthetic and historical influences on cinema as well as the effects of cinema on society. Discusses the impact of television on film and popular culture. (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. Scriptwriting, directing, producing, and acting will be included. (Same as TELE 132.) [D; CSU; UC]

ART 137.
Web Site Development for Artists and Graphic Designers

4 units

Prerequisite: ART 192 or equivalent

Lecture 3 hours, laboratory 3 hours

Offered: Variable

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

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 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. [D; CSU]

ART 148B.**Airbrush II**

3 units

Prerequisite: ART 148A or equivalent**Lecture 2 hours, laboratory 4 hours****Offered:** Fall, Spring

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. [D; CSU]

ART 148C.**Airbrush III**

3 units

Prerequisite: ART 148B or equivalent**Lecture 2 hours, laboratory 4 hours****Offered:** Fall, Spring

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. [D; CSU]

ART 148D.**Airbrush IV**

3 units

Prerequisite: ART 148C or equivalent**Lecture 2 hours, laboratory 4 hours****Offered:** Fall, Spring

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

Introduces a survey of women artists in Western art from the Renaissance to the present. Emphasizes the emergence of the female artist, including 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.**Art History Survey—Stone Age to the Ages of Faith**

3 units

Grade only**Lecture 3 hours****Offered:** Fall, Spring

Surveys the development of art in painting, sculpture, architecture, and handicrafts from the dawn of art to the beginning of the Renaissance. [D; CSU; UC; CAN-ART 2; ART 150 + ART 151 = CAN-ART SEQ A]

ART 151.**Art History—Renaissance to Modern**

3 units

Lecture 3 hours**Offered:** Fall, Spring

Surveys a variety of artistic traditions and the history of visual cultural production from the Renaissance to present day. Analyzes the aesthetic and cultural development of painting, sculpture, architecture, and handicrafts. [D; CSU; UC-ART 4; ART 150 + ART 151 = CAN-ART SEQ A]

ART 156.**History of Photography**

3 units

Lecture 3 hours**Offered:** Variable

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 Through Twenty-First Century Art**

3 units

Lecture 3 hours**Offered:** Variable

Introduces modern and contemporary artistic trends and philosophical ideas to enhance students' appreciation of the history of visual cultural production from the nineteenth through twenty-first centuries. Analyzes the aesthetic and cultural development of painting, sculpture, architecture, and handicrafts. [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 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; UC]

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) [D; CSU; UC]

ART 164.**Graphic Design—Production**

3 units

Grade only*Prerequisite:* ART 159 and ART 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****Offered:** Variable

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. Focuses on design and construction of clay forms including an introduction to the use of the 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. Emphasizes the further development of skills in ceramic media emphasizing individual work in vessel and/or sculptural forms. Focuses on construction, scale, surface design, and kiln functions. [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. Focuses on advanced problems in clay media emphasizing design and further development of 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:** Variable

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:** Variable

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. Concentrates on the production of functional pottery made primarily on the potter's wheel. [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. Continues 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. Explores the use of wood as a utilitarian and artistic medium. Focuses on the history of wood working, design, artistic expression, and joinery techniques. [D; CSU]

ART 182L.**Open Studio: Three-Dimensional Media Lab/Design in Wood I**

1 unit

Credit/No Credit only**Corequisite:** ART 182**Laboratory 3 hours****Offered:** Variable

Fee: \$5. Open lab course designed to provide extended instruction, augmenting comprehension of the principles of design and application of appropriate utilization of tools and machinery in completing three-dimensional designs in wood for students enrolled in ART 182. [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. Explores wood as a creative medium. Continues the development of personal design statement. Offers specialized woodworking and joinery techniques focused on sculptural forms and furniture construction. [D; CSU]

ART 183L.**Open Studio: Three-Dimensional Media Lab/Design in Wood II**

1 unit

Credit/No Credit only**Corequisite:** ART 183**Laboratory 3 hours****Offered:** Variable

Fee: \$5. Open lab course designed to provide extended instruction, augmenting comprehension of the principles of design, and application of appropriate utilization of tools and machinery in the execution of advanced three-dimensional designs in wood for students enrolled in ART 183. [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 185L.**Open Studio: Three-Dimensional Media Lab/Jewelry and Metalwork**

1 unit

Credit/No Credit only**Corequisite:** ART 185A, 185B, 185C, or 185D**Laboratory 3 hours****Offered:** Variable

Fee: \$5. Open lab course designed to provide extended instruction, augmenting comprehension of the principles of design, and the application of appropriate utilization of tools in completing three-dimensional designs in metal for students enrolled in ART 185A, 185B, 185C, or 185D. (Repeatable three times.) [D; CSU]

ART 190.**Art of Hieroglyphs**

3 units

Lecture 3 hours**Offered:** Variable

Focuses on the principles of writing-system design, particularly Egyptian and Maya hieroglyphic writing, leading to an ability to understand the gist of the majority of Maya texts. [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 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 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 explored. [D; CSU]

ART 199B.**Portrait Photography II**

3 units

Prerequisite: ART 199A or equivalent**Lecture 2 hours, laboratory 4 hours****Offered:** Variable

Fee: \$5. 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

Fee: \$10. Introduces an in-depth study of new genres in contemporary art and examines the history and theory of installation and site-specific art, recent artistic practices, and technologies. [D; CSU; UC]

ART 200L.**Open Studio: Three-Dimensional Media Lab/New Genre: Installation and Site-Specific Art**

1 Unit

Credit/No Credit only**Corequisite:** ART 200**Laboratory 3 hours****Offered:** Variable

Fee: \$5. Open lab course designed to provide extended instruction, augmenting comprehension of the principles of design and the application of appropriate utilization of tools in the execution of installation and site-specific art for students enrolled in ART 200. [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. (May be repeated for additional credit with new content.) [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 Behavioral and Social Sciences

Dean Viara Giraffe, Ph.D., Office 470K, 619-482-6582

Faculty Felix Tuyay, M.A.

Department Chair Barry Horlor, 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

Below is a sample of the career options available for the Asian-American Studies major. A few of these require an associate degree, most require a bachelor's 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

Associate in Arts Degree: Transfer Preparation

Asian-American Studies

Major Code

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 (ASIA 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 115	Filipino-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 35.

* 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 41 for further information.**

Asian-American Studies Courses

ASIA 112.

Asian-American History I

3 units

Recommended Preparation: RDG 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: RDG 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, interethnic 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: RDG 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: RDG 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 Grant J. Miller, M.S. • Jeffrey Veal, Ph.D.

Interim Department Chair Jeffrey Veal, Ph.D.

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

Below is a sample of the career options available for the astronomy major. A few require an associate degree, some require a bachelor's 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 Elective: CHEM 200.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

* 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 41 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; RDG 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; RDG 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; and recent discoveries regarding our solar system and planets around distant stars. [D; CSU; UC]

ASTR 150. **Discovery of the Cosmos** 3 units

Recommended Preparation: RDG 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; and 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; RDG 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; RDG 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

Faculty Jose Ibarra, A.A. • David Preciado, A.A. • Chuck Wagoner, A.A.

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

Below is a sample of the career options for the automotive major. Most require a certificate or an associate in science 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, Cooling, and Air Conditioning
ASE Electrical Systems
ASE Engine Repair
ASE Automatic 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, Cooling, and Air Conditioning	3
AT 140	Engine Repair	3

Third Semester

AT 220	Engine Performance II	3
AT 230	Automotive Electronics	3
AT 234	Automatic 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 35.

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	2
AT 146	Industrial Engine and Repair	2
LNT 72	Horticultural Equipment: Care and Operations	2

Second Semester

AT 147	Advanced Industrial Engine and Repair	2
AT 148	Small Motorcycle Engine Repair	2
AT 149	Large Motorcycle Engine Repair	2
AT 150	Advanced Motorcycle Engine Repair	2

Third Semester

AT 151	Small Outboard Marine Engine Repair	2
AT 152	Large Outboard Marine Engine Repair	2
AT 153	Advanced Outboard Marine Engine Repair	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 35.

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 to Basic Automotive Service	3
AT 102	Automotive 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 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

Total units **12**

Automotive Performance Systems

Career/Technical (Major Code: 02765)

AT 101	Introduction to 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, Cooling, and Air Conditioning	3
AT 140	Engine Repair	3

Third Semester

AT 220	Engine Performance II	3
AT 230	Automotive Electronics	3
AT 234	Automatic 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 Performance Certification	AT 120/AT 220
ASE Automotive Heating, Cooling, and 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 Transmissions 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	2
AT 146	Industrial Engine and Repair	2
LNT 72	Horticultural Equipment: Care and Operations	2

Second Semester

AT 147	Advanced Industrial Engine and Repair	2
AT 148	Small Motorcycle Engine Repair	2
AT 149	Large Motorcycle Engine Repair	2
AT 150	Advanced Motorcycle Engine Repair	2

Third Semester

AT 151	Small Outboard Marine Engine Repair	2
AT 152	Large Outboard Marine Engine Repair	2
AT 153	Advanced Outboard Marine Engine Repair	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 TO Basic Automotive Service

3 units

Grade only

Lecture 2 hours, laboratory 4 hours

Offered: Variable

Fee: \$13. Introduces basic general automotive service and repair for all automotive enthusiasts. Emphasizes basic theory and plenty of hands-on lab activities. Focuses on how to perform oil changes, wheel balance and rotation, as well as fluid level inspection among other basic vehicle services. Provides foundation for advanced training. [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 gas analyzer function detailed. Initial phase of preparation for the Automotive Service Excellence Exam Certification in Engine Performance (A8). [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 (A8). [D; CSU]

AT 131.

Automotive Heating, Cooling, and 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 (A7), 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 (A1). [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 (A6). [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 (A2). [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 (A3). (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 driveability 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 II (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.
Cooperative Work Experience in Automotive Technology I
2–4 units

Grade only

Limitation on Enrollment: Declared Automotive Technology major. Student must complete no fewer 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 291.
Cooperative Work Experience in Automotive Technology II
2–4 units

Grade only

Prerequisite: AT 290 or equivalent
Limitation on Enrollment: Declared Automotive Technology major. Student must complete no fewer 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 292.
Cooperative Work Experience in Automotive Technology III
2–4 units

Grade only

Prerequisite: AT 291 or equivalent
Limitation on Enrollment: Declared Automotive Technology major. Student must complete no fewer 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 293.
Cooperative Work Experience in Automotive Technology IV
2–4 units

Grade only

Prerequisite: AT 292 or equivalent
Limitation on Enrollment: Declared Automotive Technology major. Student must complete no fewer 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.
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]

Baja California Studies

School of Mathematics, Science, and Engineering

Dean Kathy Tyner, M.S., Office 345, 619-482-6459

Faculty Deana Alonso-Post, 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. • Margery Stinson, 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

Certificate of Achievement

Baja California Studies

Major Code

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)

Service learning hours that focus on the Baja California region are required in some courses. The hours will be determined by the individual instructor of each course. It is recommended that the student demonstrate an intermediate to 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.

Fall Semester

COMM 176 Intercultural Communication	3
ENGL 274 Literature of the Border and Baja California	3

Spring Semester

BIOL 143 Biology, Oceanography, and Geoscience of Baja California	3
BIOL 145 Ecomundo: Ecology and Environmental Science	3

Total units 12

Recommended Electives: BIOL 146; COMM 142; SPAN 205.

Note: Fulfills the following General Education Requirements. You will have met four GE requirements in the Associate Degree General Education Requirements (A), California State University General Education Breadth Requirements (B), and IGETC (C) at the completion of this certificate

BIOL 143	A: Group D5	B: Group D5	C: Pending
BIOL 145	A: Group B	B: Group B2	C: Area 5B
COMM 176	A: Group D7	B: Group D7	C: Area 4G
ENGL 274	A: Group C2	B: Group C2	C: Area 3B

Biology

School of Mathematics, Science, and Engineering

Dean Kathy Tyner, M.S., Office 345, 619-482-6459

Faculty Jonathan Atwater, Ph.D. • Nouna Bakhiet, Ph.D. • David Brady, M.S. • Nira Clark, M.A. • Charles Hoyt, M.S. • Linda Jones, D.C. • Shery Medler, M.S. • Valerie Pennington, M.S. • Michael Riddle, M.S. • Sharon Shapiro, D.P.M. • Margery Stinson, M.S. • John Tolli, Ph.D. • Kathy Tyner, M.S.

Department Chair Shery Medler, 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

Below is a sample of the career options available for the biology major. A few of these require an associate in science degree, most require a bachelor's 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
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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
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Fourth Semester

BIOL 212	Biology of Plants	4
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Total units	28
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To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

* 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 41 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 in 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>

Note: Two calculus-based physics course sequences are now available for biology majors. Sequence one—PHYS 170, 172, and 174. Sequence two—PHYS 270, 272, and 274. Check with your transfer institution for specific requirements.

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 Kathy Tyner, M.S., Office 345, 619-482-6459

Faculty Jonathan Atwater, Ph.D. • Nouna Bakhiet, Ph.D.

Department Chair Shery Medler, M.S.

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

Below is a sample of the career options available for the biotechnology major. Most of these require a certificate or an associate in science 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 nonprofit institutions.

Degree/Certificate Options

Associate in Science Degree: Transfer Preparation

	Major Code
Biotechnology	01512

Certificate of Achievement

Biotechnology	01511
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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
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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
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**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. See page 35.

* 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 requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 41 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: RDG 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: RDG 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: RDG 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: RDG 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: RDG 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: RDG 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. [D; CSU; UC]

BIOL 145.

EcoMundo—Ecology and Environmental Science

3 units

Recommended Preparation: RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Variable

Features basic concepts and science processes in ecology with an emphasis on international borders, regional, and global environmental interactions and issues. Focus is on the 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: RDG 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 160.

Marine Biology

3 units

Grade only

Recommended Preparation: RDG 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: RDG 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: RDG 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: RDG 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: RDG 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: RDG 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 193.
Principles of Human Anatomy and Physiology
5 units

Grade only

Prerequisite: CHEM 100 or 170 or equivalent; BIOL 100 and 101, or equivalent

Recommended Preparation: RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours, laboratory 6 hours

Offered: Fall

Lecture and laboratory study of human anatomy and physiology. Emphasis on homeostatic regulation; precise terminology; structural-functional relationships of organ systems; and includes mammalian dissection and scientific methodology. Limited to Southwestern College pre-nursing students. (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: RDG 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 207.
Introduction to Bioinformatics
3 units

Credit/No Credit only

Lecture 3 hours

Offered: Variable

Provides an analysis of genes, proteins, and genomes; particularly their sequences and their changes due to evolutionary mechanisms. Introduces the fundamentals of computer-based analysis of genes, genomes, and proteins, including database organization, retrieval and search rules, probabilistic models, substitution matrices, and sequence alignment algorithms. [ND]

BIOL 210.
General Zoology
4 units

Grade only

Prerequisite: MATH 65 or the equivalent skill level as determined the Southwestern College Mathematics Assessment or equivalent

Recommended Preparation: One full year of high school biology with grade of "C" or better; RDG 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 170 or 200 or equivalent; MATH 65 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent

Recommended Preparation: BIOL 210 or equivalent; RDG 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 biology and molecular biology principles for biology and related science majors. Principles include the chemical basis of life, cell structure and function, energy transformation, cell division, genetics, molecular biology, and the origin of life. [D; CSU; UC]

BIOL 212.
Biology of Plants

4 units

Grade only

Prerequisite: BIOL 211 or equivalent

Recommended Preparation: RDG 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 plants with an emphasis on structure, function, growth, physiology, and genetics. Plant taxonomy, physiology, plant cytology, an introduction to genomes, and general ecology; population biology and evolution of populations will be included. [D; CSU; UC; CAN-BIOL 6]

BIOL 215.
Biostatistics

3 units

Grade only

Prerequisite: MATH 101, 121, or 244, or equivalent; BIOL 210 or equivalent

Lecture 2 hours, laboratory 3 hours

Offered: Variable

Introduction to basic probability, descriptive and inferential statistics, design of experiments, and methods to define and solve quantitative problems and test hypotheses using biological examples. [D; CSU; UC]

BIOL 229.
Introduction to Biological Research I

3 units

Recommended Preparation: CHEM 100, 170, or 200, or equivalent; RDG 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: Summer, Fall, Spring

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: RDG 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 Irma Alvarez, M.A., Office 215, 619-482-6457

Faculty Yvonne Lucas, M.B.A. • Frank Paiano, M.B.A. • Elizabeth Shapiro, J.D. • Gail Stockin, M.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, and technologies governing the increasingly global business environment.

Career Options

Below is a sample of the career options available for the business or business-related major. Most require an associate degree, some require a bachelor's 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, purchasing agent, 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

Associate in Arts Degree: Transfer Preparation

	Major Code
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/The Legal Environment of Business	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	4

Total units 32

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

* 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 41 for further information.**

International Business Emphasis

Transfer Preparation * (Major Code: 01101)

The associate in arts degree in business administration with an emphasis in international business 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/The Legal Environment of Business	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 35.

* 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 41 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/The Legal Environment of Business	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	4
Total units		32

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

* 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 41 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/The Legal Environment of Business	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	4
Total units		32

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

- * 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 41 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/The Legal Environment of Business	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	4
Total units		32

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

- * 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 41 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. • Victoria Lopez, J.D. • Yvonne Lucas, M.B.A. • Frank Paiano, M.B.A. • Elizabeth Shapiro, J.D. • Gail Stockin, M.A.

Department Chair Larry Christiansen, J.D.

General Description

Business management is a broad area encompassing administration, management, marketing, financial services, entrepreneurship, supervision, eBusiness, merchandising, international trade, logistics, community development, accounting, and information systems. Study in this area explores the theories, history, principles, skills, practices, laws, ethics, and technologies governing the increasingly global business environment.

Career Options

Below is a sample of the career options available for the business or business-related major. Most require an associate degree, some require a bachelor's or 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 professional. Many entry-level employment opportunities are available in retail or wholesale sales, business offices, financial institutions, schools, colleges, and local, state, and federal government.

Degree/Certificate Options

Associate in Science Degree: Career/Technical

	Major Code
eBusiness	02456
Entrepreneurship and Small Business	01156
International Business	02038
Leadership and Supervision	02114
Management	01151

Certificates of Achievement

eBusiness—Basic	A2444
eBusiness—Intermediate	02457
Entrepreneurship and Small Business—Basic	A2442
Entrepreneurship and Small Business—Intermediate	01155
Financial and Investment Services—Basic	A2027
International Business—Basic	A2119
International Business—Intermediate	02039
Leadership and Supervision—Basic	A2117
Leadership and Supervision—Intermediate	01154
Management—Basic	01152
Management—Intermediate	01153

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

eBusiness

Career Technical (Major Code: 02456)

Designed to prepare students to work in the dynamic field of electronic business and commerce. The associate degree provides students with a broad range of the business knowledge and technical skills required to be competitive in the job market in the field of eBusiness.

ACCT 12	Microcomputer Accounting (3)	3–4
	OR	
ACCT 102	Principles of Accounting II—Managerial (4)	
BUS 120	Introduction to Business	3
	OR	
BUS 121	Financial Planning and Money Management	
BUS 136	Diverse Workforce Management and Communication (2)	2–3
	OR	
BUS 152	Human Relations in Organizations (3)	
BUS 150	Principles of Management	3
	OR	
BUS 177	Principles of International Business	
BUS 183	Business Mathematics	3
CIS 133	Advanced Microcomputer Spreadsheets Software	1
	OR	
CIS 134	Microcomputer Database Software—Access	
LDR 148	Business Presentation Skills—Bilingual (English/Spanish)	2
	OR	
LDR 149	Business Presentation Skills	
	Plus the courses required for the eBusiness—Intermediate certificate	32–38
Total units		49–57

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

Entrepreneurship and Small Business

Career/Technical (Major Code: 01156)

Designed for both prospective and current owners or managers of a small business. Emphasizes opportunities available in San Diego County for entrepreneurs and provides training in all aspects of the development of a successful small business enterprise.

ACCT 12	Microcomputer Accounting	3
BUS 121	Financial Planning and Money Management	3
BUS 150	Principles of Management	
	OR	3
BUS 177	Principles of International Business	
BUS 152	Human Relations in Organizations (3)	
	OR	2-3
BUS 136	Diverse Workforce Management and Communication (2)	
BUS 183	Business Mathematics	3
CIS 133	Advanced Microcomputer Spreadsheet Software	
	OR	1
CIS 134	Microcomputer Database Software—Access	
LDR 148	Business Presentation Skills—Bilingual (English/Spanish)	
	OR	2
LDR 149	Business Presentation Skills	
LDR 151	Human Resources and Labor Relations	3
Plus the required courses for the Entrepreneurship and Small Business—Intermediate certificate		30-35
Total units		50-56

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

International Business

Career/Technical (Major Code 02038)

Designed to prepare students for work in multinational companies. 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.

ACCT 12	Microcomputer Accounting (3)	
	OR	3-4
ACCT 102	Principles of Accounting II—Managerial (4)	
BUS 121	Financial Planning and Money Management	
	OR	3
BUS 174	Modern Production and Marketing Practices	
BUS 183	Business Mathematics	3
CIS 133	Advanced Microcomputer Spreadsheet Software	
	OR	1
CIS 134	Microcomputer Database Software—Access	
LDR 148	Business Presentation Skills—Bilingual (English/Spanish)	
	OR	2
LDR 149	Business Presentation Skills	
	Foreign language (220 level or higher)	5
Plus the courses required for the International Business—Intermediate certificate		34-38
Total units		51-56

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

Note: *Students who have graduated from high school in a foreign country may waive the foreign language requirement.*

Leadership and Supervision

Career Technical (Major Code: 02114)

Builds on the basic skills acquired in the basic certificate program. Emphasizes the development of versatile leadership abilities as well as skills in planning and problem solving, organizing, staffing, training, and working with individuals and teams.

ACCT 12	Microcomputer Accounting (3)		3-4
	OR		
ACCT 102	Principles of Accounting II—Managerial (4)		
BUS 150	Principles of Management	3	
BUS 183	Business Mathematics	3	
CIS 133	Advanced Microcomputer Spreadsheets Software		
	OR		1
CIS 134	Microcomputer Database Software—Access		
Plus the required courses for the Leadership and Supervision—Intermediate certificate			32-37
Total units			42-48

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

Note: For leadership courses, see pages 312-313.

Management

Career/Technical (Major Code: 01151)

Designed to provide students with key concepts in business management, including the areas of administration, management, marketing, finance, entrepreneurship, supervision, banking, small business, merchandising, international trade, accounting, and information systems. Explores the theories, history, principles, skills, practices, laws, ethics, and technologies governing the increasingly global business environment.

BUS 177	Principles of International Business	3	
BUS 121	Financial Planning and Money Management	3	
CIS 133	Advanced Microcomputer Spreadsheets Software		
	OR		1
CIS 134	Microcomputer Database Software—Access		
LDR 148	Business Presentation Skills—Bilingual (English/Spanish)		
	OR		2
LDR 149	Business Presentation Skills		
LDR 151	Human Resources and Labor Relations	3	
Plus the required courses for the Management Intermediate certificate			31-32
Total units			43-44

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

Certificates of Achievement

eBusiness—Basic

Career/Technical (Major Code: A2444)

Designed to introduce students to the field of electronic commerce with a focus on the business and organizational aspects of the field.

BUS 134	eBusiness I: Principles of Electronic Commerce	3
BUS 143	eStrategic Business Planning	2
CIS 101	Introduction to Computers and Information Processing (4)	
	OR	1-4
CL 120	Computer Literacy (1)	
CIS 151	Research Using the Internet	1
CIS 201	Build an Online Storefront Using Miva	6
Total units		13-16

Recommended Electives: BUS 148, 149.

eBusiness—Intermediate

Career/Technical (Major Code: 02457)

Designed to prepare students to work in the dynamic field of electronic business and commerce. Builds upon the combined knowledge and technical skills students have acquired in creating and maintaining a strong business presence on the Web.

ACCT 7	Basic Business Bookkeeping (3)		3-4
	OR		
ACCT 101	Principles of Accounting I (4)		
BUS 140	Business Law/The Legal Environment of Business	3	
BUS 142	Business Ethics—Corporate and Personal	1	
BUS 144	Advertising and Promotional Strategy (1)		
	OR		1-3
BUS 174	Modern Promotion and Marketing Practices (3)		
BUS 211	Communication in Business and Industry		
	OR		3
BUS 212	Business Communication		
BUS 290-293	Work Experience in Business I-IV (2-4)		2
CIS 202	Integrating Dreamweaver and Fireworks With Online Storefront Using Miva		6
Plus the courses required for the eBusiness—Basic certificate			13-16
Total units			32-38

Note: It is recommended that students complete the eBusiness—Basic certificate program plus half of the courses required for the eBusiness—Intermediate certificate program prior to enrolling in BUS 290-293.

Entrepreneurship and Small Business—Basic

Career/Technical (Major Code: A2442)

Designed for both the prospective and the current owner/manager of a small business. Emphasizes basic concepts in bookkeeping, law, and operations management for a small business, as well as the advertising and selling of products and services.

BUS 143	eStrategic Business Planning	2
BUS 148	Developing and Starting a New Business	3
BUS 149	Operating and Managing a Small Business	3
CIS 151	Research Using the Internet	1
CL 120	Computer Literacy (1)	1–4
	OR	
CIS 101	Introduction to Computers and Information Processing (4)	
LDR 152	Business Innovation and Creativity	1
LEGL 272	Business Organizations	2
Total units		13–16

Entrepreneurship and Small Business—Intermediate

Career/Technical (Major Code: 01155)

Designed for both prospective and current owners or managers of a small business. Emphasizes further development of skills learned in the basic program to enhance the concepts of bookkeeping, law, small business operations management, and the promotion and sale of products and/or services.

ACCT 7	Basic Business Bookkeeping	
	OR	3
ACCT 12	Microcomputer Accounting	
BUS 120	Introduction to Business	3
	OR	
BUS 134	eBusiness I: Principles of Electronic Commerce	
BUS 140	Business Law/The Legal Environment of Business	3
BUS 142	Business Ethics—Corporate and Personal	1
BUS 144	Advertising and Promotional Strategy (1)	1–3
	OR	
BUS 147	Successful Selling Techniques (1)	
	OR	
BUS 174	Modern Promotion and Marketing Practices (3)	
BUS 145	Financial Management for Small Business	1
BUS 211	Communication in Business and Industry	3
	OR	
BUS 212	Business Communication	
BUS 290–293	Work Experience in Business I–IV (2–4)	2
Plus the required courses for the Entrepreneurship and Small Business—Basic certificate		13–16
Total units		30–35

Note: It is recommended that students complete the Entrepreneurship and Small Business—Basic certificate plus half of the courses required for the Entrepreneurship and Small Business—Intermediate certificate prior to enrolling in BUS 290–293.

Financial and Investment Services—Basic

Career/Technical (Major Code: A2027)

Designed to provide students with a basic understanding of financial services and investments which is required for a wide variety of positions in the financial services industry. Covers banking services, including loans, deposit accounts, lines of credit, sales or inventory financing, certificates of deposit, cash management, and mutual funds as well as investment principles, including markets, stock and bonds, investment funds, and insurance investments.

ACCT 107	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 123	Introduction to Investments and Securities		3
BUS 183	Business Mathematics		3
Total units			15–16

International Business—Basic

Career/Technical (Major Code: A2119)

Prepares students to work in the field of international business with an emphasis in export/import trade. Emphasizes a small business approach to the study of the field and provides training in key concepts and techniques that make an international trade organization successful.

BUS 122	Principles of Importing and Exporting		3
BUS 126	Introduction to Business Logistic Management		3
BUS 140	Business Law/The Legal Environment of Business		3
BUS 177	Principles of International Business		3
CL 120	Computer Literacy (1)		
	OR		1–4
CIS 101	Introduction to Computers and Information Processing (4)		
Total units			13–16

Recommended Electives: 3–5 units in a foreign language

International Business—Intermediate

Career/Technical (Major Code: 02039)

Designed to prepare students for work in multinational companies. 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.

ACCT 7	Basic Business Bookkeeping (3)		
	OR		3–4
ACCT 101	Principles of Accounting I (4)		
BUS 116	Latin American Business Law		3
BUS 134	eBusiness I: Principles of Electronic Commerce		3
BUS 142	Business Ethics—Corporate and Personal		1
BUS 143	eStrategic Business Planning		2
BUS 211	Communication in Business and Industry		
	OR		3
BUS 212	Business Communication		
BUS 290–293	Work Experience in Business I–IV (2–4)		2
LEGL 256	International Law for Business		3
LDR 152	Business Innovation and Creativity		1
Plus the required courses for the International Business—Basic certificate			13–16
Total units			34–38

Note: It is recommended that students complete the International Business—Basic certificate plus half of the courses required for the International Business—Intermediate certificate prior to enrolling in BUS 290–293.

Leadership and Supervision—Basic

Career/Technical (Major Code: A2117)

Designed to prepare students for work in multinational companies. 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 136	Diverse Workforce Management and Communication (2)		
	OR		2–3
BUS 152	Human Relations in Organizations (3)		
LDR 150	Leadership and Supervision		3
LDR 151	Human Resources and Labor Relations		3
LDR 152	Business Innovation and Creativity		1
LDR 153	Work and Life Balance for Success		2
LDR 148	Business Presentation Skills—Bilingual (English/Spanish)		
	OR		2
LDR 149	Business Presentation Skills		
Total units			13–14

Leadership and Supervision— Intermediate

Career/Technical (Major Code: 01154)

Designed to build on the basic skills acquired in the basic certificate program. Emphasizes the development of versatile leadership abilities as well as skills in planning and problem solving, organizing, staffing, training, and working with individuals and teams.

ACCT 7	Basic Business Bookkeeping (3)		
	OR	3–4	
ACCT 101	Principles of Accounting I (4)		
BUS 120	Introduction to Business		
	OR	3	
BUS 134	eBusiness I: Principles of Electronic Commerce		
BUS 140	Business Law/The Legal Environment of Business		3
BUS 142	Business Ethics—Corporate and Personal		1
BUS 174	Modern Promotion and Marketing Practices		
	OR	3	
BUS 121	Financial Planning and Money Management		
BUS 211	Communication in Business and Industry		
	OR	3	
BUS 212	Business Communication		
CL 120	Computer Literacy (1)		
	OR	1–4	
CIS 101	Introduction to Computers and Information Processing (4)		
BUS 290–293	Work Experience in Business I–IV (2–4)		2
Plus the required courses for the Leadership and Supervision—Basic certificate			13–14
Total units			32–37

Note: It is recommended that students complete the Leadership and Supervision—Basic Certificate plus half of the courses required for the Leadership and Supervision—Intermediate certificate prior to enrolling in BUS 290–293.

Note: For Leadership courses, see pages 312–313.

Management—Basic

Career/Technical (Major Code: 01152)

Designed to provide students with continued study in key concepts and practices of business management, including marketing, finance, entrepreneurship, supervision, banking, small business, merchandising, international trade, accounting, and information systems.

BUS 120	Introduction to Business		3
BUS 136	Diverse Workforce Management and Communication (2)		
	OR		2–3
BUS 152	Human Relations in Organizations (3)		
BUS 140	Business Law/The Legal Environment of Business		3
BUS 150	Principles of Management		3
Total units			11–12

Management—Intermediate

Career/Technical (Major Code: 01153)

Designed to provide students with continued study in key concepts and practices of business management, including marketing, finance, entrepreneurship, supervision, banking, small business, merchandising, international trade, accounting, and information systems.

ACCT 101	Principles of Accounting I		4
BUS 174	Modern Promotion and Marketing Practices		3
BUS 142	Business Ethics—Corporate and Personal		1
BUS 183	Business Mathematics		3
BUS 211	Communication in Business and Industry		
	OR		3
BUS 212	Business Communication		
CIS 101	Introduction to Computers and Information Processing		4
BUS 290–293	Work Experience in Business I–IV (2–4)		2
Plus the required courses for the Management—Basic certificate			11–12
Total units			31–32

Note: It is recommended that students complete the Management—Basic certificate program plus half of the courses required for the Management—Intermediate certificate program prior to enrolling in BUS 290–293.

Business Courses

BUS 35.

Administrative Office Assistant— Bilingual

12 units

Lecture 9.5 hours, laboratory 7 hours

Offered: Variable

Fee: \$3. Upon program completion, the student may 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: \$3. 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 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]

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 116.

Latin American Business Law

3 units

Recommended Preparation: RDG 158 or *the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*

Lecture 3 hours

Offered: Variable

Comparative review of Latin American legal systems, focusing on the laws applied to business operations and their influence on Latin American business practices. [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 122.
Principles of Importing and Exporting
3 units

Recommended Preparation: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours
Offered: Variable

Covers the fundamentals of importing, exporting, and U.S. Customs Regulations. Provides an overview of international documentation, financial instruments of trade, and marketing. Emphasis on advanced concepts of exporting and importing, as well as practical application and completion of documents commonly used in the field. [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 126.
Introduction to Business Logistics Management
3 units

Recommended Preparation: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours
Offered: Variable

Covers systems approach to managing activities associated with the management of traffic, transportation, inventory, warehousing, packaging, order processing, and material handling for international trade. Designed to provide an overview of the fundamentals of logistics management including its scope, process, functions, and services. [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 136.
Diverse Workforce Management and Communication
2 units

Recommended Preparation: BUS 210 or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 2 hours
Offered: Variable

Designed to develop an awareness of current workforce diversity trends and the adaptation required in organizational structure to enhance productivity. Discusses changes in managerial and communication styles that successfully address cross-cultural communications, as well as effective negotiations and conflict resolution. [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: \$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 commerce initiatives. (Same as CIS 136.) [D; CSU]

BUS 139.
Consumer Retailing and Merchandising
1 unit

Lecture 1 hour
Offered: Variable

Introduces processes used for distributing consumer goods from manufacturers through wholesale and retail channels. Emphasizes retail outlet organization, buying procedures, advertising, pricing, and selling. Also discusses online retailing (e-tailing) as a possible strategy. [D; CSU]

BUS 140.
Business Law/The Legal Environment of Business

3 units

Grade only

Lecture 3 hours

Offered: Variable

Examines the nature and role of the law in our society emphasizing the legal environment in which business operates. Provides an overview of the U.S. legal system, contracts, torts, bankruptcy, consumer protection, environmental law, intellectual property, Uniform Commercial Code, and regulation of business. [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 members of the business community 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

Lecture 1 hour

Offered: Variable

Develops and explores the role of advertising and public relations for small business owners or entrepreneurs. Emphasizes creation of 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

Lecture 1 hour

Offered: Variable

Provides an overview of sales skills for small business owners. Emphasizes creation of an effective psychology of selling, analysis of buyer's behavior, 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.
Principles of Management

3 units

Recommended Preparation: ACCT 101 or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Variable

Studies management principles with primary emphasis on basic management functions: communicating, planning, organizing, and controlling. Analyzes decision making, human relations, and the role of the manager as leader. Discusses actual business problems and solutions. [D; CSU]

BUS 152.
Human Relations in Organizations

3 units

Recommended Preparation: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Variable

Develops the ability to nurture good relationships on the job which has been identified as a key to promotion and success in business. Focuses on techniques and behaviors that develop this potential in individuals, creating opportunities for higher salary, advancement, 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 Employee 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.
Modern Promotion and Marketing Practices

3 units

Lecture 3 hours

Offered: Variable

Discusses new marketing methods, institutions, and practices, including effective eCommerce methods. Emphasizes retailing and wholesaling, channels of distribution, cooperative marketing, and market analysis and costs. [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 multinational 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

Lecture 3 hours, laboratory .5 hour

Offered: Fall, Spring

Studies the fundamental mathematical operations and their application to business problems. Includes payroll, pricing, interest and discount, commission, taxes, and other pertinent uses of mathematics in the field of business. Course meets the math proficiency requirement. [D; CSU]

BUS 200A.
Microsoft Word: Beginning

2.5 units

Grade only

Recommended Preparation: BUS 71 or equivalent

Lecture 2 hours, laboratory 2 hours

Offered: Variable

Fee: \$1. Designed to prepare students for entry-level positions in today's modern electronic office, as well as to prepare students for the introductory level of Microsoft Office Specialist certification. [D; CSU]

BUS 200B.
Microsoft Word: Advanced

2.5 units

Grade only

Recommended Preparation: BUS 200A or equivalent

Lecture 2 hours, laboratory 2 hours

Offered: Variable

Fee: \$1. Designed to prepare students for advanced applications required in today's modern electronic office. Includes worksheets, tables, mail merge, macros, and work group collaboration. Prepares students for the Microsoft Office Specialist Expert certification examination. [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

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 and CIS 92, or equivalent

Lecture 4 hours, laboratory 2 hours

Offered: Fall, Spring

Fee: \$2. Emphasizes development of professional attitude, intercultural communication, ethics, workplace safety, writing skills, time and stress management, telephone, receptionist, supervisory and leadership skills, mail handling, alphabetic filing, teamwork, job search techniques, and career planning. Includes a job practicum designed to provide students with experience of interaction and workflow in an office environment. [D; CSU]

BUS 223.
Legal Office Procedures

2.5 units

Recommended Preparation: RDG 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 filling out legal documents on the computer. [D; CSU]

BUS 225.
Interpretation and Translation:
General Business
3 units

Recommended Preparation: BUS 210 and SPAN 201, 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

Introduces 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, and 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 bilingual legal assistants. The student will learn English and Spanish terminology commonly used in civil, probate, family and criminal law pleadings and documents. [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 239.
Project Management
3 units

Prerequisite: BUS 71 or equivalent

Recommended Preparation: CIS 133 or equivalent

Lecture 3 hours, laboratory 1 hour
Offered: Variable

Trains students to successfully manage projects working alone or with a team—an essential skill in today's job market and often the impetus for future job promotions. (Same as CIS 239.) [D; CSU]

BUS 240.
Microsoft Outlook
2.5 units

Lecture 2 hours, laboratory 2 hours
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 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.**Work Experience in Business I**

1–4 units

Grade only

Limitation on Enrollment: Fall/Spring—Declared Business major. Student must complete no fewer than seven units, including work experience, during each semester in order to receive credit. (Summer—Declared Business major. Student must complete no fewer than .5 unit, including work experience, during the summer, in order to receive credit.)

Lecture 1 hour, laboratory 1–15 hours**Offered:** Variable

Applies principles and skills acquired in business occupational majors to on-the-job assignments. In addition to weekly class activities, one unit of credit is granted for each 60 hours of volunteer or 75 hours of paid work activity. The job supervisor and the BUS 290 instructor will evaluate each student's job performance. [D; CSU]

BUS 291.**Work Experience in Business II**

1–4 units

Grade only**Prerequisite:** BUS 290 or equivalent

Limitation on Enrollment: Fall/Spring—Declared Business major. Student must complete no fewer than seven units, including work experience, during each semester in order to receive credit. (Summer—Declared Business major. Student must complete no fewer than .5 unit, including work experience, during the summer, in order to receive credit.)

Lecture 1 hour, laboratory 1–15 hours**Offered:** Variable

Applies principles and skills acquired in business occupational majors to on-the-job assignments. In addition to weekly class activities, one unit of credit is granted for each 60 hours of volunteer or 75 hours of paid work activity. The job supervisor and the BUS 291 instructor will evaluate each student's job performance. [D; CSU]

BUS 292.**Work Experience in Business III**

1–4 units

Grade only**Prerequisite:** BUS 291 or equivalent

Limitation on Enrollment: Fall/Spring—Declared Business major. Student must complete no fewer than seven units, including work experience, during each semester in order to receive credit. (Summer—Declared Business major. Student must complete no fewer than .5 unit, including work experience, during the summer, in order to receive credit.)

Lecture 1 hour, laboratory 1–15 hours**Offered:** Variable

Applies principles and skills acquired in business occupational majors to on-the-job assignments. In addition to weekly class activities, one unit of credit is granted for each 60 hours of volunteer or 75 hours of paid work activity. The job supervisor and the BUS 292 instructor will evaluate each student's job performance. [D; CSU]

BUS 293.**Work Experience in Business IV**

1–4 units

Grade only**Prerequisite:** BUS 292 or equivalent

Limitation on Enrollment: Fall/Spring—Declared Business major. Student must complete no fewer than seven units, including work experience, during each semester in order to receive credit. (Summer—Declared Business major. Student must complete no fewer than .5 unit, including work experience, during the summer, in order to receive credit.)

Lecture 1 hour, laboratory 1–15 hours**Offered:** Variable

Applies principles and skills acquired in business occupational majors to on-the-job assignments. In addition to weekly class activities, one unit of credit is granted for each 60 hours of volunteer or 75 hours of paid work activity. The job supervisor and the BUS 293 instructor will evaluate each student's job performance. [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. • David Hecht, Ph.D. • Tinh-Alfredo V. Khuong, M.S. • Jacquelyn Thomas, M.S. • Kathy Tyner, M.S.

Interim Department Chair Jeffrey Veal, Ph.D.

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

Below is a sample of the career options available to the chemistry major. A few require an associate in science degree, some require a bachelor's 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
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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	5
	OR	
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 35.

* 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 41 for further information.**

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: RDG 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: RDG 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: RDG 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 are 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: RDG 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: RDG 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: RDG 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; RDG 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: RDG 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: RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours, laboratory 6 hours

Offered: Fall

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: RDG 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: RDG 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., Office 570B, 619-482-6460

Faculty Sandra Corona, Ph.D. • Leslynn Gallo, Ph.D. • Mary Holmes, M.A. • Virginia Watson, M.A.

Department Chair Leslynn Gallo, Ph.D.

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 childcare environments, community resources, curriculum, childrearing, and language acquisition as they pertain to the child in contemporary society.

Career Options

Below is a sample of the career options available for the child development major. Most require a certificate or associate degree, some require a bachelor's degree, or 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 physician, and public health administrator.

Degree/Certificate Options

Associate in Arts Degree: Transfer Preparation

Child Development	01750
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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 Childcare	A2725
Family Support Specialist—Basic	A2726
Family Support Specialist—Geriatric	B2728
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 directors or to transfer to other colleges and universities offering a bachelor's 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.

CD 135	Principles of Family Development	3
CD 170	Principles of Child Development	3
CD 170L	Principles of Child Development Laboratory	1
CD 180	Observation and Guidance for Child Development	3
CD 180L	Observation and Guidance for Child Development Laboratory	1
CD 181	Curriculum Planning for Child Development	3
CD 184	Observation and Documentation	3
CD 284	Child, Family, and Community	3
CD 282A	Child Development Field Practicum	3
SOC 101	Introduction to Sociology	3
	OR	
PSYC 101	Introduction to Psychology	3
SOC 270	Statistical Methods of Sociology	3
	OR	
PSYC 270	Statistical Methods of Psychology	3

Total units 29

Recommended Electives: CD 175, 177, 282B.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

* 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 41 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 daycare centers for young children.

First Semester

CD 170	Principles of Child Development	3
CD 170L	Principles of Child Development Laboratory	1
CD 176	Music and Movement for Young Children	3
CD 180	Observation and Guidance for Child Development	3
CD 180L	Observation and Guidance for Child Development Laboratory	1

Second Semester

CD 130	Math for Young Children	1
CD 131	Science for Young Children	1
CD 132	Technology for Young Children	1
CD 181	Curriculum Planning for Child Development	3
CD 184	Observation and Documentation	3
CD 284	Child, Family, and Community	3

Third Semester

CD 177	Alternatives to Violence	3
CD 275	Art for Children	3
CD 282A	Child Development Field Practicum	3

Fourth Semester

CD 175	Nutrition, Health, and Safety for Children*	3
CD 282B	Advanced Child Development Field Practicum	3
CD 283	Emerging Literacy	3
Total units		41

Recommended Electives: ART 104; CD 80–88, 172, 278, 286.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

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 278	Working With Children and Families With Special Needs	3
CD 288	Mentorship and Adult Supervision	3
Plus the courses required for the Child Development Teacher program		41
Total units		47

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

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 the courses required for the Child Development Teacher program		41
Total units		50

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

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 the courses required for the Child Development Teacher program		41
Total units		50

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

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 the courses required for Child the Development Teacher program		41
Total units		50

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

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 170L	Principles of Child Development Laboratory	1
CD 176	Music and Movement for Young Children	3
CD 180	Observation and Guidance for Child Development	3
CD 180L	Observation and Guidance for Child Development Laboratory	1

Second Semester

CD 130	Math for Young Children	1
CD 131	Science for Young Children	1
CD 132	Technology for Young Children	1
CD 181	Curriculum Planning for Child Development	3
CD 184	Observation and Documentation	3
CD 284	Child, Family, and Community	3

Third Semester

CD 177	Alternatives to Violence	3
CD 275	Art for Children	3
CD 282A	Child Development Field Practicum	3

Fourth Semester

CD 175	Nutrition, Health, and Safety for Children*	3
CD 282B	Advanced Child Development Field Practicum	3
CD 283	Emerging Literacy	3

Total units **41**

Recommended Electives: ART 104; CD 80–88, 172, 278, 286.

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 the courses required for the Child Development Teacher program		41
Total units		50

Family Childcare

Career/Technical (Major Code: A2725)

Family childcare businesses are licensed to care for children in a home environment. The family childcare provider is responsible for designing developmentally appropriate curriculum for multi-age groups of children; providing a safe environment; and operating a successful small business. Designed for the prospective and experienced family childcare provider.

First Semester

BUS 145	Financial Management for Small Business	1
CD 80	The Business of Family Childcare	1
CD 82	Family Childcare Environment	1
CD 170	Principles of Child Development	3

Second Semester

CD 81	Children in Family Childcare—Crisis, Challenges, and Change	1
CD 87	Family Childcare Curriculum	1
CD 181	Curriculum Planning for Child Development	3
CL 120	Computer Literacy	1

Third Semester

BUS 144	Advertising and Promotional Strategy	1
CD 83	Nutrition for Family Childcare	1
CD 84	Health and Safety in Family Childcare	1
CD 86	Positive Guidance in Family Childcare	1
CD 90	Family Childcare School-Age Environment	1

Total units 17

Recommended Electives: BUS 148, 149, 164, 165; CD 91; CIS 246.

Family Support Specialist—Basic

Career/Technical (Major Code: A2726)

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.

First Semester

CD 151	Introduction to Home Visitation	3
CD 170	Principles of Child Development	3
CD 180	Observation and Guidance for Child Development	3

Second Semester

CD 177	Alternatives to Violence	3
CD 278	Working With Children and Families With Special Needs	3
CD 280	Family Support Practicum	2

Total units 17

Family Support Specialist—Geriatric

Career/Technical (Major Code: B2728)

The family support specialist is a paraprofessional who may be employed in healthcare settings, home, and social service agencies. Under the supervision of a professional, they provide quality care, health services, and education to the elderly and their families.

First Semester

CD 151	Introduction to Home Visitation	3
CD 177	Alternatives to Violence	3
PSYC 101	General Psychology	3

Second Semester

CD 280	Family Support Practicum	2
PSYC 109	The Psychology of Death and Dying	3
PSYC 230	Developmental Psychology	3

Total units 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 their 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 170	Principles of Child Development (Must be concurrently enrolled in ESL 27A.)	3
CD 180	Observation and Guidance for Child Development (Must be concurrently enrolled in ESL 27B.)	3
CD 181	Curriculum Planning for Child Development (Must be concurrently enrolled in ESL 27C.)	3
CD 284	Child, Family, and Community (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 Childcare**

1 unit

Credit/No Credit only

Recommended Preparation: CD 170 or equivalent

Lecture 1 hour

Offered: Spring

Focuses on appropriate family childcare business plan to include: budget, marketing, projected income, and business practices to meet Internal Revenue Service requirements. Examines marketing, balancing a budget, projecting income, contracts and legal considerations, and collection of fees. Explores grants, additional supplementary income sources, and reimbursement of food costs. [D]

CD 81. **Children in Family Childcare—Crisis, Challenges, and Change**

1 unit

Credit/No Credit only

Recommended Preparation: CD 170 or equivalent

Lecture 1 hour

Offered: Spring

Develops awareness in family childcare providers of the needs of children relating to divorce, death, disasters, loss, and families with specially-abled children. Provides methods for modifying the learning environment to accommodate these challenges with inclusive materials and curriculum. [D]

CD 82. **Family Childcare Environment**

1 unit

Credit/No Credit only

Recommended Preparation: CD 170 or equivalent

Lecture 1 hour

Offered: Spring

Emphasizes ways to make optimum design for family childcare providers to create a learning home environment promoting competency in development and promoting pro-social behavior. Presents creative ways to make optimum use of the home environment space and materials available. [D]

CD 83. **Nutrition for Family Childcare**

1 unit

Credit/No Credit only

Lecture 1 hour

Offered: Fall

Introduces the planning of low-cost menus with an emphasis on nutritional requirements of children ages birth through school-age while encouraging healthy eating habits. Emphasizes the procedures for qualification and reimbursement through the childcare food program. [D]

CD 84. **Health and Safety in Family Childcare**

1 unit

Credit/No Credit only

Recommended Preparation: CD 170 or equivalent

Lecture 1 hour

Offered: Fall

Emphasizes key aspects of the health and safety needs of children ages birth through school-age. Identifies health policies, medication dispensation, and suspected child abuse reporting procedures for the family childcare provider. Focuses on creating a safe environment for children. [D]

CD 86. **Positive Guidance in Family Childcare**

1 unit

Credit/No Credit only

Recommended Preparation: CD 170 or equivalent

Lecture 1 hour

Offered: Spring

Emphasizes the understanding of children's behavior within the family childcare environment. Introduces effective guidance techniques to promote pro-social behavior of children aged infants through school-age. [D]

CD 87. **Family Childcare Curriculum**

1 unit

Credit/No Credit only

Recommended Preparation: CD 170 or equivalent

Lecture 1 hour

Offered: Spring

Emphasizes adopting a play-based model for curricular practices in the family childcare environment. Focuses on adapting curriculum strategies for home-based childcare. [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. **Family Childcare School-Age Environment**

1 unit

Credit/No Credit only

Lecture 1 hour

Offered: Spring

Focuses on the planning of a stimulating learning environment for school-age children in family childcare. Emphasizes the integration of school-age children in family childcare settings which focus on age-appropriate activities and equipment. [D]

CD 91. **Family School-Age Childcare Partnerships**

1 unit

Credit/No Credit only

Lecture 1 hour

Offered: Spring

Focuses on creating and fostering cooperative partnerships and communication between school-age family childcare programs and parents, community, and school districts. Provides an overview of community resources and their utilization for school-age family 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 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: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Variable

Introduces the student to historical and modern family lifestyles, functions, and values that influence behavior. Provides examination of contemporary families changes, crisis, and resilience. Analyzes nontraditional families as well as the classic nuclear family and the social support they need. [D; CSU; UC; CAN-FCS 12]

CD 151.
Introduction to Home Visitation

3 units

Recommended Preparation: RDG 158 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. Focuses on 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. [D; CSU]

CD 170.
Principles of Child Development

3 units

Recommended Preparation: RDG 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 170L.
Principles of Child Development Laboratory

1 unit

Grade only

Laboratory 3 hours

Offered: Variable

Designed to give students hands-on experience of child development through observing and recording children's behavior. Explore various methods for examining the developmental domains of children from birth through middle childhood. [D; CSU]

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

Recommended Preparation: CD 170 or equivalent

Lecture 3 hours

Offered: Variable

Focuses on the development of children under three years of age. Includes the study of biological factors and environmental factors shaping the early cognitive, language, social, and physical development. Requires the observation of infants and toddlers in different settings. Emphasizes 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

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. [D; CSU]

CD 176.
Music and Movement for Young Children
3 units

Recommended Preparation: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours
Offered: Variable

Focuses on the relationship between children's conceptual growth and ability to express thoughts and feeling in response to music and movement. Emphasizes on how teachers can effectively utilize the kinesthetic mode of learning. [D; CSU]

CD 177.
Alternatives to Violence
3 units

Recommended Preparation: RDG 158 or the equivalent skill level as determined by the Southwestern college Reading Assessment or equivalent

Lecture 3 hours
Offered: Variable

Introduces the student to the challenges of teaching young children in violent times and alternatives for overturning the cycle of aggressive and anti-social behavior. Relates the importance of anti-bias activities in the classroom and the understanding of various aspects of diversity in all program areas. [D; CSU]

CD 180.
Observation and Guidance for Child Development
3 units

Corequisite: CD 180L (May be taken previously.)

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 180L.
Observation and Guidance for Child Development Laboratory
1 unit

Corequisite: CD 180 (May be taken previously.)

Laboratory 3 hours
Offered: Fall, Spring

Provides direct observation of young children in early childhood settings and laboratory experience in assessing children's behavior and creating curriculum which promotes the child's self-control, self-esteem, and competence. [D; CSU]

CD 181.
Curriculum Planning for Child Development
3 units

Grade only
Recommended Preparation: CD 170 or equivalent

Lecture 3 hours
Offered: Variable

Provides methods and materials for planning and implementing an integrated program for young children. Emphasis on designing an environment for learning related to emergent curriculum goals. [D; CSU]

CD 184.
Observation and Documentation
3 units

Prerequisite: CD 170 and 170L, or equivalent

Lecture 2 hours, laboratory 3 hours
Offered: Variable

Provides skills in observation and documentation to understand children's behavior and construction of knowledge. Applies multimedia to support the narrative interpretation of children's experiences. Emphasizes observation and documentation to facilitate the understanding of children's development. [D; CSU]

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. 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 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 280.
Family Support Practicum
2 units

Prerequisite: CD 151, 170, and 180, or equivalent

Lecture 1 hour, laboratory 3 hours
Offered: Variable

Provides students field experiences in various family development settings. Applies theory and knowledge as students increase their professional skills and abilities under close supervision. [D; CSU]

CD 282A.**Child Development Field Practicum**

3 units

Grade only**Prerequisite:** CD 170, 180, 181, and 184, or equivalent**Lecture 1 hour, laboratory 6 hours****Offered:** Fall, Spring

Provides close supervision at approved, quality early childhood education sites. Applies child development, curriculum, and guidance knowledge while implementing and evaluating learning experiences in all areas of learning. Requires conducting group times, handling routines of the classroom, and responding to group and individual needs. [D; CSU]

CD 282B.**Advanced Child Development Field Practicum**

3 units

Prerequisite: CD 282A or equivalent**Lecture 1 hour, laboratory 6 hours****Offered:** Variable

Provides students field experience in various family development settings. Applies theory and knowledge as the students increase their professional skills and abilities under close supervision. [D; CSU]

CD 283.**Emerging Literacy**

3 units

Recommended Preparation: CD 170 or equivalent; RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent**Lecture 3 hours****Offered:** Variable

Focuses on the relationship between language development and cognitive, social, emotional, and physical development. Provides analysis of the construction of learning environments facilitating language as it emerges from curriculum. Relates the critical importance of early learning and interactions to 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 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.**Administration Leadership in Early Childhood Programs**

3 units

Lecture 3 hours**Offered:** Variable

Expands the knowledge and practice of supervision and leadership skills required for early childhood program administration. Examines principles for infusing program philosophy and goals into fiscal, staff, and personnel management style. Includes working with a board of directors, community involvement/partnership, and networking with other agencies for support and collaboration. [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 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 Joel M. Levine, Ed.D., Office 430F, 619-482-6349

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 of 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 of 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, M.S., Office 702B, 619-482-6372

Faculty Linda Hensley, M.A. • Alana-Patris Loyer, M.A. • Eric Maag, M.A. • Jordan Mills, M.A. • Candice Taffolla-Schreiber, M.A. • Sharon Taylor, Ph.D. • 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. 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

Below is a sample of the career options available for the communication major. A few of these require an associate in a science degree, most require a bachelor's degree, and some require a graduate-level degree. Possible career options include: 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, radio critic, or film critic. With additional coursework, a 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 174 Interpersonal Communication (3)	
COMM 176 Intercultural Communication (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: Individual Events (2)	
COMM 263 Forensics Workshop II: Individual Events (2)	
COMM 264 Forensics Workshop III: Individual Events (2)	
COMM 265 Forensics Workshop IV: Individual Events (2)	
COMM 272 Forensics Workshop I: Debate (2)	
COMM 273 Forensics Workshop II: Debate (2)	
COMM 274 Forensics Workshop III: Debate (2)	
COMM 275 Forensics Workshop IV: Debate (2)	

Total units 21

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

Note: *No more than 8 units from forensics workshop courses will be accepted towards the completion of the major.*

* 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 41 for further information.**

Communication Courses

COMM 103.
Oral Communication
3 units

Grade only
Recommended Preparation: RDG 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, and the presentation of informal and formal debates. [D; CSU; UC; CAN-SPCH 6]

COMM 174.
Interpersonal Communication
3 units

Recommended Preparation: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours
Offered: Fall, Spring

Focuses on interpersonal communication theories, principles, and on public speaking. Emphasis on self-concept, perception, communication climates, verbal and nonverbal communication, listening, feedback and disclosure skills, conflict styles, resolution strategies, ethics, and mediated communication. Special focus on communication in family, friendship, romantic, workplace, and intercultural relationships. [D; CSU]

COMM 176.
Intercultural Communication
3 units

Recommended Preparation: RDG 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 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: Fall, Spring

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: Individual Events**

2 units

Lecture 1 hour, laboratory 3 hours**Offered:** Fall, Spring

Designed as a lecture/laboratory for speech competition. Students will compete on the college forensics team, critique speeches, and/or make presentations to community groups. [D; CSU]

COMM 263.**Forensics Workshop II: Individual Events**

2 units

Lecture 1 hour, laboratory 3 hours**Offered:** Fall, Spring

Designed as a lecture/laboratory for speech competition. Students will compete on the college forensics team, critique speeches, and/or make presentations to community groups. [D; CSU]

COMM 264.**Forensics Workshop III: Individual Events**

2 units

Lecture 1 hour, laboratory 3 hours**Offered:** Fall, Spring

Designed as a lecture/laboratory for speech competition. Students will compete on the college forensics team, critique speeches, and/or make presentations to community groups. [D; CSU]

COMM 265.**Forensics Workshop IV: Individual Events**

2 units

Lecture 1 hour, laboratory 3 hours**Offered:** Fall, Spring

Designed as a lecture/laboratory for speech competition. Students will compete on the college forensics team, critique speeches, and/or make presentations to community groups. [D; CSU]

COMM 272.**Forensics Workshop I: Debate**

2 units

Lecture 1 hour, laboratory 3 hours**Offered:** Variable

Designed as a lecture/laboratory for forensics competition. Students will debate on the college forensics team, critique debate rounds, and/or debate to community groups. [D; CSU]

COMM 273.**Forensics Workshop II: Debate**

2 units

Lecture 1 hour, laboratory 3 hours**Offered:** Variable

Designed as a lecture/laboratory for forensics competition. Students will debate on the college forensics team, critique debate rounds, and/or debate before community groups. [D; CSU]

COMM 274.**Forensics Workshop III: Debate**

2 units

Lecture 1 hour, laboratory 3 hours**Offered:** Variable

Designed as a lecture/laboratory for forensics competition. Students will debate on the college forensics team, critique debate rounds, and/or debate before community groups. [D; CSU]

COMM 275.**Forensics Workshop IV: Debate**

2 units

Lecture 1 hour, laboratory 3 hours**Offered:** Variable

Designed as a lecture/laboratory for forensics competition. Students will debate on the college forensics team, critique debate rounds, and/or debate 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 Technology and Human Services

Dean Patricia Axsom, M.S., Office 570B, 619-482-6460

Faculty Walter John Smith, B.A.

Department Chair Corey Breininger, M.A.Ed.

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 associate in science 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

Below is a sample of the career options available for the computer aided design major. Some require a certificate of achievement and most require an associate in science degree: 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

Associate in Science Degree: Career/Technical

	Major Code
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 in Science Degree

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 CADD/CAM Systems	3
CAD 222	CAD Mechanical Design I	3
ENGR 110	Engineering Design and 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
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Total units 24

Recommended Electives: CAD 240, 272, 276.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

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 Careers	1
ENGR 110	Engineering Design and Graphics	3
ARCH 200	Introduction Computer Aided Design	3
	OR	
CAD 220	Introduction to CADD/CAM Systems	3
MATH 104	Trigonometry	

Second Semester

ARCH 205	Advanced Architectural CAD	3
	OR	
CAD 222	CAD Mechanical Design I	2
ELEC 111	DC Circuit Principles	

Third Semester

ELEC 116	AC Circuit Principles	2
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Fourth Semester

ELEC 118	AC Circuit Analysis and Computer Simulation	2
	Select 6 units from electives	6

Total units 25

Electives: CAD 223, 224, 240, 272, 276.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

Certificates of Achievement

Computer Aided Design and Drafting—Basic

Career/Technical (Major Code: 02569)

CAD 220	Introduction to CADD/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 Design and Graphics	3
Total units		15

Computer Aided Design and Drafting—Advanced

Career/Technical (Major Code: A2576)

First Semester

CAD 220	Introduction to CADD/CAM Systems	3
CAD 222	CAD Mechanical Design I	3
ENGR 110	Engineering Design and 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
Total units		24

Design Technology

Career/Technical (Major Code: A2577)

First Semester

ENGR 101	Introduction to Engineering Careers	1
ENGR 110	Engineering Design and Graphics	3
ARCH 200	Introduction to Computer Aided Design	3
	OR	
CAD 220	Introduction to CADD/CAM Systems	3
MATH 104	Trigonometry	3

Second Semester

ARCH 205	Advanced Architectural CAD	3
	OR	
CAD 222	CAD Mechanical Design I	3
ELEC 111	DC Circuit Principles	2

Third Semester

ELEC 116	AC Circuit Principles	2
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Fourth Semester

ELEC 118	AC Circuit Analysis and Computer Simulation	2
Select 6 units from electives		6
Total units		25

Electives: CAD 223, 224, 240, 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 3 hours

Offered: Variable

Fee: \$2. Introduces 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 3 hours

Offered: Variable

Fee: \$2. Serves as a continuation of CAD 220. Introduces computer aided design and computer aided manufacturing (CAD/CAM). Emphasizes advanced CAD functions, including three-dimensional solid 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: \$2. 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: \$5. 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

Credit/No Credit only

Lecture 2 hours, laboratory 2 hours

Offered: Fall

Fee: \$2. Introduces students to the techniques, analysis, and modification of parametric solid 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: \$15. 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: \$2. 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: \$2. 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: \$2. Introduction to advanced 3D studio functions and integration of media using video capture and authoring software. [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 John J. Davis, B.A. • Julie Grimes, M.S. • Gregory Hazlett, A.B. • Robert Lingvall, M.S. • Kathleen Canney López, B.A. • Thomas Luibel, B.S. Gregory Mohler, M.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 information systems and technology. This department explores computer skills, data entry operations, information manipulation, control and data structures, software capabilities, program development, database management, design processes, Web applications, operating systems, and system analysis.

Career Options

Below is a sample of the career options available for computer information systems majors. Most require an associate in science degree, some require a bachelor's 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, local area network (LAN) administrator, personal computer (PC) specialist, Web designer, database designer, and eCommerce technician and administrator positions available in allied professions of computer science, business, and industry.

Degree/Certificate Options

Associate in Arts Degree: Transfer Preparation

Information Systems 01130

Associate in Science Degree: Career/Technical

CIS—Computer Programming With an Emphasis on Applications	02273
CIS—eCommerce Emphasis	02071
CIS—Internet Emphasis	02083
CIS—Internet Web Design Emphasis	02086
CIS—Internetwork Technician Emphasis	02088
CIS—Microcomputer Applications Emphasis	02335
CIS—Network Administration Emphasis	02103
CIS—Operations/PC Support Specialist Emphasis	02079
CIS—Systems Programming Emphasis	02090
CIS—Web Flash Developer and Gaming Animator	02129
CIS—Web Site Designer and Developer	02121
CIS—Web Site eCommerce Administrator	02127
CIS—Web Storefront Builder Using Miva	02123
Microcomputer Office and Technical Support Skills	02331

Certificates of Achievement

CIS—Computer Programming With an Emphasis on Applications—Basic	02274
CIS—Computer Programming With an Emphasis on Applications—Advanced	02275
CIS—eCommerce Emphasis—Basic	02072
CIS—eCommerce Emphasis—Advanced	02073
CIS—Internet Emphasis—Basic	02074
CIS—Internet Emphasis—Advanced	02093
CIS—Internet Web Design Emphasis—Basic	02092
CIS—Internet Web Design Emphasis—Advanced	02094
CIS—Internetwork Technician Emphasis—Basic	02089
CIS—Internetwork Technician Emphasis—Advanced	02097
CIS—Microcomputer Applications Emphasis—Basic	02337
CIS—Microcomputer Applications Emphasis—Advanced	02338
CIS—Network Administration Emphasis	02104
CIS—Operations/PC Support Specialist Emphasis—Basic	02082
CIS—Operations/PC Support Specialist Emphasis—Advanced	02098
CIS—Systems Programming Emphasis	02099
CIS—Web Database Programmer/Administrator—LAMP (Linux, Apache, MySQL, PHP)	02107
CIS—Web Designer	02108
CIS—Web Flash Designer	02109
CIS—Web Flash Developer and Gaming Animator	02134
CIS—Web Multimedia Developer Using Director	02106
CIS—Web Site Designer and Developer	02122
CIS—Web Site eCommerce Administrator	02128
CIS—Web Storefront Builder Using Miva—Basic	02124
CIS—Web Storefront Builder Using Miva—Advanced	02126
Microcomputer Office and Technical Support Skills—Basic	02139
Microcomputer Office and Technical Support Skills—Advanced	02141

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/The Legal Environment of Business	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	4
Total units		32

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

* 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 41 for further information.**

Associate in Science Degree

CIS—Computer Programming With an Emphasis on Applications

Career Technical (Major Code: 02273)

Provides training in the theory and practice of computer programming and software design emphasizing business and computer applications. Prepares students for employment in the programming field and provides a strong foundation for students who desire to transfer to work toward a bachelor's degree in the area of information technology (IT).

BUS 120	Introduction to Business	
OR		
BUS 134	eBusiness I: Principles of Electronic Commerce	3
BUS 142	Business Ethics—Corporate and Personal	1
BUS 183	Business Mathematics	3
BUS 211	Communication in Business and Industry	
OR		
BUS 212	Business Communication	3
CIS 101	Introduction to Computers and Information Processing	4
CIS 106	Programming Logic and Design	3
CIS 115	Introduction to Programming Using C++	4
CIS 130	Microcomputer Disk Operating System	1
CIS 146	Introduction to Structured Query Language (SQL)	2
CIS 167	Quality Assurance and Software Testing	3
CIS 226	Operating Systems and Command Languages	3
CIS 239	Project Management	3
CIS 290–291	Work Experience CIS Applications I–II (2–4)	2–4
Plus Group A and Group B		23

Group A—Open Source

CIS 108	PHP (Personal Home Page) and MySQL (6)
CIS 153	Internet Programming Using Java/J++ (4)
CIS 155	Interactive Web Pages With Perl (1)

Group B: Microsoft

CIS 117	Windows Programming Using Visual BASIC (4)
CIS 139	Windowing Environments (1)
CIS 166	C# Programming (3)
CIS 262	Graphical User Interface (GUI) Programming Using C++ (4)

Total units **58–60**

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

Computer Information Systems

Career/Technical

Common Core

BUS 211	Communication in Business and Industry	3
OR		
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

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)	3–4
OR		
CIS 104	eCommerce IV—Beginning ColdFusion (3)	
CIS 103B	eCommerce IVa—Miva Script XML Based Programming Language	3
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 Computer Information Systems		15

Total units 38–39

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

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 155	Interactive Web Pages With Perl	1
CIS 157A	Web Authoring: Introduction to Macromedia Dreamweaver	4
CIS 158	Imaging for the World Wide Web (Photoshop and ImageReady)	3
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 Post-production and Special Effects	3
Plus Common Core courses for Computer Information Systems		15

Total units 39

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

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 Information Systems		15
Total units		37

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

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	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 Computer Information Systems		15
Total units		44

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

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 121B	Word Processing—Microsoft Word	1
CIS 122B	Spreadsheet Software—Excel	1
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 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 35.

* Students should have typing skills or should complete BUS 70 Keyboarding I, as their first course of the program.

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 290–291	Work Experience CIS Applications I–II (2–4)	3
Plus Common Core courses for Computer Information Systems		15
Total units		38

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

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/ELEC 14	Office Automation Equipment Repair	2
CIS 141A	Networking Systems—Windows	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 Computer Information Systems	15
Total units		29

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

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 (mini/micro 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 courses listed below:		8
CIS 111	Structured Programming Using BASIC (4)	
CIS 117	Windows Programming Using Visual BASIC (4)	
CIS 153	Internet Programming Using Java/J++ (4)	
Plus Common	Core courses for Computer Information Systems	15
Total units		46

Recommended Electives: CIS 133, 137; MATH 140.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

CIS—Web Flash Developer and Gaming Animator

Career/Technical (Major Code: 02129)

Designed to prepare students to work in a computer animation studio, Web design firm, gaming firm, or to work independently as a freelance animator. Students will create interactive video games and Web sites using Flash ActionScript, Personal Home Page (PHP), and My Server Query Language (MySQL).

BUS 134	eBusiness I: Principles of Electronic Commerce	3
BUS 211	Communication in Business and Industry	3
CIS 108	PHP (Personal Home Page) and MySQL	6
CIS 124	Web Imaging With Fireworks	6
CIS 125	Flash Motion Graphics	6
CIS 126	Advanced Flash ActionScript	6
CIS 162	Web Design and Usability	2
Total units		32

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

CIS—Web Site Designer and Developer

Career/Technical (Major Code: 02121)

Designed to prepare students to work in Web design studios, computer firms, or as independent freelance Web designers or database developers. Students will create dynamic Web sites using Dreamweaver and Personal Home Page (PHP) and My Server Query Language (MySQL), and create and manage Internet databases using LINUX operating system and Apache Web server.

BUS 134	eBusiness I: Principles of Electronic Commerce	3
BUS 211	Communication in Business and Industry	3
CIS 108	PHP (Personal Home Page) and MySQL	6
CIS 109	Linux Operating System and Apache Web Server	6
CIS 123	Web Publishing With Dreamweaver	6
CIS 124	Web Imaging With Fireworks	6
CIS 162	Web Design and Usability	2
Total units		32

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

CIS—Web Site eCommerce Administrator

Career/Technical (Major Code: 02127)

Designed to prepare students to work as a Web site eCommerce administrator installing and implementing eCommerce software using open source and Macromedia/Miva implementations.

BUS 134	eBusiness I: Principles of Electronic Commerce	3
BUS 211	Communication in Business and Industry	3
CIS 108	PHP (Personal Home Page) and MySQL	6
CIS 109	Linux Operating System and Apache Web Server	6
CIS 123	Web Publisher With Dreamweaver	6
CIS 162	Web Design and Usability	2
CIS 201	Build an Online Storefront Using Miva	6
CIS 202	Integrating Dreamweaver and Fireworks With Online Storefront Using Miva	6
CIS 203	Integrating Dreamweaver and Flash With Online Storefront Using Miva	6
Total units		44

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

CIS—Web Storefront Builder Using Miva

Career/Technical (Major Code: 02123)

Designed to prepare students to build an advanced online store using Miva and Macromedia software. Includes online order processing, payments collection to include credit card processing, MS Access database creation, online database development, and security technologies utilized by eCommerce entities on the Web.

BUS 134	eBusiness I: Principles of Electronic Commerce	3
BUS 211	Communication in Business and Industry	3
CIS 162	Web Design and Usability	2
CIS 201	Build an Online Storefront Using Miva	6
CIS 202	Integrating Dreamweaver and Fireworks With Online Storefront Using Miva	6
CIS 203	Integrating Dreamweaver and Flash With Online Storefront Using Miva	6
CIS 204	Integrating MS Access With Online Storefront—Beginning	6
CIS 205	Integrating MS Access With Online Storefront—Advanced	6
Total units		38

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

Microcomputer Office and Technical Support Skills

Career Technical (Major Code: 02331)

Trains students for positions as computer and technical support specialists to work in today's highly technical office environment.

BUS 120	Introduction to Business		
	OR		3
BUS 134	eBusiness I: Principles of Electronic Commerce		
BUS 142	Business Ethics—Corporate and Personal	1	
BUS 183	Business Mathematics		3
BUS 211	Communication in Business and Industry		3
	OR		3
BUS 212	Business Communication		
CIS 10A	Microcomputer Repair and Service	2	
CIS 10B	Microcomputer Hardware and Software Upgrade	2	
CIS 101	Introduction to Computers and Information Processing		4
CIS 117	Windows Programming Using Visual BASIC (4)		2–4
	OR		2–4
CIS 146	Introduction to Structure Query Language (SQL) (2)		
CIS 133	Advanced Microcomputer Spreadsheets Software	1	
CIS 135	Advanced Microcomputer Database Software—Access		1
CIS 139	Windows Environments	1	
CIS 150	Introduction to Telecommunication and the Internet		1
CIS 152	Using HTML to Create World Wide Web Pages on the Internet		1
CIS 165	JavaScript Programming	3	
CIS 290–291	Work Experience CIS Applications I–II (2–4)		2–4
Total units			30–34

*To earn an associate degree, additional general education and graduation requirements must be completed.
See page 35.*

Certificates of Achievement

CIS—Computer Programming With an Emphasis on Applications—Basic

Career/Technical (Major Code: 02274)

Provides training in the theory and practice of computer programming emphasizing business and computer applications. Prepares students for employment as entry-level programmers or programmer aides and provides a foundation for students who wish to prepare for a career in the field of information technology.

BUS 70	Keyboarding I	1
CIS 101	Introduction to Computers and Information Processing	4
CIS 106	Programming Logic and Design	3
CIS 115	Introduction to Programming Using C++	4
CIS 130	Microcomputer Disk Operating System	1
CIS 146	Introduction to Structure Query Language (SQL)	2
CIS 167	Quality Assurance and Software Testing	3
CIS 226	Operating Systems and Command Languages	3
Total units		21

CIS—Computer Programming With an Emphasis on Applications—Advanced

Career/Technical (Major Code: 02275)

Provides training in the theory and practice of computer programming emphasizing business and computer applications. Prepares students for employment as beginning- to intermediate-level programmers and provides a foundation for students who wish to transfer to a four-year university to study for a career in informational technology (IT).

BUS 210	Business English		
	OR		3
BUS 211	Communication in Business and Industry		
	OR		
BUS 212	Business Communication		
CIS 101	Introduction to Computers and Information Processing		4
CIS 106	Programming Logic and Design		3
CIS 115	Introduction to Programming Using C++		4
CIS 130	Microcomputer Disk Operating System		1
CIS 146	Introduction to Structured Query Language (SQL)		2
CIS 167	Quality Assurance and Software Testing		3
CIS 226	Operating Systems and Command Languages		3
CIS 290–291	Work Experience CIS Applications I–II (2–4)	2–4	
CIS 239	Project Management		3

Select one of the following groups:

Group A—Open Source

CIS 108	PHP (Personal Home Page) and MySQL (6)		11
CIS 153	Internet Programming Using Java/J++ (4)		
CIS 155	Interactive Web Pages With Perl (1)		

Group B—Microsoft

CIS 117	Windows Programming Using Visual BASIC (4)		12
CIS 139	Windowing Environments (1)		
CIS 166	C# Programming (3)		
CIS 262	Graphical User Interface (GUI) Programming Using C++ (4)		

Total units 39–42

CIS—eCommerce Emphasis—Basic

Career/Technical (Major Code: 02072)

BUS 134	eBusiness 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		3
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		3
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 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 155	Interactive Web Pages With Perl	1
CIS 157A	Web Authoring: Introduction to Macromedia Dreamweaver	4
CIS 158	Imaging for the World Wide Web (Photoshop and ImageReady)	3
CIS 250	Web Page Scripting	1
CIS 252	Advanced Multimedia for the Internet	4
Total units		15

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 155	Interactive Web Pages With Perl	1
CIS 157A	Web Authoring: Introduction to Macromedia Dreamweaver	4
CIS 158	Imaging for the World Wide Web (Photoshop and ImageReady)	3
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 Post-production and Special Effects	3
Plus Common Core courses for Computer Information Systems		15
Total units		39

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 Common Core courses for 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 Computer Information Systems		15
Total units		44

CIS—Microcomputer Applications Emphasis—Basic

Career/Technical (Major Code: 02337)

BUS 70	Keyboarding I *	1
BUS 120	Introduction to Business	3
CIS 10A	Microcomputer Repair and Service	2
CIS 121B	Word Processing—Microsoft Word	1
CIS 122B	Spreadsheet Software—Excel	1
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		13

* 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 121B	Word Processing—Microsoft Word	1
CIS 122B	Spreadsheet Software—Excel	1
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 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 290–291	Work Experience CIS Applications I–II (2–4)	3
Plus Common Core courses for 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	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	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 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 courses listed below: 8

CIS 111	Structured Programming Using BASIC (4)	
CIS 117	Windows Programming Using Visual BASIC (4)	
CIS 153	Internet Programming Using Java/J++ (4)	
Plus Common Core courses for Computer Information Systems		15
Total units		46

Recommended Electives: CIS 133, 137; MATH 140.

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 (Personal Home Page) 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 ActionScript	6
CIS 162	Web Design and Usability	2
Total units		14

CIS—Web Flash Developer and Gaming Animator

Career/Technical (Major Code: 02134)

BUS 134	eBusiness I: Principles of Electronic Commerce	3
BUS 211	Communication in Business and Industry	3
CIS 108	PHP (Personal Home Page) and MySQL	6
CIS 124	Web Imaging With Fireworks	6
CIS 125	Flash Motion Graphics	6
CIS 126	Advanced Flash ActionScript	6
CIS 162	Web Design and Usability	2
Total units		32

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 Web Design Using Director	4
CIS 162	Web Design and Usability	2
Total units		10

CIS—Web Site Designer and Developer

Career/Technical (Major Code: 02122)

BUS 134	eBusiness I: Principles of Electronic Commerce	3
BUS 211	Communication in Business and Industry	3
CIS 108	PHP (Personal Home Page) and MySQL	6
CIS 109	Linux Operating System and Apache Web Server	6
CIS 123	Web Publishing With Dreamweaver	6
CIS 124	Web Imaging With Fireworks	6
CIS 162	Web Design and Usability	2
Total units		32

CIS—Web Site eCommerce Administrator

Career/Technical (Major Code: 02128)

BUS 134	eBusiness I: Principles of Electronic Commerce	3
BUS 211	Communication in Business and Industry	3
CIS 108	PHP (Personal Home Page) and MySQL	6
CIS 109	Linux Operating System and Apache Web Server	6
CIS 123	Web Publisher With Dreamweaver	6
CIS 162	Web Design and Usability	2
CIS 201	Build an Online Storefront Using Miva	6
CIS 202	Integrating Dreamweaver and Fireworks With Online Storefront Using Miva	6
CIS 203	Integrating Dreamweaver and Flash With Online Storefront Using Miva	6
Total units		44

CIS—Web Storefront Builder Using Miva—Basic

Career/Technical (Major Code: 02124)

BUS 134	eBusiness I: Principles of Electronic Commerce	3
CIS 162	Web Design and Usability	2
CIS 201	Build an Online Storefront Using Miva	6
CIS 202	Integrating Dreamweaver and Fireworks With Online Storefront Using Miva	6
Total units		17

CIS—Web Storefront Builder Using Miva—Advanced

Career/Technical (Major Code: 02126)

BUS 134	eBusiness I: Principles of Electronic Commerce	3
BUS 211	Communication in Business and Industry	3
CIS 162	Web Design and Usability	2
CIS 201	Build an Online Storefront Using Miva	6
CIS 202	Integrating Dreamweaver and Fireworks With Online Storefront Using Miva	6
CIS 203	Integrating Dreamweaver and Flash With Online Storefront Using Miva	6
CIS 204	Integrating MS Access With Online Storefront—Beginning	6
CIS 205	Integrating MS Access With Online Storefront—Advanced	6
Total units		38

Microcomputer Office and Technical Support Skills—Basic

Career/Technical (Major Code: 02139)

Designed to provide entry-level computer support skills for the automated office environment.

CIS 10A	Microcomputer Repair and Service	2
CIS 10B	Microcomputer Hardware and Software Upgrade	2
CIS 92	Software Technology for the Workplace (3)	3–4
OR		
CIS 101	Introduction to Computers and Information Processing (4)	1
CIS 139	Windowing Environments	
CIS 150	Introduction to Telecommunication and the Internet	1
Total units		9–10

Microcomputer Office and Technical Support Skills—Advanced

Career/Technical (Major Code: 02141)

Covers advanced computer and technical skills required to support new technologies in today's business office environment.

BUS 210	Business English	
	OR	3
BUS 211	Communication in Business and Industry	
	OR	
BUS 212	Business Communication	
CIS 117	Windows Programming Using Visual BASIC (4)	
	OR	2-4
CIS 146	Introduction to Structure Query Language (SQL) (2)	
CIS 133	Advanced Microcomputer Spreadsheets Software	1
CIS 135	Advanced Microcomputer Database Software—Access	1
CIS 152	Using HTML to Create World Wide Web Pages on the Internet	1
CIS 165	JavaScript Programming	3
CIS 290-291	Work Experience CIS Applications I-II (2-4)	2-4
Plus completion of the courses required for the Microcomputer Office and Technical support—Basic		9-10
Total units		22-27

Computer Information Systems Courses

CIS 10A.

Microcomputer Repair and Service

2 units

Lecture 1.5 hours, laboratory 1.5 hours

Offered: Variable

Fee: \$1. 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 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: RDG 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: \$3. 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 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 108.**PHP (Personal Home Page) and MySQL**

6 units

Grade only**Lecture 5 hours, laboratory 5 hours****Offered:** Variable

Fee: \$1. 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: \$1. 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 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: \$1. 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 or 106, or equivalent**Lecture 3 hours, laboratory 3 hours****Offered:** Variable

Fee: \$1. Introduces C++ programming methods using structured and object-oriented methodology. Covers topics including C++ language syntax, data types, pointers, functions, structures, and introduction to classes. [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: \$1. Introduces programming methods using Visual BASIC (VB.NET). Covers topics including the VB.NET Integrated Development Environment, VB.NET syntax and programming constructs of decision making, data types, events, forms, controls, and object-oriented programming techniques. [D; CSU]

CIS 121B.**Word Processing—Microsoft Word**

1 unit

Recommended Preparation: CL 120 or equivalent; RDG 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: \$1. Covers lecture and hands-on introduction to applications of microcomputer word processing, including basic text editing and document formatting in simple business documents. Focuses on software package Microsoft Word for Windows for IBM PCs and compatible personal computers. [D; CSU]

CIS 122B.**Spreadsheet Software—Excel**

1 unit

Recommended Preparation: CL 120 or equivalent**Lecture 1 hour, laboratory .5 hour****Offered:** Variable

Fee: \$1. Introduces 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: \$1. 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: \$1. 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: \$1. 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: \$1. 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: \$1. 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: \$1. Introduction to the concepts used with Disk Operating System (DOS) on a micro-computer. DOS directories, subdirectories, and DOS supplemental programs. [D; CSU]

CIS 133.**Advanced Microcomputer Spreadsheets Software**

1 unit

Recommended Preparation: CIS 122B or equivalent**Lecture .5 hour, laboratory 1 hour****Offered:** Fall, Spring

Fee: \$1. Covers intermediate and advanced spreadsheet software concepts and techniques. Includes advanced capabilities of the spreadsheet software. The software package is Excel. [D; CSU]

CIS 134.**Microcomputer Database Software—Access**

1 unit

Recommended Preparation: CL 120 or equivalent; RDG 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: \$1. 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; RDG 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: \$1. 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 104 or equivalent**Lecture 3 hours, laboratory 3 hours****Offered:** Variable

Fee: \$1. Learn how businesses and other organizations use electronic commerce and how to work with interdisciplinary team effort in justifying, designing, implementing, maintaining, enhancing, and evaluating electronic initiatives. (Same as BUS 137.) [D; CSU]

CIS 137.**Advanced Word Processing Software**

1 unit

Recommended Preparation: CIS 121B or equivalent**Lecture .5 hour, laboratory 1 hour****Offered:** Fall, Spring

Fee: \$2. Includes the 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 spell check and thesaurus via the computer. [D; CSU]

CIS 139.**Windowing Environments**

1 unit

Recommended Preparation: CIS 130 or equivalent**Lecture 1 hour, laboratory .5 hour****Offered:** Variable

Fee: \$1. Introduces students to the Microsoft Windows environment. Emphasizes 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: \$1. 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: \$1. 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: CIS 130 or 139 or equivalent***Lecture 2 hours, laboratory 3 hours****Offered:** Variable

Fee: \$1. Focuses on the fundamentals of computer internetworking. Includes cabling, network topology, electrical considerations, the Open System Interconnection (OSI) reference model, Internet Protocol (IP) addressing, bridges, switches, hubs, and routers. Introduces the first in a four-course sequence that prepares the students for 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: \$1. Covers local area network fundamentals. Includes router fundamentals, router setup and configuration, network management, routing and routed protocols, and network troubleshooting. Introduces the second course in a four-course sequence that qualifies the student to take the Cisco Certified Network Associate (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: \$1. Focuses on configuration of routers for various industry standard protocols. Covers segmentation of Local Area Networks (LANs) using bridges, routers, and switches as well as virtual LANs, fast ethernet, cut-through and store, and forward LAN switching. Introduces the third course in a four-course Cisco Certified Network Associate (CCNA) certification 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: \$1. Emphasizes configuration of wide area network services. Covers frame relays techniques, features, and terms, as well as frame relay router configuration and monitoring, Integrated Services Digital Network (ISDN), and point-to-point protocol. Requires completion of 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: \$1. 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 or equivalent***Lecture 2 hours, laboratory 3 hours****Offered:** Variable

Fee: \$1. Students learn how deploy security techniques on the Cisco Internetwork Operating System (IOS) to protect network resources and mitigate network threats. Prepares students to take the Securing Cisco IOS Networks (SECUR) exam, which is one in a series of five exams that lead to the Cisco Security Specialist certification. [D; CSU]

CIS 150.**Introduction to Telecommunications and
the Internet**

1 unit

Lecture .5 hour, laboratory 1 hour**Offered:** Variable

Fee: \$1. 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 hours, laboratory 1 hour**Offered:** Variable

Fee: \$1. 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 106 and 115, or equivalent***Lecture 3 hours, laboratory 3 hours****Offered:** Variable

Fee: \$1. 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 155.**Interactive Web Pages With Perl**

1 unit

*Recommended Preparation: CIS 115 or equivalent***Lecture 1 hour, laboratory .5 hour****Offered:** Variable

Fee: \$1. 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 hours, laboratory 3 hours**Offered:** Variable

Fee: \$1. 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 and ImageReady)**

3 units

Lecture 2 hours, laboratory 3 hours**Offered:** Variable

Fee: \$1. Hands-on application of Adobe Photoshop and ImageReady, industry standards in digital images for print and the Web. Techniques for creating and adapting images focusing on specific file formats. Modification utilities for transparent and animated GIF. Image sampling, quantizing 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: \$1. 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. [D; CSU]

CIS 159B.**Advanced Web Design Using Director**

4 units

*Prerequisite: CIS 159A or equivalent***Lecture 3 hours, laboratory 3 hours****Offered:** Variable

Fee: \$1. 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: \$1. 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 images effectively, and publicizing the site. [D; CSU]

CIS 165.**Javascript Programming**

3 units

*Recommended Preparation: CIS 101 or 106 or equivalent***Lecture 2.5 hours, laboratory 2.5 hours****Offered:** Fall

Introduces student to JavaScript programming focusing on creating interactive Web pages. Emphasizes integration with Hypertext Markup Language (HTML), writing and calling JavaScript functions, event handling, and arrays. Creates a variety of effects and how to apply skills to common business situations. [D; CSU]

CIS 166.**C# Programming**

3 units

*Recommended Preparation: CIS 101 or 106 or equivalent***Lecture 2.5 hours, laboratory 2.5 hours****Offered:** Variable

Introduces C# programming methods using Visual C# .NET. Includes C# syntax and programming constructs of decision making, data types, member methods and properties using an object oriented approach to development, and introduction to user defined classes. [D; CSU]

CIS 167.**Quality Assurance and Software Testing**

3 units

*Recommended Preparation: CIS 101 or 106 or equivalent***Lecture 2.5 hours, laboratory 2.5 hours****Offered:** Variable

Introduces software testing techniques. Covers topics including test design, test management, testing tools requirements modeling, and automated tests suites. [D; CSU]

CIS 201.**Build an Online Storefront Using Miva**

6 units

*Recommended Preparation: CIS 101 or equivalent***Lecture 5 hours, laboratory 5 hours****Offered:** Variable

Fee: \$1. Focuses on building a complete online store using Miva and support software. Designed to train students to process orders, collect payments, lease a Web domain, develop Web presence strategies, and become aware of how to maintain a secure Web site. [D; CSU]

CIS 202.**Integrating Dreamweaver and Fireworks With Online Storefront Using Miva**

6 units

*Recommended Preparation: CIS 201 or equivalent***Lecture 5 hours, laboratory 5 hours****Offered:** Variable

Fee: \$1. Specifically designed for the small business that wishes to use Macromedia's Dreamweaver and Fireworks to develop professional Miva storefront Web sites. Covers the tips and tricks needed to use these products effectively. [D; CSU]

CIS 203.**Integrating Dreamweaver and Flash With Online Storefront Using Miva**

6 units

*Recommended Preparation: CIS 201 or equivalent***Lecture 5 hours, laboratory 5 hours****Offered:** Variable

Fee: \$1. Designed for the small business that wishes to use Macromedia's Dreamweaver and Flash to develop professional Miva Storefront Web sites. Covers the tips and tricks needed to use these products effectively. [D; CSU]

CIS 204.**Integrating MS Access With Online Storefront—Beginning**

6 units

Recommended Preparation: CIS 101 or equivalent**Lecture 5 hours, laboratory 5 hours****Offered:** Variable

Fee: \$1. Focuses on the Microsoft Office Specialist skills required for certification on the core level for Access within the Office XP suite. Emphasis on creating and using databases, creating and modifying tables and queries, viewing and organizing information, and defining relationships. [D; CSU]

CIS 205.**Integrating MS Access with Online Storefront—Advanced**

6 units

Recommended Preparation: CIS 204 or equivalent**Lecture 5 hours, laboratory 5 hours****Offered:** Variable

Fee: \$1. Trains students to create an online Storefront and Web-enabled database using MS Access and Dreamweaver tools. The user learns the steps required in setting up a database on the college's server and designing Web pages in Dreamweaver to interact with the database. [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: \$1. 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 in 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: \$1. 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 239.**Project Management**

3 units

Prerequisite: BUS 71 or equivalent*Recommended Preparation:* CIS 133 or equivalent**Lecture 3 hours, laboratory 1 hour****Offered:** Variable

Trains students to successfully manage projects working alone or with a team—an essential skill in today's job market and often the impetus for future job promotions. (Same as BUS 239.) [D; CSU]

CIS 244A.**Building Cisco Scalable Networks**

4 units

Grade only*Limitation on enrollment:* Students who have successfully completed CIS 144C or have a valid CCNA certification or equivalent**Lecture 3 hours, laboratory 3 hours****Offered:** Variable

Fee: \$1. 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 Local Area Networks (LANs) and Wide Area Networks (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: \$1. 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 bandwidth utilization over the remote links. [D; CSU]

CIS 244C.**Building Cisco Multilayer Switched Networks**

3 units

Grade only*Limitation on Enrollment:* Students who have successfully completed CIS 144C or have a valid CCNA certification or equivalent**Lecture 2 hours, laboratory 3 hours****Offered:** Variable

Fee: \$1. Focuses on the techniques and technologies required to build campus networks using Ethernet Local Area Network (LAN) switching. Includes both routing and switching concepts, LAN design, Virtual LANs (VLANs), VLAN Trunking, Spanning Tree, Inter-VLAN routing, Multilayer Switching, Hot Standby Routing Protocol (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: \$1. 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

Limitation on Enrollment: Students who have successfully completed CIS 144C or have a valid CCNA certification or equivalent

Lecture 2 hours, laboratory 3 hours

Offered: Variable

Fee: \$1. Focuses on how to describe, configure, manage, and troubleshoot the Cisco Public Internet Exchange (PIX) Firewall product.

Prepares students to take the Cisco Secure PIX Firewall Advanced (CSPFA) exam, which is one in a series of four exams that leads 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: \$1. 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 250.
Web Page Scripting

1 unit

Lecture 1 hour, laboratory .5 hour

Offered: Variable

Fee: \$1. 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: \$1. 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: \$1. 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

Fee: \$1. 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, or 153, or equivalent

Lecture 3 hours, laboratory 3 hours

Offered: Variable

Fee: \$1. 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: RDG 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

Fee: \$1. 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: \$1. 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: \$1. 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.
Work Experience CIS Applications I

2–4 units

Limitation on Enrollment: Declared Computer Information System major. Student must complete no fewer 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 291.
Work Experience CIS Applications II

2–4 units

Prerequisite: CIS 290 or equivalent

Limitation on Enrollment: Declared Computer Information System major. Student must complete no fewer 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.

Computer Literacy

School of Business and Information Systems

Dean Irma Alvarez, M.A., Office 215, 619-482-6457

Department Chair Joan Stroh, B.A.

Computer Literacy Courses

CL 120.

Computer Literacy

1 unit

Recommended Preparation: *RDG 52 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*

Lecture 1 hour, laboratory .5 hour

Offered: *Variable*

Fee: \$1. 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, spreadsheets, 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]

Computer Science

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. • Shannon Gracey, M.S. • Irene Hollman, M.A. • Alexander Juden, M.S. • Randy Krauss, M.S. • Richard E. Linder, M.S. • Janet Mazzarella, M.A. • Andrew Medin, M.A. • Miriam Rasky, M.A. • Bruce Smith, M.S. • Patrick Staley, M.S. • Romina Tehrani, M.A.

Department Chair Martha Carey, M.S.

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

Below is a sample of the career options available for the computer science major. A few of these require an associate in arts degree, most require a bachelor's 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

Associate in Arts Degree: Transfer Preparation

	Major Code
Computer Science	01180

Associate in Science Degree: Career/Technical

Computer Science	02190
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Certificate of Achievement

Computer Science	02191
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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 bachelor's degree, and some require a graduate-level degree. The coursework for this associate degree prepares students who plan to transfer and major in 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	Data Structures and Algorithms	4
MATH 251	Analytic Geometry and Calculus II	4

Third Semester

MATH 252	Analytic Geometry and Calculus III	4
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Fourth Semester

MATH 254	Introduction to Linear Algebra	3
MATH 260	Discrete Mathematics	3

Total units 27

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 35.

* 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 41 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.

First Semester

MATH 119	Elementary Statistics	4
MATH 130	Introduction to Computer Programming	4

Second Semester

MATH 140	Data Structures and Algorithms	4
MATH 250	Analytic Geometry and Calculus I	5

Third Semester

MATH 230	Assembly Language Programming	4
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Total units 21

Recommended Electives: MATH 251, 252, 253, 254, 260.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

Certificate of Achievement

Computer Science

Career/Technical (Major Code: 02191)

First Semester

MATH 119	Elementary Statistics	4
MATH 130	Introduction to Computer Programming	4

Second Semester

MATH 140	Data Structures and Algorithms	4
MATH 250	Analytic Geometry and Calculus I	5

Third Semester

MATH 230	Assembly Language Programming	4
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Total units 21

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 Inspection is the study of the design, fabrication, codes, inspection processes, and licensure governing the construction of structures, both residential 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

Below is a sample of the options for construction inspection majors. Most require a certificate achievement or an associate in science degree, some require a bachelor's 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

Associate in Science Degree: Career/Technical

	Major Code
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	Specifications 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 Mechanical Construction	3
CI 80	Soils Engineering	3

Fourth Semester

CI 40	Electrical Inspection	3
CI 70	Inspection of Architectural Details and Structural Inspection	3

Total units	24
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Recommended Elective: CI 90.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

Construction Management

Career/Technical (Major Code: 02881)

Designed to provide students 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 Computer Aided Design	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/The Legal Environment of Business	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 35.

Certificates of Achievement

Construction Inspection

Career/Technical (Major Code: 02882)

First Semester

CI 10	Specifications 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 Mechanical Construction	3
CI 80	Soils Engineering	3

Fourth Semester

CI 40	Electrical Inspection	3
CI 70	Inspection of 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 Computer Aided Design	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/The Legal Environment of Business	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

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: Fall

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; and 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: Spring

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: Fall

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]

Cooperative Education

Disability Support Services

Dean Beatrice Zamora-Aguilar, M.S., Office S204F, 619-482-6471

Cooperative Education Courses

CE 290.

Occupational Cooperative Education I

2–4 units

Grade only

Limitation on Enrollment: Declared vocational education major. Student must complete no fewer 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]

CE 291.

Occupational Cooperative Education II

2–4 units

Grade only

Prerequisite: CE 290 or equivalent

Limitation on Enrollment: Declared vocational education major. Student must complete no fewer 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]

CE 292.

Occupational Cooperative Education II

2–4 units

Grade only

Prerequisite: CE 291 or equivalent

Limitation on Enrollment: Declared vocational education major. Student must complete no fewer 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]

CE 293.

Occupational Cooperative Education IV

2–4 units

Grade only

Prerequisite: CE 292 or equivalent

Limitation on Enrollment: Declared vocational education major. Student must complete no fewer 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]

Culinary Arts

School of Business and Information Systems

Dean Irma Alvarez, M.A., Office 215, 619-482-6457

Department Chair Larry Christiansen, J.D.

General Description

The Professional Baking and Pastry program is a specialized culinary arts program offered by Southwestern College with the goal of preparing students for employment in quality establishments in the baking and restaurant industry in San Diego County. The local job market maintains a demand for bakers and pastry chefs due to its constant emphasis on tourism, leisure activity, and hospitality. The curriculum not only provides students with a solid program of study in professional baking and pastry preparation but also establishes a foundation that will help students build a satisfying and lucrative lifetime career in the culinary arts field.

Career Options

Below is a sample of the career options available for culinary arts majors. In addition to employment as bakery chefs, students will be provided with a foundation that will allow them to prepare for careers ranging from entry-level prep cooks to experienced chefs, as well as restaurant and bakery entrepreneurs. Related job titles include baker, baker assistant, bakery production finisher, pastry decorator, caterer, and catering manager. Employment exists in bakeries, large grocery chains, cafes, restaurants, hotels, resorts, childcare facilities, cafeterias, hospitals, food preparation centers, casinos, and catering facilities.

Degree/Certificate Options

Certificate of Achievement

Professional Baking and Pastry

Major Code

01820

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Certificates of Achievement

Professional Baking and Pastry

Career/Technical (Major Code: 01820)

Designed to prepare students to work as pastry chefs in local restaurants, hotels, resorts, bakeries, and catering establishments. Develops skills in food handling, bread and pastry baking, and decoration techniques. Introduces principles of bakery production and cost management. Students are given training to test for San Diego County food handler's certification.

CA 181	Food Service Handling, Safety, and Sanitation	2
CA 182	Introduction to Baking Skills and Culinary Arts	4
CA 183	Food Purchase and Control	3
CA 184	Professional Baking and Pastry Production Basics	4
CA 185	Professional Pastry Design and Decorating	3
CA 186	Professional Baking and Pastry Production—Breads	4
CL 120	Computer Literacy	1
BUS 290–293		
	Work Experience in Business I–IV (1–4)	2
	Total units	23

Recommended Electives: BUS 78, 120, 142, 145, 148, 174; HLTH 204.

Note: For other options in Culinary Arts, see Hospitality, pages 283–289.

Culinary Arts Courses

CA 181. **Food Service Handling, Safety, and Sanitation**

2 units

Lecture 2 hours

Offered: Variable

Introduction to principles of food microbiology, food-borne diseases, regulatory standards, and measures applied for the prevention of food-borne diseases. Course meets current food protection standards for regulatory agents. Prepares students to test for the San Diego County food handler's certification. (ROP Option) [D; CSU]

CA 182. **Introduction to Baking Skills and Culinary Arts**

4 units

Recommended Preparation: CA 181 or equivalent

Lecture 2 hours, laboratory 5 hours

Offered: Variable

Designed to introduce students to basic baking techniques and to the primary ingredients utilized in the baking industry. Course emphasizes weights, measures, and preparation of basic sweet dough, rolls, pie dough, fillings, cakes, and cookies. (ROP option) [D; CSU]

CA 183. **Food Purchase and Control**

3 units

Lecture 3 hours

Offered: Variable

Designed to familiarize students with basic aspects of purchase and cost control within the food service industry. Emphasizes application of skills in forecasting operational needs, menu pricing, food purchasing, and cost control. Students gain essential skills required by employers within the industry. (ROP option) [D; CSU]

CA 184. **Professional Baking and Pastry Production Basics**

4 units

Prerequisite: CA 182 or equivalent

Recommended Preparation: CA 181 or equivalent

Lecture 2 hours, laboratory 5 hours

Offered: Variable

Trains students to prepare ingredients for doughs, pastries, fillings, and toppings using proper weights and measures. Emphasis on proper utilization of baking equipment and evaluation of finished baked products. Regulations that affect the baking industry are reviewed. (ROP option) [D; CSU]

CA 185. **Professional Pastry Design and Decorating**

3 units

Prerequisite: CA 182 or equivalent

Recommended Preparation: CA 181 or equivalent

Lecture 2 hours, laboratory 4 hours

Offered: Variable

Trains students in the application of professional-level pastry design and decoration techniques. Emphasis on the design, decoration, and presentation of traditional pastries and wedding cakes. Students learn to prepare sugar- and chocolate-based icings and fillings. (ROP option) [D; CSU]

CA 186. **Professional Baking and Pastry Production—Breads**

4 units

Prerequisite: CA 182 or equivalent

Recommended Preparation: CA 181 or equivalent

Lecture 2 hours, laboratory 5 hours

Offered: Variable

Advanced techniques utilized in the production, storage, evaluation, and presentation of uniform baked products. Emphasis on American, ethnic, foreign breads, rolls, pastries, and fillings. Students learn bakery layout and assembly techniques designed to maximize efficiency in the production of baked products. (ROP Option) [D; CSU]

CA 295. **Selected Topics in Culinary Arts**

1–3 units

Offered: Variable

Permits students to study relevant subjects within the field of culinary 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.

CA 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 culinary arts of interest to the student and not included in the regular courses offered by the College. [D; *CSU]

* Please refer to the class schedule for specific course description and transferability information.

Dance

School of Arts and Communication

Interim Dean Donna Arnold, M.S., 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

Below is a sample of the career options for the dance major. A few of these require an associate degree, most require a bachelor's 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

Associate in Arts Degree: Transfer Preparation

Dance

Major Code

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	Cultural 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	.5-1
DANC 200	Dance History and Appreciation	3
PSYC 101	General Psychology	3

Total units 17.5-21

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 35.

* 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 41 for further information.**

Dance Courses

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

Lecture 1 hour, laboratory 2–3 hours

Offered: Variable

Introduces the performance-oriented dancer to the elements of choreography through creating and participating in short dance studies. Requires a performance of student choreography at end of semester. [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 administering 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

1 unit

Grade only

Limitation on Enrollment: For students selected by audition

Laboratory 3 hours

Offered: Variable

Emphasizes the learning and rehearsing or choreographing of dances to be selected for performance in annual dance production. Attendance of scheduled rehearsals is required. (Selection by audition.) [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. (Selection by audition.) [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. (Selection by audition.) [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. (Selection by audition.) [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. (Selection by audition.) [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. (Selection by audition.) [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. (Selection by audition.) [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 perform. (Selection by audition.) [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 139.
American Ballroom and Social Dance III
1 unit

Grade only
Prerequisite: DANC 138 or equivalent
Laboratory 3 hours
Offered: Fall, Spring, Summer

Continues the progression to intermediate ballroom dance forms presenting more advanced steps for fox-trot, waltz, current Latin dances, and swing dances. [D; CSU]

DANC 140.
American Ballroom and Social Dance IV
1 unit

Grade only
Prerequisite: DANC 139 or equivalent
Laboratory 3 hours
Offered: Fall, Spring, Summer

Emphasizes the progression to more advanced-intermediate steps for fox-trot, waltz, current Latin, and swing dances. [D; CSU]

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 160.
Lyrical Variations I

1 unit

Grade only

Prerequisite: DANC 116 or equivalent

Laboratory 3 hours

Offered: Fall, Spring, Summer

Emphasizes the study of contemporary neo-classical dance forms, consisting of a barre warm-up and center work, including adage, allegro, jumps, turns, and locomotor movement. [D; CSU]

DANC 170.
Hip Hop I

1 unit

Grade only

Laboratory 3 hours

Offered: Fall, Spring, Summer

Integrates a structured warm-up and theoretical explanation of weight, alignment, rhythmic components, and interpretation of style. Presents urban street dance in a step-by-step format designed to increase stamina, stress motor memory, and teach ethnic style. [D; CSU]

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

Interim Dean Christine M. Perri, M.A., Higher Education Center at National City, 619-216-6665, ext. 6668

Faculty Kesa Hopkins, M.S. • Linda Lukacs, D.D.S.

Acting Director Teresa Poulos, M.Ed.

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 bachelor's 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.
- * 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 General Chemistry	4
CHEM 110	Elementary Organic and Biological Chemistry	4
HLTH 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	2
DH 111B	Dental Radiography Laboratory	1
DH 114	Head and Neck Anatomy	2
DH 117	Medical and Dental Emergencies	1
DH 123	Oral Anatomy and Physiology	1
DH 124	Oral Embryology and Histology	2

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

Summer Session

DH 118	Transitional Clinic	1.5
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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 **54.5**

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 35.

Dental Hygiene Courses

DH 26.

Dental Hygiene Clinical Licensing Exam Preparation

2 units

Grade/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: 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 hour

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

2 units

Grade only

Corequisite: DH 111B

Limitation on Enrollment: Enrollment is limited to those students in the Dental Hygiene program

Lecture 2 hour

Offered: Variable

Emphasizes the principles of dental radiography and clinical application of procedures involved in exposing, processing, interpreting, and evaluating radiographs and images. Includes digital radiology, panorex, intraoral camera, and digital camera. [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 118.
Transitional Clinic

1.5 units

Grade only
Limitation on Enrollment: Enrollment is limited to those students who are enrolled in the Dental Hygiene program
Prerequisite: DH 112 or equivalent
Laboratory 5 hours
Offered: Variable

Focuses on intermediate clinical experience in the treatment of dental hygiene patients to expand on the procedures and techniques presented in Introduction to Clinic (DH 102) and Clinic I (DH 112). Introduces experience with difficult cases. Provides instruction for transition from Clinic I to Clinic II clinical experiences. [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]

Economics

School of Behavioral and Social Sciences

Dean Vira 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

Below is a sample of the career options available for the economics major. A few of these require an associate degree, most require a bachelor's 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

Associate in Arts Degree: Transfer Preparation

Economics

Major Code

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	4
	Foreign Language	10–15
Total units		24–29

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

* 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 41 for further information.**

Economics Courses

ECON 100.

Contemporary Economic Problems

3 units

Recommended Preparation: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Fall, Spring

Presents a 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. (Does 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: RDG 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

Introduces the process of basic economic principles and the theory relating to the structure of our economic institutions, economic problems analysis, and formation of public policy. Emphasizes macro analysis, including gross domestic product (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; RDG 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

Emphasizes a study of the principles and applications regarding specific economic sectors (micro analysis). Includes analyses of various competitive models in a market economy, including the analysis of the theory of the firm, the role of prices, and market failures. Focuses on 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 Joel M. Levine, Ed.D., Office 430F, 619-482-6349

Faculty Randy Beach, M.A. • Cynthia McDaniel, Ed.D. • Leslie Yoder, C.Phil. • Susan Yonker, M.A.

Department Chair Leslie Yoder, C.Phil.

Education Courses

ED 100.

Tutor Training: Level I

2 units

Grade only

Recommended Preparation: RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 2 hours

Offered: Fall, Spring

Introduces effective tutoring principles and strategies. Includes guidelines for tutoring: how to plan, conduct, and evaluate productive tutoring sessions; components of effective intercultural tutoring; and strategies to facilitate student independence in learning. Two on-campus meetings. [D; CSU]

ED 101.

Tutor Training: Level II

2 units

Grade only

Prerequisite: ED 100 or equivalent

Recommended Preparation: RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 2 hours

Offered: Fall, Spring

Focuses on increased understanding of learning and development as applicable to tutoring. Topics include self and identity; motivation; interaction within academic and nonacademic environments; theories of intelligence, learning styles, preferences and strategies; self-regulation, goal setting, and independent learning; mentoring; communication; tutoring in specific subject areas; and critical thinking. [D; CSU]

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 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 education 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.*

Electronics

School of Business and Information Systems

Dean Irma Alvarez, M.A., Office 215, 619-482-6457

Faculty William Snell, M.S. • Russell Bonine

Department Chair Joan Stroh, B.A.

General Description

Electronics is a technological giant among America's businesses and industries. The electronics technician possesses the fundamental knowledge of both the engineer and the craftsperson and thus acts as a liaison between them. Our programs offer opportunities for certification studies in the field. Study in this program consists of building and testing prototype circuits and equipment, modifying electronic apparatus, and interpreting schematic drawings and sketches. Southwestern College is a member of the International Electronics Technicians Articulation Committee (IETAC).

Career Options

Below is a sample of the career options available for the electronics/electrical majors. Most of these require an associate degree, some require a bachelor's degree, and a few require a graduate-level degree: electronics mechanic, automated systems technician, manufacturing specialist, computer support technician, electrical/electronics test technician, engineering assistant, telecommunications engineer and technician, network specialist, sales representative, and service technician. Entry-level career opportunities are available in electric utilities, industrial plants, engineering firms, electrical manufacturing, smart home construction and landscaping businesses, telecommunications, biomedical electronics, and radio and television stations.

Degree/Certificate Options

Major Code

Associate in Science Degree: Career/Technical

Computer Systems Intensive Certification Training Program	02135
Electrical and Electronics Test Technician	A2893
Electronics—Computer Technician Emphasis	02907
Electronics—Electronics Technician Emphasis	02915
Electronics—Internetwork Technician Emphasis	02911
Electronics—Network Administrator Emphasis	02913

Certificates of Achievement

Computer Systems Intensive Certification Training Program	02136
Electrical and Electronic Test Technician—Intermediate	A2894
Electrical Test Technician—Basic	02896
Electronics—Computer Technician Emphasis—Basic	02908
Electronics—Computer Technician Emphasis—Advanced	02916
Electronics—Electronics Technician Emphasis	02917
Electronics—Internetwork Technician Emphasis—Basic	02912
Electronics—Internetwork Technician Emphasis—Advanced	02918
Electronics—Network Administrator Emphasis—Basic	02914
Electronics—Network Administrator Emphasis—Advanced	02919
Microsoft Certified Systems Intensive Training—Basic	02137
Microsoft Certified Systems Intensive Training—Advanced	02138

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

Computer Systems Intensive Certification Training Program

Career/Technical (Major Code: 02135)

Reviews basic and advanced computer repair, operating systems, networking basics and server systems operation, and prepares the students to pass the CompTIA certification. A work experience component allows students to apply classroom knowledge to a job internship.

First Semester

ELEC 147	Computer Repair and Networking	12
ELEC 290	Electronics Cooperative Work Experience I	1

Second Semester

ELEC 148	A+, Network+, and Server+ Certification Preparation	12
ELEC 291	Electronics Cooperative Work Experience II	1

Summer Session

ELEC 149	Microsoft Certified Desktop Support Technician (MCDST) Certification	6
ELEC 292	Electronics Cooperative Work Experience III	1

Total units **33**

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

Electrical and Electronics Test Technician

Career/Technical (Major Code: A2893)

Introduces students to the fields of electricity and electronics and provide a review of related mathematics principles. Discusses personal computers, radio, radar, television, fiber optics, and laser systems. Provides the skills required to assemble various electronics kits. A work experience component allows students to apply classroom knowledge to a job internship.

CIS 92	Software Technology for the Workplace (3)	3-4
OR		
CIS 101	Introduction to Computers and Information Processing (4)	
ELEC 141	Electrical Test Technician	12
ELEC 143	Electronics Test Technician	12
ELEC 290-293	Electronic Cooperative Work Experience I-IV (2-4)	2-4
Total units		29-32

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

Electronics

Career/Technical

Provides students with foundational skills and knowledge required for success in the fields of electrical and electronics.

Common Core

ELEC 141	Electrical Test Technician (12)	12
OR		
ELEC 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)

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 CADD/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 and A+ Certification	4
ELEC 266	Network Management for Technicians	4
Plus Common Core courses for Electronics		12

Total units **31**

*To earn an associate degree, additional general education and graduation requirements must be completed.
See page 35.*

Independent National Certification Objectives

Designed to prepare students to take certification exams:

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 Circuits 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 for Electronics		12

Total units **26**

*To earn an associate degree, additional general education and graduation requirements must be completed.
See page 35.*

Independent National Certification Objectives

Designed to prepare students to take certification exams:

** Certified Electronics Technician (CET)*

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 for Electronics		12
Total units		34

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

Independent National Certification Objectives

Designed to prepare the students to take certification exams in the following areas:

- * *Cisco Certified Network Associate*
- * *A+ Computer Technician*
- * *Certified Electronics Technician (CET)*
- * *Federal Communication Commission General Radio Operator License (GROL)*
- * *Network +*
- * *Server +*
- * *Microsoft Certified Desktop Support Technician (MCDST)*
- * *Microsoft Certified System Administrator (MCSA)*
- * *Microsoft Certified System Engineer (MCSE)*

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 for Electronics		12
Total units		29

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

Independent National Certification Objectives

Designed to prepare students to take certification exams in the following areas:

- * *A+ Computer Technician*
- * *N+ Network Technician*

Certificates of Achievement

Computer Systems Intensive Certification Training Program

Career/Technical (Major Code: 02136)

First Semester

ELEC 147	Computer Repair and Networking	12
ELEC 290	Electronics Cooperative Work Experience I	1

Second Semester

ELEC 148	A+, Network+, and Server+ Certification Preparation	12
ELEC 291	Electronics Cooperative Work Experience II	1

Summer Session

ELEC 149	Microsoft Certified Desktop Support Technician (MCDST) Certification	6
ELEC 292	Electronics Cooperative Work Experience III	1

Total units **33**

Electrical Test Technician—Basic

Career/Technical (Major Code: 02896)

Prepares students to enter the field of electricity as electrical test technicians. Provides a strong foundation for higher-level career positions in the fields of electricity and electronics.

CIS 92	Software Technology for the Workplace (3)	3–4
	OR	
CIS 101	Introduction to Computers and Information Processing (4)	
ELEC 141	Electrical Test Technician	12
Total units		15–16

Electrical and Electronic Test Technician—Intermediate

Career/Technical (Major Code: A2894)

Introduces students to the field of electricity, electronics, and provides a review of related mathematics and electronics principles. Discusses personal computers, radio, radar, television, fiber optics, and laser systems. Covers the skills required to assemble various electronics kits. A work experience component allows students to apply classroom knowledge to a job internship.

CIS 92	Software Technology for the Workplace (3)	3–4
OR		
CIS 101	Introduction to Computers and Information Processing (4)	
ELEC 141	Electrical Test Technician	12
ELEC 143	Electronics Test Technician	12
ELEC 290–293		
Electronic Cooperative Work Experience I–IV (2–4)		2–4
Total units		29–32

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 and 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 CADD/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 and A+ Certification	4
ELEC 266	Network Management for Technicians	4
Plus Common Core courses 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 Circuits 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 for Electronics		12
Total units		26

Electronics—Internetwork Technician Emphasis—Basic

Career/Technical (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
Total units		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 for Electronics		12
Total units		34

Electronics—Network Administrator Emphasis—Basic

Career/Technical (Major Code: 02914)

CIS 140	Computer Networking Software	1
CIS 141A	Computer Networking Systems—Windows	2
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	4
OR		
ELEC 266	Network Management for Technicians	4
Total units		15

Electronics—Network Administrator Emphasis—Advanced

Career/Technical (Major Code: 02919)

CIS 140	Computer Networking Software	1
CIS 141A	Computer Networking Systems—Windows	2
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
Plus Common Core courses for Electronics		12
Total units		29

Microsoft Certified Systems Intensive Training—Basic

Career/Technical (Major Code: 02137)

Provides students with practical training, skills application, and practice on test materials in preparation for passing the Microsoft Certified Systems Administrator (MCSA) and/or the Microsoft Certified Systems Engineer (MCSE) certification tests.

ELEC 149	Microsoft Certified Desktop Support Technician (MCDST) Certification	6
ELEC 150	Microsoft Certified System Administrator (MCSA) Windows 2000	12
	OR	
ELEC 151	Microsoft Certified Systems Engineer (MCSE) Windows Server 2003	12
	Total units	18

Microsoft Certified Systems Intensive Training—Advanced

Career/Technical (Major Code: 02138)

Provides students with practical training, skills application, and practice on test materials in preparation for passing the Microsoft Certified Systems Administrator (MCSA) and the Microsoft Certified Systems Engineer (MCSE) certification tests.

ELEC 149	Microsoft Certified Desktop Support Technician (MCDST) Certification	6
ELEC 150	Microsoft Certified System Administrator (MCSA) Windows 2000	12
ELEC 151	Microsoft Certified System Engineer (MCSE) Windows Server 2003	12
	Total units	30

Electronics Courses

ELEC 10A. **Microcomputer Repair and Service** 2 units

Lecture 1.5 hours, laboratory 1.5 hours
Offered: Fall; Spring

Fee: \$1. 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]

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: \$1. 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: \$1. Covers the maintenance and service of office automation equipment such as scanners, facsimile, laser printers, copiers, CD-ROMs, and modems. Theory, operation, and troubleshooting 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: \$1. 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 20A. **Mobile Electronics Certification I** 2 units

Grade only
Lecture 1.5 hours, laboratory 1.5 hours
Offered: Fall

Fee: \$1. Introduces students to mobile electronics theory and installation. Prepares them to install audio, video, and security systems in automobiles. [ND]

ELEC 20B. **Mobile Electronics Certification II** 2 units

Grade only
Prerequisite: ELEC 20A or equivalent
Lecture 1.5 hours, laboratory 1.5 hours
Offered: Fall

Fee: \$1. Introduces students to basic security system installation methods, remote starter installation, troubleshooting common problems, and mobile video system installation. [ND]

ELEC 100. **Introduction to Electronics** 3 units

Grade only
Lecture 3 hours
Offered: Variable

Fee: \$3. 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 109. **Office Support and Network Technician** 6 Units

Lecture 5 hours, laboratory 5 hours
Offered: Fall, Spring, Summer

Introduces students to entry-level and upgrade training in computer maintenance and support; hardware upgrade and expansion; office equipment maintenance and service; data, voice, and video cabling installation; and customer relations. [D; CSU]

ELEC 111. **DC Circuit Principles** 2 units

Grade only
Lecture 1.5 hours, laboratory 1.5 hours
Offered: Fall

Fee: \$5. 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: \$5. 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: \$18. 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: \$19. 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 or 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: \$17. 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: \$1. 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 141.**Electrical Test technician**

12 units

Recommended Preparation: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 8 hours, laboratory 12 hours**Offered:** Variable

Fee: \$3. Introduces the field of electronics and reviews related mathematics principles. Discusses direct current (DC) and alternating current (AC) components. Various electronic kits will be assembled, reinforcing skills required on the job. [D; CSU]

ELEC 142.**Networking Academy Fundamentals (Cisco Certification Preparation)**

3 units

Recommended Preparation: CIS 130 or 139 or equivalent

Lecture 2 hours, laboratory 3 hours**Offered:** Variable

Fee: \$2. Focuses on the fundamentals of computer internetworking. Includes cabling, network topology, electrical considerations, the Open System Interconnection (OSI) reference model, Internet Protocol (IP) addressing, bridges, switches, hubs, and routers. Introduces the first in a four-course sequence that prepares the students for the Cisco CCNA certification test. (Same as CIS 142.) [D; CSU]

ELEC 143.**Electronics Test Technician**

12 units

Grade only**Prerequisite:** ELEC 141 or equivalent; CIS 92 or 101 or equivalent

Recommended Preparation: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 8 hours, laboratory 12 hours**Offered:** Variable

Covers the basics of solid state and digital devices and discusses and emphasizes advanced topics such as operational amplifiers and microprocessors. Serves as a foundational course for other specialized intensive programs. [D; CSU]

ELEC 144.**Electronic Communications With Certified Electronic Technician Preparation**

6 units

Grade only**Prerequisite:** ELEC 143 or equivalent**Lecture 4 hours, laboratory 6 hours****Offered:** Variable

Fee: \$2. Introduces modern electronic communication concepts, including amplitude modulation, frequency modulation, radio transmitters and receivers, digital communication, multiplexing and demultiplexing, computer networking, transmission lines, antennas and wave propagation, satellite communication, telecommunication systems, and television. Prepares students for the Certified Electronic Technician examination (CET). [D; CSU]

ELEC 145.**Certified Electronics Technician Test Preparation**

1 Unit

Grade only**Lecture .5 hour, laboratory 1.5 hours****Offered:** Variable

Fee: \$1. Prepares student to become a Certified Electronic Technician by reviewing all test objectives and preparing for a national examination. [D; CSU]

ELEC 146.**General Radiotelephone Operator License Preparation**

1 Unit

Grade only**Lecture .5 hour, laboratory 1.5 hours****Offered:** Variable

Fee: \$1. Covers preparation for the Federal Communication Commission (FCC) General Radio Telephone Operator License plus Ship Radar Endorsement. [D; CSU]

ELEC 147.**Computer Repair and Networking**

12 units

Grade only**Lecture 8 hours, laboratory 12 hours****Offered:** Variable

Fee: \$1. Prepares students for work as electronics/computer technicians. Develops skills in basic and advanced computer repair and networking, using a variety of operating systems. [D; CSU]

ELEC 148.**A+, Network+, and Server+ Certification Preparation**

12 units

Grade only**Prerequisite:** ELEC 147 or equivalent**Lecture 8 hours, laboratory 12 hours****Offered:** Variable

Fee: \$3. Prepares students for a career in computers, electronics, and computer networks by teaching concepts that will allow students to troubleshoot various operating systems. Prepares students to test for A+ Hardware, A+ Operating Systems, Network+, and Server+ examinations. [D; CSU]

ELEC 149.**Microsoft Certified Desktop Support Technician (MCDST) Certification**

6 units

Lecture 4 hours, laboratory 6 hours**Offered:** Variable

Fee: \$1. Prepares students to work as computer support technicians. Provides training for students in preparation for taking Microsoft Certified Desktop Support Technician examinations. [D; CSU]

ELEC 150.**Microsoft Certified System Administrator (MCSA) Windows 2000**

12 units

Grade only**Lecture 8 hours, laboratory 12 hours****Offered:** Variable

Fee: \$3. Reviews special techniques and shortcuts utilized by the systems administrator. Provides students with skills in system administration and prepares them to take Microsoft Certified System Administrator (MCSA) examinations. [D; CSU]

ELEC 151.**Microsoft Certified System Engineer (MCSE) Windows Server 2003**

12 units

Lecture 8 hours, laboratory 12 hours**Grade only****Offered:** Fall

Reviews Microsoft Certified System Engineer (MCSE) exams with Windows Server 2003 Operating System. Prepares students to take six different Microsoft examinations. [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: \$19. 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. A hands-on course that 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: \$19. 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: \$19. Covers linear integrated circuits used in industrial and consumer electronic products; operational amplifiers used as active filters, comparators, oscillators, regulators, adders, and subtractors. Laboratory exercises include hands-on breadboarding and testing, as well as computer circuit simulation. [D; CSU]

ELEC 238.**Digital Circuits and System Troubleshooting**

2 units

Grade only**Recommended Preparation:** ELEC 131 or equivalent**Lecture 1.5 hours, laboratory 1.5 hours****Offered:** Variable

Fee: \$1. Covers theory and troubleshooting of digital circuits and systems used in industrial and consumer electronics equipment. Emphasizes test equipment familiarity and usage (digital probes, digital pulsers, oscilloscopes, current tracer, and logic analyzer). [D; CSU]

ELEC 260.**Microcomputer Systems and A+ Certification**

4 units

Grade only**Recommended Preparation:** ELEC 10A and 10B, or equivalent; or ELEC 138 and 152, or equivalent**Lecture 4 hours, laboratory 2 hours****Offered:** Variable

Fee: \$11. 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 263.**Advanced Alternating Current Electronics With MathCAD, MATLAB, Excel, and PSPICE**

2 units

Grade only**Prerequisite:** ELEC 141, 143, and 144, or equivalent**Lecture 1.5 hours, laboratory 1.5 hours****Offered:** Fall, Spring, Summer

Fee: \$1. Reviews and expands the principles of alternating current electronics to computer tools, including MultiSIM, Cadence PSPICE, Microsoft Excel, Mathsoft MathCAD, and MATLAB programs. [D; CSU]

ELEC 265.**Computer Networking for N+ Certification**

4 units

Grade only

Recommended Preparation: ELEC 10A, 10B, and CIS 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

Fee: \$17. 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

Fee: \$17. 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 274.**Electronic Test Instruments With Analog and Digital Measurement Techniques**

2 units

Grade only

Lecture 1.5 hours, laboratory 1.5 hours

Offered: Fall

Fee: \$1. Serves as an advanced guide to electronic test measurements, practices, testing, and measurement techniques. Covers instruments and techniques, analog and digital testing, and low and high frequency measurements. [D; CSU]

ELEC 290.**Electronics Cooperative Work Experience I**

2–4 units

Grade only

Limitation on Enrollment: Declared Electronics major. Student must complete no fewer 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 291.**Electronics Cooperative Work Experience II**

2–4 units

Grade only

Prerequisite: ELEC 290 or equivalent

Limitation on Enrollment: Declared Electronics major. Student must complete no fewer 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 292.**Electronics Cooperative Work Experience III**

2–4 units

Grade only

Prerequisite: ELEC 291 or equivalent

Limitation on Enrollment: Declared Electronics major. Student must complete no fewer 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 293.**Electronics Cooperative Work Experience IV**

2–4 units

Grade only

Prerequisite: ELEC 292 or equivalent

Limitation on Enrollment: Declared Electronics major. Student must complete no fewer 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]

Emergency Medical Technology and Paramedic

Otay Mesa Center

Dean Angelica Suarez, Ph.D.

Faculty Clark Binley, B.S. • Joanne Stonecipher, M.S. • Ronald Ungar, M.A.

Department Chair Paul Azevedo, J.D.

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

Below is a sample of the career options available for the emergency medical or paramedic major. Most require an associate degree, some require a bachelor's 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
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Certificate of Achievement: Career/Technical

Emergency Medical Technology and Paramedic	02341
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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 licensure. 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 Laboratory	2

Summer Session

EMTP 214	Advanced Prehospital Life Support	5
EMTP 214L	Advanced Prehospital Life Support Laboratory	2

Second Semester

EMTP 220	Clinical Practicum for 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	3
OR		3
ENGL 116	Critical Thinking and Composition	3
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 35.

EMTP Credit

Licensed paramedics may be granted college units toward an associate in arts degree if they are currently licensed by 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 Laboratory	2

Summer Session

EMTP 214	Advanced Prehospital Life Support	5
EMTP 214L	Advanced Prehospital Life Support Laboratory	2

Second Semester

EMTP 220	Clinical Practicum for Paramedic	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: RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 5 hours, laboratory 4 hours

Offered: Variable

Fee: \$13. Introduces techniques of emergency care, as outlined by the National Department of Transportation (DOT) curriculum. Emphasizes specific cognitive and manipulative skills. Includes eight-hour hospital emergency department observation, eight-hour ambulance ride-along, and two 8-hour Saturday skills labs. (Repeatable two times.) [D; CSU]

EMT 125.

Wilderness First Responder

4 units

Grade only

Lecture 4 hours, laboratory 1.5 hours

Offered: Variable

Provides curriculum consistent with DOT first responder guidelines. Emphasis on medical care of the sick and injured with a delayed or prolonged transport. Optional certification is available through Wilderness Medical Associates (WMA). [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 and Paramedic Courses

EMTP 115. **Paramedic Preparation** 1.5–2.5 units

Credit/No Credit only

Recommended Preparation: EMT 111 or equivalent; RDG 156 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 1.5–2 hours, laboratory 1–2 hours

Offered: Variable

Prepares the basic emergency medical technician (EMT) to begin paramedic training. Emphasizes review of EMT knowledge, human anatomy and physiology, math calculation, and electrocardiograph (ECG) interpretation. Provides the basic EMT with intensive scenario-based training. Designed to improve student success in paramedic school. (Repeatable two times.) [D; CSU]

EMTP 212. **Fundamentals of Advanced Prehospital Life Support** 5 units

Grade only

Corequisite: EMTP 212L

Limitation on Enrollment: Acceptance into paramedic program

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: \$1. 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 prehospital 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: \$3. 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

Fee: \$3. 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

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 I** 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 II**

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 (NREMT) 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.

Interim Department Chair Jeffrey Veal, Ph.D.

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

Below is a sample of the career options available for the engineering major. A few of these require an associate degree, most require a bachelor's 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 Design and 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 Material	3
MATH 252	Analytic Geometry and Calculus III	4
PHYS 272	Principles of Physics II	4

Fourth Semester

ENGR 204	Engineering Dynamics for Electrical Engineers (1.5)	
	OR	1.5–3
ENGR 251	Engineering Dynamics (3)	
ENGR 270	Electrical Circuits	3
PHYS 274	Principles of Physics III	4
Total units		47.5–49

Recommended Elective: ENGR 101.

*To earn an associate degree, additional general education and graduation requirements must be completed.
See page 35.*

* 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 41 for further information.**

The program outlined fulfills the requirements for San Diego State University and the California State University system.

Engineering Courses

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]

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, and 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; MATH 121 or 250 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 Thevenin's equivalent. Analysis of operational amplifiers, mutual inductance, natural and step response of RC, RL, RLC 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 Joel M. Levine, Ed.D., Office 430F, 619-482-6349

Faculty Randy Beach, M.A. • Francisco Bustos, M.F.A. • Heather Eudy, M.F.A. • Dagmar Fields, M.A. • Steve Kowit, M.F.A. • Philip López, M.A. • Glenda McGee, M.A. • Cynthia McDaniel, Ed.D. • Meredith Morton, M.A. • Kathy Parrish, M.A. • Lynn Pollock, M.A. • Andrew Rempt, M.A. • Tracy Schaelen, M.A. • Claire Villalpando-Utgaard, M.A. • Leslie Yoder, C.Phil. • Susan Yonker, M.A. • Eileen Zamora, M.A.

Department Chair Leslie Yoder, C.Phil.

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

Below is a sample of the career options available for the English major. A few of these require an associate in arts degree, most require a bachelor's 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 bachelor's 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 35.

* 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 41 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, 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 bachelor's 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 35.

* 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 41 for further information.**

English Courses

There are three types of English courses:

- Reading (For reading courses, see page 412–413)
- Written Communication
- Literature

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

Fee: \$1. Focuses on the writing of paragraphs and short essays. Emphasizes the writing process. Includes paragraph structure, sentence construction, editing for grammar usage, and punctuation errors. Integrates reading with writing and critical thinking assignments. [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: \$1. Designed for students who need to fulfill the writing requirement for a certificate program or an associate 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

Fee: \$1. Emphasis on a thorough step-by-step approach to writing finished compositions, the longest being 750 words. Readings included as models for analysis and writing. [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: \$1. 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

Focuses on the theory of writing in the major genres with an emphasis on basic concepts and techniques. Includes the writing and analysis of fiction, drama, and poetry. [D; CSU; UC; CAN-ENGL 6]

ENGL 117B. **Creative Writing II**

3 units

Prerequisite: *ENGL 117A or equivalent*

Lecture 3 hours

Offered: Fall, Spring

Covers intermediate training in theory and practice of writing major creative genres with an 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

Covers the theory and practice of writing the major creative genres with an emphasis on highly accomplished creative writing in fiction, plays, poetry, and creative nonfiction. [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, demanding a high level of skill in the creation of short stories through more rigorous examination of elements of plot, character, scene, and theme. Focuses on students' individual interests with emphasis on well-crafted stories, extensive rewriting, and 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: Creative Nonfiction I

3 units

Recommended Preparation: ENGL 115 or equivalent

Lecture 3 hours

Offered: Fall, Spring

Focuses on the theory of writing creative nonfiction with an emphasis on basic concepts and techniques. Includes the writing and/or analysis of creative nonfiction: the memoir; the personal essay; literary journalism; cultural criticism; autoethnography; and feature articles, including travel, science, music, or nature writing. [D; CSU]

ENGL 175B.
Advanced Creative Writing: Creative Nonfiction II

3 units

Prerequisite: ENGL 175A or equivalent

Lecture 3 hours

Offered: Fall, Spring

Focuses on the theory of writing creative nonfiction with an emphasis on intermediate concepts and techniques. Includes the writing and/or analysis of creative nonfiction: the memoir; the personal essay; literary journalism; cultural criticism; autoethnography; and feature articles, including travel, science, music, or nature writing. [D; CSU]

ENGL 175C.
Advanced Creative Writing: Creative Nonfiction III

3 units

Prerequisite: ENGL 175B or equivalent

Lecture 3 hours

Offered: Fall, Spring

Focuses on the theory of writing creative nonfiction with an emphasis on advanced concepts and techniques. Includes the writing and/or analysis of creative nonfiction: the memoir; the personal essay; literary journalism; cultural criticism; autoethnography; and feature articles, including travel, science, music, or nature writing. [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]

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 ENGL 116 and specialized literature classes.

[D; CSU; UC]

ENGL 225.**Introduction to Children's Literature**

3 units

Recommended Preparation: ENGL 115 and 220, 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 115 and 220, or equivalent; or ENGL 116 or equivalent**Lecture 3 hours****Offered:** Variable

Exploration of world literature from the earliest texts through the 1600s, 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 115 and 220, 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 240.**English Literature I**

3 units

Recommended Preparation: ENGL 115 and 220, 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 115 and 220, or equivalent; or ENGL 116 or equivalent**Lecture 3 hours****Offered:** Variable

Survey of 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 115 and 220, 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 115 and 220, or equivalent; or ENGL 116 or equivalent**Lecture 3 hours****Offered:** Variable

Survey of American literature from the end of the 1800s 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 115 and 220, or equivalent; or ENGL 116 or equivalent**Lecture 3 hours****Offered:** Variable

Surveys literature written in the twentieth and early twenty-first century (not limited to English-language literature), including significant movements and seminal authors. Focuses on the relationship between literary movements, influential writers, and the cultural climate of this time period. [D; CSU; UC]

ENGL 256.**Introduction to Shakespeare**

3 units

Recommended Preparation: ENGL 115 and 220, 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 115 and 220, 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 115 and 220, 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 115 and 220, or equivalent; or ENGL 116 or equivalent**Lecture 3 hours****Offered:** Variable

Examines cultural diversity as expressed in literature. Explores the role of race, ethnic identity, class, gender, and sexual orientation in identity formation, evaluating the collision/interaction between cultures. Includes, but is not limited to, works from the Americas, Pacific Rim, Middle East, and Africa. [D; CSU; UC]

ENGL 271.**Latin American Literature**

3 units

Recommended Preparation: ENGL 115 and 220, 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 115 and 220, 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 274.**Literature of the Border and Baja California**

3 units

Recommended Preparation: ENGL 115 and 220, or equivalent; or ENGL 116 or equivalent**Lecture 3 hours****Offered:** Variable

Surveys colonial and contemporary literature from the border and Baja, Mexico. Focuses 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 115 and 220, or equivalent; or ENGL 116 or equivalent**Lecture 3 hours****Offered:** Variable

Surveys literature by culturally diverse women. Includes, but is not limited to, writers such as Toni Morrison, Leslie Marmon Silko, Amy Tan, Dorothy Allison, and Isabele Allende. Focuses on women's lives from a variety of genres concerning issues of race, class, ethnicity, and sexual orientation. [D; CSU; UC]

ENGL 281.**Horror, Madness, and the Macabre**

3 units

Recommended Preparation: ENGL 115 and 220, 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]

English Miscellaneous Courses

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 Joel M. Levine, Ed.D., Office 430F, 619-482-6349

Faculty Surian Figueroa, M.A. • Patricia Kelly, M.A. • Alison MacArthur, M.A. • Robin McCubbin, M.Ed. • Andrew MacNeill, M.A. • Daniel Moody, M.A. • Jorge Pérez, M.A. • Eliana Santana, M.A. • Angelina Stuart, M.A.

Department Chair Andrew MacNeill, 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 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 courses is determined by the ESL Assessment Process. Students may enter at the beginning, intermediate, or advanced levels.

First Semester

ESL 20	English as a Second Language: Grammar I	5
ESL 21	English as a Second Language: Listening and Speaking I	3
ESL 25	English as a Second Language: Writing I	4
Select 3 units from electives		3

Second Semester

ESL 30	English as a Second Language: Grammar II	5
ESL 31	English as a Second Language: Listening and Speaking II	3
ESL 50	English as a Second Language: Reading	2
ESL 103	English as a Second Language: Writing II	4

Third Semester

ESL 40	English as a Second Language: Grammar III	5
ESL 41	English as a Second Language: Listening and Speaking III	3
ESL 52	English as a Second Language: Basic Reading	2
ESL 104	English as a Second Language: Writing III	4

Total units 43

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	Inglés Como Segunda Lengua: Gramática I	5
ESL 21	Inglés Como Segunda Lengua: Hablar y Escuchar I	3
ESL 25	Inglés Como Segunda Lengua: Escritura I	4
Seleccione 3 unidades de las electivas		3

Segundo Semestre

ESL 30	Inglés Como Segunda Lengua: Gramática II	5
ESL 31	Inglés Como Segunda Lengua: Hablar y Escuchar II	3
ESL 50	Inglés Como Segunda Lengua: Lectura	2
ESL 103	Inglés Como Segunda Lengua: Escritura II	4

Tercer Semestre

ESL 40	Inglés Como Segunda Lengua: Gramática III	5
ESL 41	Inglés Como Segunda Lengua: Hablar y Escuchar III	3
ESL 52	Inglés Como Segunda Lengua: Lectura Básica	2
ESL 104	Inglés Como Segunda Lengua: Escritura III	4

Total de Unidades	43
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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 tomar inglés 71, el cual facilita la transición al program regular de inglés.

***Nota:** El programa regular de ESL incluye tres niveles (principiante, intermedio y avanzado) de cursos coordinados en gramática, conversación y composición. Además, se pueden tomar otros cursos especializados para desarrollar destrezas específicas (ESL 15, 16, 17, 115). Los talleres de ESL se ofrecen 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 Preparation: Placement as determined by the Southwestern College ESL Assessment

Recommended Concurrent Enrollment:

ESL 21 and 25

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 Preparation: Placement as determined by the Southwestern College ESL Assessment

Recommended Concurrent Enrollment:

ESL 20 and 21

Lecture 4 hours

Offered: Fall, Spring

Fee: \$1. Provides beginning level ESL students with a basic knowledge of the writing process which includes prewriting communicative activities, writing, editing, and rewriting skills. Emphasis will also be placed on vocabulary, spelling, punctuation, grammar usage, and capitalization. [ND]

ESL 27A.**ESL 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

Integrates the four language skills of listening, speaking, reading, and writing. Supports students who wish to take CD 170 in order to receive a certificate of completion from the Child Development department. Focuses on intermediate low English skills for use in dealing with child development milestones and theories. [ND]

ESL 27B.**ESL for Child Development: Positive Guidance and Observation**

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 that supports students who take CD 180 to receive a certificate from the Child Development department. Focuses on English skills required to explain children's behavior and effective guidance techniques to promote children's self-control, self-esteem, and competence. [ND]

ESL 27C.**ESL for Curriculum I**

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. Supports students who wish to take CD 181 in order to receive a certificate of completion from the Child Development department. Focuses on English skills needed to express reasons and requirements for curriculum and classroom environment.[ND]

ESL 27D.**ESL 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

Integrates the four language skills of listening, speaking, reading, and writing. Supports students who wish to take CD 284 in order to receive a certificate of completion from the Child Development department. Focuses on oral and written English skills needed to interact with parents and community members.[ND]

ESL 30.**English as a Second Language: Grammar II**

5 units

Recommended Preparation: ESL 20 or the equivalent skill level as determined by the Southwestern College ESL Assessment or equivalent

Recommended Concurrent Enrollment: ESL 31, 103, and appropriate reading course

Lecture 5 hours**Offered:** Fall, Spring

Covers the second in 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 40.**English as a Second Language: Grammar III**

5 units

Recommended Preparation: ESL 30 or the equivalent skill level as determined by the Southwestern College ESL Assessment or equivalent

Recommended Concurrent Enrollment: ESL 41 and 104

Lecture 5 hours**Offered:** Fall, Spring

Completes the last in the series of English as a Second Language grammar courses for students at an advanced level. 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: RDG 2

Recommended Concurrent Enrollment: ESL 30

Lecture 2 hours**Offered:** Fall, Spring

Designed to prepare students to enter the developmental reading program by raising their reading proficiency level. Students will work with effective strategies for reading in a second language: word attack skills and vocabulary development, sentence and paragraph content, critical thinking skills, 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. First reading and writing course in a series of two. Integrates language skills. Emphasizes application of reading and writing strategies. Focuses on paragraph development. [ND]

ESL 52.
English as a Second Language:
Basic Reading
2 units

Corequisite: *RDG 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, and writing about reading selections. (Same as RDG 52.) [ND]

ESL 53.
English as a Second Language: Advanced
Reading and Writing
6 units

Recommended Preparation: *ESL 51, ESL/RDG 52, or ESL 103, or equivalent*

Lecture 6 hours

Offered: *Variable*

Second course in a series of two reading and writing courses. Emphasizes application of second language reading and writing strategies. Integrates language skills. Focuses on essay development. [ND]

ESL 103.
English as a Second Language:
Writing II
4 units

Recommended Preparation: *ESL 25 or the equivalent skill level as determined by the Southwestern College ESL Assessment or equivalent*

Recommended Concurrent Enrollment: *ESL 30 and 31*

Lecture 4 hours

Offered: *Fall, Spring*

Fee: \$1. 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 Preparation: *ESL 103 or the equivalent skill level as determined by the Southwestern College ESL Assessment or equivalent*

Recommended Concurrent Enrollment: *ESL 40 and 41*

Lecture 4 hours

Offered: *Fall, Spring*

Fee: \$1. Advanced-level ESL writing course—the last in a series of three. Continued emphasis on prewriting 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
1 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
1 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
1 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/Gramática 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: Evaluación ESL de Southwestern College

Se Recomienda Correoquisito: ESL 21, 25 y un curso apropiado en lectura

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 Correoquisito: 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 correoquisito 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
4 unidades

Se Recomienda: Evaluación ESL de Southwestern College

Se Recomienda Correoquisito: ESL 20 y 21

Teoría 4 horas

Se Ofrece: Otoño, Primavera

Cuota para materiales: \$1. 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.**ESL Para Desarrollo Infantil: Principios 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 Associate Teacher Certificate) pueden inscribirse en esta clase

Lectura 2 horas**Se Ofrece:** Variable

Utiliza las cuatro destrezas lingüísticas: comprensión oral, conversación, lectura y escritura. Prepara a los alumnos que desean tomar el curso CD 170 para recibir un certificado del Departamento de Desarrollo Infantil. Enfatiza el uso del inglés a nivel intermedio bajo necesario para poder hablar de las etapas y las teorías del desarrollo infantil. [ND = Curso no aceptado para graduación o programa.]

ESL 27B.**ESL 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

Utiliza las cuatro destrezas lingüísticas: comprensión oral, conversación, lectura y escritura. Prepara a los alumnos que desean tomar el curso CD 180 para recibir un certificado del Departamento de Desarrollo Infantil. Enfatiza el uso del inglés necesario para poder explicar el comportamiento del niño así como las técnicas conductuales que fomentan el auto control, el auto estima y el aprendizaje de los niños. [ND = Curso no aceptado para graduación o programa.]

ESL 27C.**ESL Para Currículo I**

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

Utiliza las cuatro destrezas lingüísticas: comprensión oral, conversación, lectura y escritura. Prepara a los alumnos que desean tomar el curso CD 180 para recibir un certificado del Departamento de Desarrollo Infantil. Enfatiza el uso del inglés necesario para expresar poder proponer y defender la planeación educativa y el ambiente en le salón de clase preescolar. [ND = Curso no aceptado para graduación o programa.]

ESL 27D.**Inglés Para el Niño, la Familia y la 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

Utiliza las cuatro destrezas lingüísticas: comprensión oral, conversación, lectura y escritura. Prepara a los alumnos que desean tomar el curso CD 284 para recibir un certificado del Departamento de Desarrollo Infantil. Enfatiza el uso del inglés oral y escrito necesario para comunicarse con los padres y con miembros de la comunidad. [ND = Curso no aceptado para graduación o programa.]

ESL 30.**Inglés Como Segunda Lengua: Gramática II**

5 unidades

Se recomienda: ESL 20 ó la aptitud equivalente, conforme a la evaluación ESL de Southwestern College o equivalente

Se recomienda Correoquisito: ESL 31, 103 y un curso apropiado en lectura

Teoría 5 horas**Se Ofrece:** Otoño, Primavera

La segunda parte 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 necesarias 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 Correoquisito: 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: ESL 30 ó la aptitud equivalente, conforme a la evaluación ESL de Southwestern College o equivalente

Se recomienda Correoquisito: ESL 41 y 104

Teoría 5 horas**Se Ofrece:** Otoño, Primavera

La última en una serie de clases de gramática para estudiantes de inglés como segundo idioma 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 Correoquisito: 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

Correoquisito: RDG 2**Se recomienda Correoquisito:** 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 ó equivalente Teoría 6 horas***Se Ofrece:** *Primavera, Otoño*

Curso de lectura y escritura de nivel intermedio. Es la primera clase en una secuencia de dos cursos. El curso enfatiza la integración de destrezas lingüísticas y la aplicación de estrategias de lectura y escritura. Se concentra en el desarrollo del párrafo. [ND = Curso no aceptado para graduación o programa.]

ESL 52.**Inglés Como Segunda Lengua: Lectura Básica**

2 unidades

Correquisito: *RDG 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 RDG 52.) [ND = Curso no aceptado para graduación o programa.]

ESL 53.**Inglés Como Segunda Lengua: Lectura y Escritura Avanzada**

6 unidades

Se Recomienda: *ESL 51, ESL/ENGL 52, o ESL 103, o equivalente***Lectura 6 horas****Se Ofrece:** *Variable*

Segundo curso de lectura y escritura. Continúa con la aplicación de estrategias para el desarrollo de lectura y escritura en la segunda lengua. Integra destrezas lingüísticas. Se concentra en el desarrollo del ensayo. [ND = Curso no aceptado para graduación o programa.]

ESL 103.**Inglés Como Segunda Lengua: Escritura II**

4 unidades

Se Recomienda: *Haber completado satisfactoriamente ESL 25 ó la aptitud equivalente, conforme a la evaluación ESL de Southwestern College***Se Recomienda Correquisito:** *ESL 30 y 31 Teoría 4 horas***Se Ofrece:** *Otoño, Primavera*

Cuota para materiales: \$1. 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: *Haber terminado satisfactoriamente ESL 103 ó la aptitud equivalente, conforme a la evaluación ESL de Southwestern College***Se Recomienda Correquisito:** *ESL 40 y 41 Teoría 4 horas***Se Ofrece:** *Otoño, Primavera*

Cuota para materiales: \$1. 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

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Faculty Marie Vicario-Fisher M.P.H.

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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 and people. 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

Below is a sample of the career options available for the environmental major. Most of these require a certificate or an associate degree, or a bachelor's degree, and a few require a graduate-level degree: field sampling technician, environmental scientist, hazardous materials specialist, pollution control technician, environmental specialist, environmental compliance manager, 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, risk analyst, and industrial hygienist.

Degree/Certificate Options

Associate in Science Degree: Career/Technical

	Major Code
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	4
EHMT 110	Waste Stream Generation, Reduction, and Treatment	3
EHMT 130	Introduction to Toxicants	3
EHMT 150	Waste Management Applications	4
EHMT 200	Environmental Materials Management Applications	4
EHMT 202	Water and Wastewater Management * (Cuyamaca College ENVT 210)	4
EHMT 230	Safety and Emergency Response	4
EHMT 290–293	Environmental Technology Cooperative Work Experience I–IV	2–4
Total units		39–41

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 35.

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 an elective offered at Cuyamaca College, but it is fully articulated with Southwestern College. Students must enroll and register for the class at Cuyamaca College (www.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	Introduction to General Chemistry	4
EHMT 100	Introduction to Environmental Technology	4
EHMT 130	Introduction to Toxicants	3
EHMT 201	Introduction to Industrial Hygiene and Occupational Health	4
EHMT 260	Occupational Safety	3
EHMT 261	Occupational Safety Management	3
EHMT 230	Safety and Emergency Response	4
EHMT 290–293	Environmental Technology Cooperative Work Experience I–IV	4–8
Total units		33–37

Recommended Electives: BIOL 211, 265; MATH 119

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

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)

EHMT 100	Introduction to Environmental Technology	4
EHMT 110	Waste Stream Generation, Reduction, and Treatment	3
EHMT 130	Introduction to Toxicants	3
EHMT 150	Waste Management Applications	4
EHMT 200	Environmental Materials Management Applications	4
EHMT 202	Water and Wastewater Management * (Cuyamaca College ENVT 210)	4
EHMT 230	Safety and Emergency Response	4
Total units		26

* EHMT 202—Water and Wastewater Management is an elective offered at Cuyamaca College, but it is fully articulated with Southwestern College. Students must enroll and register for the class at Cuyamaca College (www.cuyamaca.net).

Occupational Health and Safety

Career/Technical (Major Code: A1974)

EHMT 100	Introduction to Environmental Technology	4
EHMT 130	Introduction to Toxicants	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		18

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

4 units

Lecture 4 hours

Offered: Variable

Emphasizes discussions of human impacts on the natural environment, environmental science and technology, and important environmental regulations. Presents the history of environmental pollution and focuses on legislation, environmental effects, waste treatment techniques, and pollution prevention measures. Includes an introduction to the scientific method using water quality analyses. [D; CSU]

EHMT 110.

Waste Stream Generation, 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

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

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 230.

Safety and Emergency Response

4 units

Recommended Preparation: EHMT 130 or equivalent

Lecture 3 hours, laboratory 3 hours

Offered: Spring

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 290.**Environmental Technology Cooperative Work Experience I**

2–4 units

Grade only

Limitation on Enrollment: Declared Environmental Hazardous Materials Technology major. Student must complete no fewer 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 291.**Environmental Technology Cooperative Work Experience II**

2–4 units

Grade only

Prerequisite: EHMT 290 or equivalent

Limitation on Enrollment: Declared Environmental Hazardous Materials Technology major. Student must complete no fewer 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 292.**Environmental Technology Cooperative Work Experience III**

2–4 units

Grade only

Prerequisite: EHMT 291 or equivalent

Limitation on Enrollment: Declared Environmental Hazardous Materials Technology major. Student must complete no fewer 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 293.**Environmental Technology Cooperative Work Experience IV**

2–4 units

Grade only

Prerequisite: EHMT 292 or equivalent

Limitation on Enrollment: Declared Environmental Hazardous Materials Technology major. Student must complete no fewer 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]

Event and Convention Planning

School of Business and Information Systems

Dean Irma Alvarez, M.A., Office 215, 619-482-6457

Department Chair Larry Christiansen, J.D.

General Description

Hospitality and tourism is a dynamic and growing industry in San Diego County. The industry has many facets, one of which is the area of event and convention planning. Individuals who work in this field coordinate events, both small and large, and are in charge of bringing together the detailed aspects of the event such as food or catering, event theme, travel, and entertainment in coordination with the hotels, convention centers, or other special locations.

The hospitality industry offers individuals great potential for growth and excellent wages. People may enter the field with basic education and training skills such as those provided by the School of Business and Information Systems in our basic and advanced certificate programs.

In addition to these career training programs, a transfer program has been developed for persons who desire to transfer to a four-year institution including San Diego State University or Alliant University at the local level, as well as other institutions at the state and national levels. Transfer students can work toward a bachelor's degree in hospitality and tourism, which is often required for top-level or high executive positions.

Career Options

Below is a sample of the career options available for event and convention planning majors. In addition to employment as event and convention planners, students will be provided with a foundation that will allow them to prepare for careers ranging from entry-level assistants to experienced event planners and managers for major hotels or organizations. Related job titles include meeting planner, wedding planner/coordinator, event marketer, corporate project manager, convention center director, and director of hospitality. Employment exists in hotels, hotel/motel chains, convention centers, casinos, lodges, recreation facilities, food service entities, travel and tourism businesses, cruise ships, and hospitality marketing organizations. Many opportunities also exist for those individuals who wish to become entrepreneurs in the industry and manage their own businesses.

Degree/Certificate Options

Certificates of Achievement

	Major Code
Event and Convention Planning—Basic	02966
Event and Convention Planning—Advanced	02967

Certificates of Achievement

Event and Convention Planning— Basic

Career/Technical (Major Code: 02966)

Prepares students to gain an entry-level position as event, meeting, and convention planners. Provides an overview of the opportunities available in the broad area of hospitality and tourism and prepares students with fundamental skills to gain employment.

CL 120	Computer Literacy	1
CIS 151	Research Using the Internet	1
EVNT 154	Introduction to Event and Convention Planning	3
EVNT 155	Event Marketing	3
EVNT 157	Corporate Event Project Management	3
Total units		11

Event and Convention Planning— Advanced

Career/Technical (Major Code: 02967)

Prepares students to gain an entry-level position as an event, meeting, and convention planner. Provides an overview of the opportunities available in the field and prepares students with fundamental skills to gain employment.

ACCT 7	Basic Business Bookkeeping (3)	
	OR	3–4
ACCT 101	Principles of Accounting I (4)	
BUS 210	Business English	3
BUS 240	Microsoft Outlook	2.5
CIS 122B	Spreadsheet Software—Excel	1
CIS 151	Research Using the Internet	1
CL 120	Computer Literacy	1
EVNT 154	Introduction to Event and Convention Planning	3
EVNT 155	Event Marketing	3
EVNT 157	Corporate Event Project Management	3
BUS 290–293		
	Work Experience in Business I–IV (1–4)	2
	Total units	22.5–23.5

Note: For other options in Event and Convention Planning, see *Hospitality*, pages 283–289.

Event and Convention Planning Courses

EVNT 154.

Introduction to Event and Convention Planning

3 units

Recommended Preparation: BUS 240 or CL 120 or equivalent

Lecture 3 hours

Offered: Variable

Provides students with a basic knowledge of conventions, conferences, and special event planning for the dynamic field of hospitality and tourism. [D; CSU]

EVNT 155.

Event Marketing

3 units

Recommended Preparation: BUS 70, 129, or CL 120, or equivalent

Lecture 3 hours

Offered: Variable

Provides students with fundamental knowledge of marketing events, festivals, conventions, and expositions. Emphasizes how to build a strong client database in the highly competitive and dynamic field of hospitality and tourism. [D; CSU]

EVNT 157.

Corporate Event Project Management

3 units

Recommended Preparation: BUS 70 and 240, or equivalent

Lecture 2 hours, laboratory 2 hours

Offered: Variable

Provides students with fundamental knowledge of the process of corporate event project management. [D; CSU]

EVNT 295.

Selected Topics in Event and Convention Planning

1–3 units

Offered: Variable

Permits students to study relevant topics within the field of event and convention planning. (May be repeated for additional credit with new content.) [D; CSU]

EVNT 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 event and convention planning, 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

Interim Dean Terry Davis, M.H.A., Office 1000K, 619-482-6551

Faculty Duro Agbede, Ph.D. • Edward A. Carberry • John D. Cosentino, M.A. • Paul M. Daniels, M.A. • Karen Cravens, M.A. • Melanie Durkin, M.A. • Robert Flores, M.A. • 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. • Art Stone, M.A. • Mustafa "Cem" Tont, M.A., M.Ed.

Department Chair John Cosentino, 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

Below is a sample of the career options available for the exercise science major. A few of these require an associate degree, most require a bachelor's 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
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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 Arts 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 35.

* 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 through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 41 for further information.**

Certificates 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
ES/T 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.) [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. [D; CSU; UC]

ES/A 110A.

Athletic Strength and Power for Football— Introductory

1 unit

Recommended Preparation: ES/T 114, 115, or 116, or equivalent

Laboratory 3 hours

Offered: Variable

Introduces progressive resistance training, specific to the improvement of muscular strength and power as it relates to explosive ballistic movements for football. Includes introductory proper mechanics of specific lifting exercises, flexibility and calisthenics, as well as maintaining and collecting data on each student's strength and power index. [D; CSU; UC]

ES/A 110B.

Athletic Strength and Power for Football— Beginning

1 unit

Prerequisite: ES/A 110A or equivalent

Laboratory 3 hours

Offered: Variable

Focuses on beginning progressive resistance training, specific to the improvement of muscular strength and power as it relates to explosive ballistic movements for football. Includes beginning proper mechanics of specific lifting exercises, flexibility and calisthenics, as well as maintaining and collecting data on strength and power index. [D; CSU; UC]

ES/A 110C.

Athletic Strength and Power for Football— Intermediate

1 unit

Prerequisite: ES/A 110B or equivalent

Laboratory 3 hours

Offered: Variable

Focuses on intermediate progressive resistance training, specific to the improvement of muscular strength and power as it relates to explosive ballistic movements for football. Includes intermediate proper mechanics of specific lifting exercises, flexibility and calisthenics, as well as maintaining and collecting data on each student's strength and power index. [D; CSU; UC]

ES/A 110D.

Athletic Strength and Power for Football— Advanced

1 unit

Prerequisite: ES/A 110C or equivalent

Laboratory 3 hours

Offered: Variable

Focuses on advanced progressive resistance training, specific to the improvement of muscular strength and power as it relates to explosive ballistic movements for football. Includes advanced proper mechanics of specific lifting exercises, flexibility and calisthenics, as well as maintaining and collecting data on each student's strength and power index. [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.) [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.) [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.) [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, and increased body awareness. (Repeatable three times.) [D; CSU; UC]

ES/A 135ABCD.**Bowling I–III**

1 unit

Laboratory 3 hours*Offered: Variable*

Fee: \$87.50. 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.) [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.) [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.) [D; CSU; UC]

ES/A 147.**Golf I**

.5–1 unit

Grade only**Laboratory 2–3 hours***Offered: Variable*

Fee: \$45. Golf fundamentals including pattern of swings, grip, and stance. Instruction includes club selection, chipping, putting, rules, etiquette, and scoring. [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: \$45. Advanced golf swing fundamentals and skills. Instruction includes advanced chipping techniques, pitching, sand bunker play, rules, and game management. [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: \$45. 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. [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: \$45. 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. [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. [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. [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. [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. [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. [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. [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. [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. [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.) [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. [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. [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. [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. [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.) [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. [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.) [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.) [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. [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. [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. [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. [D; CSU; UC]

ES/A 186ABCD.**Strength and Fitness Training I–IV**

.5–1 unit

Laboratory 2–3 hours**Offered:** Variable

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.) [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. [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. [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. [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. [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.) [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.) [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.) [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.) [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. [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.) [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, noncompetitive 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.) [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.) [D; CSU; UC]

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, and Assessment. Features latest techniques in strength and cardiovascular training. (Repeatable three times.) [D; CSU; UC]

ES/A 223.**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. [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. [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. [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.) [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. [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. [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****Offered:** Variable

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.) [D; CSU; UC]

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. [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. [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.) [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. [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. [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. [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. [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.) [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. [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—Theory Courses

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. [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. [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. [D; CSU; UC]

ES/T 111.

Theory and Application of Conditioning: Baseball 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. [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. [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. [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. [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. [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. [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. [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. [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. [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. [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. [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. [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. [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. [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. [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. [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. [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. [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. [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. [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. [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. [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. [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. [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. [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 thorough review for those intending to teach weight training. Covers anatomy and physiology, training sequences, available equipment, and safety factors including contraindications. [D; CSU; UC]

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. [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. [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. [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. [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. [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. [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. [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 class competition. [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. [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. [D; CSU; UC]

ES/T 204.**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. [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. [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.) [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.) [D; CSU; UC]

ES/T 250.**Prevention and Care of Athletic Injuries**

2 units

Lecture 1 hour, 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. [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.) [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. [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.*

Exercise Science—Limited

Disability Support Services

Director Helen Elias, M.S. Ed., Office S108, 619-482-6512

Department Chair Frank Post, M.S.

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. [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. [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. [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. [D; CSU; UC]

ES/L 106A. **Adapted Flexibility Fitness I**

.5–1 unit

Prerequisite: Level of physical strength and agility to avoid injury to the student and others in course activities

Laboratory 1.5–3 hours

Offered: Variable

Designed to lengthen muscles and increase range of motion. Multiskill-level class with emphasis on stretching and increasing flexibility. Benefits include reducing risk or injury, increasing flexibility, and increasing body awareness. (Repeatable two times.) [D; CSU; UC]

ES/L 106B. **Adapted Flexibility Fitness II**

.5–1 unit

Prerequisite: ES/L 106A and level of physical strength and agility to avoid injury to the student and others in course activities

Laboratory 1.5–3 hours

Offered: Variable

Designed to lengthen muscles and increase range of motion. Multiskill-level class with emphasis on stretching and increasing flexibility. Benefits include reducing risk or injury, increasing flexibility, and increasing body awareness. (Repeatable two times.) [D; CSU; UC]

ES/L 106C.**Adapted Flexibility Fitness III**

.5–1 unit

Prerequisite: ES/L 106B and level of physical strength and agility to avoid injury to the student and others in course activities

Laboratory 1.5–3 hours**Offered:** Variable

Designed to lengthen muscles and increase range of motion. Multiskill-level class with emphasis on stretching and increasing flexibility. Benefits include reducing risk or injury, increasing flexibility, and increasing body awareness. (Repeatable two times.)

[D; CSU; UC]

ES/L 106D.**Adapted Flexibility Fitness IV**

.5–1 unit

Prerequisite: ES/L 106C and level of physical strength and agility to avoid injury to the student and others in course activities

Laboratory 1.5–3 hours**Offered:** Variable

Designed to lengthen muscles and increase range of motion. Multiskill-level class with emphasis on stretching and increasing flexibility. Benefits include reducing risk or injury, increasing flexibility, and increasing body awareness. (Repeatable two times.)

[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.

[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.

[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.

[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.

[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-resistant exercises of strength and flexibility, endurance, and cardiovascular improvement utilizing total body workout in the shallow end of the pool. [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-resistant exercises of strength and flexibility, endurance, and cardiovascular improvement utilizing total body workout in the shallow end of the pool. [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-resistant exercises of strength and flexibility, endurance, and cardiovascular improvement utilizing total body workout in the shallow end of the pool. [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-resistant exercises of strength and flexibility, endurance, and cardiovascular improvement utilizing total body workout in the shallow end of the pool.

[D; CSU; UC]

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. [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.

Farsi

School of Languages and Humanities

Dean Joel M. Levine, Ed.D., Office 430F, 619-482-6349

Department Chair Esther Alonso, M.A.

Farsi Courses

FARS 101.

Elementary Farsi I

5 units

Lecture 5 hours

Offered: Variable

Focuses on basic beginning interpersonal communications. Emphasizes a Farsi-speaker's world-views, behaviors, attitudes, and contributions to the world. Designed for students with very little or no knowledge of Farsi. (Not open to students who speak Farsi fluently.) Equivalent to one year of high school Farsi.

(Formerly FARS 120.) [D; CSU; UC]

FARS 102.

Elementary Farsi II

5 units

Prerequisite: FARS 101 or equivalent

Lecture 5 hours

Offered: Fall, Spring

Focuses on interpersonal communication for intermediate students. Covers grammatical structure and vocabulary necessary to discuss personal relations, travel, health, environment, media, art, and culture. Explores Farsi-speakers' worldviews contributions to the world. (Not intended for students who speak Farsi fluently.) Equivalent to three years high school Farsi.

[D; CSU]

FARS 295.

Selected Topics in Farsi

1–3 units

Offered: Variable

Permits students to study relevant subjects within the field of Farsi. 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.*

FARS 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 Farsi 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.*

Fire Science Technology

Otay Mesa Center

Dean Angelica Suarez, Ph.D., 619-216-6750

Department Chair Paul Azevedo, J.D.

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

Below is a sample of the career options available to the fire science major. Most require a certificate of achievement or an associate in science 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; EMT 100, 111; FS 110, 125, 126, 135, 136, 140, 141, 145, 150, 151, 290–293, 295, 299.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

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; EMT 100, 111; FS 110, 125, 126, 135, 136, 140, 141, 145, 150, 151, 290–293, 295, 299.

Fire Science Technology 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 20.
Fire Apparatus and Equipment
3 units

Recommended Preparation: MATH 35 or equivalent
Lecture 3 hours
Offered: Variable

Emphasizes driving laws, driving technique, construction and operation of pumping engines, ladder trucks, aerial platforms, specialized equipment, apparatus maintenance, and theoretical hydraulic calculations. [D]

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

Provides the components of building construction that relate to fire and life safety. Focuses on firefighter safety. Demonstrates that elements of construction and design of structures are key factors when inspecting buildings, preplanning fire operations, and operating at emergencies. [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, and 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; and 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 144.
Basic Wildland Firefighting Academy

5 units

Lecture 4 hours, laboratory 3 hours

Offered: Variable

Provides theory and application of basic wildland firefighting covering wildland fire behavior, fire suppression, fire safety, and field experience. Students who successfully complete this course will be qualified to suppress wildfires. (Formerly FS 295C.) [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.
Fire Science
Cooperative Work Experience I

2–4 units

Grade only

Prerequisite: FS 101 or equivalent

Limitation on Enrollment: Declared Fire Science major. Students must complete no fewer 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 work experience 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 291.
Fire Science
Cooperative Work Experience II

2–4 units

Grade only

Prerequisite: FS 290 or equivalent

Limitation on Enrollment: Declared Fire Science major. Students must complete no fewer 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 work experience 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 292.
Fire Science
Cooperative Work Experience III

2–4 units

Grade only

Prerequisite: FS 291 or equivalent

Limitation on Enrollment: Declared Fire Science major. Students must complete no fewer 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 work experience 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 293.**Fire Science
Cooperative Work Experience IV**2–4 units

Grade only**Prerequisite:** FS 292 or equivalent**Limitation on Enrollment:** Declared Fire Science major. Students must complete no fewer 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 work experience 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–65.) (May be repeated for additional credit with new content.) [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 Joel M. Levine, Ed.D., Office 430F, 619-482-6349

Faculty Deana Alonso-Post, M.A. • Esther Alonso, M.A. • Margarita Andrade-Robledo, M.A. • Concetta Calandra, M.A. • Nora Corral, M.A. Surian Figueroa, M.A. • Dinorah Guadiana-Costa, M.A. • Andrew MacNeill, M.A. • Eliana Santana, Ed.D. • Angelina Stuart, M.A.

Department Chair Esther Alonso, M.A.

General Description

Language and communication are at the heart of the human experience. Knowing another language gives one the powerful key to successfully communicate with speakers of other languages. Learning another culture prepares us to live in a multicultural world which helps us gain an especially rich preparation for the future. Each language program at Southwestern College is designed to facilitate interaction and communication with speakers of other languages, whether they are across town or across the world.

Career Options

Below is a sample of the career options available to students with fluency in a foreign language. Fluency and intercultural communication skills in a second language enhances opportunities in: government, business, medicine and health care, teaching, technology, the military, social service, law enforcement, communications, fashion, and marketing.

Foreign language courses offered at Southwestern College

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(See separate listing for each language in this catalog)

French

School of Languages and Humanities

Dean Joel M. Levine, Ed.D., Office 430F, 619-482-6349

Faculty Nora Corral, M.A.

Department Chair Esther Alonso, M.A.

General Description

Language and communication are at the heart of the human experience. Knowing another language gives one the powerful key to successfully communicate with speakers of other languages. Learning another culture prepares us to live in a multicultural world which helps us gain an especially rich preparation for the future. Each language program at Southwestern College is designed to facilitate interaction and communication with speakers of other languages, whether they are across town or across the world.

Career Options

Below is a sample of the career options available to students with fluency in a foreign language. Fluency and intercultural communication skills in a second language enhances opportunities in: government, business, medicine and health care, teaching, technology, the military, social service, law enforcement, communications, fashion, and marketing.

Degree/Certificate Options

Associate in Arts Degree: Transfer Preparation

French

Major Code

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; and 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 I 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 35.

* 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 41 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 of 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 of 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 of 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.

Interim Department Chair Jeffrey Veal, Ph.D.

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

Below is a sample of the career options available for the geography major. A few of these require an associate in science degree, most require a bachelor's 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

Certificate of Achievement:

Geographic Information Science—Continuing Students and Working Professionals 01771
Geographic Information Science—GIS Technician 01772

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 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 35.

* 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 41 for further information.**

Certificates of Achievement

Geographic Information Science— Continuing Students and Working Professionals

Career/Technical (Major Code: 01771)

Geographic Information Science (GIS) is a discipline that endeavors to spatially analyze, study, and critically research aspects of our world with the use of innovative tools and techniques that organize and display large amounts of site specific data. Today, a significant need exists within the workforce for personnel trained in the theory and use of GIS software and hardware, particularly within “spatial” disciplines including (but not limited to) geography, geology, environmental science, biology, political science, anthropology, humanities, criminal justice, health, history, education, and military science. The SWC GIS program is designed for three major groups of students: 1) Continuing students seeking training in GIS and geospatial technology for their specific discipline; 2) Working professionals seeking GIS and geospatial technology training for their present job; 3) Students seeking an entry-level technical position in GIS. The SWC GIS program is comprehensive, introducing both GIS concepts and applications. Special emphasis is on hands-on experience with the hardware, software, and techniques employed in science, industry, and academia. The flexibility of our program allows students to complete the majority of their coursework online. Periodic meetings on campus offer students the opportunity to use our professional GIS lab and to collaborate/interact with classmates.

GEOG 150	Introduction to Mapping and Geographic Information Systems	3
GEOG 151	Intermediate GIS—Techniques and Analysis	4
GEOG 152	Advanced GIS—Project Design and Applications	3
Total units		10

Geographic Information Science— GIS Technician

Career/Technical (Major Code: 01772)

Geographic Information Science (GIS) is a discipline that endeavors to spatially analyze, study, and critically research aspects of our world with the use of innovative tools and techniques that organize and display large amounts of site specific data. Today, a significant need exists within the workforce for personnel trained in the theory and use of GIS software and hardware, particularly within “spatial” disciplines including (but not limited to) geography, geology, environmental science, biology, political science, anthropology, humanities, criminal justice, health, history, education, and military science. The SWC GIS program is designed for three major groups of students: 1) Continuing students seeking training in GIS and geospatial technology for their specific discipline; 2) Working professionals seeking GIS and geospatial technology training for their present job; 3) Students seeking an entry-level technical position in GIS. The SWC GIS program is comprehensive, introducing both GIS concepts and applications. Special emphasis is on hands-on experience with the hardware, software, and techniques employed in science, industry, and academia. The flexibility of our program allows students to complete the majority of their coursework online. Periodic meetings on campus offer students the opportunity to use our professional GIS lab and to collaborate/interact with classmates.

GEOG 150	Introduction to Mapping and Geographic Information Systems	3
GEOG 151	Intermediate GIS—Techniques and Analysis	4
GEOG 152	Advanced GIS—Project Design and Applications	3
GEOG 153	GIS Internship	2
Total units		12

Geography Courses

GEOG 100.

Introduction to Geography—Physical Elements

3 units

Recommended Preparation: RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Fall, Spring

Focuses on the physical forces that help shape the landscape. Analysis of Earth's interior and exterior characteristics, including oceanographic, climatic, pedologic, and biographic patterns. Includes map reading and interpretation [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 106.

World Regional Geography

3 units

Grade only

Recommended Preparation: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Variable

Introduction to world geography, focusing on the principles and issues of cultural geography in a regional context. Students will study regional similarities and differences in human ethnicity, language, religion, urbanization and urban systems, political organization, and other cultural components. Analysis and critique of cultural phenomena in a spatial context. [D; CSU; UC]

GEOG 120.

Introduction to Geography: Cultural Elements

3 units

Recommended Preparation: RDG 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: RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Variable

Principles of weather, the worldwide pattern of weather developments, and the resulting climate circumstances. [D; CSU; UC]

GEOG 150.

Introduction to Mapping and Geographic Information

3 units

Recommended Preparation: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 2 hours, laboratory 3 hours

Offered: Variable

Provides a theoretical and practical introduction to geographic information systems (GIS), cartography, and spatial analysis. Includes real-world exercises allowing students from various disciplines to explore the use of GIS for their field of study. Emphasizes the use of industry leading GIS software: Environmental Systems Research Institute (ESRI) ArcGIS. [D; CSU]

GEOG 151.

Intermediate GIS—Techniques and Analysis

4 units

Prerequisite: GEOG 150 or equivalent

Recommended Concurrent Enrollment: GEOG 152

Lecture 3 hours, laboratory 3 hours

Offered: Variable

Covers the fundamentals of data acquisition, database management, and spatial analysis techniques. Includes project design, modeling, accuracy, uncertainty, data creation and conversion, and utilizes remote sensing, photogrammetry, global positioning system (GPS), and web-based data. Provides lab exercises designed to enhance skills in the collection, correction, management, and analysis of data. [D; CSU]

GEOG 152.

Advanced GIS—Project Design and Applications

3 units

Prerequisite: GEOG 150 or equivalent

Recommended Concurrent Enrollment: GEOG 151

Lecture 2 hours, laboratory 3 hours

Offered: Variable

Focuses on the diverse applications of geographic information systems (GIS). Requires students to complete a semester-long GIS project of their choice. Includes project design and development, data acquisition, spatial analysis, project report, and presentation. [D; CSU]

GEOG 153.

GIS Internship

2–4 units

Credit/No Credit only

Prerequisite: GEOG 150 or equivalent

Laboratory 6–12 hours

Offered: Variable

Provides students with the opportunity to apply classroom instruction to real-world GIS problem-solving by working with a government or private agency. Requires supervision of an instructor from the college and an advisor from the agency. [D; CSU]

GEOG 160.**Geography of California**3 units

Recommended Preparation: RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours**Offered:** Variable

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.*

Geology

School of Mathematics, Science, and Engineering

Dean Kathy Tyner, M.S., Office 345, 619-482-6459

Faculty Ken Yanow, M.S., M.A.

Interim Department Chair Jeffrey Veal, Ph.D.

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

Below is a sample of the career options available for the geology major. A few of these require an associate in science degree, most require a bachelor's 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
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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 70-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 35.*

- * 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 41 for further information.**

Geology Courses

GEOL 100.

Principles of Geology

3 units

Recommended Preparation: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Fall, 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 (May be taken previously)

Recommended Preparation: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Laboratory 3 hours

Offered: Fall, Spring

Designed to provide practical application of the scientific method as applied to the geological sciences. The course corresponds to SDSU Geology 101. [D; CSU; UC; CAN-GEOL 2, with GEOL 100]

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

Interim Dean Terry Davis, M.H.A., Office 1000K, 619-482-6551

Faculty Duro Agbede, Ph.D. • John D. Cosentino, M.A. • Karen Cravens, M.A. • Paul M. Daniels, M.A. • Melanie Durkin, M.A. • Robert Flores, M.A. 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. • Art Stone, M.A. • Mustafa "Cem" Tont, M.A.

Department Chair Walt Justice, M.A.

Health Courses

HLTH 101.

Principles of Healthful Living

3 units

Recommended Preparation: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Variable

Addresses contemporary public health issues and development of holistically healthy living. Provides an overview of epidemiology, chronic and infectious diseases, environmental health, injury prevention, chemical dependency, nutrition, health policies and promotion, global health, body composition, fitness, psychological wellness, fertility, sexuality, emergency preparedness, disaster response, conflict resolution, and end of the life cycle. [D; CSU; UC]

HLTH 106.

Healing Touch Level I

1 unit

Grade only

Lecture 1 hour

Offered: Variable

Beginning course of study of complimentary healing which focuses on energy theory and principles and practice of energy-based interventions. Application of techniques to a variety of situations, ranging from self-care to professional use in programs such as health/wellness, stress reduction, rehabilitation, nursing, medicine, hospital, and hospice care. [D; CSU]

HLTH 110.

First Responder

2–3 units

Grade only

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 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

Lecture 3 hours

Offered: Variable

Covers nutrition as applied to the stages of the normal life cycle. Focuses on the basic principles of nutrition, including knowledge of daily nutritional requirements. Emphasizes effects of over and under eating. Includes fitness standards and psychological homeostasis. [D; CSU; UC]

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 Behavioral and Social Sciences

Dean Viara Giraffe, Ph.D., Office 470K, 619-482-6582

Faculty Victor Chavez, M.A. • Rosalinda González, Ph.D. • Barry Horlor, M.A. • Stanley James, M.A. • Jennie L. Padilla, M.A. • Laura Ryan, M.A. Felix Tuyay, M.A.

Department Chair Barry Horlor, 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

Below is a sample of the career options available for the history major. A few of these require an associate in arts degree, most require a bachelor's 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:

18

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 I (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 35.

* 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 41 for further information.**

History Courses

HIST 100. **American Civilization I** 3 units

Recommended Preparation: RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours
Offered: Fall, Spring

Covers American history from the origins of Native Americans to Reconstruction. Emphasizes the contributions made by the diverse peoples around the world to American culture. Includes a study of the Constitution with an emphasis on the Constitutional issues promoting the Civil War. (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: RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours
Offered: Fall, Spring

Covers American history from Reconstruction to the present day. Emphasizes the rise 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: RDG 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: RDG 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: RDG 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: RDG 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: RDG 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 AFRO 110.) [D; CSU; UC]

HIST 111. **African-American History II** 3 units

Grade only
Recommended Preparation: RDG 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 AFRO 111.) [D; CSU; UC]

HIST 112. **Asian-American History I** 3 units

Recommended Preparation: RDG 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: RDG 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, interethnic 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: RDG 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: RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours**Offered:** Fall

Covers the 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. Includes a study of the U.S. Federal Constitution and modern constitutional issues. (Partially fulfills American Institutions requirement at CSU.) [D; CSU; UC]

HIST 122.**Comparative History of the Americas II**

3 units

Recommended Preparation: RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours**Offered:** Spring

Covers the history of the Americas from 1812 to the present with an emphasis on the evolution of American involvement in Canadian, Caribbean, and Latin American affairs. Includes a study of the Constitution of California and the current interactions among the federal, state, and local governments. (Partially fulfills American Institutions requirement at CSU.) [D; CSU; UC]

HIST 132.**Herstory: Women in Historical Studies**

3 units

Recommended Preparation: RDG 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; UC]

HIST 141.**Mexican-American History I**

3 units

Recommended Preparation: RDG 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: RDG 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.

Hospitality and Tourism Management

School of Business and Information Systems

Dean Irma Alvarez, M.A., Office 215, 619-482-6457

Faculty Valerie Grim Suter, M.B.A. • Vern Jorgenson, M.B.A. • Victoria Lopez, J.D. • Yvonne Lucas, M.B.A. • Frank Paiano, M.B.A. • Elizabeth Shapiro, J.D. Gail Stockin, M.A. • Dick Wasson, M.B.A.

Department Chair Larry Christiansen, J.D.

General Description:

Hospitality and tourism is a dynamic and growing industry in San Diego County with many opportunities and career paths for individuals who desire to advance and gain excellent positions in the field. While the field has many facets including recreation and entertainment, it is often divided into four key areas: event, and convention planning; travel and tourism; hotel operations; and culinary arts. The School of Business and Information Systems provides programs for employment training in all four areas at both the entry and management levels. Employment stability and wages vary within each area; however, the most lucrative positions can be found at the supervisory and managerial levels. These positions are often part of a career ladder which allows an entry-level employee to pursue additional education and training to gain positions of greater responsibility and higher wages. With this career ladder in mind, the School of Business and Information Systems has designed both a basic and an advanced certificate to allow students to enter or to advance in the industry. Our School has also designed an associate in science degree that will allow students to continue their studies with the goal of advancing even further within the industry.

In addition to these career training programs, a transfer program has been developed for students who desire to transfer to four-year institutions including San Diego State University and Alliant University at the local level, as well as other institutions at the state and national levels. Transfer students can work toward a bachelor's degree in hospitality and tourism, which is often required for top-level or high executive positions.

Career Options

Below is a sample of the career options available for the hospitality and tourism management areas. Most of these require a certificate or an associate in science degree. The four areas and a few of the job titles that make up the hospitality industry include:

- Travel and Tourism—travel manager, transportation director, travel agent/consultant, tour guide, and travel entrepreneur
- Event and Convention planning—event meeting and convention planner, and events manager/coordinator
- Hotel Operations—hotel operations assistant/manager, room division manager/lodge manager/coordinator
- Culinary Arts—chef's assistant, head chef, restaurant manager, catering manager, and food service manager

Employment can also be found in marketing agencies and organizations, cruise ships, bakeries, restaurants, catering establishments, hotels, convention and meeting centers, recreation and sports centers, and casinos. Opportunities are great for entrepreneurs who develop businesses in the specialty areas of the hospitality and tourism industry.

Degree/Certificate Options

Degree/Certificate Options	Major Code
Associate in Arts Degree: Transfer Preparation	
Hospitality and Tourism Management	02963

Associate in Science Degree: Career/Technical	
Hospitality: Culinary Arts—Baking and Pastry Management	01821
Hospitality: Event and Convention Management	02994
Hospitality: Hotel Operations Management	02991
Hospitality: Travel and Tourism Management	02997

Certificates of Achievement

Hospitality: Culinary Arts—Baking and Pastry Management—Basic	01822
Hospitality: Culinary Arts—Baking and Pastry Management—Advanced	01823
Hospitality: Event and Convention Management—Basic	02995
Hospitality: Event and Convention Management—Advanced	02996
Hospitality: Hotel Operations Management—Basic	02992
Hospitality: Hotel Operations Management—Advanced	02993
Hospitality: Travel and Tourism Management—Basic	02998
Hospitality: Travel and Tourism Management—Advanced	02999

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

Hospitality and Tourism Management

Transfer Preparation (Major Code: 02963)

Designed to prepare students to transfer to various colleges and universities with programs in the dynamic field of hospitality and tourism. Students receive an associate in arts degree from Southwestern College and are able to articulate their basic transfer courses locally with San Diego State University, as well as with other colleges and universities at the local, state, and national levels.

ACCT 101	Principles of Accounting I	4
ACCT 102	Principles of Accounting II—Managerial	4
ACCT 103	Hospitality Management Accounting	4
BUS 140	Business Law/The Legal Environment of Business	3
BUS 212	Business Communication	3
CIS 101	Introduction to Computer and Information Processing	4
ECON 101	Principles of Economics I	3
ECON 102	Principles of Economics II	3
HTM 150	Introduction to Hospitality and Tourism Management	3
MATH 119	Elementary Statistics	4
MATH 120	Calculus for Business Analysis	4
Total units		39

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

- * 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 41 for further information.

Associate in Science Degree

Hospitality: Culinary Arts—Baking and Pastry Management

Career/Technical (Major Code: 01821)

Prepares students with the expertise, commitment, and skills for management, marketing, and operations positions in the food service industry.

ACCT 7	Basic Business Bookkeeping (3)	
OR		3–4
ACCT 101	Principles of Accounting (4)	
BUS 140	Business Law/The Legal Environment of Business	3
BUS 142	Business Ethics—Corporate and Personal	1
BUS 147	Successful Selling Techniques	1
BUS 210	Business English	3
BUS 211	Communication in Business and Industry	
OR		3
BUS 212	Business Communication	
BUS 290–293	Work Experience in Business I–IV (1–4)	2
CA 181	Food Service Handling, Safety, and Sanitation	2
CA 182	Introduction to Baking Skills and Culinary Arts	4
CA 183	Food Purchase and Control	3
CA 184	Professional Baking and Pastry Production Basics	4
CA 185	Professional Pastry Design and Decorating (3)	
OR		3–4
CA 186	Professional Baking and pastry Production—Breads (4)	
CIS 92	Software Technology for the Workplace (3)	
OR		3–4
CIS 101	Introduction to Computers and Information Processing (4)	
EVNT 155	Event Marketing	3
HTM 150	Introduction to Hospitality and Tourism Management	3
HTM 156	Restaurant and Food Service Management	3
Total units		44–47

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

Hospitality: Event and Convention Management

Career/Technical (Major Code: 02994)

Prepares students with the expertise, commitment, and skills for management, marketing, and operations positions in the event and convention planning industry.

ACCT 101	Principles of Accounting I	4
BUS 140	Business Law/The Legal Environment of Business	3
BUS 142	Business Ethics—Corporate and Personal	1
BUS 147	Successful Selling Techniques	1
BUS 150	Principles of Management	3
BUS 210	Business English	3
BUS 211	Communication in Business and Industry	3
	OR	
BUS 212	Business Communication	3
BUS 290–293	Work Experience in Business I–IV (1–4)	2
CIS 92	Software Technology for the Workplace (3)	3–4
	OR	
CIS 101	Introduction to Computers and Information Processing (4)	3–4
CIS 151	Research Using the Internet	1
CA 183	Food Purchase and Control	3
EVNT 154	Introduction to Event and Convention Planning	3
EVNT 155	Event Marketing	3
EVNT 157	Corporate Event Project Management	3
HTM 150	Introduction to Hospitality and Tourism Management	3
HTM 156	Restaurant and Food Service Management	3
Total units		42–43

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

Hospitality: Hotel Operations Management

Career/Technical (Major Code: 02991)

Prepares students with the expertise, commitment, and skills for management, marketing, and operations positions in the hotel/motel industry.

ACCT 101	Principles of Accounting I	4
ACCT 103	Hospitality Management Accounting	4
BUS 140	Business Law/The Legal Environment of Business	3
BUS 142	Business Ethics—Corporate and Personal	1
BUS 147	Successful Selling Techniques	1
BUS 210	Business English	3
BUS 211	Communication in Business and Industry	3
	OR	
BUS 212	Business Communication	3
BUS 290–293	Work Experience in Business I–IV (1–4)	2
CIS 92	Software Technology for the Workplace (3)	3–4
	OR	
CIS 101	Introduction to Computers and Information Processing (4)	3–4
CIS 151	Research Using the Internet	1
EVNT 154	Introduction to Event and Convention Planning	3
EVNT 157	Corporate Event Project Management	3
HTM 150	Introduction to Hospitality and Tourism Management	3
HTM 151	Hotel Operations and Rooms Division Management	3
HTM 156	Restaurant and Food Service Management	3
Total units		40–41

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

Hospitality: Travel and Tourism Management

Career/Technical (Major Code: 02997)

Prepares students for entry-level management positions or advancement in the travel and tourism industry. Emphasis on management responsibilities including operations, marketing, and human resources related to the field.

ACCT 101	Principles of Accounting I	4
BUS 140	Business Law/The Legal Environment of Business	3
BUS 142	Business Ethics—Corporate and Personal	1
BUS 147	Successful Selling Techniques	1
BUS 150	Principles of Management	3
BUS 210	Business English	3
BUS 211	Communication in Business and Industry	3
	OR	3
BUS 212	Business Communication	3
CIS 92	Software Technology for the Workplace (3)	3–4
	OR	3–4
CIS 101	Introduction to Computers and Information Processing (4)	4
CIS 151	Research Using the Internet	1
EVNT 155	Event Marketing	3
HTM 150	Introduction to Hospitality and Tourism Management	3
T&T 160	Travel Destinations—Wester Hemisphere	3
T&T 162	Travel Destinations—Europe, Africa, and the Middle East	3
T&T 164	Travel Destinations—South Pacific, Asia, Orient	3
T&T 258	Worldwide Cruise Travel	3
T&T 260	Basic Computer Applications in Travel and Tourism	2
T&T 272	Travel Agency Operations	3
T&T 290–293	Cooperative Work Experience in Travel and Tourism I–IV (2–4)	2
Total units		47–48

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

Certificates of Achievement

Hospitality: Culinary Arts—Baking and Pastry Management—Basic

Career/Technical (Major Code: 01822)

Prepares students with the expertise, commitment, and skills for entry-level operations positions in the food service industry.

BUS 210	Business English	3
CA 181	Food Service Handling, Safety, and Sanitation	2
CA 182	Introduction to Baking Skills and Culinary Arts	4
CA 183	Food Purchase and Control	3
CA 184	Professional Baking and Pastry Production Basics	4
CA 185	Professional Pastry Design and Decorating (3)	3–4
	OR	3–4
CA 186	Professional Baking and Pastry Production—Breads (4)	4
CIS 92	Software Technology for the Workplace (3)	3–4
	OR	3–4
CIS 101	Introduction to Computers and Information Processing (4)	4
HTM 150	Introduction to Hospitality and Tourism Management	3
Total units		25–27

Hospitality: Culinary Arts—Baking and Pastry Management—Advanced

Career/Technical (Major Code: 01823)

Prepares students with the expertise, commitment, and skills for management, marketing, and operations positions in the food service industry.

[ACCT 7	Basic Business Bookkeeping (3)		
	OR		3–4
[ACCT 101	Principles of Accounting (4)		
BUS 140	Business Law/The Legal Environment of Business	3	
BUS 142	Business Ethics—Corporate and Personal	1	
BUS 147	Successful Selling Techniques	1	
BUS 210	Business English	3	
[BUS 211	Communication in Business and Industry		
	OR		3
[BUS 212	Business Communication		
BUS 290–293	Work Experience in Business I–IV (1–4)	2	
CA 181	Food Service Handling, Safety, and Sanitation	2	
CA 182	Introduction to Baking Skills and Culinary Arts	4	
CA 183	Food Purchase and Control	3	
CA 184	Professional Baking and pastry Production Basics	4	
[CA 185	Professional Pastry Design and Decorating (3)		
	OR		3–4
[CA 186	Professional Baking and Pastry Production—Breads (4)		
[CIS 92	Software Technology for the Workplace (3)		
	OR		3–4
[CIS 101	Introduction to Computers and Information Processing (4)		
EVNT 155	Event Marketing	3	
HTM 150	Introduction to Hospitality and Tourism Management	3	
HTM 156	Restaurant and Food Service Management	3	
	Total units		44–47

Hospitality: Event and Convention Management—Basic

Career/Technical (Major Code: 02995)

Prepares students with the expertise, commitment, and skills for entry-level operations positions in the event and convention planning industry.

[ACCT 7	Basic Business Bookkeeping (3)		
	OR		3–4
[ACCT 101	Principles of Accounting I (4)		
BUS 210	Business English	3	
[CIS 92	Software Technology for the Workplace (3)		
	OR		3–4
[CIS 101	Introduction to Computers and Information Processing (4)		
CIS 151	Research Using the Internet	1	
CA 183	Food Purchase and Control	3	
EVNT 154	Introduction to Event and Convention Planning	3	
EVNT 155	Event Marketing	3	
EVNT 157	Corporate Event Project Management	3	
HTM 150	Introduction to Hospitality and Tourism Management	3	
	Total units		25–27

Hospitality: Event and Convention Management—Advanced

Career/Technical (Major Code: 02996)

Prepares students with the expertise, commitment, and skills for management, marketing, and operations positions in the event and convention planning industry.

ACCT 101	Principles of Accounting I	4
BUS 140	Business Law/The Legal Environment of Business	3
BUS 142	Business Ethics—Corporate and Personal	1
BUS 147	Successful Selling Techniques	1
BUS 150	Principles of Management	3
BUS 210	Business English	3
BUS 211	Communication in Business and Industry	3
	OR	
BUS 212	Business Communication	3
BUS 290–293	Work Experience in Business I–IV (1–4)	2
CIS 151	Research Using the Internet	1
CIS 92	Software Technology for the Workplace (3)	3–4
	OR	
CIS 101	Introduction to Computers and Information Processing (4)	3
CA 183	Food Purchase and Control	3
EVNT 154	Introduction to Event and Convention Planning	3
EVNT 155	Event Marketing	3
EVNT 157	Corporate Event Project Management	3
HTM 150	Introduction to Hospitality and Tourism Management	3
HTM 156	Restaurant and Food Service Management	3
Total units		42–43

Hospitality: Hotel Operations Management—Basic

Career/Technical (Major Code: 02992)

Prepares students with the expertise, commitment, and skills for management, marketing, and operations positions in the hotel industry.

ACCT 101	Principles of Accounting I	4
BUS 210	Business English	3
CIS 92	Software Technology for the Workplace (3)	3–4
	OR	
CIS 101	Introduction to Computers and Information Processing (4)	3
CIS 151	Research Using the Internet	1
EVNT 154	Introduction to Event and Convention Planning	3
HTM 150	Introduction to Hospitality and Tourism Management	3
HTM 151	Hotel Operations and Rooms Division Management	3
HTM 156	Restaurant and Food Service Management	3
Total units		23–24

Hospitality: Hotel Operations Management—Advanced

Career/Technical (Major Code: 02993)

Prepares students with the expertise, commitment, and skills for management, marketing, and operations positions in the hotel/motel industry.

ACCT 101	Principles of Accounting I	4
ACCT 103	Hospitality Management Accounting	4
BUS 140	Business Law/The Legal Environment of Business	3
BUS 142	Business Ethics—Corporate and Personal	1
BUS 147	Successful Selling Techniques	1
BUS 210	Business English	3
BUS 211	Communication in Business and Industry	3
	OR	
BUS 212	Business Communication	3
BUS 290–293	Work Experience in Business I–IV (1–4)	2
CIS 92	Software Technology for the Workplace (3)	3–4
	OR	
CIS 101	Introduction to Computers and Information Processing (4)	3
CIS 151	Research Using the Internet	1
EVNT 154	Introduction to Event and Convention Planning	3
EVNT 157	Corporate Event Project Management	3
HTM 150	Introduction to Hospitality and Tourism Management	3
HTM 151	Hotel Operations and Rooms Division Management	3
HTM 156	Restaurant and Food Service Management	3
Total units		40–41

Hospitality: Travel and Tourism Management—Basic

Career/Technical (Major Code: 02998)

Prepares students with the expertise, commitment, and skills for entry-level operations positions in the travel and tourism industry.

BUS 210	Business English	3
CIS 92	Software Technology for the Workplace (3)	
	OR	3–4
CIS 101	Introduction to Computers and Information Processing (4)	
CIS 151	Research Using the Internet	1
HTM 150	Introduction to Hospitality and Tourism Management	3
T&T 160	Travel Destinations—Western Hemisphere	3
T&T 164	Travel Destinations—South Pacific, Asia, Orient	3
T&T 258	Worldwide Cruise Travel	3
T&T 260	Basic Computer Applications in Travel and Tourism	2
Total units		21–22

Hospitality: Travel and Tourism Management—Advanced

Career/Technical (Major Code: 02999)

Prepares students with the expertise, commitment, and skills for management, marketing, and operations positions in the travel and tourism industry.

ACCT 101	Principles of Accounting I	4
BUS 140	Business Law/The Legal Environment of Business	3
BUS 142	Business Ethics—Corporate and Personal	1
BUS 147	Successful Selling Techniques	1
BUS 150	Principles of Management	3
BUS 210	Business English	3
BUS 211	Communication in Business and Industry	
	OR	3
BUS 212	Business Communication	
CIS 92	Software Technology for the Workplace (3)	
	OR	3–4
CIS 101	Introduction to Computers and Information Processing (4)	
CIS 151	Research Using the Internet	1
EVNT 155	Event Marketing	3
HTM 150	Introduction to Hospitality and Tourism Management	3
T&T 160	Travel Destinations—Western Hemisphere	3
T&T 162	Travel Destinations—Europe, Africa, and the Middle East	3
T&T 164	Travel Destinations—South Pacific, Asia, Orient	3
T&T 258	Worldwide Cruise Travel	3
T&T 260	Basic Computer Applications 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)	2
Total units		47–48

Hospitality and Tourism Management Courses

HTM 150.

Introduction to Hospitality and Tourism Management

3 units

Grade only

Recommended Preparation: *RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*

Lecture 3 hours

Offered: *Variable*

Introduces students to the hospitality and tourism industry. Explores the inner workings of the various components that comprise the industry—lodging, foodservice, transportation, travel, events, and entertainment. Focuses on actual industry examples, case studies, guest speakers, and site visits are used extensively. [D; CSU]

HTM 151.

Hotel Operations and Rooms Division Management

3 units

Recommended Preparation: *RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*

Lecture 3 hours, laboratory 1 hour

Offered: *Variable*

Analyzes hotel operations, including front office, rooms management, guest services, housekeeping, reservations, sales and marketing, human resources, food and beverage control, engineering/maintenance, and security. Explores the interaction of key areas of hotel operations in relationship to customer service. [D; CSU]

HTM 156.

Restaurant and Food Service Management

3 units

Recommended Preparation: *ACCT 101 of equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*

Lecture 3 hours

Offered: *Variable*

Provides students with the basic skills and concepts required for success in the field of restaurant and food operation management. [D; CSU]

HTM 295.

Selected Topics in Hospitality and Tourism Management

1–3 units

Offered: *Variable*

Permits students to study relevant topics within the field of hospitality and tourism management. (May be repeated for additional credit with new content.) [D; CSU]

HTM 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 hospitality and tourism management which is of particular interest to the student and not included in regular courses of the College. [D; CSU]

Humanities

School of Languages and Humanities

Dean Joel M. Levine, Ed.D., Office 430F, 619-482-6349

Faculty Peter Bolland, M.A. • Alejandro Orozco, M.A. • Vivien Vaughan, M.F.A.

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

Below is a sample of the career options available in the humanities major. A few of these require an associate degree, most require a bachelor's 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 bachelor's 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 35.

- * 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 41 for further information.**

Humanities Courses

HUM 101.

Humanities Through the Arts I

3 units

Recommended Preparation: RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Variable

Emphasizes an historically-organized, integrated content that analyzes music, visual arts, drama, literature, architecture, philosophy, and history. Includes the use of slides, films, and selections from original texts of literature and philosophy from pre-history through the Renaissance. [D; CSU; UC]

HUM 102.

Humanities Through the Arts II

3 units

Recommended Preparation: RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Variable

Emphasizes an historically-organized, integrated content analyzing music, visual arts, drama, literature, architecture, philosophy, and history. Includes the use of slides, films, and selections from original texts of literature and philosophy from the Baroque through the Contemporary. [D; CSU; UC]

HUM 104.

Introduction to Humanities: Arts and Ideas

3 units

Lecture 3 hours

Offered: Fall, Spring

Introductory course that analyzes, interprets, and 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.

World Mythology

3 units

Recommended Preparation: RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Variable

Analysis of myths representing 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 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.

Insurance

School of Business and Information Systems

Dean Irma Alvarez, M.A., Office 215, 619-482-6457

Faculty Frank Paiano, M.B.A.

Department Chair Larry Christiansen, J.D.

General Description

The Insurance program was developed as part of a statewide grant in collaboration with key members of the insurance industry in consultation with the California Insurance Commissioner's Office. The \$106 billion California insurance industry as a whole is one of the largest, most diverse employers in the state. The industry has a strong record of advancement for its employees and provides excellent opportunities for entrepreneurs and businesses to enter the field. The industry continues to grow in San Diego County creating a demand for entry-level as well as experienced workers to enter and advance in the field.

Career Options

Students gain a solid foundation to enter and grow within the industry in a wide variety of career positions. The field offers great opportunities for those interested in developing their skills and advancing to higher-level positions. These include the job entry-level areas of insurance underwriter, sales agent, claims adjuster/examiner, investigator, as well as insurance claims and policy processing clerk.

Degree/Certificate Options

Associate in Science Degree: Career/Technical

Insurance	02181
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Certificates of Achievement

Insurance—Basic	02182
Insurance—Advanced	02183

Major Code

Associate in Science Degree

Insurance

Career/technical (Major Code: 02181)

Provides training for students who wish to enter the diverse field of insurance. Prepares students with a solid foundation to enter and grow within the insurance industry in a wide variety of career positions.

ACCT 7	Basic Business Bookkeeping (3)	
	OR	3–4
ACCT 101	Principles of Accounting I (4)	
BUS 120	Introduction to Business	
	OR	3
BUS 134	eBusiness I: Principles of Electronic Commerce	
BUS 121	Financial Planning and Money Management	3
BUS 140	Business Law/The Legal Environment of Business	3
BUS 147	Successful Selling Techniques	1
BUS 150	Principles of Management	3
BUS 152	Human Relations in Organizations	3
BUS 211	Communication in Business and Industry	
	OR	3
BUS 212	Business Communication	
BUS 290–293	Work Experience in Business I–IV (1–4)	2
CIS 101	Introduction to Computers and Information Processing	4
INS 100	Introduction to Insurance	1
INS 103	Insurance Code and Ethics	1
INS 121	Principles of Property and Liability Insurance	3
INS 122	Personal Insurance	3
INS 123	Commercial Insurance	3
LDR 148	Business Presentation Skills—Bilingual (English/Spanish)	
	OR	2
LDR 149	Business Presentation Skills	
Total units		41–42

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

Certificates of Achievement

Insurance—Basic

Career/Technical (Major Code: 02182)

Provides training for students who wish to enter the diverse field of insurance. Prepares students with a solid foundation to enter and grow within the insurance industry in a wide variety of career positions.

INS 100	Introduction to Insurance	1
INS 103	Insurance Code and Ethics	1
INS 121	Principles of Property and Liability Insurance	3
INS 122	Personal Insurance	3
INS 123	Commercial Insurance	3
Total units		11

Insurance—Advanced

Career/Technical (Major Code: 02183)

Provides training for students who wish to enter the diverse field of insurance. Prepares students with a solid foundation to enter and grow within the insurance industry in a wide variety of career positions.

ACCT 7	Basic Business Bookkeeping (3)	
	OR	3-4
ACCT 101	Principles of Accounting I (4)	
BUS 140	Business Law/The Legal Environment of Business	3
BUS 147	Successful Selling Techniques	1
BUS 210	Business English	
	OR	3
BUS 211	Communication in Business and Industry	
	OR	
BUS 212	Business Communication	
BUS 290-293	Work Experience in Business I-IV	2-4
CIS 92	Software Technology for the Workplace (3)	
	OR	3-4
CIS 101	Introduction to Computers and Information Processing (4)	
INS 100	Introduction to Insurance	1
INS 103	Insurance Code and Ethics	1
INS 121	Principles of Property and Liability Insurance	3
INS 122	Personal Insurance	3
INS 123	Commercial Insurance	3
Total units		26-30

Insurance Courses

INS 100.
Introduction to Insurance
1 unit

Lecture 1 hour
Offered: Variable

Covers the basics of the modern insurance system, how insurance products and services are distributed to the consumer, how insurance company departments function, the importance of the risk management process, civil laws and torts, insurance contracts, and how reinsurance is used to create an insurance company and insure high liability limits. [D; CSU]

INS 103.
Insurance Code and Ethics
1 unit

Lecture 1 hour
Offered: Variable

Addresses the ethical considerations one must support in order to succeed in the insurance industry and presents the ethical issues with which employees working in insurance offices will be involved. [D; CSU]

INS 121.
Principles of Property and Liability Insurance
3 units

Lecture 3 hours
Offered: Variable

Covers the fundamentals of property and liability insurance, including types of insurers, institutions that provide insurance, how it is regulated, and measurements of financial performance. Includes insurance contracts, loss exposure, and risk management. [D; CSU]

INS 122.
Personal Insurance
3 units

Lecture 3 hours
Offered: Variable

Covers the fundamentals of insurance, including automobile, homeowners, fire, earthquake, marine, personal property, liability, life, and health insurance. [D; CSU]

INS 123.
Commercial Insurance
3 units

Lecture 3 hours
Offered: Variable

Covers the whole of commercial insurance, including business income insurance, commercial crime insurance, equipment breakdown insurance, inland and ocean marine insurance, commercial general liability insurance, commercial automobile insurance, business owners policies, farm insurance, workers compensation and employers liability insurance, and other miscellaneous coverage. [D; CSU]

INS 295.
Selected Topics in Insurance
1–3 units

Offered: Variable

Permits students to study relevant subjects within the field of insurance. 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.*

INS 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 insurance of particular interest to the student and not included in regular courses of the College. [D; CSU]

Italian

School of Languages and Humanities

Dean Joel M. Levine, Ed.D., Office 430F, 619-482-6349

Faculty Concetta Calandra, M.A. • Surian Figueroa, M.A.

Department Chair Esther Alonso, M.A.

Italian Courses

ITAL 101.

Elementary Italian I

5 units

Lecture 5 hours

Offered: Fall, Spring

Focuses on basic beginning interpersonal communication. Covers structures and vocabulary necessary to talk about family, friends, activities, obligations, school, travel, and food. Introduces students to Italian culture. Designed for students with little or no knowledge of Italian. Equivalent to one year of high school Italian. (Formerly ITAL 120.) [D; CSU; UC; CAN-ITAL 2; ITAL 120 + ITAL 130 = CAN ITAL SEQ A]

ITAL 102.

Elementary Italian II

5 units

Prerequisite: ITAL 101 or equivalent

Lecture 5 hours

Offered: Fall, Spring

Continuation of Italian 101. Designed to further enable students to carry out basic interpersonal communication and acquire the structures and vocabulary necessary to talk about childhood activities, daily routine, vacations, weather, seasons, holidays, Italian cuisine and future plans. Introduces students to cultural readings. Equivalent to two years high school Italian. (Formerly ITAL 130.) [D; CSU; UC; CAN-ITAL 4; ITAL 120 + ITAL 130 = CAN ITAL SEQ A]

ITAL 201.

Intermediate Italian I

5 units

Prerequisite: ITAL 102 or equivalent

Lecture 5 hours

Offered: Variable

Provides extensive review of all first-year structures. Focuses on interpersonal communication for intermediate students. Covers grammatical structures and vocabulary necessary to discuss traditions, newspapers and magazines, interpersonal relationships, beliefs and stereotypes, music, and technology. Introduces readings reflecting Italian culture. Equivalent to three years of high school Italian. (Formerly ITAL 220.) [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 Joel M. Levine, Ed.D., Office 430F, 619-482-6349

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 speakers' 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 speakers' 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 JPN 120 with emphasis on spoken Japanese. Introduction to KANJI (Chinese characters). Equivalent to three years of 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, M.S. Office 702B, 619-482-6372

Faculty Max Branscomb, M.S.

Department Chair Linda Hensley, M.A.

General Description

Journalism is the study of mass communication media such as newspapers, television, radio, magazines, and Internet. Journalism is a cornerstone of American society and a guardian of this nation's freedoms. 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

Below is a sample of the many career options available for the journalism major. A few of these require an associate degree, most require a bachelor's degree, and some require a graduate-level degree. Possible career options include 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 bachelor's 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	4
Select 6 units	from electives	6

Total units 19

Electives: ART 121, 159; TELE 110, 180.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

* 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 41 for further information.**

Journalism Courses

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**

4 units

Recommended Preparation: JOUR 151 or equivalent

Lecture 3 hours, laboratory 4 hours

Offered: Fall, Spring

Fee: \$10. Practical application in newspaper work. Apply skills and materials learned in news writing and photojournalism to produce the College newspaper, the *Southwestern Sun*. [D; CSU]

JOUR 201. **Campus Newspaper Production II**

4 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 is on writing, photography, and layout for the College newspaper, the *Southwestern Sun*. [D; CSU]

JOUR 202. **Campus Newspaper Production III**

4 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 201. Emphasis on writing, photography, and layout for the College newspaper, the *Southwestern Sun*. Includes newspaper management. [D; CSU]

JOUR 203. **Campus Newspaper Production IV**

4 units

Grade only

Prerequisite: JOUR 202 or equivalent

Lecture 3 hours, laboratory 4 hours

Offered: Fall, Spring

Builds on skills obtained in Journalism 202. Emphasizes writing, photography, and layout for the college newspaper, the *Southwestern Sun*. [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/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

Below is a sample of the 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 bachelor's 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

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 Construction: Concrete and 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	Principles of 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 101; 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 35.

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 Covers	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

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 101.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

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 (Drought Tolerant)	3
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 35.

* Students may select any of the plant identification classes, to total 6 units

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 Crop Production	1.5
LNT 144	House Plant Care and Production	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: 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.

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 for Floral Design	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 (1)	
	OR	1–2
LNT 147	Wedding Design (2)	
CE 290–293	Occupational Cooperative Education I–IV	8
	Plus Common Core courses for Nursery Occupations	16.5
Total units		36.5–37.5

Recommended Elective: BUS 174.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

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 (4)	
	OR	4
BIOL 100	Principles of Biology (3)	
BIOL 101	Principles of Biology Laboratory (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, 117, 125, 126, 127, 143.

* 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 35.

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	Principles of 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 101; 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 Covers	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

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 Skills	1
LNT 126	Landscape Construction: Fence, Deck, and Lumber Skills	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 and Ground 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 (Drought Tolerant)	
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.

* Students may select any of the plant identification classes, to total 6 units

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 Crop Production	1.5
LNT 144	House Plant Care and Production	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)

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 for Floral Design	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 (1)	
	OR	1–2
LNT 147	Wedding Design (2)	
CE 290–293	Occupational Cooperative Education I–IV	8
	Plus Common Core courses for Nursery Occupations	16.5

Total units **36.5–37.5**

Recommended Elective: BUS 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 Laboratory (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, 117, 125, 126, 127, 143.

* 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: LNT 120 and 128, or equivalent

Lecture 2 hours, laboratory 3 hours

Offered: Fall, Spring

Provides instruction in the use of computer-aided design as applied to the landscape architecture field. Focuses on the creation of landscape, sprinkler, and three-dimensional plans using the software AutoCAD. Includes instruction on drawing and editing commands, file management, and printing options. (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 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 2 hours, laboratory 3 hours**Offered:** Fall

Fundamentals 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 greenhouse 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.
House Plant Care and Production

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 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]

Law Enforcement Training Academy

Otay Mesa Center

Dean Angelica Suarez, Ph.D., 619-216-6750

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

Below is a sample of the career options available for the administration of justice or criminal justice majors. Many require an associate degree, some require a bachelor's 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

Certificates of Achievement

Law Enforcement Training Academy

Major Code

02711

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Certificate of Achievement

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

Leadership

School of Business and Information Systems

Dean Irma Alvarez, M.A., Office 215, 619-482-6457

Note: For Leadership and Supervision programs, see pages 130–133.

Leadership Courses

LDR 148.

Business Presentation SKills—Bilingual (English/Spanish)

2 units

Recommended Preparation: BUS 120 and 148, or equivalent; SPAN 215 or equivalent

Lecture 2 hours

Offered: Variable

Introduces oral and written bilingual English and Spanish presentation styles and techniques utilized in business settings such as job interviews, meetings, panel discussions, presentations, and seminars. Develops techniques and methods to create powerful and effective presentations to an individual, group, and/or panel in both English and Spanish. [D; CSU]

LDR 149.

Business Presentation Skills

2 units

Recommended Preparation: BUS 120 and 148, or equivalent

Lecture 2 hours

Offered: Variable

Introduces oral and written presentation styles and techniques utilized in business settings such as job interviews, meetings, panel discussions, presentations, and seminars. Develops techniques and methods to create powerful and effective presentations to an individual, group, and/or panel. [D; CSU]

LDR 150.

Leadership and Supervision

3 units

Recommended Preparation: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Variable

Designed to provide skills in supervision, leadership, and team development. Includes employee motivation, delegation, empowerment, and team facilitation. Emphasis on successful supervisory theories and techniques. Students carry out the task of analyzing a real or hypothetical work team to determine the best strategies to improve the team's effectiveness. [D; CSU]

LDR 151.

Human Resources and Labor Relations

3 units

Recommended Preparation: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Variable

Designed to examine successful human resource concepts and techniques utilized by supervisors and managers. Includes selecting the best employees, developing employees' skills, and assisting employees to grow within the organization. Emphasis on the supervisor's responsibilities and interaction with human resources, labor unions, and fair employment practices. [D; CSU]

LDR 152.

Business Innovation and Creativity

1 unit

Recommended Preparation: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 1 hour

Offered: Variable

Designed to train students to exploit innovation and creativity to promote high productivity throughout an organization. Students will learn how employees are empowered to maximize their creativity and how a variety of supportive strategies are directed throughout an organization. [D; CSU]

LDR 153.

Work and Life Balance for Success

2 units

Recommended Preparation: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 2 hours

Offered: Variable

Designed to examine causes of stress, analyze time management, and develop strategies to deal with these elements both at home and on the job. Supervisors and employees will gain valuable techniques to become more effective and to create a healthier life style balance. [D; CSU]

LDR 295.
Selected Topics in Management and Leadership

1–3 units

Offered: Variable

Permits students to study relevant subjects within the field of management and leadership. 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.*

LDR 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 management and leadership of interest to the student and not included in the regular courses offered by the College. [D; *CSU]

** Please refer to the class schedule for specific course description and transferability information.*

Learning Skills

School of Languages and Humanities

Dean Joel M. Levine, Ed.D., Office 430F, 619-482-6349

Interim Department Chair Susan Brenner, M.A.

Learning Skills Courses

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; and 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 Maria E. Martinez, M.B.A. • Regina Hunter, M.A. • Marisa Soler-McElwain, M.L.

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 pleadings, forms, simple reports, and certificates. The program also emphasizes terminology required by interpreters in the medical, immigration, and business areas.

Career Options

Below is a sample of the career options available for the interpretation and translation major. Some require a certificate of achievement and most require an associate in science degree: court interpreter, freelance interpreter/translator, assistant in legal intake and services in juvenile mediation, immigration, and family counseling. Employment opportunities in local courts, legal clinics, related public and private agencies, and international business entities.

Degree/Certificate Options

Certificate of Achievement

Legal Interpretation and Translation (English/Spanish) 02451

Major Code

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	3
	OR	
BUS 211	Communication in Business and Industry	3
	OR	
BUS 212	Business Communication	
BUS 225	Interpretation and Translation: General Business	3
	OR	
BUS 233	Interpretation and Translation—Immigration	3
	OR	
LEGL 257	International 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 (English/Spanish)	1
BUS 234	Advanced Interpretation and Translation: Legal	3
SPAN 221	Introduction to Literature for Bilinguals *	5
	OR	
SPAN 202	Intermediate Spanish II *	5
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. • Victoria López, J.D. • Maria E. Martinez, M.B.A. • Marisa Soler-McElwain, M.L.

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 or more legal specialties, including family law; civil litigation; criminal law; business law; international business law; immigration law; wills, trust, probate; and word processing. Students with a specialty and/or knowledge of a frequently used foreign language will have the greatest opportunities for employment.

Career Options

Below is a sample of the career options available for the legal secretary or the legal secretary major. A few of these require a certificate of achievement and most require an associate in science degree: 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, and entry-level paralegal.

Degree/Certificate Options

Associate in Science: Career/Technical

Legal Office Professional	B2155
Business Law Specialty	A2152
Civil Litigation Specialty	A2153
Criminal Law Specialty	A2154
Family Law Specialty	A2156
Immigration Law Specialty	A2157
International Business Law Specialty	A2158
Wills, Trusts, and Estates	A2159
Word Processing Specialty	02147

Certificate of Achievement

Legal Office Professional	B2355
Business Law Specialty	A2252
Civil Litigation Specialty	A2253
Criminal Law Specialty	A2254
Family Law Specialty	A2256
Immigration Law Specialty	A2257
International Business Law Specialty	A2258
Wills, Trusts, and Estates Specialty	A2259
Word Processing Specialty	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	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, 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 35.

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/The Legal Environment of Business	3
LEGL 258	Legal Communications	3
LEGL 272	Business Organizations	2
LEGL 290–293		
	Legal Cooperative Work Experience I–IV (2–4)	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 35.

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 (2–4)	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 35.

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 (2–4)	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 35.

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 (2–4)	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 35.

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 (2–4)	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 35.

International Business Law Specialty

Career/Technical (Major Code: A2158)

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 177	Principles of International Business	3
LEGL 290–293		
	Legal Cooperative Work Experience I–IV (2–4)	2
	Plus courses required for the Legal Office Professional program	20
Total units		34

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

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	3
	OR	
RE 101	Real Estate Principles	3
LEGL 290–293	Legal Cooperative Work Experience I–IV (2–4)	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 35.

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	2.5
BUS 240	Microsoft Outlook	2.5
LEGL 258	Legal Communications	3
	OR	
BUS 211	Communication in Business and Industry	3
	OR	
BUS 212	Business Communication	3
LEGL 290–293	Legal Cooperative Work Experience I–IV (2–4)	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 35.

Certificates 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	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/The Legal Environment of Business	3
LEGL 258	Legal Communications	3
LEGL 272	Business Organizations	2
LEGL 290–293		
	Legal Cooperative Work Experience I–IV (2–4)	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 (2–4)	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 (2–4)	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 (2–4)	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 (2–4)	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	International Law for Business	3
LEGL 257	International Business and Legal Communications: Spanish	3
	OR	
LEGL 258	Legal Communications	3
BUS 177	Principles of International Business	3
LEGL 290–293	Legal Cooperative Work Experience I–IV (2–4)	2
Plus courses required for the Legal Office Professional program		20
Total units		34

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	2.5
BUS 240	Microsoft Outlook	2.5
LEGL 258	Legal Communications	3
	OR	
BUS 211	Communication in Business and Industry	3
	OR	
BUS 212	Business Communication	3
LEGL 290–293	Legal Cooperative Work Experience I–IV (2–4)	2
Plus courses required for the Legal Office Professional program		20
Total units		32

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	3
	OR	
RE 101	Real Estate Principles	3
LEGL 290–293	Legal Cooperative Work Experience I–IV (2–4)	2
Plus courses required for the Legal Office Professional program		20
Total units		33

Legal Office Professional-Bilingual

School of Business and Information Systems

Dean Irma Alvarez, M.A., Office 215, 619-482-6457

Faculty Marilynne Hudgens, Ed.M. • Victoria López, J.D. • Maria E. Martinez, M.B.A. • Marisa Soler-McElwain, M.L.

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

Below is a sample of the career options available for the legal secretary or the legal secretary major. A few of these require a certificate of achievement and most require an associate in science degree: 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, legal documents translator, and entry-level paralegal.

Degree/Certificate Options

Major Code

Bilingual

Associate in Science: Career/Technical

Legal Office Professional (English/Spanish)	B2165
Business Law Specialty	A2162
Civil Litigation Specialty	A2163
Criminal Law Specialty	A2164
Family Law Specialty	A2166
Immigration Law Specialty	A2167
International Business Law Specialty	A2168
Legal Interpretation and Translation Specialty (English/Spanish)	02174
Wills, Trusts, and Estates Specialty	A2169
Word Processing Specialty	02144

Certificates of Achievement

Legal Office Assistant—Bilingual	A2455
Legal Office Professional (English/Spanish)	B2365
Business Law Specialty	A2262
Civil Litigation Specialty	A2263
Criminal Law Specialty	A2264
Family Law Specialty	A2266
Immigration Law Specialty	A2267
International Business Law Specialty	A2268
Legal Interpretation and Translation Specialty (English/Spanish)	02272
Wills, Trusts, and Estates Specialty	A2269
Word Processing Specialty	02145

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	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 202	Intermediate Spanish II *	5
Total units		25

Recommended Electives: ACCT 7; BUS 73, 74, 183, 200B, 206, 225, 227, 228, 234, 240, 246; CIS 129, 133, 134, 135, 139, 140, 151, 152; LEGL 255, 256, 257, 259, 264, 267, 268.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

* 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/The Legal Environment of Business	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 (2–4)	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 35.

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 (2–4)	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 35.

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	3
	OR	
BUS 211	Communication in Business and Industry	3
	OR	
BUS 212	Business Communication	3
LEGL 290–293	Legal Cooperative Work Experience I–IV (2–4)	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 35.

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	3
	OR	
BUS 211	Communication in Business and Industry	3
	OR	
BUS 212	Business Communication	3
LEGL 263	Family Law	3
LEGL 266	Mediation, Negotiation, and Conflict Management	2
LEGL 290–293	Legal Cooperative Work Experience I–IV (2–4)	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 35.

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	3
	OR	
BUS 211	Communication in Business and Industry	3
	OR	
BUS 212	Business Communication	3
LEGL 262	Immigration Law and Procedure	3
BUS 233	Interpretation and Translation—Immigration (3)	2–3
	OR	
LEGL 267	Interviewing and Investigation for Paralegals (2)	2
LEGL 290–293	Legal Cooperative Work Experience I–IV (2–4)	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 35.

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	3
	OR	
LEGL 258	Legal Communications	3
LEGL 256	International Law for Business	3
BUS 177	Principles of International Business	3
LEGL 290–293	Legal Cooperative Work Experience I–IV (2–4)	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 35.

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 (2–4)	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 35.

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 (2–4)	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 35.

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	2.5
BUS 240	Microsoft Outlook	2.5
BUS 211	Communication in Business and Industry OR	
BUS 212	Business Communication OR	3
LEGL 258	Legal Communications	
LEGL 224	Procedures for Legal Office Personnel	3
LEGL 290–293	Legal Cooperative Work Experience I–IV (2–4)	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 35.

Certificates of Achievement

Legal Office Assistant—Bilingual

Career/Technical (Major Code: A2455)

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 desarrollo de habilidades en terminología legal, técnicas telefónicas y de recepción, procedimientos legales de oficina, mecanografía, correspondencia, procesamiento de documentos (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 290–293	Work Experience in Business I–IV (1–4)	1
Total units		13

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	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 202	Intermediate Spanish II *	5
Total units		25

Recommended Electives: ACCT 7; BUS 73, 74, 183, 200B, 206, 225, 227, 228, 234, 240, 246; CIS 129, 133, 134, 135, 139, 140, 151, 152; LEGL 255, 256, 257, 259, 264, 267, 268.

Note: Certificate of Achievement or associate in science 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/The Legal Environment of Business	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 (2–4)	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 (2–4)	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 (2–4)	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	3
OR		
BUS 211	Communication in Business and Industry	3
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 (2–4)	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	3
OR		
BUS 211	Communication in Business and Industry	3
OR		
BUS 212	Business Communication	
LEGL 262	Immigration Law and Procedure	3
BUS 233	Interpretation and Translation—Immigration (3)	2–3
OR		
LEGL 267	Interviewing and Investigation for Paralegals (2)	
LEGL 290–293		
	Legal Cooperative Work Experience I–IV (2–4)	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	3
OR		
LEGL 258	Legal Communications	
LEGL 256	International Law for Business	3
BUS 177	Principles of International Business	3
LEGL 290–293		
	Legal Cooperative Work Experience I–IV (2–4)	2
Plus courses required for the Legal Office Professional—Bilingual program		25
Total units		40

Legal Interpretation and Translation Specialty (English/Spanish)

Career Technical (major Code: 02272)

BUS 181	Spanish Computer Skills for Interpretation and Translation	3
BUS 211	Communication in Business and Industry	3
OR		
BUS 212	Business Communication	3
OR		
LEGL 258	Legal Communications	
LEGL 224	Procedures for Legal Office Personnel	3
BUS 227	Interpretation and Translation: Medical	3
OR		
BUS 233	Interpretation and Translation—Immigration	3
OR		
LEGL 257	International Business and Legal Communication: Spanish	
LEGL 290–293		
	Legal Cooperative Work Experience I–IV (2–4)	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	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 (2–4)	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	2.5
BUS 240	Microsoft Outlook	2.5
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
LEGL 290–293		
	Legal Cooperative Work Experience I–IV (2–4)	2
Plus courses required for the Legal Office Professional—		
Bilingual program		25
Total units		39

Legal Courses

For Legal courses see pages 387–389.

Liberal Studies—Elementary Education

School of Languages and Humanities

Dean Joel M. Levine, Ed.D., Office 430F, 619-482-6349

Department Chair Leslie Yoder, C.Phil.

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

Associate in Arts Degree: Transfer Preparation

Liberal Studies—Elementary Education 01800

Students are advised to please see a counselor for areas of specialization at San Diego State University

Major Code

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 * (Major Code: 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 through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 41 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
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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

+Transfer course acceptable for substitution to fulfill SDSU course requirement.

History and Social Science

1. Three units selected from the following:

AFRO/HIST 110 African-American History I
MAS/HIST 141 Mexican-American History I
HIST 100 American Civilization I

2. Three units selected from the following:

AFRO/HIST 111 African-American History II
MAS/HIST 142 Mexican-American History II
HIST 101 American Civilization II
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 Mathematics for Elementary School Teachers I
MATH 111 Mathematics for Elementary School Teachers II
MATH 112 Children's Mathematical Thinking

Science

Complete the following courses:

BIOL 100 Principles of Biology
BIOL 101 Principles of Biology Laboratory

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 for 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

Learning Resources

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 Diane Gustafson, M.L.S.

Library Courses

LIB 110.

Simplified Research: Print and Electronic

1 unit

Recommended Preparation: RDG 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. • Martha S. Dillon, A.B. • Richard Fielding, M.S. • William Foley, M.S. • Valentina Goldberg, M.A. Shannon Gracey, M.S. • Irene Hollman, M.A. • Alexander Juden, M.S. • Randy Krauss, M.S. • Richard E. Linder, M.S. • Janet Mazzarella, M.A. Andrew Medin, M.A. • Miriam Rasky, M.A. • Diane Short, M.A. • Bruce Smith, M.S. • Patrick Staley, M.S. • Romina Tehrani, M.A.

Department Chair Martha Carey, M.S.

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 100 or above) that will meet the lower-division needs of college transfer students.

Students may opt to take their developmental courses in a self-paced or variable format. By working independently, it is possible for students to complete their courses more rapidly than through the classroom lecture format. Courses designated as interactive math or hybrid online use computer assisted instruction as part of the class instruction.

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

Below is a sample of the career options available for the mathematics major. A few of these require an associate degree, most require a bachelor's 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. See page 35.

* 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 41 for further information.**

**MATH 130 may be taken in any semester; however, it should be noted that MATH 130 is a prerequisite for 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: RDG 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: Variable

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 the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent

Recommended Preparation: RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 4 hours

Offered: Variable

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: RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 4 hours

Offered: Variable

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.) [D]

MATH 45PL. **Beginning Algebra Plus Lab**

5 units

Prerequisite: MATH 35 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent

Recommended Preparation: RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 4 hours, laboratory 3 hours

Offered: Variable

Emphasizes elementary concepts of algebra, including real numbers, linear equations and inequalities in one variable, graphs of lines and inequalities, midpoint and distance formulas, Pythagorean theorem, 2x2 systems, exponents, polynomials, factoring techniques, rational expressions and equations, and applications. Includes mandatory lab. (Not open to students with credit in any higher-numbered mathematics course.) [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: RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 5 hours

Offered: Variable

Solving first-degree equations/inequalities in one variable, writing the equation of 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 65PL. **Intermediate Algebra Plus Lab**

6 units

Prerequisite: MATH 45 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent

Recommended Preparation: RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 5 hours, laboratory 3 hours

Offered: Fall, Spring

Emphasizes solving first degree equations/inequalities in one variable; writing the equation of 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; arithmetic with complex numbers; solving quadratic equations; identifying and graphing conic sections, exponential and logarithmic properties, and equations. Includes a required lab. [D]

MATH 100.
Mathematics for General Education

3 units

Prerequisite: MATH 65 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent

Recommended Preparation: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Variable

Designed to give a brief survey of the historical development and current application of topics such as set theory, logic, finance, counting methods, probability, and statistics. [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: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Variable

Functions, relations, theory of equations and inequalities, matrices, binomial theorem, sequences and series, and 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 MATH 101 and 104. (Not open to students with credit in MATH 250 or the equivalent.) [D; CSU; UC; 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: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Variable

Graphic and numerical applications of trigonometry, circular and inverse trigonometric functions, proving and applying identities, solutions and practical applications of right and oblique triangles, and 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. [D; CSU; CAN-MATH 8]

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: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Variable

Emphasizes topics of the current elementary school curricula from an advanced perspective. Incorporates logical thinking, problem solving, and critical analysis. Topics include structure of the number system, functions and relations, and number theory which requires the students to explain and demonstrate a working knowledge and explanation of the basic mathematical concepts, and the connections between them and basic computational skills. [D; CSU; UC]

MATH 111.
Mathematics for Elementary School Teachers II

3 units

Prerequisite: MATH 110 or equivalent

Recommended Preparation: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Variable

Incorporates logical thinking, problem solving, and critical analysis. Includes geometry, measurement, proportional reasoning, probability, and statistics. Requires the explanation and working knowledge of basic mathematical and geometric concepts and the connections among them. Emphasizes geometric, algebraic, and statistical reasoning and analysis. [D; CSU; UC]

MATH 112.
Children's Mathematical Thinking

2 units

Credit/No Credit only

Prerequisite: MATH 65 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent

Recommended Preparation: RDG 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: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 4 hours

Offered: Variable

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**

4 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; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 4 hours**Offered:** Variable

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: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours**Offered:** Variable

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: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours**Offered:** Variable

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: RDG 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

Introduces computer science. Uses the computer to solve problems from engineering, mathematics, and sciences. [D; CSU; UC]

MATH 140.**Data Structures and Algorithms**

4 units

Prerequisite: MATH 130 or equivalent

Recommended Preparation: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours, laboratory 3 hours**Offered:** Spring, Fall

Introduces the fundamental concepts of data structures and the algorithms that proceed from them. Includes recursion, object-oriented programming, fundamental data structures (including stacks, queues, linked-lists, hash tables, trees, and graphs), and the basics of algorithmic analysis. Examines 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:** Spring

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 241E.**Mathematics Software Workshop Using Excel**

1 unit

Prerequisite: MATH 122 or 251 or equivalent

Lecture 1 hour**Offered:** Variable

Focuses on an introduction to mathematical software using Excel with a particular emphasis on solving problems from engineering and the sciences. [D; CSU]

MATH 241G.**Mathematics Software Workshop Using Geometer Sketch Pad**

1 unit

Prerequisite: MATH 65 or equivalent

Lecture 1 hour**Offered:** Variable

Focuses on an introduction to mathematical software using Geometer Sketch Pad (GSP). Emphasizes the use of GSP for teaching high school math classes. [D; CSU]

MATH 241M.**Mathematics Software Workshop Using MATLAB**

1 unit

Prerequisite: MATH 122 or 251 or equivalent

Lecture 1 hour**Offered:** Variable

Focuses on an introduction to mathematical software using MATLAB with a particular emphasis on problems from engineering and the sciences. Serves as a companion course for the linear algebra class or the differential equations class. [D; CSU]

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: RDG 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, and 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, and 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; UC]

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:** Variable

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:** Variable

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 indeterminate 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, Spring

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 Assistant—Administrative and Clinical

School of Business and Information Systems

Dean Irma Alvarez, M.A., Office 215, 619-482-6457

Faculty Sandra Romero, B.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 as medical assistants. Today's healthcare industry demands a higher level of thinking and performance skills than ever before. The medical assistant programs prepare students for careers as administrative medical or clinical assistants or as medical office managers. The administrative medical assistant provides service to patients within the front office environment. The clinical medical assistant provides some administrative services to patients with primary duties in a clinical (back office) environment.

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, skilled nursing facilities, state and federal health agencies, and medical research institutions.

Below is a sample of the career options available for the medical assistant and medical office management major. Some require a certificate of achievement and most require an associate in science degree or higher degree: medical assistant—administrative or clinical, 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.

Degree/Certificate Options

Major Code

Associate in Science Degree: Career/Technical

Medical Assistant: Administrative	02314
Medical Assistant: Clinical	02321
Medical Office Management	02311

Certificate of Achievement

Medical Assistant: Administrative—Basic	02315
Medical Assistant: Administrative—Intermediate	02316
Medical Assistant: Clinical—Basic	02322
Medical Assistant: Clinical—Intermediate	02323
Medical Assistant: Clinical—Intensive Training	02324
Medical Assistant: Coding and Insurance—Basic	02317
Medical Assistant: Coding and Insurance—Intermediate	02318
Medical Interpreter—Basic (English/Spanish)	02325
Medical Interpreter—Intermediate (English/Spanish)	02326
Medical Office Assistant—Bilingual (English/Spanish)	A2055
Medical Office Management—Basic	02312
Medical Office Management—Advanced	02313

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 Assistant: Administrative

Career technical (Major Code: 02314)

Provides students with training to become administrative medical assistants with industry-required skills to work in healthcare settings. Prepares students for the California Certified Medical Assistant-Administrative examination conducted by the California Certifying Board for Medical Assistants.

BUS 182	Keyboarding for Office Professionals (2)		
	OR		
		2–2.5	
BUS 200B	Microsoft Word: Advanced (2.5)		
BUS 183	Business Mathematics	3	
BUS 200A	Microsoft Word: Beginning	2.5	
BUS 211	Communication in Business and Industry		
	OR		
		3	
BUS 212	Business Communication		
BUS 239	Project Management	3	
BUS 240	Microsoft Outlook	2.5	
BUS 290–293	Work Experience in Business I–IV (1–4)	2	
CIS 92	Software Technology for the Workplace (3)		
	OR		
		3–4	
CIS 101	Introduction to Computers and Information Processing (4)		
LDR 148	Business Presentation Skills		
	OR		
		2	
LDR 149	Business Presentation Skills—Bilingual (English/Spanish)		
MEDOP 21	Medical Coding I	3	
MEDOP 22	Medical Coding II	2.5	
MEDOP 41A	Medical Insurance I	2	
MEDOP 41B	Medical Insurance II	2	
MEDOP 229	Medical Terminology—Bilingual (English/Spanish)		
	OR		
		3	
MEDOP 230	Medical Terminology		
MEDOP 231	Medical Office Procedures	4	
MEDOP 233	Anatomy and Physiology for Allied Health Professionals	3	
Total units		42.5–44	

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

Medical Assistant: Clinical

Career technical (Major Code: 02321)

Prepares students to work in a medical office setting and other healthcare facilities. Covers instruction in medical office administrative duties and regulations, medical record management, communication skills, office finances, insurance and coding procedures, clinical practices of diagnostic equipment, routine lab tests, blood drawing techniques, immunization administration, infection control techniques, vital signs and CPR.

BUS 71	Keyboarding II (1)		
	OR		
			1–2
BUS 182	Keyboarding for Office Professionals (2)		
BUS 183	Business Mathematics		3
BUS 211	Communication in Business and Industry		
	OR		
			3
BUS 212	Business Communication		
BUS 239	Project Management		3
BUS 290–293	Work Experience in Business I–IV (2–4)		2–4
CL 120	Computer Literacy		1
LDR 148	Business Presentation Skills		
	OR		
			2
LDR 149	Business Presentation Skills—Bilingual (English/Spanish)		2
MEDOP 229	Medical Terminology—Bilingual (English/Spanish)		
	OR		
			3
MEDOP 230	Medical Terminology		
MEDOP 231	Medical Office Procedures		4
MEDOP 233	Anatomy and Physiology for Allied Health Professionals		3
MEDOP 234	Medical Assistant—Clinical		4
MEDOP 235	Pathophysiology for Health Professionals		3
MEDOP 236	Pharmacology for Allied Health Professionals		3
Total units			35–38

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

Medical Office Management

Career/Technical (Major Code: 02311)

Prepares students with fundamental supervisory and management skills required in various types of healthcare settings.

ACCT 7	Basic Business Bookkeeping (3)		
	OR		3-4
ACCT 101	Principles of Accounting I (4)		
BUS 140	Business Law/The Legal Environment of Business	3	
BUS 150	Principles of Management		
	OR		3
BUS 211	Communication in Business and Industry		
	OR		
BUS 212	Business Communication		
BUS 239	Project Management		3
BUS 290-293	Work Experience in Business I-IV (2-4)	2-4	
CIS 101	Introduction to Computers and Information Processing		4
MEDOP 231	Medical Office Procedures		4
Plus completion of Medical Office Management—Basic certificate			22-23
Total units			44-48

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

Certificates of Achievement

Medical Assistant: Administrative—Basic

Career/Technical (Major Code: 02315)

Prepares students to work in a medical office setting and other healthcare facilities. Students gain an understanding of basic medical terminology, anatomy and physiology, medical office procedures, including receptionist and telephone techniques, medical records filing, and documentation processing.

BUS 71	Keyboarding II (1)		
	OR		1-2
BUS 182	Keyboarding for Office Professionals (2)		
BUS 200A	Microsoft Word: Beginning		2.5
BUS 210	Business English		3
MEDOP 21	Medical Coding I		3
MEDOP 41A	Medical Insurance I	2	
MEDOP 229	Medical Terminology—Bilingual (English/Spanish)		
	OR		3
MEDOP 230	Medical Terminology		
MEDOP 231	Medical Office Procedures		4
Total units			18.5-19.5

Medical Assistant: Administrative—Intermediate

Career/Technical (Major Code: 02316)

Provides students with training to become administrative medical assistants with industry-required skills to work in various healthcare settings, and prepares them for the CCMA-Administrative examination conducted by the California Certifying Board for Medical Assistants.

BUS 182	Keyboarding for Office Professionals (2)	
	OR	2–2.5
BUS 200B	Microsoft Word: Advanced (2.5)	
BUS 211	Communication in Business and Industry	
	OR	3
BUS 212	Business Communication	
BUS 239	Project Management	3
BUS 240	Microsoft Outlook	2.5
BUS 290–293	Work Experience in Business I–IV (1–4)	2
CIS 92	Software Technology for the Workplace (3)	
	OR	3–4
CIS 101	Introduction to Computers and Information Processing (4)	
MEDOP 22	Medical Coding II	2.5
MEDOP 41B	Medical Insurance II	2
MEDOP 233	Anatomy and Physiology for Allied Health Professionals	3
Plus the required courses for the Medical Assistant:		
	Administrative—Basic certificate	18.5–19.5
Total units		42–44

Medical Assistant: Clinical—Basic

Career technical (Major Code: 02322)

Prepares students to work in a medical office setting and other healthcare facilities. Covers instruction in medical office administrative duties and regulations, medical record management, communication skills, office finances, insurance and coding procedures, clinical practices of diagnostic equipment, routine lab tests, blood drawing techniques, immunization administration, infection control techniques, vital signs, and CPR.

BUS 71	Keyboarding II (1)	
	OR	1–2
BUS 182	Keyboarding for Office Professionals (2)	
BUS 210	Business English	3
CL 120	Computer Literacy	1
MEDOP 229	Medical Terminology—Bilingual (English/Spanish)	
	OR	3
MEDOP 230	Medical Terminology	3
MEDOP 231	Medical Office Procedures	4
MEDOP 234	Medical Assistant—Clinical	4
Total units		16–17

Medical Assistant: Clinical—Intermediate

Career technical (Major Code: 02323)

Prepares students to work in a medical office setting and other healthcare facilities. Covers instruction in medical office administrative duties and regulations, medical record management, communication skills, office finances, insurance and coding procedures, clinical practices of diagnostic equipment, routine lab tests, blood drawing techniques, immunization administration, infection control techniques, vital signs, and CPR.

BUS 183	Business Mathematics	3
BUS 211	Communication in Business and Industry	
	OR	3
BUS 212	Business Communication	
BUS 239	Project Management	3
BUS 290–293	Work Experience in Business I–IV (1–4)	2
MEDOP 233	Anatomy and Physiology for Allied Health Professionals	3
MEDOP 236	Pharmacology for Allied Health Professionals	3
Plus the courses required for the Medical Assistant:		
	Clinical—Basic certificate	16–17
Total units		33–34

Medical Assistant: Clinical—Intensive Training

Career technical (Major Code: 02324)

Covers instruction in medical office administrative duties and regulations, medical terminology, medical record management, communication skills, office finances, and insurance and coding procedures. Provides training on diagnostic equipment and routine clinical lab test, blood drawing techniques, immunization administration, infection control techniques, vital signs, and CPR.

MEDOP 100	Medical Assistant: Clinical—Intensive Training	12
BUS 290–293	Work Experience in Business I–IV (1–4)	1–4
Total units		13–16

Medical Assistant: Coding and Insurance—Basic

Career technical (Major Code: 02317)

Prepares students for entry-level positions in healthcare settings where they will be responsible for validating medical codes using International Classification of Diseases (ICD-9) and Current Procedural Terminology (CPT) manuals to facilitate reimbursement. The basic-level prepares students to sit for the National Certified Coding Associate (CCA) examination.

BUS 71	Keyboarding II (1)		
	OR		1–2
BUS 182	Keyboarding for Office Professionals (2)		
BUS 210	Business English		3
MEDOP 21	Medical Coding I		3
MEDOP 41A	Medical Insurance I		2
MEDOP 229	Medical Terminology—Bilingual (English/Spanish)		
	OR		3
MEDOP 230	Medical Terminology		
MEDOP 231	Medical Office Procedures		4
Total units			16–17

Medical Assistant: Coding and Insurance—Intermediate

Career technical (Major Code: 02318)

Prepares students for advanced-level positions in healthcare settings where they will be responsible for validating medical codes using International Classification of Diseases (ICD-9) and Current Procedural Terminology (CPT) manuals to facilitate reimbursement. Also prepares them to sit for the National Certified Coding Associate (CCA) examination.

BUS 183	Business Mathematics		3
BUS 211	Communication in Business and Industry		
	OR		3
BUS 212	Business Communication		
BUS 240	Microsoft Outlook		2.5
Bus 290–293	Work Experience in Business I–IV (1–4)		2
MEDOP 22	Medical Coding II		2.5
MEDOP 41B	Medical Insurance II		2
MEDOP 233	Anatomy and Physiology for Allied Health Professionals (3)		
	OR		3–4
BIOL 190	Human Anatomy and Physiology (4)		
Plus the required courses for the Medical Assistant: Coding and Insurance—Basic certificate			16–17
Total units			34–36

Medical Interpreter: Basic (English/Spanish)

Career technical (Major Code: 02325)

Emphasizes English/Spanish medical interpretation skills and knowledge to facilitate communication between healthcare professionals and patients. Provides a foundation for students who desire to become certified administrative and medical interpreters for the state of California.

BUS 71	Keyboarding II (1)		
	OR		1–2
BUS 182	Keyboarding for Office Professionals (2)		
BUS 181	Spanish Computer Skills for Interpretation/ Translation		3
BUS 210	Business English		3
MEDOP 21	Medical Coding I		3
MEDOP 41A	Medical Insurance I		2
MEDOP 229	Medical Terminology—Bilingual (English/Spanish)		3
MEDOP 231	Medical Office Procedures		4
SPAN 215	Spanish for Bilinguals I (5)		
	OR		3–5
SPAN 225	Intermediate Conversation and Writing on Spanish Culture (3)		
Total units			22–25

* 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 or a diploma from their foreign institution.

Medical Interpreter—Intermediate (English/Spanish)

Career technical (Major Code: 02326)

Emphasizes advanced English/Spanish medical interpretation skills and knowledge to facilitate communication between healthcare professionals and patients. Provides a foundation for students who desire to become certified administrative and medical interpreters for the state of California.

BUS 211	Communication in Business and Industry	
	OR	3
BUS 212	Business Communicaton	
BUS 227	Interpretation and Translation: Medical	3
BUS 290–293	Work Experience in Business I–IV (1–4)	2
MEDOP 22	Medical Coding II	2.5
MEDOP 41B	Medical Insurance II	2
MEDOP 233	Anatomy and Physiology for Allied Health Professionals (3)	
	OR	3–4
BIOL 190	Human Anatomy and Physiology (4)	
SPAN 216	Spanish for Bilinguals II (5)	
	OR	3–5
SPAN 226	Intermediate Conversation and Writing on Latin American Culture (3)	
Plus the required courses for the Medical Interpreter—Basic certificate		22–25
Total units		40.5–46.5

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). Énfasis en la terminología médica bilingüe.

MEDOP 40	Medical Office Assistant: Bilingual	12
Total units		12

Medical Office Management—Basic

Career/Technical (Major Code: 02312)

Prepares students who possess experience working in a medical office for a career in medical office management in various types of healthcare settings.

BUS 71	Keyboarding II (1)	
	OR	1–2
BUS 182	Keyboarding for Office Professionals (2)	
BUS 183	Business Mathematics	3
BUS 210	Business English	3
LDR 148	Business Presentation Skills—Bilingual (English/Spanish)	
	OR	2
LDR 149	Business Presentation Skills	
LDR 151	Human Resources and Labor Relations	3
MEDOP 229	Medical Terminology—Bilingual (English/Spanish)	
	OR	3
MEDOP 230	Medical Terminology	
MEDOP 231	Medical Office Procedures	4
MEDOP 233	Anatomy and Physiology for Allied Health Professionals	3
Total units		22–23

Medical Office Management—Advanced

Career/Technical (Major Code: 02313)

Prepares students who possess experience working in a medical office for a career in medical office management in various types of healthcare settings.

ACCT 7	Basic Business Bookkeeping (3)	
	OR	3–4
ACCT 101	Principles of Accounting I (4)	
BUS 140	Business Law/Legal Environment of Business	3
BUS 150	Principles of Management	3
BUS 211	Communication in Business and Industry	
	OR	3
BUS 212	Business Communication	
BUS 239	Project Management	3
BUS 290–293	Work Experience in Business I–IV (1–4)	2–4
CIS 101	Introduction to Computers and Information Processing	4
Plus completion of Medical Office Management—Basic certificate		22–23
Total units		43–47

Medical Office Professional Courses

MEDOP 21. **Medical Coding I** 3 units

Prerequisite: MEDOP 230 or equivalent
Recommended Preparation: BUS 71 or equivalent
Lecture 3 hours, laboratory 1 hour
Offered: Variable

Covers entry-level training in medical coding. Develops an understanding of Current Procedural Terminology (CPT), International Classification of Diseases (ICD-9-CM) Volumes I and II, and Health Care Finance Administration (HCFA) Healthcare Common Procedure Coding System (HCPCS) as they are used in medical claims processing and records management. (ROP option) [D]

MEDOP 22. **Medical Coding II** 2.5 units

Prerequisite: MEDOP 21 or equivalent
Lecture 2 hours, laboratory 2 hours
Offered: Variable

Covers entry-level training in medical coding. Develops 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. (ROP option) [D]

MEDOP 38. **Medical Office Assistant: Intensive Training** 12 units

Recommended Preparation: BUS 71 or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent
Lecture 9 hours; laboratory 8 hours
Offered: Variable

Emphasizes skills for medical front office positions at the receptionist, clerk-typist, or secretarial assistant level. Provides training in medical office procedures, written and oral communication skills, appointment scheduling, medical record maintenance, insurance and coding procedures, word processing, site audit regulations, medical terminology, vital signs, and CPR. (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; RDG 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

Fee: \$1. 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. (ROP option) [D]

MEDOP 41A. **Medical Insurance I** 2 units

Prerequisite: MEDOP 230 or equivalent
Recommended Preparation: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent
Lecture 2 hours, laboratory 1 hour
Offered: Variable

Introduces principles of medical records documentation, medical insurance practices, and plans. Provides practical experience in completion of universal claims forms and basic instruction in diagnostic and procedural coding. (ROP option) [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, hospitals, and clinics. Emphasizes healthcare claims coding, processing, monitoring, and appeals as well as interpretation and processing of Explanation of Benefits (EOB). Focuses on the International Classification of Diseases Clinical Modifications (ICD-CM) and the Diagnostic Procedural Terminology (DPT) coding systems. (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 English 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 research groups, and city and state health departments. (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. (ROP option) [D]

MEDOP 100. **Medical Assistant: Clinical—Intensive Training** 12 units

Grade only
Prerequisite: BUS 71 or equivalent
Recommended Preparation: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent
Lecture 9 hours, laboratory 8 hours
Offered: Fall

Trains students to utilize their skills in the medical office field. Covers instruction in medical office procedures (front and back office), telephone techniques, scheduling appointments, maintaining and filing medical records, word processing, insurance and billing procedures, site audit regulations, vital signs, and CPR. (ROP option) [D]; CSU]

MEDOP 229.**Medical Terminology—Bilingual (English/Spanish)**

3 units

Recommended Preparation: SPAN 215 or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College reading Assessment or equivalent

Lecture 3 hours**Offered:** Variable

Introduces the study of English and Spanish medical terminology. Emphasizes word structure and usage in vocabulary that relates to body systems, medical processes and procedures, human disease, and pharmacology. (ROP option) [D; CSU]

MEDOP 230.**Medical Terminology**

3 units

Recommended Preparation: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours**Offered:** Variable

Fee: \$1. Introduces students interested in allied health professions to basic medical terminology. Emphasizes word structure and usage, medical procedures, processes, and pharmacology related to body systems and human diseases. (ROP option) [D; CSU]

MEDOP 231.**Medical Office Procedures**

4 units

Prerequisite: BUS 70 and MEDOP 230, or equivalent

Lecture 3 hours, laboratory 3 hours**Offered:** Variable

Fee: \$1. Emphasizes competency in standard medical office procedures comprised of customer service and telephone techniques, scheduling patient appointments, insurance billing, filing, maintaining medical records, preparing basic medical correspondence and reports, and ethics for medical office professionals. (ROP option) [D; CSU]

MEDOP 233.**Anatomy and Physiology—for Allied Health Professionals**

3 units

Recommended Preparation: MEDOP 230 or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours**Offered:** Variable

Fee: \$1. Emphasizes basic human anatomy, physiology, and pathophysiology concepts required by medical office and allied health professionals. (ROP option) [D; CSU]

MEDOP 234.**Medical Assistant—Clinical**

4 units

Prerequisite: MEDOP 230 or equivalent

Lecture 3 hours, laboratory 3 hours**Offered:** Variable

Provides students with knowledge of basic clinical skills as used in medical back office practice. Prepares students to sit for the California Medical Assistant-Clinical certification examination. [D; CSU]

MEDOP 235.**Pathophysiology for Health Professionals**

3 units

Prerequisite: MEDOP 230 or equivalent

Lecture 3 hours**Offered:** Variable

Recommended Preparation: BUS 70 or equivalent; MATH 20 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent; ENGL 71 or the equivalent skill level as determined by the Southwestern College English Assessment or equivalent

Lecture 3 hours**Offered:** Variable

Trains students with fundamental skills for clinical research or advanced medical assistant coordinator positions. Provides in-depth knowledge of pathophysiology of diseases and the necessary precautions that need to be taken to protect and educate patients. Helps students prepare for the Clinical Research Coordinator and Unit Coordinator national certification exams. [D; CSU]

MEDOP 236.**Pharmacology for Allied Health Professionals**

3 units

Prerequisite: MEDOP 230 or equivalent

Recommended Preparation: MATH 20 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours, laboratory 1 hour**Offered:** Variable

Provides students with essential knowledge and current practices employed in the preparation and administration of medication to adult and special groups (elderly and children). [D; CSU]

MEDOP 237.**Clinical Research Coordinator**

3 units

Prerequisite: MEDOP 234 or equivalent

Lecture 3 hours**Offered:** Variable

Emphasizes skills required by clinical research coordinators (CRCs), clinical research associates (CRAs), and principal investigators (PIs) in the clinical trials field. Discusses arranging of study sites; screening and follow-up of clinical study participants; dispensing the drugs and supplies; completing case report documents; and ensuring adherence to Good Clinical Practice guidelines. [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 Behavioral and Social Sciences

Dean Viana Giraffe, Ph.D., Office 470K, 619-482-6582

Faculty Victor Chavez, M.A. • Rosalinda González, Ph.D. • Barry Horlor, M.A. • Jannie L. Padilla, M.A.

Department Chair Barry Horlor, 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

Below is a sample of the career options available for the Mexican-American studies major. A few of these require an associate in arts degree, most require a bachelor's 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

Associate in Arts Degree: Transfer Preparation

Mexican-American Studies

Major Code

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 35.

* 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 41 for further information.**

Mexican-American Studies Courses

MAS 141.

Mexican-American History I

3 units

Recommended Preparation: RDG 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-Columbian 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: RDG 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: RDG 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. (May be repeated for additional credit with new content.)

[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, M.S., Office 702B, 619-482-6372

Faculty Todd Caschetta, M.A. • Jay Henry, B.A. • Cynthia McGregor, Ph.D. • Jeffrey Nevin, Ph.D. • Jorge Pastrana, D.M.A. • Teresa Russell, D.M.A.

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, is music which 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

Below is a sample of the career options available for the music major. A few of these require an associate in arts degree, most require a bachelor's 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

Associate in Arts Degree: Transfer Preparation

	Major Code
Music	01240
Music—Mariachi Specialization	02542

Associate in Science Degree: Career/Technical

Music—Commercial	02540
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Certificate of Achievement

Music—Commercial	02541
Music—Mariachi Specialization	02543

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

Music

Transfer Preparation * (Major Code: 01240)

Provides programs for students who wish to become professional musicians; prepares 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	Sight Singing and Dictation I	1
MUS 125	Applied Music—Individual Study 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	Sight Singing and Dictation II	1
MUS 126	Applied Music—Individual Study 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 127	Applied Music—Individual Study III	1
MUS 132C	Class Piano III	1
MUS 141	Class Voice II	1

Select four courses from the required performance courses listed below

Total units	26
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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 166–169	Jazz Ensemble I–IV
MUS 170–173	Small Performance Groups 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

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 35.

- * 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 41 for further information.**

Music—Mariachi Specialization

Transfer Preparation * (Major Code: 02542)

The 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	Sight Singing and Dictation I	1
MUS 125	Applied Music—Individual Study I	1
MUS 124A	Introduction to Mariachi Performance I	1
	OR	2
MUS 157A	Mariachi Garibaldi I	2
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	Sight Singing and Dictation II	1
MUS 126	Applied Music—Individual Study II	1
MUS 124B	Introduction to Mariachi Performance II	1
	OR	2
MUS 157B	Mariachi Garibaldi II	2
	Primary instrument instruction*	1–2

Third Semester

MUS 109	Foundations of Music Theory III	3
MUS 127	Applied Music—Individual Study III	1
MUS 124C	Introduction to Mariachi Performance III	1
	OR	2
MUS 157C	Mariachi Garibaldi III	2
	Secondary instrument instruction*	1–2

Fourth Semester

MUS 124D	Introduction to Mariachi Performance IV	1
	OR	2
MUS 157D	Mariachi Garibaldi IV	2
	Secondary instrument instruction*	1–2

Total units **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 35.

Note: *Students with music degrees from elsewhere or who have previously completed courses equivalent to MUS 101, z102, 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	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	Sight Singing and Dictation II	1
MUS 125	Applied Music—Individual Study I	1
MUS 132B	Class Piano II	1
Select 1–3 units from electives		1–3

Third Semester

MUS 107	American Popular Music	3
MUS 126	Applied Music—Individual Study II	1
MUS/TELE 151	Recording Techniques	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.

Required Performance Courses:

Students are required to complete a minimum of one course per semester with a maximum of four courses.

MUS 136A–D	Jazz Vocal Ensemble I–IV
MUS 166–169	Jazz Ensemble I–IV
MUS 170–173	Small Performance Groups 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

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 35.

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	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	Sight Singing and Dictation II	1
MUS 125	Applied Music—Individual Study I	1
MUS 132B	Class Piano II	1
Select 1–3 units from electives		1–3

Third Semester

MUS 107	American Popular Music	3
MUS 126	Applied Music—Individual Study II	1
MUS/TELE 151	Recording Techniques	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.

Required Performance Courses:

Students are required to complete a minimum of one course per semester with a maximum of four courses.

MUS 136A–D	Jazz Vocal Ensemble I–IV
MUS 166–169	Jazz Ensemble I–IV
MUS 170–173	Small Performance Groups 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

Note: This is a course requirement, not a unit requirement.

Music—Mariachi Specialization

Career Technical (Major Code: 02543)

MUS 101	Foundations of Music Theory I	3
MUS 102	Foundations of Music Theory II	3
MUS 111	Sight Singing and Dictation I	1
MUS 113	Sight Singing and Dictation II	1
MUS 202	Development of Mariachi: Style and Culture	3

Mariachi Performance Courses 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 II (2)
MUS 157C	Mariachi Garibaldi III (2)
MUS 157D	Mariachi Garibaldi IV (2)

Total units	15
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Music Courses

There are six types of music courses:

- Music appreciation and history
- Music theory and analysis
- Recording arts and technology
- Applied music
- 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

Devoted to the development of listening skills through a survey of significant composers, major forms, and types of Western art music. [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. **American Popular Music** 3 units

Grade only
Lecture 3 hours
Offered: Fall, Spring

Covers an historical survey of American popular music since the turn of the twentieth century up to the present. Focuses on how popular music reflects the social, political, cultural attitudes, and trends of America at the time each style of music was being created. [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; and 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. **World Music** 3 units

Lecture 3 hours
Offered: Variable

Explores various performance practices of Africa, the Caribbean region, Indonesia, China, Japan, India, and the Middle East. Focuses on the role of music in society. [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

Emphasizes the rudiments of music including note reading, time classification and rhythm, time signatures, intervals, modes, major and minor scales, and elementary triads. [D; CSU; UC]

MUS 102. **Foundations of Music Theory II** 3 units

Grade only
Prerequisite: MUS 101 or equivalent
Recommended Concurrent Enrollment: MUS 113
Lecture 3 hours
Offered: Variable

Reviews harmony, scales, and triads. Analyzes the principles of voice leading in diatonic harmonic progressions, non-harmonic tones, sevenths chords, and beginning modulation. [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 102 or equivalent
Recommended Concurrent Enrollment: MUS 114
Lecture 3 hours
Offered: Variable

Emphasizes analysis and voice leading of triads, sevenths chords, secondary dominants, and chromatic chords found in music literature. Incorporates composition for keyboard and in the four-part chorale style. [D; CSU; UC]

MUS 110. **Foundations of Music Theory IV** 3 units

Grade only
Prerequisite: MUS 109 or equivalent
Recommended Concurrent Enrollment: MUS 115
Lecture 3 hours
Offered: Variable

Surveys analytical techniques of late nineteenth and twentieth century music, including chromaticism, impressionism, jazz theory, and atonality. [D; CSU; UC]

MUS 111. **Sight Singing and Dictation I** 1 unit

Grade only
Corequisite: MUS 101
Laboratory 2 hours
Offered: Variable

Emphasizes singing and dictation of major and minor scales, triads, diatonic melodies, and simple rhythmic divisions. [D; CSU; UC]

MUS 113. **Sight Singing and Dictation II** 1 unit

Grade only
Prerequisite: MUS 111 or equivalent
Recommended Concurrent Enrollment: MUS 102
Laboratory 2 hours
Offered: Variable

Emphasizes the singing of major and minor scales. Develops singing and dictation skills with diatonic, conjunct, and disjunct melodies. Executes rhythmic exercises that include simple and compound meter. [D; CSU; UC]

MUS 114. **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

Emphasizes the singing of melodies in major and minor keys. Develops singing and dictation skills with conjunct and disjunct melodies. Executes more complex rhythmic exercises with syncopations. [D; CSU; UC]

MUS 115. **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

Emphasizes the singing of melodies with chromaticism. Develops singing and dictation skills of harmonic progressions. Executes and dictates complex rhythmic exercises with syncopations. [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]

Applied Music Courses

MUS 119A.
Brass Instrument Class I
2 units

Grade only
Limitation on Enrollment: Demonstrated proficiency and rudimentary knowledge of brass instruments

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.
Applied Music—Individual Study I

1 unit

Grade only

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 126.
Applied Music—Individual Study II

1 unit

Grade only

Prerequisite: MUS 125 or equivalent

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 127.
Applied Music—Individual Study III

1 unit

Grade only

Prerequisite: MUS 126 or equivalent

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 128.
Applied Music—Individual Study IV

1 unit

Grade only

Prerequisite: MUS 127 or equivalent

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 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 knowledge of string instruments
Recommended Preparation: One or more of the following courses: MUS 119A, 137, or 140, or equivalent
Lecture 1 hour, laboratory 5 hours
Offered: Variable

Group and private instruction on any of the following string instruments: violin, viola, cello, or 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, or 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, or 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, or contrabass. All levels of students, from beginning to advanced, may enroll. [D; CSU; UC]

Music Performance Ensembles Courses

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 119A, 137, 140, 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 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

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. [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

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. Performance required. [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

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 avant-garde or "free" playing styles. Performance required. [D; CSU; UC]

MUS 170.**Small Performing Groups I**

1 unit

Grade only**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 171.**Small Performing Groups II**

1 unit

Grade only**Prerequisite:** MUS 170 or equivalent**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 172.**Small Performing Groups III**

1 unit

Grade only**Prerequisite:** MUS 171 or equivalent**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 173.**Small Performing Groups IV**

1 unit

Grade only**Prerequisite:** MUS 172 or equivalent**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 180.**Chamber Singers I**

2 units

Limitation on Enrollment: Demonstrated proficiency**Lecture 2 hours, laboratory 4 hours****Offered:** Fall, Spring

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. [D; CSU; UC]

MUS 181.
Chamber Singers II

2 units

Limitation on Enrollment: *Demonstrated proficiency*

Lecture 2 hours, laboratory 4 hours

Offered: *Fall, Spring*

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. [D; CSU; UC]

MUS 182.
Chamber Singers III

2 units

Limitation on Enrollment: *Demonstrated proficiency*

Lecture 2 hours, laboratory 4 hours

Offered: *Fall, Spring*

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. [D; CSU; UC]

MUS 183.
Chamber Singers IV

2 units

Limitation on Enrollment: *Demonstrated proficiency*

Lecture 2 hours, laboratory 4 hours

Offered: *Fall, Spring*

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. [D; CSU; UC]

MUS 185.
Concert Choir I

1 unit

Lecture 1 hour, laboratory 5 hours

Offered: *Fall, Spring*

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. Public performance required. [D; CSU; UC]

MUS 186.
Concert Choir II

1 unit

Lecture 1 hour, laboratory 5 hours

Offered: *Fall, Spring*

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. Public performance required. [D; CSU; UC]

MUS 187.
Concert Choir III

1 unit

Lecture 1 hour, laboratory 5 hours

Offered: *Fall, Spring*

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. Public performance required. [D; CSU; UC]

MUS 188.
Concert Choir IV

1 unit

Lecture 1 hour, laboratory 5 hours

Offered: *Fall, Spring*

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. Public performance required. [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 Patricia Axsom, M.S., Office 570B, 619-482-6460

Faculty Zaydie Feria, B.S. • Yvette Duncan, B.S.N. • Mary Livingston, M.S.N. • Linda McDonald, M.S.N. • Catherine L. McJannet, M.N. Gabriella Penalzoza, B.S.N. • Arlin Ramira, M.S.N. • Susan Schoenrock, M.S. • Margaret Ann Taylor, M.S.N.

Department Chair Mary Livingston, M.S.N.

Interim Director Catherine L. McJannet, M.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

Below is a sample of the career options available for the nursing major. Some of these require an associate degree, most require a bachelor's degree, and a few require a graduate-level 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

Associate in Arts Degree: Transfer Preparation

	Major Code
Transfer Education/Preparation for Nursing	A1330

Associate in Science Degree: Career/Technical

Nursing	02360
Surgical Technology	02345
Vocational Nursing	02390

Certificates of Achievement:

Central Service Technology	02347
Certified Nursing Assistant	02371
Operating Room Nursing	02361
Surgical Technology	02346
Vocational Nursing	02392

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 delegation. 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 Option 1 (BIOL 260, 261, and 265) must be completed with a cumulative GPA of 2.5 or Option 2, BIOL 193 and microbiology with a 3.0 GPA. 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 ten 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 RDG 158, ENGL 116, or equivalent reading course; equivalency documented by approved petition; or college transcript showing an earned associate or bachelor’s 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, and provide evidence of payment of malpractice insurance premium and ATI testing fees.

Effective Fall 2007, all ADN, LVN-ADN and VN students must pass the Test of Essential Academic Skills (TEAS). This is a diagnostic test that covers basic math, reading, and science. Students who fail to achieve a passing score must complete additional pre-nursing course work as directed by the nursing department. Student may prepare for this test by going to the ATI testing site (<http://www.atitesting.com/>), then go to ASSESSMENTS; go to Test of Essential Academic Skills (TEAS). The TEAS test will be given by the nursing faculty prior to starting the nursing program by the nursing department.

All nursing students in ALL programs will be required to complete the background check and urine drug screen **BEFORE BEGINNING THE NURSING PROGRAMS IN SAN DIEGO—THIS IS A HOSPITAL/HEALTH CARE AGENCY REQUIREMENT.** Students will be given the information regarding these requirements upon admission to the program.

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 noncredit “Success in Nursing” course is encouraged for all students entering nursing.

Some financial assistance is available through Financial Aid. 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 1625 North Market Blvd, Suite N-217; Sacramento, CA 95834-1924 or 1170 Durfee Avenue, Suite G; South El Monte, CA 91733-4400, 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 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's 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 and Biological 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 35.

* 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 41 for further information.**

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.

Select one option for completion of prerequisites.

Students transferring as nursing majors to the CSU's must complete Option I.

Prerequisites to Option I and Option II

- Nursing Assistant Certification or equivalent

Option I 17

BIOL 260	Human Anatomy * (5)
BIOL 261	Principles of Human Physiology (4)
BIOL 265	General Microbiology * (5)
ENGL 115	Reading and Composition: Exposition and Argumentation (3)

Option II 13

BIOL 193	Principles of Human Anatomy and Physiology (5)
BIOL 265	General Microbiology (5)
ENGL 115	Reading and Composition: Exposition and Argumentation (3)

Total prerequisite units 13–17

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

Third Semester

ADN 221	Adult Nursing	5
ADN 221L	Adult Nursing Laboratory	5

Fourth Semester

ADN 114	Nursing Supervision and Leadership I	2
ADN 223	Gerontology	2
ADN 223L	Gerontology Laboratory	4
ADN 225	Nursing Supervision and Leadership II: Preceptorship2	4

Total semester units 39

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The following courses can be taken at any time as part of the General Education requirement for nursing.

COMM 103 Oral Communication		
OR		
COMM 174 Interpersonal Communication		3
PSYC 101 General Psychology		3
CD 170 Principles of Child Development		3
OR		
PSYC 230 Lifespan Development		3
Humanities: One course from Group 1: Fine Arts of Plan A		3
MATH 45 or equivalent		4
Total units		68–72

Proficiencies required for department acceptance into this program include basic nursing skills (CNA or equivalent) college-level reading (RDG 158), and pre-algebra math (MATH 35).

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

* Or 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 Principles of Human Physiology	4
BIOL 265 General Microbiology *	5
No recency requirement on science courses	

Total prerequisite units **14**

* Or 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.

Summer Session

ADN 115 Transition to Associate Degree Nursing	3
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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: Preceptorship	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	Principles of Human Physiology	4
BIOL 265	General Microbiology *	5
Total prerequisite units		9

Summer Session

ADN 115	Transition to Associate Degree Nursing	3
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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: Preceptorship	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	Human Anatomy and Physiology (4)	4–5
OR		
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	Advanced Operating Room Techniques	4
ST 140	Practicum: Major Surgical Specialties	8
ST 150	Current Concepts in Surgical Technology	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 35.

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 go to the ROP office (Room 213B) for program information.

Vocational Nursing

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
HLTH 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	48.5-55.5

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 pre-algebra 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 35.

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.

Certificates of Achievement

Central Service Technology

Career/Technical (Major Code: 02347)

Designed for students interested in a career as a Central Service Technician (CST). CSTs 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.^f

CNA 10 Certified Nursing Assistant	7
Total units	7

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 circulate.

- 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	Human Anatomy and Physiology (4)	4–5
OR		
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	Advanced Operating Room Techniques	4
ST 140	Practicum: Major Surgical Specialties	8
ST 150	Current Concepts in Surgical Technology	1

Summer Session

ST 160	Practicum: Subspecialties	6
Total units		35–36

Vocational Nursing

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	
HLTH 204	Fundamentals of Nutrition 3	
Total prerequisites 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

Proficiencies required for department acceptance into this program include basic nursing skills (CNA or equivalent), college-level reading, and pre-algebra math.

Nursing Courses

There are five types of nursing courses:

- Associate degree nursing
- Certified nursing assistant
- Operating room nurse
- Surgical technology
- Vocational nursing

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 healthcare occupations. Professional and technical skill necessary for healthcare careers. [D]

ADN 106.
Dosage Calculations for Nurses
2 units

Grade only
Lecture 2 hours
Offered: Summer

Focuses on math review for dosage calculations, conversion between different systems of measurement, dosage calculation and measurement, drug orders and labels, and intravenous calculations. Emphasizes techniques of safe medication administration. Examines special considerations for administration of medications to elderly and pediatric patients. (Formerly ADN 295C.) [D; CSU]

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; and 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

Designed to cover the pathophysiology and pharmacological treatment of diseases of the reproductive, neurosensory, ENT, integumentary, and immune systems, gastrointestinal systems, and nutrition. Includes mental disorders and their pharmacological treatment, and illicit drugs. Reviews cultural and age specific aspects of the medications and emphasizes critical thinking. [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
Corequisite: ADN 111A and 112
Limitation on Enrollment: Nursing Assistant Certification
Laboratory 15 hours
Offered: Fall

Fee: \$63. 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: \$22. 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 212.
Assessment and Management of the Critical Ill Patient
2 units

Grade only

Limitation on Enrollment: Registered nurses or student nurses

Lecture 2 hours

Offered: Spring

Introduces nursing students and registered nurses to the concepts of nursing care of the critically ill patient. Describes principles of care for patients in the emergency room, intensive care unit, and telemetry units. Covers advanced assessment, electrocardiogram interpretation, and hemodynamic monitoring. (Formerly ADN 295B.) [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

Fee: \$22. 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

Fee: \$22. Companion laboratory class for ADN 223. Provided at a variety of clinical settings. [D; CSU]

ADN 225.
**Nursing Supervision and Leadership II:
Preceptorship**

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.
**Associate Degree Nursing Work
Experience I**

1–3 units

Credit/No Credit only

Prerequisite: ADN 112L or equivalent

Limitation on Enrollment: Declared Associate Degree Nursing major. Students must complete no fewer than seven 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 291.
**Associate Degree Nursing Work
Experience II**

1–3 units

Credit/No Credit only

Prerequisite: ADN 290 or equivalent

Limitation on Enrollment: Declared Associate Degree Nursing major. Students must complete no fewer than seven 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 292.
**Associate Degree Nursing Work
Experience III**

1–3 units

Credit/No Credit only

Prerequisite: ADN 291 or equivalent

Limitation on Enrollment: Declared Associate Degree Nursing major. Students must complete no fewer than seven 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

1–3 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: \$9. 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: \$9. 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 Nurse Courses

ORN 110.

Introduction to Surgical Technology

8 units

Grade only

Corequisite: ORN 120

Limitation on Enrollment: Registered Nurse License and acceptance into program

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. (Same as ST 110.) [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. (Same as ST 120.) [D; CSU]

ORN 211.

Perioperative Nurses Training

2 units

Grade only

Corequisite: ORN 211L.

Limitation on Enrollment: Registered Nurse 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

Limitation on Enrollment: 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

1-3 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 role of the central service technician. [D]

ST 110.
Introduction to Surgical Technology

8 units

Grade only

Prerequisite: BIOL 190 or equivalent

Corequisite: ST 120

Limitation on Enrollment: Acceptance into the Surgical Technology program

Lecture 8 hours

Offered: Variable

Introduction to operating room, aseptic technique, disinfection, sterilization, instruments, equipment, and 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) (Same as ORN 110.) [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. (Same as ORN 120.) (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, laparoscopic, 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 25.

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
Corequisite: VN 30 and 101L
Limitation on Enrollment: CNA certification or equivalent
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: \$27. 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: \$16. 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: \$9. 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 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**1–3 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]

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Department Chair Marilynn 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 challenging 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

Below is a sample of the career options available for the office information systems major. Some require a certificate of achievement and most require an associate in science 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

Associate in Science Degree: Career/Technical	Major Code
Office Information Systems Professional	02046

Certificates of Achievement

OIS: Office Information Systems Professional—Basic	02047
OIS: Office Information Systems Professional—Advanced	02048
OIS: Microsoft Office Specialist (MOS)—Basic	02052
OIS: 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	2.5
BUS 200B	Microsoft Word: Advanced	2.5
BUS 206	Filing and Records Management	2.5
BUS 210	Business English	3
BUS 211	Communications in Business and Industry	3
	OR	
BUS 212	Business Communication	3
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 (1–4)	2

Total units 30

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; CIS 92, 101, 133, 134, 135, 139, 140.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

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	2.5
BUS 206	Filing and Records Management	2.5
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		16.5

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	2.5
BUS 200B	Microsoft Word: Advanced	2.5
BUS 206	Filing and Records Management	2.5
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 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 (1–4)	2
Total units		30

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; CIS 92, 101, 133, 134, 135, 139, 140.

OIS: Microsoft Office Specialist (MOS)—Basic

Career/Technical (Major Code: 02052)

Prepares students to pass the Microsoft Officer Specialist (MOS) certification test in word processing. Gaining certification will allow students to be more competitive in obtaining well-paid office and related technical positions or in advancing in their present positions.

BUS 182	Keyboarding for Office Professionals	2
BUS 200A	Microsoft Word: Beginning	2.5
BUS 200B	Microsoft Word: Advanced	2.5
BUS 210	Business English	3
BUS 218	Procedures for Office Professionals	4
Total units		14

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 (2.5) OR	2.5–3
CIS 92	Software Technologies for the Workplace (3)	
BUS 200B	Microsoft Word: Advanced	2.5
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 240	Microsoft Outlook	2.5
CIS 129	Multimedia Presentations (PowerPoint)	1
CIS 122B	Spreadsheet Software—Excel OR	1
CIS 133	Advanced Microcomputer Spreadsheets Software	
CIS 134	Microcomputer Database Software—Access OR	1
CIS 135	Advanced Microcomputer Database Software	

Total units 23.5–24

Recommended Electives: BUS 35, 36, 70, 71, 73, 246; CIS 134, 139, 140, 150, 151, and 152.

Office Information Systems Professional— Bilingual

School of Business and Information Systems

Dean Irma Alvarez, M.A., Office 215, 619-482-6457

Faculty Marilynne Hudgens, M.A. • Maria E. Martínez, M.B.A. • Marisa Soler-McElwain, M.L.

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. Training for a bilingual (Spanish/English) office environment is emphasized. 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

Below is a sample of the career options available for the office information systems major. Some require a certificate of achievement and most require an associate in science 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 in Science Degree: Career/Technical

OIS: Office Information Systems Professional—Bilingual 02041

Certificates of Achievement

Administrative Office Assistant—Bilingual	02045
OIS: Office Information Systems Professional— Bilingual—Basic	02042
OIS: Office Information Systems Professional— Bilingual—Advanced	02043

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 I	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	2.5
BUS 200B	Microsoft Word: Advanced	2.5
BUS 206	Filing and Records Management	2.5
BUS 210	Business English	3
BUS 211	Communication in Business and Industry	3
	OR	
BUS 212	Business Communication	3
BUS 218	Procedures for Office Professionals	4
BUS 225	Interpretation and Translation: General Business	3
	OR	
LEGL 257	International Business and Legal Communications: Spanish	3
BUS 246	Desktop Publishing	1
SPAN 216	Spanish for Bilinguals II *	5
	OR	
SPAN 202	Intermediate Spanish II *	5
BUS 290–293	Work Experience in Business I–IV (1–4)	2
	Total units	37.5

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; CIS 92, 101, 133, 134, 135, 139, 140.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

* 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

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 290–293	Work Experience in Business I–IV (1–4)	1
	Total units	13

OIS: Office Information Systems Professional—Bilingual—Basic

Career/Technical (Major Code: 02042)

BUS 73	Keyboarding Speed and Accuracy I	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	2.5
BUS 206	Filing and Records Management	2.5
BUS 210	Business English	3
BUS 246	Desktop Publishing	1
SPAN 216	Spanish for Bilinguals II *	5
	OR	
SPAN 202	Intermediate Spanish II *	5
	Total units	21

* 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 I	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	2.5
BUS 200B	Microsoft Word: Advanced	2.5
BUS 206	Filing and Records Management	2.5
BUS 210	Business English	3
BUS 211	Communication in Business and Industry	3
	OR	
BUS 212	Business Communication	3
BUS 218	Procedures for Office Professionals	4
BUS 225	Interpretation and Translation: General Business	3
	OR	
LEGL 257	International Business and Legal Communications: Spanish	3
BUS 246	Desktop Publishing	1
SPAN 216	Spanish for Bilinguals II *	5
	OR	
SPAN 202	Intermediate Spanish II *	5
BUS 290–293	Work Experience in Business I–IV (1–4)	2
Total units		37.5

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; CIS 92, 101, 133, 134, 135, 139, 140.

Paralegal Studies

School of Business and Information Systems

Dean Irma Alvarez, M.A., Office 215, 619-482-6457

Faculty Larry Christiansen, J.D. • Victoria López, J.D. • Elizabeth Shapiro, 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 College 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 are 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

Below is a sample of the career options available for the paralegal studies major. A few require a certificate of achievement, some require an associate in science degree, and some require a bachelor's degree: 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, and 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	Legal Assistant: An Introduction	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 * (2–4)	2

Select 11 units from the courses listed below: 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 Management (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)	

Select 3 units from the courses listed below: 3

BUS 140	Business Law/The Legal Environment of Business (3)	
AJ 151	Concepts of Criminal Law (3)	
AJ 156	Legal Aspects of Evidence (3)	
AJ 181	Juvenile Law and Procedures (3)	
RE 106	Legal Aspects of Real Estate (3)	

Total units 33.5

To earn an associate degree, additional general education and graduation requirements must be completed.

See page 35.

* 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	Legal Assistant: An Introduction	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 * (2–4)	2

Select 11 units from the courses listed below: 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 Management (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)	

Select 3 units from the courses listed below: 3

BUS 140	Business Law/The Legal Environment of Business (3)	
AJ 151	Concepts of Criminal Law (3)	
AJ 156	Legal Aspects of Evidence (3)	
AJ 181	Juvenile Law and Procedures (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. • Victoria López, J.D. • Elizabeth Shapiro, J.D. • Marisa Soler-McElwain M.L.

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 College 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 are 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

Below is a sample of the career options available for the paralegal studies major. A few require a certificate of achievement, some require an associate in science degree, and some require a bachelor's degree: 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, and 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

Associate in Science Degree: Career/Technical

	Major Code
Paralegal Studies: Bilingual (English/Spanish)	A2517

Certificate of Achievement

Paralegal Studies: Bilingual (English/Spanish)	A2519
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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	Legal Assistant: An Introduction	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 * (2–4)	2
SPAN 202	Intermediate Spanish II **	5

Select 5 units from the courses listed below: 5

LEGL 263	Family Law (3)	
LEGL 264	Wills, Trusts, and Estates (3)	
LEGL 266	Mediation, Negotiation, and Conflict Management (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)	

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 35.*

* 60 or more hours of on-the-job work experience internship, paid or volunteer, are required in the LEGL 290–293 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	Legal Assistant: An Introduction	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 * (2–4)	2
SPAN 202	Intermediate Spanish II **	5

Select 5 units from the courses listed below: 5

LEGL 263	Family Law (3)	
LEGL 264	Wills, Trusts, and Estates (3)	
LEGL 266	Mediation, Negotiation, and Conflict Management (2)	
LGL 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)	

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 290–293 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.

**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.

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.

Legal Courses

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; RDG 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: \$1. 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: RDG 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, and 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: RDG 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; RDG 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; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Variable

Fee: \$2. 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; RDG 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; RDG 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; RDG 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 266.
Mediation, Negotiation, and Conflict Management
2 units

Recommended Preparation: RDG 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: \$3. 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: \$1. 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; CSU]

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.
Legal Cooperative Work Experience I

2–4 units

Grade only

Limitation on Enrollment: *Declared Paralegal Studies or Legal Office Professional major.*

Student must complete no fewer 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 291.
Legal Cooperative Work Experience II

2–4 units

Grade only

Prerequisite: *LEGL 290 or equivalent*

Limitation on Enrollment: *Declared Paralegal Studies or Legal Office Professional major.*

Student must complete no fewer 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 292.
Legal Cooperative Work Experience III

2–4 units

Grade only

Prerequisite: *LEGL 291 or equivalent*

Limitation on Enrollment: *Declared Paralegal Studies or Legal Office Professional major.*

Student must complete no fewer 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 293.
Legal Cooperative Work Experience IV

2–4 units

Grade only

Prerequisite: *LEGL 292 or equivalent*

Limitation on Enrollment: *Declared Paralegal Studies or Legal Office Professional major.*

Student must complete no fewer 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]

Personal Development

School of Counseling and Personal Development

Dean Beatrice Zamora-Aguilar, M.S., Office S204F, 619-482-6471

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. • Adriana Garibay, M.S. • James Jimenez, M.A. • Caree Lesh, M.S. • Janelle Williams Melendrez, M.S. David Ramírez, M.S. • Nicole Goedhart, 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 Scott Finn, M.A.

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 assist 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 111 College Seminar
- PD 112 Cultural Diversity in Higher Education
- PD 113 University Transfer
- PD 114 Transition to Higher Education

Work success skills assist students in preparation for entering the workforce by sharpening interpersonal skills. The work success skills curriculum will assist in the development of career goals and life planning. They include:

- PD 100 Lifelong Success
- PD 100A Career Planning: Career Assessment
- PD 100C Career Planning: Job Search Skills
- PD 106 Work Success: Career Management
- PD 107 Work Success—Confidence in the Workplace
- PD 108 Work Success: Effective Communication in the Workplace
- PD 109 Work Success: Successful Workplace Behavior

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 college, work and life success. Uses assessment of personality, interests, skills, and values to identify major and career options. Uses learning styles, psychological principles of learning, life management, and creative and critical thinking techniques to promote health and lifelong learning. [D; CSU, UC]

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, and personality style and goals as they relate to careers and the world of work. [D; CSU]

PD 100C.
Career Planning: Job Search Skills
1 unit

Credit/No Credit only

Recommended Preparation: PD 100A or equivalent

Lecture 1 hour

Offered: Fall; Spring

Designed to assist students in organizing a job search plan. Includes 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 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 workforce. 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 and task management; learning styles; personal and educational goals and values; psychosocial and psychological health; memory and concentration; academic study strategies; and use of college resources. (Same as LS 110.) [D; CSU]

PD 111.
College Seminar

1 unit

Recommended Preparation: ENGL 105 or 114 or the equivalent skill level as determined by the Southwestern College English Assessment or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 1 hour

Offered: Fall, Spring, Summer

Introduces college system and reviews strategies and resources necessary for students to attain their educational goals. Analyzes and reviews college resources, health and wellness issues, class selection and scheduling, academic planning, academic probation and disqualification, transition into college, self-awareness and understanding, and decision making. [D; CSU]

PD 112.
Cultural Diversity in Higher Education

1 unit

Recommended Preparation: ENGL 105 or 114 or the equivalent skill level as determined by the Southwestern College English Assessment or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 1 hour

Offered: Fall, Spring

Explores the dynamics of multicultural issues affecting student success and transition to higher education. Includes an examination of cultural diversity, cultural competency, university demographics, origins of values systems, identity development, cross-cultural communication, and health and wellness issues related to culture and ethnicity. [D; CSU]

PD 113.
University Transfer

1 unit

Recommended Preparation: ENGL 105 or 114 or the equivalent skill level as determined by the Southwestern College English Assessment or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 1 hour

Offered: Fall

Emphasizes various topics involved with university transfer. Includes the examination and discussion, as well as university culture and rules, psychosocial issues, effective decision making skills and strategies, researching, comparing, evaluating, and determining transfer goals. [D; CSU]

PD 114.
Transitions in Higher Education

3 units

Recommended Preparation: ENGL 105 or 114 or the equivalent skill level as determined by the Southwestern College English Assessment or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Fall

Covers a step-by-step approach toward identifying and describing psychosocial, physiological, and academic matters involved with transition to higher education. Includes a study of the culture and rules of higher education, effective decision making skills and strategies, motivation, goal attainment, cultural competency, finance and budgeting, college resources, researching university selections, and health and safety. [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]

Personal Development—Disability Support Services

Disability Support Services

Director Helen Elias, M.S.Ed., Office S108, 619-482-6512

Faculty Maria Constein, M.S. • Malia Flood, Ph.D. • Diane Branman, M.S. • Patricia Flores-Charter, M.A. • Frank Post, M.S. • Sherilyn Salahuddin, M.Ed.

Department Chair Frank Post, M.S.

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 Services 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 I

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 96.
Learning Assistance Practicum

1 unit

Credit/No Credit only

Laboratory 2 hours

Offered: Variable

Provides individualized assistance and learning/study strategies to enhance learning in basic skills and/or content area courses. Instructional methods and materials are based on individualized learning need. [ND]

PD 100.
Lifelong Success

3 units

Lecture 3 hours

Offered: Variable

Applies physiological, social, and psychological principles to college, work and life success. Uses assessment of personality, interests, skills, and values to identify major and career options. Uses learning styles, psychological principles of learning, life management, and creative and critical thinking techniques to promote health and lifelong learning. [D; CSU, UC]

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 and 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.
Occupational Cooperative Work Experience I

2–4 units

Credit/No Credit only

Limitation on Enrollment: Completed Student Educational Contract (SEC). Student must complete no fewer 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 291.
Occupational Cooperative Work Experience II

2–4 units

Credit/No Credit only

Prerequisite: PD 290 or equivalent
Limitation on Enrollment: Completed Student Educational Contract (SEC). Student must complete no fewer 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 292.
Occupational Cooperative Work Experience III

2–4 units

Credit/No Credit only

Prerequisite: PD 291 or equivalent
Limitation on Enrollment: Completed Student Educational Contract (SEC). Student must complete no fewer 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 293.
Occupational Cooperative Work Experience IV

2–4 units

Credit/No Credit only

Prerequisite: PD 292 or equivalent
Limitation on Enrollment: Completed Student Educational Contract (SEC). Student must complete no fewer 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]

Pharmaceutical and Laboratory Science

School of Mathematics, Science, and Engineering

Dean Kathy Tyner, M.S., Office 345, 619-482-6459

Faculty David R. Brown, Ph.D. • David Hecht, Ph.D. • Tinh-Alfredo V. Khuong, M.S. • Jacquelyn Thomas, M.S. • Kathy Tyner, M.S.

Interim Department Chair Jeffrey Veal, Ph.D.

General Description

The chemical industry is diverse, vast, and touches nearly every aspect of our lives on a daily basis. Chemical technology is a discipline in which chemical principles are applied to solve problems or produce materials in a wide range of fields in the areas of high-technology, consumer products, and healthcare. An education in chemical technology provides the skills and knowledge essential to carry out the tasks necessary to push forward the progress of the multi-billion dollar chemical industry, including hands-on experience with state-of-the-art analytical instrumentation, small molecule synthesis, computational methods, and protein electrophoresis and purification.

Career Options

Below is an example of the career options available for the chemical technology major. A few require a certificate of achievement, some require an associate in science degree, and most require a graduate-level degree. The San Diego region is home to one of the highest concentrations of pharmaceutical, biotechnology, and other chemistry-based industries in the United States. An ever-increasing demand for skilled chemical technicians exists in the local job market. Graduates of the program will have gained the knowledge and skills necessary to perform many of the key laboratory tasks undertaken in a variety of industrial settings where research and development and/or manufacturing take place. Chemical technicians provide valuable support in companies involved in drug discovery, environmental and forensics analyses, development of new materials, petroleum refining, and the manufacturing of plastics, electronic materials, textiles, paints, foods and beverages, and cosmetics, among many others.

Degree/Certificate Options

Major Code

Associate in Science Degree: Career Technical

Pharmaceutical and Laboratory Science	A1532
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Certificate of Achievement

Pharmaceutical and Laboratory Science	A1533
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Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Web site for Chemical Technology major:

<http://www.swccd.edu/~chemtech>

Associate in Science Degree

Pharmaceutical and Laboratory Science

Career/Technical (Major Code: A1532)

Composed of a comprehensive collection of instructional and laboratory experiences directed toward readying graduates for entry-level positions in a wide variety of chemistry-based industries such as pharmaceutical, biotechnology, paints and coatings, and electronic materials. The program curriculum is structured to equip students with many of the technical skills and competencies identified by the American Chemical Society as essential in the preparation of well-trained chemical technicians.

Prerequisites

MATH 65	Intermediate Algebra	5
MATH 121	Applied Calculus I	3
CHEM 170	Preparation for General Chemistry	4
CHEM 200	General Chemistry I	5
CHEM 210	General Chemistry II	5
Total units		22

First Semester

CHEM 150	Introduction to Chemical Technology	2
CHEM 180	Computational Methods in Chemistry	2
MATH 122	Applied Calculus II	3
PHYS 170	College Physics I	3
PHYS 171	College Physics Laboratory I	1

Second Semester

CHEM 190	Chemical Health and Safety	2
PHYS 172	College Physics II	3
PHYS 173	College Physics Laboratory II	1

Third Semester

CHEM 240	Organic Chemistry I	5
CHEM 250	Analytical Chemistry	5

Fourth Semester

CHEM 160	Introductory Biochemistry	3
CHEM 161	Biochemical Techniques	2
CHEM 242	Organic Chemistry II	5
CHEM 244	Organic Analysis and Spectroscopy	2
Total units		39

To earn an associate degree, additional general education and graduation requirements must be completed.
See page 35.

Certificate of Achievement

Pharmaceutical and Laboratory Science

Career/Technical (Major Code: A1533)

First Semester

CHEM 150	Introduction to Chemical Technology	2
CHEM 180	Computational Methods in Chemistry	2
MATH 122	Applied Calculus II	3
PHYS 170	College Physics I	3
PHYS 171	College Physics Laboratory I	1

Second Semester

CHEM 190	Chemical Health and Safety	2
PHYS 172	College Physics II	3
PHYS 173	College Physics Laboratory II	1

Third Semester

CHEM 240	Organic Chemistry I	5
CHEM 250	Analytical Chemistry	5

Fourth Semester

CHEM 160	Introductory Biochemistry	3
CHEM 161	Biochemical Techniques	2
CHEM 242	Organic Chemistry II	5
CHEM 244	Organic Analysis and Spectroscopy	2
Total units		39

Philosophy

School of Languages and Humanities

Dean Joel M. Levine, Ed.D., Office 430F, 619-482-6349

Faculty Peter Bolland, M.S. • Alejandro Orozco, 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

Below is a sample of the career options available for the philosophy major. A few of these require an associate degree, some require a bachelor's 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

Associate in Arts Degree: Transfer Preparation

Philosophy

Major Code

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-level 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 bachelor's 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 35.

* 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 41 for further information.**

Philosophy Courses

PHIL 101.
Introduction to Philosophy
3 units

Recommended Preparation: RDG 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: RDG 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: RDG 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: RDG 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; RDG 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 Science

School of Mathematics, Science, and Engineering

Dean Kathy Tyner, M.S., Office 345, 619-482-6459

Faculty Ken Yanow, M.S., M.A.

Interim Department Chair Jeffrey Veal, Ph.D.

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 bachelor's 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

Associate in Science Degree: Transfer Preparation

Physical Science 01670

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

Major Code

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 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	Principles of 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 35.*

* 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 41 for further information.**

Physical Science Courses

PHS 101.

Introduction to the Physical Sciences

3 units

Grade only

Recommended Preparation: RDG 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: Variable

Introduction to basic physics and chemistry with emphasis on the understanding and significance of accepted 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: RDG 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 Kathy Tyner, M.S., Office 345, 619-482-6459

Faculty Hok Kong Lee, Ph.D. • Jeffrey Veal, Ph.D.

Interim Department Chair Jeffrey Veal, Ph.D.

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

Below is a sample of the career options available for the physics major. A few of these require an associate degree, some require a bachelor's 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

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://physics.sdsu.edu/>
UCSD <http://physics.ucsd.edu/>
CSU, San Marcos <http://physics.csusm.edu/>
Articulation <http://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
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Total units	30
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To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

* 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 41 for further information.**

Physics Courses

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; UC CAN-PHYS 4]

PHYS 170. **College Physics I** 3 units

Prerequisite: MATH 121 or equivalent

Recommended Preparation: RDG 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 mainly for majors in the life sciences. Topics include: Newtonian mechanics; and waves. [D; CSU; UC]

PHYS 171. **College Physics Laboratory I** 1 unit

Corequisite: PHYS 170 (May be taken previously)

Laboratory 3 hours

Offered: Fall, Spring

Laboratory course to accompany College Physics (PHYS 170). [D; CSU; UC]

PHYS 172. **College Physics II** 3 units

Prerequisite: PHYS 170 and MATH 122, or equivalent

Lecture 3 hours

Offered: Fall, Spring

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; and 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: Fall, Spring

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: Fall

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; and 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: Fall

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: RDG 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 Joel M. Levine, Ed.D., Office 430F, 619-482-6349

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: Fall, 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 Behavioral and Social Sciences

Dean Viara Giraffe, Ph.D., Office 470K, 619-482-6582

Faculty Alma Aguilar, M.A. • Norris S. Nagao, Ed.M. • Phil Saenz, J.D.

Department Chair Barry Horlor, 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

Below is a sample of the career options available for the political science, prelaw, or public administration major. A few of these require an associate degree, most require a bachelor's 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)	3-4
	OR	
SOC 270	Statistical Methods of Sociology (3)	
	OR	
PSYC 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 35.

* 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 41 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 35.

- * 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 41 for further information.**

Political Science Courses

PS 101.

Introduction to Political Science

3 units

Recommended Preparation: RDG 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. [D; CSU; UC]

PS 102.

Introduction to American Government and Politics

3 units

Recommended Preparation: RDG 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; RDG 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; RDG 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 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 Western and non-Western contexts are 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 analyzes how public policy decisions are made and implemented. [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 Joel M. Levine, Ed.D., Office 430F, 619-482-6349

Faculty Esther Alonso, M.A. • Eliana Santana, Ed.D.

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. 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 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 Behavioral and social sciences

Dean Viara Giraffe, Ph.D., Office 470K, 619-482-6582

Faculty Christopher Hayashi, M.A. • Jan Koontz, M.A. • Danielle McAneney, M.A. • Thomas Murray, Ph.D. • 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

Below is a sample of the career options available for the psychology major. A few of these require an associate degree, most require a bachelor's 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

Associate in Arts Degree: Transfer Preparation

Psychology

Major Code

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 35.

* 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 41 for further information.**

Psychology Courses

PSYC 101.

General Psychology

3 units

Recommended Preparation: RDG 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 scientific study of human behavior through the analysis of facts, theories, and concepts. Emphasizes biological, social, and cognitive influences on behaviors, such as learning, memory, perception, sexuality, personality, development, psychological disorders, and group behavior. Attention also given to historical developments and experimental techniques. [D; CSU; UC; CAN-PSY 2]

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 psychological 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 211.

Learning

3 units

Prerequisite: PSYC 101 or equivalent

Recommended Preparation: RDG 52 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Fall, Spring

Studies 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

Focuses upon the study of human behavior from a physiological perspective. Emphasizes the brain and its relationship to behaviors such as perception, emotion, motivation, learning, memory, arousal, sleep, and psychological disorders. Discusses evolutionary explanations, along with genetic and hormonal influences. [D; CSU; UC]

PSYC 270.

Statistical Methods of Psychology

3 units

Prerequisite: PSYC/SOC 101 or equivalent; MATH 65 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent

Lecture 3 hours

Offered: Fall, Spring

Emphasizes statistical methods of behavioral sciences, including sampling, basic research designs, describing distributions through graphs and tables, measures of central tendency, variability, linear correlation and regression, applications of normal probability curve, and test of significance. (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.

Reading

School of Languages And Humanities

Dean Joel M. Levine, Ed.D., Office 430F, 619-482-6349

Faculty Fredric Ball, M.A. • Susan Brenner, M.A. • Cher Johnson, M.A. • Joal Mayer, M.A. • Carmen Nieves-Cardenas, M.S. • Cheryl Norton, M.A. Elizabeth Smith, M.S. • Rob Unger, J.D.

Interim Department Chair Susan Brenner, M.A.

Reading Courses

READING SKILLS LAB

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	RDG 2
ESL 52	RDG 4
RDG 52	RDG 4
RDG 54	RDG 6
RDG 56	RDG 9
RDG 158	No Corequisite

RDG 1.

Reading Skills Lab I
1 unit

Credit/No Credit only

Prerequisite: Initial placement in sequence based on Southwestern College Reading Assessment

Laboratory 3 hours

Offered: Fall, Spring

Provides individualized reading assignments for continuing students who need to meet a competency requirement from RDG 2, 4, 6, or 9 reading labs. [ND]

RDG 2.

Reading Skills Lab II
1 unit

Credit/No Credit only

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]

RDG 4.

Basic Reading Laboratory
1 unit

Credit/No Credit only

Corequisite: RDG 52 or ESL 52

Recommended Preparation: ESL 51 or equivalent

Laboratory 3 hours

Offered: Fall, Spring

Fee: \$1. 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; and writing about reading selections. [ND]

RDG 6.

Developmental Reading Laboratory
1 unit

Credit/No Credit only

Prerequisite: RDG 4 or eligibility for RDG 54 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Corequisite: RDG 54

Laboratory 3 hours

Offered: Fall, Spring

Fee: \$1. 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]

RDG 9.

Introduction to College Reading Laboratory
1 unit

Credit/No Credit only

Prerequisite: RDG 6 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Corequisite: RDG 56

Laboratory 3 hours

Offered: Fall, Spring

Fee: \$1. 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]

RDG 12.**College Reading Laboratory**

1 unit

Credit/No Credit only

Prerequisite: RDG 9 or eligibility for RDG 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]

RDG 52.**Basic Reading**

2 units

Corequisite: RDG 4

Recommended Preparation: ESL 50 or equivalent; RDG 2 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 2 hours

Offered: Fall, Spring

Improves student's basic reading skills. Focuses on the specialized needs of the ESL student. Provides effective strategies for reading in a second language: vocabulary development, reading comprehension, and critical thinking skills. (Same as ESL 52.) [ND]

RDG 54.**Developmental Reading**

2 units

Prerequisite: RDG 4 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Corequisite: RDG 6

Lecture 2 hours

Offered: Fall, Spring

Focuses on basic reading skills which include effective reading strategies, vocabulary development, identification of main ideas, supporting details, and patterns of organization of writing, critical thinking skills, writing about reading selections, and the application of study strategies. [ND]

RDG 56.**Introduction to College Reading**

2 units

Prerequisite: RDG 6 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Corequisite: RDG 9

Lecture 2 hours

Offered: Fall, Spring

Stresses comprehension of intermediate-level reading selections. Focuses 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]

RDG 158.**College Reading**

3 units

Prerequisite: RDG 9 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Fall, Spring

Focuses on critical thinking and the analytical interpretation of the following college discourse modes and genres: narration (fiction and nonfiction), argumentation, persuasion, exposition, and poetry. Integrates the reading of college-level material with writing and critical thinking assignments. [D; CSU]

RDG 295.**Selected Topics in Reading**

1–3 units

Offered: Variable

Permits students to study relevant topics within the field of reading.

(May be taken for additional credit with new content.) [D; CSU]

Real Estate

School of Business and Information Systems

Dean Irma Alvarez, M.A., Office 215, 619-482-6457

Faculty Gail Stockin, M.A.

Department Chair Larry Christiansen, J.D.

General Description

The field of real estate focuses on real property and land use affairs, and 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

Below is a sample of the career options available for the real estate major. Most of these require a certificate of achievement or an associate in science degree, some require a bachelor's 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

Associate in Arts Degree: Transfer Preparation

	Major Code
Real Estate	01170

Associate in Science Degree: Career/Technical

Real Estate	02130
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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/The Legal Environment of Business	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	4

Total units	32
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To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

* 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 41 for further information.**

Associate in Science

Real Estate

Career/Technical (Major Code: 02130)

The Associate in Science degree 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/The Legal Environment of Business	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 121B, 122B; PSYC 101; RE 114, 120.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

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/The Legal Environment of Business	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)	3
OR		3-4
ACCT 101	Principles of Accounting I (4)	4
RE 110	Real Estate Appraisal	3

Select 9 units from the courses listed below: 9

BUS 140	Business Law/The Legal Environment of Business (3)	3
RE 101	Real Estate Principles (3)	3
RE 114	Property Management (3)	3
RE 120	Escrow Principles (3)	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/The Legal Environment of Business	3
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
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 and 102 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 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: BUS 211 or 212 or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent
Lecture 3 hours
Offered: Fall, Spring

Features an introductory course for the consumer or the career-minded individual. Focuses on 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: BUS 211 or 212 or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent
Lecture 3 hours
Offered: Fall, Spring

Focuses on 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

Prerequisite: RE 101 or equivalent
Lecture 3 hours
Offered: Fall

Develops a practical working knowledge of financing and mathematical formulas of real estate finance and appraisal for financing purposes. [D; CSU]
(Note: RE License is accepted in lieu of completion of RE 101.)

RE 106. **Legal Aspects of Real Estate** 3 units

Prerequisite: RE 101 or equivalent
Lecture 3 hours
Offered: Spring

Covers 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.)

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

Prerequisite: RE 101 or equivalent
Recommended Preparation: RE 108 or equivalent
Lecture 3 hours
Offered: Fall

Covers the principles and methods of appraisal as they may be used in listing or selling property, including establishing or interpreting appraisal information. [D; CSU]

RE 114. **Property Management** 3 units

Prerequisite: RE 101 or equivalent
Lecture 3 hours
Offered: Spring

Introduces 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.)

RE 120. **Escrow Principles** 3 units

Prerequisite: RE 101 or equivalent
Recommended Preparation: RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent
Lecture 3 hours
Offered: Spring

Covers the principles and practices in handling escrow involving land titles. Studies the forms used in the escrow departments of banks, title insurance companies, lending institutions, and independent escrow firms. Includes 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

Interim Dean Terry Davis, M.H.A., Office 1000K, 619-482-6551

Faculty Melanie Durkin, M.A. • Richard Mason, M.A.

Department Chair John Cosentino, 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 for 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

Below is a sample of the career options available for the recreation and leisure studies major. Some of these require an associate degree, most require a bachelor’s 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 activity 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 (2–4)	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 35.*

* 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 through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER INFORMATION section on page 41 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. **Recreation** **Cooperative Work Experience I** 2–4 units

Credit/No Credit only
Limitation on Enrollment: Declared Recreation major. Student must complete no fewer 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 291. **Recreation** **Cooperative Work Experience II** 2–4 units

Credit/No Credit only
Prerequisite: REC 290 or equivalent
Limitation on Enrollment: Declared Recreation major. Student must complete no fewer 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 292. **Recreation** **Cooperative Work Experience III** 2–4 units

Credit/No Credit only
Prerequisite: REC 291 or equivalent
Limitation on Enrollment: Declared Recreation major. Student must complete no fewer 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 293. **Recreation** **Cooperative Work Experience IV** 2–4 units

Credit/No Credit only
Prerequisite: REC 292 or equivalent
Limitation on Enrollment: Declared Recreation major. Student must complete no fewer 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 Behavioral and Social Sciences

Dean Viara Giraffe, Ph.D., Office 470K, 619-482-6582

Faculty Elizabeth Ballesteros, M.A. • Faustino Escalera, Ph.D. • Robin Franck, Cand. Ph.D.

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

Below is a sample of the career options available for the sociology or social work major. A few of these require an associate degree, most require a bachelor's 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, 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 35.

* 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 41 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
SOC 270	Statistical Methods of Sociology	3
	OR	
PSYC 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 35.*

- * 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 41 for further information.**

Sociology Courses

SOC 101.

Introduction to Sociology

3 units

Recommended Preparation: RDG 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; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Fall, Spring

Examines various contemporary social problems from multiple perspectives with an emphasis on their causes and possible solutions. Covers topics such as substance abuse, crime, poverty, racism, sexism, ageism, unemployment, education, healthcare, terrorism, and environmental destruction.

[D; CSU; UC; CAN-SOC 4]

SOC 115.

Filipino-American Culture

3 units

Recommended Preparation: RDG 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 ASIA 115.)

[D; CSU; UC]

SOC 116.

Introduction to Social Psychology

3 units

Recommended Preparation: RDG 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: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Fall, Spring

Examines the changing definition and construct of the family in America with an emphasis on the social, economic, and political influences affecting the images, ideals, and realities of this most central social institution. [D; CSU; UC; CAN-FCS 12]

SOC 150.

Mexican and Latino Culture in the United States

3 units

Grade only

Recommended Preparation: RDG 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 151.

Introduction to African-American Culture

3 units

Recommended Preparation: RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

Lecture 3 hours

Offered: Variable

Introduction to the origins and development of African-American culture in the United States between 1619 and the present. Emphasis on the critical analysis of the historical and sociological aspects of the African-American experience in the arenas of family, education, religion, and the arts. (Same as AFRO 151.)

[D; CSU; UC]

SOC 270.

Statistical Methods of Sociology

3 units

Prerequisite: SOC/PSYC 101 or equivalent; MATH 65 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent

Lecture 3 hours

Offered: Fall, Spring

Emphasizes statistical methods of behavioral sciences, including sampling, basic research designs, describing distributions through graphs and tables, measures of central tendency, variability, linear correlation and regression, applications of normal probability curve, and test of significance. (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. (May be repeated for additional credit with new content.)

[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 Joel M. Levine, Ed.D., Office 430F, 619-482-6349

Faculty Deana Alonso-Post, M.A. • Esther Alonso, M.A. • Margarita Andrade-Robledo, M.A. • Concetta Calandra, M.A. • Dinorah Guadiana-Costa, M.A. Angelina Stuart, M.A.

Department Chair Esther Alonso, M.A.

General Description

Knowing Spanish gives one the power to successfully communicate with the people of twenty one Spanish speaking countries, as well as 20 million Spanish speakers in the United States. After English, Spanish is the most studied language in Europe and Asia as well. In today's business world, Spanish is widely used as a valuable tool of communication for commercial transactions in the global market. It is one of the five official languages in the United Nations.

Career Options

Below is a sample of the career options available to students with fluency in a foreign language. Fluency and intercultural communication skills in a second language enhances opportunities in: government, business, medicine and health care, teaching, technology, the military, social service, law enforcement, communications, fashion, and marketing.

Degree/Certificate Options

Major Code

Associate in Arts Degree: Transfer Preparation

Spanish	01460
Spanish for Bilinguals	A1490

Certificates of Achievement

Spanish	01461
Spanish Proficiency	01461

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 101	Elementary Spanish I (5)	
	OR	5-6
SPAN 101A	Introduction to Elementary Spanish (3)	
SPAN 101B	Continuation of Elementary Spanish (3)	

Second Semester

SPAN 102	Elementary Spanish II	5
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Third Semester

SPAN 201	Intermediate Spanish I	5
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Fourth Semester

SPAN 225	Intermediate Conversation and Writing on Spanish Culture	3
SPAN 226	Intermediate Conversation and Writing on Latin American Culture	3
SPAN 202	Intermediate Spanish II	5
Total units		26-27

Recommended Elective: SPAN 205.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

* 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 41 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
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Second Semester

SPAN 216	Spanish for Bilinguals II	5
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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 202	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 Elective: SPAN 205.

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 35.

* 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 41 for further information.**

Certificates of Achievement

Spanish Proficiency

Career/Technical (Major Code: 01461)

Prepares students to successfully and professionally use oral and written formal Spanish in the community and the marketplace.

SPAN 215	Spanish for Bilinguals I (5)	
SPAN 216	Spanish for Bilinguals II (5)	
	OR	10
SPAN 216	Spanish for Bilinguals II (5)	
SPAN 221	Introduction to Literature for Bilinguals (5)	

Select one course from the following courses: 3

BUS 225	Interpretation and Translation: General Business (3)	
BUS 226	Interpretation and Translation: Legal (3)	
BUS 227	Interpretation and Translation: Medical (3)	
BUS 233	Interpretation and Translation: Immigration (3)	
BUS 234	Advanced Interpretation and Translation: Legal (3)	
LEGL 257	International Business and Legal Communication: Spanish (3)	

Total units		13
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Spanish Courses

SPAN 101.
Elementary Spanish I
5 units

Lecture 5 hours
Offered: Fall, Spring

Focuses on basic beginning interpersonal communication. Covers structures and vocabulary to talk about family, daily activities, obligations, weather, employment, school, and food. Introduces Spanish speakers' worldviews. Designed for students with very little or no knowledge of Spanish. Not intended for students who speak Spanish. Equivalent to one year of high school Spanish. (Formerly SPAN 120.) [D; CSU; UC; CAN-SPAN 2; SPAN 120 + SPAN 130 = CAN SPAN SEQ A]

SPAN 101A.
Introduction to Elementary Spanish
3 units

Lecture 3 hours
Offered: Fall, Spring

First half of SPAN 101. Focuses on basic beginning interpersonal communications. Covers structures and vocabulary to talk about family, school, everyday and weekend activities. Introduces Spanish speakers' worldviews. Designed for students without prior knowledge of Spanish. Not intended for students who speak Spanish. Not open to students with credit in SPAN 120 or SPAN 101. (Formerly SPAN 120A.) [D; CSU; UC]

SPAN 101B.
Continuation of Elementary Spanish
3 units

Prerequisite: SPAN 101A or equivalent
Lecture 3 hours
Offered: Fall, Spring

Continuation of SPAN 101A, equivalent to second half of SPAN 101. Focuses on basic beginning interpersonal communication. Covers structures and vocabulary to talk about work, career plans, food, relationships, going places and the weather. Introduces Spanish speakers' worldviews. Designed for students with little knowledge of Spanish. Not intended for students who speak Spanish. Not open to students with credit in SPAN 120 or SPAN 101. (Formerly SPAN 120B.) [D; CSU; UC]

SPAN 102.
Elementary Spanish II
5 units

Prerequisite: SPAN 101 or 101B or equivalent
Lecture 5 hours
Offered: Fall, Spring

Continuation of SPAN 101. Designed to further enable students to carry out basic interpersonal communication and acquire structures and vocabulary to talk about hobbies, chores and pastimes, vacations, childhood, health, important events, and goals. Study of Spanish speakers' worldviews. Equivalent to two years high school Spanish. Not intended for students who speak Spanish. (Formerly SPAN 130.) [D; CSU; UC; CAN-SPAN 4; SPAN 120 + SPAN 130 = CAN SPAN SEQ A]

SPAN 201.
Intermediate Spanish I
5 units

Prerequisite: SPAN 102 or equivalent
Lecture 5 hours
Offered: Fall, Spring

Provides extensive review of all first-year structures. Focuses on interpersonal communication for intermediate students. Covers grammatical structures and vocabulary necessary to discuss personal relations, family, travel, health, environment, media, art, and culture. Introduces readings reflecting Spanish speakers' worldviews. Equivalent to three years of high school Spanish. (Formerly SPAN 220.) [D; CSU; UC; CAN-SPAN 8; SPAN 220 + SPAN 230 = CAN SPAN SEQ B]

SPAN 202.
Intermediate Spanish II
5 units

Prerequisite: SPAN 201 or equivalent
Lecture 5 hours
Offered: Fall, Spring

Continuation of SPAN 201. Focuses on student's ability to communicate at an intermediate high level, on topics including careers, history, civilization, environment, literature, art, values, and politics in Spanish-speaking countries. Includes further study of complex grammatical structures and literary selections. Equivalent to four years of high school. (Formerly SPAN 230.) [D; CSU; UC; CAN-SPAN 10; SPAN 220 + SPAN 230 = CAN SPAN SEQ B]

SPAN 205.
Intermediate Conversation and Writing on Baja California
3 units

Prerequisite: SPAN 102 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; UC]

SPAN 215.
Spanish for Bilinguals I
5 units

Lecture 5 hours
Offered: Variable

Designed for bilingual students who need to improve their reading, writing, and formal speaking skills. Emphasizes Hispanic culture and literature and focuses on the professional use of Spanish in the work world. Not intended for students with a high school diploma from a Spanish-speaking country. [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. Designed for bilingual students who wish to acquire advanced writing, reading, and grammar skills. Focuses on real-life tasks reflecting the use of formal Spanish in the global community and the job market. Emphasizes formal oral and written Spanish, and a greater appreciation of Hispanic culture and literature. [D; CSU; UC]

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 202 or equivalent

Lecture 3 hours

Offered: Fall

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. Class discussions will be conducted in Spanish.
[D; CSU; UC]

SPAN 226.
**Intermediate Conversation and Writing on
Latin American Culture**

3 units

Prerequisite: SPAN 202 or equivalent

Lecture 3 hours

Offered: Spring

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. Class discussions will be conducted in Spanish.
[D; CSU; UC]

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 Donna Arnold, M.S., Office 702B, 619-482-6372

Faculty William Alexander, M.A. • Luis Bohorquez, B.A. • Mark Sisson, M.F.A.

Department Chair Linda Hensley, M.A.

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 the broadening implications of producing media for new wider Internet and other distribution opportunities.

Career Options

Below is a sample of the career options available for the telemedia major. Most of these require a certificate of achievement or an associate in arts degree, some require a bachelor's degree, and a few require a graduate-level degree: possible career options include 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 bachelor's degree in television, film, and new media production at SDSU.

ART 121	Darkroom and Digital Photography I	3
ART 159	Graphic Design—Layout	3
TELE 110	Writing for Film and Electronic Media	3
TELE 112	Culture and the Media	3
	OR	
TELE 113	History of Film as Art	3
	OR	
TELE 114/ COMM 185	Cinema as a Form of Expression and Communication	3
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 35.

* 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 41 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	Darkroom and Digital Photography I (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	
ART 159	Graphic Design—Layout	3
TELE 110	Writing for Film and Electronic 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 Post-production and Special Effects (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	Professional Media Work Experience I–IV	2–4
	Total units	35–39

Recommended Electives: BUS 147, 174, 183; ELEC 10A, 10B, 14, 162; TELE 104, 105, 114, 115, 116, 132, 233, 234, 242, 210; HLTH 101.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

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	4
TELE/ ART 131	Introduction to Video and Film Production	3
TELE 155	Introduction to Video Engineering	3
TELE 183	Video Studio Production	3
TELE 290–293	Professional Media Work Experience I–IV	2–4
	Total units	37–40

Recommended Electives: CIS 101, 111; ELEC 10A, 10B, 14; TELE 100, 150, 151.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

Certificates of Achievement

Telemedia Production Specialist— Basic

Career/Technical (Major Code: 02531)

ART 121	Darkroom and Digital Photography I (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 Film and Electronic Media		3
TELE 103	Fundamentals of Animation (2)		
	OR		2–3
TELE 163	Video Post-production and Special Effects (3)		
Total units			14–16

Telemedia Production Specialist— Advanced

Career/Technical (Major Code: 02532)

ART 159	Graphic Design—Layout		3
ART 131	Introduction to Video and Film Production		
	OR		3
TELE/ MUS 151	Recording Techniques		
TELE/ TA 150	Technical Design and Production		3
TELE 155	Introduction to Video Engineering (3)		
	OR		3–4
TELE 183	Video Studio Production (3)		
	OR		
TELE 290–293	Professional 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		4
TELE/ ART 131	Introduction to Video and Film Production		3
TELE 155	Introduction to Video Engineering		3
TELE 183	Video Studio Production		3
TELE 290–293	Professional Media Work Experience I–IV (2–4)		2–4
Total units			37–40

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 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 110. **Writing for Film and Electronic 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 for electronic and film media. Introduction to techniques of narrative and documentary writing and scripting. [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

Provides a survey of cinema with an emphasis on the chronological development of styles and techniques in the medium. Focuses on aesthetic and historical influences on cinema as well as the effects of cinema on society. Discusses the impact of television on film and popular culture. (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 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 videotape 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 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 163.
Video Post-production and Special Effects
3 units

Grade only
Recommended Preparation: TELE/ART 131 or equivalent
Lecture 2 hours, laboratory 4 hours
Offered: Variable

Instruction about how minds process images is provided while using post-production software to enhance and complete videos for output to digital videotape or to DVDs and CD-ROMs. Correct video imperfections, add animated titles, create a soundtrack, learn keying techniques for multi-layered compositions, and more. [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 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

Grade only
Recommended Preparation: TELE/ART 131 or equivalent
Lecture 2 hours, laboratory 3 hours
Offered: Variable

Techniques used in film including pre-production, production, and post-production utilizing computer-based and nonlinear editing. [D; CSU]

TELE 234.
Documentary Video Production
3 units

Recommended Preparation: TELE/ART 131 or equivalent
Lecture 2 hours, laboratory 3 hours
Offered: Variable

Emphasis on the theory, history, technical, and aesthetic characteristics of nonfiction (documentary) field production. Content includes documentary pre-production (including research and writing), production, and post-production processes. [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, scriptwriting, 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. [D; CSU]

TELE 290.**Professional Media Work Experience I**

2–4 units

Grade only*Prerequisite:* TELE 100, 110, TELE/ART 131, and 183, or equivalent*Limitation on Enrollment:* Declared Telemedia major. Students must complete no fewer 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 professional media production experience by developing and producing media materials as a student-producer in collaboration with 'client(s)'. This includes nonprofit or governmental organizations off campus, or as an intern at an approved production company, television, or radio station. [D; CSU]

TELE 291.**Professional Media Work Experience II**

2–4 units

Grade only*Prerequisite:* TELE 290 or equivalent*Limitation on Enrollment:* Declared Telemedia major. Students must complete no fewer 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 professional media production experience by developing and producing media materials as a student-producer in collaboration with 'client(s)'. This includes nonprofit or governmental organizations off campus, or as an intern at an approved production company, television, or radio station. [D; CSU]

TELE 292.**Professional Media Work Experience III**

2–4 units

Grade only*Prerequisite:* TELE 291 or equivalent*Limitation on Enrollment:* Declared Telemedia major. Students must complete no fewer 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 professional media production experience by developing and producing media materials as a student-producer in collaboration with 'client(s)'. This includes nonprofit or governmental organizations off campus, or as an intern at an approved production company, television, or radio station. [D; CSU]

TELE 293.**Professional Media Work Experience IV**

2–4 units

Grade only*Prerequisite:* TELE 292 or equivalent*Limitation on Enrollment:* Declared Telemedia major. Students must complete no fewer 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 professional media production experience by developing and producing media materials as a student-producer in collaboration with 'client(s)'. This includes nonprofit or governmental organizations off campus, or as an intern at an approved production company, television, or radio station. [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. (May be repeated for additional credit with new content.) [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, M.S., Office 702B, 619-482-6372

Faculty Carla Kirkwood, M.F.A. • Gary Larson, M.F.A. • Mark Pentilescu, M.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 civilizations to teach, inform, entertain, and bring the community together in a positive environment. The word drama implies 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

Below is a sample of the career options available for the theatre arts major. A few require an associate degree, most require a bachelor's 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 Arts 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 150	Technical Design and Production	3

Select 6–8 units from the courses listed below: 6–8

TA 120	Theatre Workshop—Performance I (1.5–2)
TA 121	Theatre Workshop—Performance II (1.5–2)
TA 122	Theatre Workshop—Performance III (1.5–2)
TA 123	Theatre Workshop—Performance 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 21–23

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

- * 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 41 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-Nuyorican, Chicano, and Cuban Americans. [D; CSU; UC]

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 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 TELE 115.) [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.
Choreography for Musical Theatre I
.5–1 unit

Grade only
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 131.
Choreography for Musical Theatre II
.5–1 unit

Grade only

Prerequisite: TA 130 or equivalent

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 132.
Choreography for Musical Theatre III
.5–1 unit

Grade only

Prerequisite: TA 131 or equivalent

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 133.
Choreography for Musical Theatre IV
.5–1 unit

Grade only

Prerequisite: TA 132 or equivalent

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 134.
Improvisation for the Theatre
3 units

Lecture 2 hours, laboratory 3 hours

Offered: Variable

Focuses on practice of the skills necessary to create spontaneous, original characters, and scenes. Improv develops creative imagination, confidence, critical analysis, and integrates current and historical events into dramatic situations. [D; CSU]

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 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 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 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 methods and means of moving individuals or groups from one place to another that involves transportation and accommodations with a focus on recreation and leisure. This program explores communication skills, reservation techniques, fiscal affairs, operations, computer applications, guiding practices and services.

Career Options

Below is a sample of the 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—Basic	02964
Travel and Tourism—Advanced	02965

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)

Prepares students for employment in the travel industry as a travel agent or consultant and provides a broad view of the industry. Emphasizes worldwide travel and diverse modes of transportation and accommodations.

BUS 210	Business English	3
BUS 211	Communication in Business and Industry	3
	OR	
BUS 212	Business Communication	3
BUS 240	Microsoft Outlook	2.5
CIS 92	Software Technologies for the Workplace (3)	3–4
	OR	
CIS 101	Introduction to Computers and Information Processing (4)	3–4
CIS 151	Research Using the Internet	1
HTM 150	Introduction to Hospitality and Tourism Management	3
T&T 150	Domestic and International Ticketing	2
T&T 160	Travel Destinations—Western Hemisphere	3
T&T 162	Travel Destinations—Europe, Africa, and the Middle East	3
T&T 164	Travel Destinations—South Pacific, Asia, Orient	3
T&T 258	Worldwide Cruise Travel	3
T&T 260	Basic Computer Applications 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)	2
Total units		36.5–37.5

Recommended Electives: BUS 147; T&T 45, 261.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 35.

Note: For other options in Travel and Tourism, see Hospitality, pages 283–289.

Certificate of Achievement

Travel and Tourism—Basic

Career/Technical (Major Code: 02964)

Prepares students to gain an entry-level position as travel agents or consultants in the field of travel and tourism. Provides an overview of the opportunities available in the field and prepares students with fundamental skills to gain employment.

BUS 210	Business English	3
CIS 92	Software Technologies for the Workplace	3
CIS 151	Research Using the Internet	1
T&T 140	Introduction to Travel and Tourism	2
T&T 150	Domestic and International Ticketing	2
T&T 160	Travel Destinations—Western Hemisphere	3
T&T 164	Travel Destinations—South Pacific, Asia, Orient	3
Total units		17

Travel and Tourism—Advanced

Career/Technical (Major Code: 02965)

Designed for students who desire to work in the field of travel and tourism as a travel agent or consultant. Provides skills required in making complex reservations using a travel database. Students gain an overview of basic travel agency operations.

BUS 210	Business English	3
BUS 240	Microsoft Outlook	2.5
CIS 92	Software Technologies for the Workplace (3)	3–4
OR		
CIS 101	Introduction to Computer and Information Processing (4)	
CIS 151	Research Using the Internet	1
T&T 140	Introduction to Travel and Tourism	2
T&T 150	Domestic and International Ticketing	2
T&T 160	Travel Destinations—Western Hemisphere	3
T&T 162	Travel Destinations—Europe, Africa, and the Middle East	3
T&T 164	Travel Destinations—South Pacific, Asia, Orient	3
T&T 258	Worldwide Cruise Travel	3
T&T 260	Basic Computer Applications 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)	2
Total units		32–33.5

Travel and Tourism Courses

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 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
2 units

Lecture 2 hours
Offered: Fall, Spring

Introduces students to the extensive world of travel. Includes the concept of tourism as a bridge between people and focuses on its economic and sociological importance. Emphasizes the history of the industry, its organization, and its various career possibilities. Required for all travel and tourism majors. [D; CSU]

T&T 150.
Domestic and International Ticketing
2 units

Recommended Preparation: T&T 140 or equivalent

Lecture 2 hours, laboratory 1 hour
Offered: Variable

Trains students in the 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

Explores the Western Hemisphere from the travel industry point of view. Includes North America, Mexico, Central America, the Caribbean, and South America—all the major destinations and their points of cultural and historical interest, 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

Presents a study of European, African, and Middle Eastern destinations. Focuses on appeal for the traveler and activities offered. Covers major tour operators, including Britrail and Eurail, serving these destinations. [D; CSU]

T&T 164.
Travel Destinations—South Pacific, Asia, Orient
3 units

Lecture 3 hours
Offered: Variable

Explores the countries of Asia, the South Pacific, and the Orient. Discusses 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

Introduces the student to the modes of travel by ship along with the study of the major cruise lines. Emphasizes the use of cruise reference guides, ports of call, and the differences worldwide among 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 2 hours, laboratory 2 hours
Offered: Variable

Provides students with a hands-on use of an airline computer system database. Focuses on building, modifying, pricing, and ticketing of a basic passenger name record. Introduces students to computerized methods for selling airline seats and 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

Provides the student a continuation of T&T 260 to concentrate on booking rental cars and hotel rooms. Uses the direct reference system and special travel account record systems. Includes 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

Presents a study in the routine operations of a travel agency. Focuses on airline accounting procedures, travel agency law, advertising, group booking, travel insurance, sales agreements, marketing, sales techniques, and time management for travel agents. [D; CSU]

T&T 290.**Cooperative Work Experience Travel and Tourism I**

2–4 units

Grade only

Limitation on Enrollment: Declared Travel and Tourism major. Students must complete no fewer 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 291.**Cooperative Work Experience Travel and Tourism II**

2–4 units

Grade only

Prerequisite: T&T 290 or equivalent

Limitation on Enrollment: Declared Travel and Tourism major. Students must complete no fewer 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 292.**Cooperative Work Experience Travel and Tourism III**

2–4 units

Grade only

Prerequisite: T&T 291 or equivalent

Limitation on Enrollment: Declared Travel and Tourism major. Students must complete no fewer 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 293.**Cooperative Work Experience Travel and Tourism IV**

2–4 units

Grade only

Prerequisite: T&T 292 or equivalent

Limitation on Enrollment: Declared Travel and Tourism major. Students must complete no fewer 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. (May be repeated for additional credit with new content.) [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 Behavioral and Social Sciences

Dean Viara Giraffe, Ph.D., Office 470K, 619-482-6582

Faculty Rosalinda González, Ph.D. • Laura Ryan, M.A.

Department Chair Barry Horlor, M.A.

General Description

The Women's Studies program 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

Below is a sample of the career options available to the women's studies major. A few of these require an associate in arts degree, most require a bachelor's 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

Associate in Arts Degree: Transfer Preparation

Women's Studies

Major Code

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 Studies	3
SOC 135	Sociology of the Family	3
	Foreign Language	5
	Electives	6
Total units		20

Recommended Electives: AFRO 110, 111; ANTH 102; ART 149; ASIA 113, 114; ENGL 260; HLTH 116; HUM 140; 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 35.

* 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 41 for further information.**

School of Continuing Education, Economic, and Workforce Development

Dean Mary Wylie, M.A., Office 1600B, 619-482-6375

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 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 noncredit 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 or WebAdvisor systems. 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.

CLASSDATE 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. [ND]

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. Partners 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; and 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 intra-class 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 for 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 17 hours

Covers complementary healing which focuses on theory and principles and practice of energy-based interventions. Focuses on applications of techniques to a variety of situations, ranging from self-care to professional use in programs such as health/wellness, stress reduction, massage, nursing, and medicine. [ND]

NC 17.
Community Emergency Response Team
Training

0 units

Lecture 24 hours

Designed for those wanting to complete Community Emergency Response Team Training (CERT) or needing refresher training. Four modules cover an introduction to CERT and its importance to the community: fire safety, hazardous materials and terrorist incidents, disaster medical operations, and search and rescue. [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 photographic 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

Email systems are becoming a prevalent means of communication, both business and personal. Sometimes email 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 29.
Healing Touch Level II

0 units

Prerequisite: NC 16 or equivalent

Lecture 17 hours

Covers complementary healing that uses energy-based interventions. Focuses on application of back techniques and expanded healing touch sequences will be included. Emphasizes developing healing sequences for specific needs. [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 24 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.
Basic First Aid and Adult CPR

0 units

Lecture 5 hours, laboratory 3 hours

Designed to prepare individuals to recognize and treat injuries and sudden illnesses. Meets the requirements for basic first aid and adult CPR in the workplace. [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 intercultural 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 1. [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 52.
Job Readiness

0 units

Lecture 54 hours

Integrates elements of job readiness which include career literacy, work ethic, and school to work transitional skills with an emphasis on career-related English development. [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 and 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 (approximately 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 potters 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

Assists 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 Stationery

0 units

Lecture 8 hours, laboratory 16 hours

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 marbled 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 94.
Wellness Through Fitness Training With Orientation

0 units

Laboratory 54 hours

Begins with an orientation to the safe and correct use of fitness equipment; covers wellness strategies and how to achieve them; includes Nautilus weight training and life cycles used to develop and maintain individual muscular strength, cardio-respiratory fitness, and flexibility. [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 108.
Introduction to Academic ESL I

0 units

Lecture 24 hours

Introduces the first in a series of three courses designed to prepare non-native English speakers for the ESL certificate program. Utilizes the corpus of 500-600 words. Focuses on fluency in conversation, reading and writing, and vocabulary development. [ND]

NC 109.
Introduction to Academic ESL II

0 units

Lecture 24 hours

Second in a series of three courses designed to prepare non-native English speakers for the ESL certificate program. Utilizes the corpus of 600-1000 words. Focuses on fluency in conversation, reading and writing, and vocabulary development. [ND]

NC 110.
Introduction to Academic ESL III

0 units

Lecture 24 hours

Third in a series of three courses designed to prepare non-native English speakers for the ESL certificate program. Utilizes the corpus of 1000-1500 words. Focuses on fluency in conversation, reading and writing, and vocabulary development. [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

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

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 leaders like Nordstrom, Southwest Airlines, 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 email 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 and 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 and First Aid**

0 units

Lecture 4 hours, laboratory 4 hours

Provides individuals with the knowledge and skills necessary to prevent, recognize, and provide basic care for respiratory, cardiac, and first aid emergencies in children and infants. Follows the American Heart Association Basic Life Support (BLS) and First Aid guidelines. (Formerly NC 51J) [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

*Prerequisite: NC 94 or equivalent***Laboratory 54 hours**

Covers wellness strategies and how to achieve them. Includes Nautilus weight training and lifecycles to develop and maintain individual muscular strength, cardio-respiratory 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 email 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 twentieth 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. [ND]

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-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

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 regulation. (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

Lecture 1 hour, 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. [ND]

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. [ND]

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 daycare 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. [ND]

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. [ND]

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– to twentieth-centuries on the symphony. [ND]

NC 1060.
Introduction to Opera

0 units

Lecture 8 hours, laboratory 8 hours

An overview of the great operatic works of the eighteenth– to 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. [ND]

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, 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 pins. 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 overall 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 to make ends meet, but to 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 instructors and instructor candidates to learn and update fundamental teaching skills. Focuses on learning theory, characteristics of learners and instructors, and information on how to conduct a course within the guidelines of national certification agencies. Emphasizes paper processing, class planning, evaluating the training process, and representing the standards of the agencies. [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 2000.**Lifeguard Safety Training**

0 units

Lecture 50 hours, laboratory 238 hours

Includes emergency response, first aid and basic life support, United States Lifeguard Association open water and advanced rescue skills, communications systems and operations, crowd control, human interaction skills, inter-agency operational protocols, physical performance, health and fitness training, and legal aspects of records and reports. [ND]

NC 2001.**Introduction to Effective Parenting**

0 units

Lecture 24 hours

Designed to increase positive and nurturing parenting skills. Focuses on child growth and development, family dynamics, health and safety, and social/emotional development. [ND]

NC 2003.**Home Care Client Excellence**

0 units

Lecture 10 hours, laboratory 6.5 hours

Provides basic theory and practical application for the caregiver in personal home care tasks and skills to promote quality of care. Topics will cover domestic tasks, personal care skills, prevention and maintenance of the client's physical well being, and some common chronic medical conditions. [ND]

NC 2004.**Careers in Healthcare**

0 units

Lecture 6 hours

Provides awareness of job careers in healthcare occupations in the local community. [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 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. [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 layout 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 Daycare**

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 Daycare 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 daycare providers; toys and materials lending; field trips and community experiences for families and children. [ND]

NC 3014.**Family Daycare—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 Daycare—Home as a Learning Environment**

0 units

Lecture 18 hours

Home as a teaching and learning environment; includes analysis and implementation of professional daycare 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 units

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 multinational 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 nonmathematical 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. Troubleshooting 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/transcriptionist. 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]

NC 3040.**Spreadsheet Software—Excel**

0 units

Lecture 9 hours, laboratory 18 hours

Introduction to electronic spreadsheets and their applications using Microsoft Excel software. Topics will include the design, creation, and manipulation of spreadsheets. [ND]

NC 3042.**Web Publishing With Dreamweaver**

0 units

Lecture 90 hours, laboratory 90 hours

Emphasis on creating and uploading professional quality Web sites. Place images, text, tables, sounds, animations, image maps, styles, and frames into Web sites. Advanced techniques include rollovers, behaviors, cascading style sheets, and automating repetitive tasks. Tips on how to market a site, check it for compliance, use of a browser, targeting, and JavaScript debugger. [ND]

NC 3043.**Advanced Microcomputer Spreadsheets Software**

0 units

Lecture 9 hours, laboratory 18 hours

Intermediate and advanced spreadsheet software concepts and techniques. Topics will include the advanced capabilities of the spreadsheet software learned in CIS 122B, "Spreadsheet Software—Excel." [ND]

NC 3044.**Multimedia Development—Director**

0 units

Lecture 54 hours, laboratory 54 hours

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. [ND]

NC 3046.**Linux Operating System and Apache Web Server**

0 units

Lecture 90 hours, laboratory 90 hours

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. [ND]

NC 3047.**Web Imaging With Fireworks**

0 units

Lecture 90 hours, laboratory 90 hours

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. [ND]

NC 3048.**Flash Motion Graphics**

0 units

Lecture 90 hours, laboratory 90 hours

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, put playback control, remote rollovers, and preloaders in movies. Covers core objectives for industry certification. [ND]

NC 3049.**Advanced Flash ActionScript**

0 units

Lecture 90 hours, laboratory 90 hours

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. [ND]

NC 3050.**Web Design and Usability**

0 units

Lecture 36 hours, laboratory 18 hours

Emphasis on 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 images effectively, and publicizing the site.

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Clarence Burton

Counselor
Appointed 1965–Retired 1976 *

Denis Callahan

English
Appointed 2000--Retired 2006*

Barbara Canaday

Psychology
Appointed 1974–Retired 2003

Oscar Cañedo

ESL/Spanish
Appointed 1975–Retired 2003

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

Delores Christiansen

Mathematics
Appointed 1975--Retire 2006

Robert Cizek

Physics
Appointed 1990–Retired 2001

John D. Clark

Art
Appointed 1955–Retired 1990

Michael Clark

Biology
Appointed 1969–Retired 2005

Francis Clarke

English
Appointed 1956–Retired 1992 *

Mark 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

Al Debaca

Business
Appointed 1968–Retired 1997 *

Wadie Deddeh

Political Science
Appointed 1962–Retired 1994

Lourdes De Perio

Nursing
Appointed 1982–Retired 1998

*Deceased

Chester S. Devore
Superintendent/President
Appointed 1946–Retired 1981

Arthur Diaz
History/Mexican-American Studies
Appointed 1972–Retired 2005

Stella Dickinson
English
Appointed 1970–Retired 1983

Mary-Nona Dorn
English
Appointed 1965–Retired 1983 *

Miriam Dornbier
Nursing
Appointed 1973–Retired 1996

Felix Dugger
Computer Information Systems
Appointed 1956–Retired 1987

William Duncan
Physical Education
Appointed 1965–Retired 1990

Ralph Edsell
English
Appointed 1998--Retired 2005

Christine R. Eldred
Vice President, Administrative Affairs
Appointed 1967–Retired 1993

Pamela Ellis
French, English
Appointed 1980–Retired 2005

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

*Deceased

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

Thomas Hahn
Vice President, Academic Affairs
Appointed 1965–Retired 1998

Willard Hanson
Mathematics
Appointed 1989–Retired 2003

Mayne Harrington
Political Science
Appointed 1961–Retired 1972 *

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

Anna Ingalls
English, ESL
Appointed 1966–Retired 2005

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

Joe Leonard
English
Appointed 1970–Retired 2005

Joseph Lierman
Business
Appointed 1990–Retired 2003

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 *

Fernando Lopez-Lopez
Astronomy/Physics
Appointed 1974–Retired 2005

Frederick Lotze
Business
Appointed 1965–Retired 2003

Lorraine F. Lowerison
Business
Appointed 1950–Retired 1984

Susan Luzzaro
English
Appointed 1991–Retired 2003

Donald Lynn
Chemistry
Appointed 1966–Retired 1997

William Lynn
Automotive Technology
Appointed 1971–Retired 2001

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

Timothy Mathis
Electronics
Appointed 1974–Retired 2005

Lois Marriott
Assistant Dean, Instructional Resources
Appointed 1976–Retired 1994

Charlotte McGowan
Anthropology
Appointed 1971–Retired 1998

Berke McKelvey
Music
Appointed 1988–Retired 2005

Suzanne McKewon
Reading/ESL
Appointed 1988–Retired 2003

George Mc Martin

Administration of Justice
Appointed 1968–Retired 1990 *

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

Gary Neely

History
Appointed 1971–Retired 2005

John Newhouse

Dean, Academic Information Services
Appointed 1977–Retired 2002*

Leo Nichols

Counselor
Appointed 1970–Retired 1994

Judith Nicolaidis

Art
Appointed 1971–Retired 2006

James Nolfi

English
Appointed 1955–Retired 1982

Vane Olinger

Counselor
Appointed 1967–Retired 1979

Leroy Olson

Biology
Appointed 1972–Retired 2000 *

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

Rachel Parsons

Business
Appointed 1988–Retired 2005

Thomas Pasqua

Political Science and Journalism
Appointed 1965–Retired 1998 *

Joseph Perretta

Automotive Technology
Appointed 1971–Retired 2005

Jon R. Pittman

Visual Arts
Appointed 1969–Retired 2002

Vera Powell Mooring

English/Reading
Appointed 1977–Retired 2003

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 *

Ellablance Salmi

English
Appointed 1985–Retired 1991

Mary Samaras

English as a Second Language
Appointed 1975–Retired 1990

Alva Sands

Business
Appointed 1984–Retired 2003

Victor Saucedo

Music
Appointed 1971–Retired 2003

Percy Sayers

Electronics
Appointed 1962–Retired 1983

Norman Schaffner

Accounting
Appointed 1959–Retired 1991

Robert Schneider

Telemedia
Appointed 1972–Retired 2005

Charles Schultz

Counselor
Appointed 1948–Retired 1982 *

Fred Schwend

Computer Information Systems
Appointed 1982–Retired 2002

Ned S. Sewell

English
Appointed 1964–Retired 1983

Pauline Sewell

Biology and Zoology
Appointed 1961–Retired 1982

Mei-Lan Shaw

Mathematics
Appointed 1969–Retired 2005

Jocelyn Sheppard

French
Appointed 1969–Retired 2000 *

Diane Short

Mathematics
Appointed 1984–Retired 2005

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 O. Sumption

Nursing
Appointed 1967–Retired 1983

Ruth Swanson

Vocational Nursing
Appointed 1964–Retired 1981 *

Wilbur Switzer

Geography
Appointed 1965–Retired 1996

Roberta Tatreau

English
Appointed 1969–Retired 2004

Loretta Taylor

Physical Education
Appointed 1965–Retired 1990

Teresa Thomas

Biology
Appointed 1980–Retired 2005

Orville L. Thomas

Business
Appointed 1961–Retired 1984

Edward Thornton

Vice President, Administrative Affairs
Appointed 1956–Retired 1990

Ruth Tucker

Learning Disabilities
Appointed 1979–Retired 1992

Robert Tugenberg

Mathematics
Appointed 1974–Retired 1990

*Deceased

Geraldine Turley

Art
Appointed 1974–Retired 2003

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 *

Susan Wing

Biology
Appointed 1975–Retired 2005

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

Classified Professionals

Classified Confidentials

Teri Ashabraner

Human Resources Technician—
Academic

Patti Blevins

Human Resources Compliance
Coordinator

Cynthia Carreno

Human Resources
Technician—Classified

Lorrie Clarke

Secretary to the Superintendent/
President

Margarita Croft

Administrative Assistant—
Human Resources

Mary Ganio

Executive Assistant to the
Superintendent/President

Rosalva Garcia

Secretary to the
Superintendent/President

Elsa C. Gerena

Human Resources Secretary

Priscilla Pasana

Administrative Assistant—
Student Affairs

Kimberlie Rader

Administrative Assistant—
Academic Affairs

Janell Ruiz

Administrative Assistant—
Administrative Affairs

Classified Bargaining

Claudia Acosta

Lead Food Service Worker

Teresita Ada

Senior Account Clerk

Miguel Aguilera

Maintenance, Facilities, Health,
and Safety Coordinator

Laura Alatorre

Evaluator

Sandra Alden

Assessment Technician

Maria Aleman

Food Service Worker

Richard Allen

Vehicle and Equipment Mechanic

Richard Allen, Jr.

Custodian

Maria Isabel Alvarez

Clerical Assistant II

Francisco Ambriz, Sr.

Warehouse Worker

Barbara Anderson

Help Desk Technician

Alvin Angeles

Instructional Lab
Technician—Telemedia

Christopher Apelo

Programmer Analyst

Froilan Aquino

Pool Maintenance Technician

Laura Arana

Financial Aid Technician

Brandon Arnieri

Research Analyst

Steven Ashabraner

Athletic Equipment Technician/
Physical Education Attendant

Jacqueline Austin

Clerical Assistant II

James Bachman

Lead Painter

Leonila Baier

Administrative Secretary II

Laura Baker

Campus Police Officer—Day

Diosdada Banayad

Custodian

Anna Banda

Administrative Secretary I

Sylvia Banda-Ramirez

Senior Project Clerk

Efren Barrera

Clerical Assistant III/Technical
Support

Margarita Barrios

Financial Aid Technician

Maria Beltran

Administrative Secretary II

Maria Bernal

Instructional Lab
Technician—Chemistry

Carlos Berrios

Custodian

Janet Billings

Bookstore Buyer

Rene Blanco

Financial Aid Specialist

Johnny Blankenship

PC Systems Technician

Sid Bocalan

Lead HVAC Mechanic

Zac Boisoeneau

Senior Gardener/Weekend
Coordinator

Bruce Boman

Lead Gardener

James Bond

Clerical Assistant II

William Brooks

Carpenter/Cabinet Maker

Gail Brown

Grants Technician

Mark Brown

Senior Financial Aid Specialist

Gregory Brownstead

Custodian

Federico Buch

Custodian

Linda Buchholz

Library Assistant

Thomas Bugzavich

Graphics Lab Specialist

Keith Bunch

PC Systems Technician

Janet Bynum

Administrative Secretary II

Veronica Cadena

Administrative Secretary I

Rolando Cadua

Custodian

Carlos Calderon

Custodian

Sandra Calderon
Outreach Technician

Pamela Caldwell-Thomas
Library Multimedia Service Technician

Martha R. Campa
Administrative Secretary II

Rosa A. Carbajal
Student Services Assistant

Shelley Carbajal
Benefits Technician

Matronillo Carbonilla
Custodian

Hilda Carey
Account Clerk

Torrance Carrington
Campus Police Sergeant—Evening

Ruben C. Castillo
Lead Custodian

Virginia Castillo
Clerical Assistant III

Gloria Castro
Instructional Operations Technician

Adam Cato
Campus Police Officer—Day

Debbie Cervantes
Clerical Assistant II

Carolina Chairez
Account Clerk

Merrily Chopp
Senior Project Clerk

Adrienne Chun
Financial Aid Technician—BFAP

Judy Churley
Instructional Lab Technician—Fine Arts

Yolanda Cisnero
Senior Account Clerk

Michele Clark-Fenlon
Clerical Assistant III

Sadie Cochran
Word Processor

Karen Cook
Clerical Assistant II

Lon Cooper
Instructional Lab Technician—Microcomputer

Carmen Cortez
Word Processor

Clara Davis
Translator/Word Processor

Michelle Dawson
Student Employment Services Specialist

Josefina DeAlba
Account Clerk

Raul DeAlba
Inventory Control Technician

Beverly DeLara
Admissions and Records Technician

Gloria Deleon
Senior Library Assistant

William Denton
Bookstore Operations Specialist

Richard DeYoung
Lead Vehicle and Equipment Mechanic

Catherine Dimapilis
Administrative Secretary II

Erica Dishon
Communications Clerk

Irma D’Lorey
Clerical Assistant III

Dolores Duenas
Clerical Assistant II

Thomas Earley
Carpenter/Cabinetmaker

Anthony Edison
Print Shop Technician

Carole Eklund
Small Business Assistant

George Essex
Instructional Lab Technician—Fine Arts

Martha Estrada
Senior Account Clerk

Nancy Ethington
Lead Food Service Worker

Judy Faas
Library Technical Services Technician

Kathleen Fagan
EOPS Technician

Alicia Farias-Zamudio
Evaluator

Guillermo Felizardo
Clerical Assistant II

Angelica Fierro
Clerical Assistant III

Yleanna Fierro
Food Service Worker

Li-Lan Fishel
Instructional Lab Technician

Alicia Flores
Instructional Assistant I

Raul Flores
Custodian

Jo Ann Forbes
Microcomputer Lab Coordinator

Michael Ford
Research Analyst

Guadalupe Franco
Food Service Worker

Rachel Francois
Clerical Assistant III

Jenny Freeman
Administrative Secretary I

Ana Frias
Food Service Worker

Enedina Frias
Lead Food Service Worker

Alicia Gamboa
Teacher, Child Development Center

Alexana Garcia
Human Resources Assistant

Yadira Garcia
Clerical Assistant II

Sylvia Garcia-Navarrete
Reading Lab Technician

Michael W. Gargano
PC Systems Technician

Allan Garrett
Network Systems Analyst

Katherine Gassaway
Clerical Assistant II

Kathryn Gates
Teacher, Child Development Center

Jesus A. Gaytan
Admissions and Records Assistant

Michael George
Instructional Lab Technician—Science

Benjamin Brandon Gess
Campus Police Officer

Patricia Gil
Instructional Services Specialist

Pearl Gil
Education Center Technician

Bibiana Glackman
Clerical Assistant II

Ricardo Godoy
Lead Food Service Worker

June Gomez
Library Assistant

Mariana Gomez
Clerical Assistant II

Rafael Gomez
Computer Operator

Patricia Gonzales
Evaluator

Diana Gonzalez
Account Clerk

Gerardo Gonzalez
Senior Programmer Analyst

Rosa Gonzalez
District Buyer

Lori Gorton
Senior Account Clerk

Bertha Govea
Administrative Secretary II

Viviana Govea
Clerical Assistant III

Robert Graham
Accountant

Allison Green
Instructional Lab Technician—Science

Edmund Guerrero
Instructional Lab
Technician—Microcomputer

Guadalupe Guerrero
Clerical Assistant III

Gustavo Guerrero
International Trade Specialist

Josephine Guerrero
EOPS Employment Technician

Marco Guerrero
Instructional Lab
Technician—Microcomputer

Nora Guido
Instructional Lab
Technician—Microcomputer

Mark Gutierrez
Custodian

James Hammond
College Trainer

Barbara Hampson
Instructional Lab
Technician—Science

Raul Haro
Food Service Worker

Andre Harris
Administrative Secretary II

Julie Hasegawa
Account Clerk

Julieta Hatz
Lead Food Service Worker

Betty Havey
Clerical Assistant III

Diana Hernandez
Education Center Technician

Rosalinda Hernandez
Planning and Facilities Assistant

Richard Hettich
Maintenance Air Filter Technician

Christina Hicks
Office Support Services Technician

Patricia Hiebert
Clerical Assistant II

Daniel Hill
Senior Systems Analyst

Patricia Hirst
Financial Aid Specialist

Tom Holst
Plumber

Valerie Hom
Administrative Secretary II

Gisel Horton
Nurse Associate

Torrey Hubbell
Bookstore Warehouse Worker

Nicole J. Hudson
Print Shop Technician

Francisco Ibanez
Custodian

Carmen Ibarra
ROP Technician

Tabitha Ibarra
Admissions and Records
Technician

Angela Islas
Clerical Assistant III

Joseph Islas
Administrative Secretary II

Efrain Jimenez
Gardener

Javier Jimenez
Irrigation Technician

Martha Jimenez
Student Services Assistant

Katherine Johnson
Financial Aid Specialist

Paul Johnson
Painter

Willima Jones
Veterans Services Technician

Sergio Juarez
Custodian

Jason Judkins
Financial Aid Technician

Jocelyn Kane
Lead Food Service Worker

Lance Kannegiesser
Custodian

Frederick Kanning
Electrician

Jeanne Kaufman
Clerical Assistant II

Patricia Kelly
Administrative Secretary II

Betty Keys
Account Technician

Elizabeth Kozel
Tutorial Center Coordinator

Carmen Lambarena
Student Services Assistant

Larry Lambert
Online Instructional Support
Specialist

Alicia Lee
Nurse Associate

Jorge Leon
Custodian

Ann Lindshield
Instructional Assistant I

Thelma Llorens-Acosta
Administrative Secretary II

Shironda Logan
Clerical Assistant III

Homer Lopez
Instructional High Tech Center
Lab Technician—DSS

Lourdes Lozano
Admissions and Records Assistant

Silvia Lugo
Performing Arts Coordinator

Kennedy Lugue
Custodian

Christina Luna
Clerical Assistant II

Maria Luque
Instructional Assistant I

Samuel Macaraeg
HVAC Mechanic

Bruce Macnintch
Library Technician

Heather Macnintch
Systems Support Specialist

Jheannifer Marasigan
Senior Project Clerk

Maria Marin
Clerical Assistant III

Nancy Martin
Food Service Worker

Christopher Martinez
Word Processor

Joe Martinez
Tool Room Attendant

Virginia Martinez
Administrative Secretary II

Eric Matos
Custodian

Wanda Maxwell
Transfer Center Specialist

Debra McHorney
Athletic Equipment Technician/
Physical Education Attendant

Antonio Melchor
Financial Aid Technician

Matthew Millus
Instructional Lab
Technician—Science

Patricia Miranda
Financial Aid Specialist

Craig Moffat
Student Activities Coordinator

Aida Mora
Admissions Center Evening Lead

Brenda Mora
Publications Associate

Sheila Moran
Instructional Lab Technician—
Fine Arts

Araceli Moreno
Instructional Assistant I

Ursula Morris
Office Support Services
Coordinator

Thomas Neiswonger
Welder/Metal Fabricator

Heidi Newhouse
Senior Instructional Services
Specialist

Carol Niekrasz
Administrative Secretary I

Lynne Northover
Clerical Assistant III

Nicole O'Bry
Admissions and Records
Technician

Yolanda Ochoa*Senior Account Clerk***Joni Ontiveros***Prerequisite Technician***Omar Orihuela***Financial Aid Specialist—BOGW***Genaro Ornelas***Instructional Lab
Technician—Microcomputer***Goldie Orvick***Administrative Secretary I***Jesse Osuna***Campus Police Officer—Day***Dorothy Palmer***Intake and Eligibility Assistant***Gloria Pangelinan***Clerical Assistant II***Pantaleon Pangelinan***Instructional Lab
Technician—Microcomputer***Erick Parga***Admissions and Records—Data
Software Specialist***Arturo Pastrana***Bookstore Operations Assistant***Deborah Peckenpaugh***Library Assistant***Rosana Pedroza***Instructional Lab
Coordinator—Chemistry***Evana Peinado***Education Center Technician***Martina Peinado***CalWorks Program Technician***Dawn Perez***Advancement Specialist***Vincent Perez***Senior Programmer Analyst***Irene Plummer***Administrative Secretary II***Darlene Poisson***Disabled Student Services
Technician***Janet Polite***District Buyer***Patricia Powers***Clerical Assistant II***Angelica Preciado***Account Clerk***Gonzalo Quintero***Program Coordinator***Patricia Ramert***Web ASP Programmer***Enrique Ramirez***Food Service Worker***Margarita Ramirez***Administrative Secretary I***Salvador Ramirez***Tool Room Attendant***Tammy Ray***Theater Operations Technician***Hector Reyes***Microcomputer Lab Coordinator***Jessie Reyes***Continuing Education Program
Technician***Manuel Reyes***Gardener***Nancy Reyer***Clerical Assistant II***Vallo Riberto***Instructional Lab Technician—
Fine Arts***Norma Rich***Clerical Assistant II***Carlos Richardson***Instructional Lab Technician—
Fine Arts***Yolanda Rocha***Senior Project Clerk***Brenda Rodriguez***Clerical Assistant II***Carlos Rodriguez***Print Shop Coordinator***Monica Rodriguez***Student Services Assistant***Patricia Rodriguez***Account Clerk***Jorge Rojas***Campus Police Officer—Evening***Burk Romero***Custodian***Armando Ruelas***Senior Gardener***Rhonda Ruiz***Communications Clerk***Edith Ruvalcaba***Career Center Technician***Laura Sales***Accountant***Luis Sandoval***Custodian***Anisabel Santamaria***Administrative Secretary II***Jaime Santos***Purchasing Assistant***Monika Saucedo***Clerical Assistant III***Mark Schweigert***Lead Electrician***Michael Selby***Senior Gardener***Lourdes Sevilla***Administrative Secretary II***Geraldine Shaw***Community Education Liaison***Pedro Sierra***Warehouse Worker***James R. Sifuentes***Campus Police Officer—Evening***Elisandra Singh***Web Technologist***Pamela Solis***Head Teacher, Child Development
Center***Sergio Soriano***Student Employment Services
Specialist***Patricia Soto***Staff Development Program
Assistant***Susan Soy***Instructional Operations
Technician***Dawn Taft***AmeriCorps/Service Learning
Coordinator***Porfiria Taijeron***Admissions and Records Assistant***Vicente Taijeron Jr.***Day/Evening Custodian***Juan Tapia***Outreach Specialist***Jane Tassi***Instructional Assistant II***Barry Thele***Education Center Information
Technology Support Specialist,
Higher Education Center,
National City***Monique Thomas***Administrative Secretary I***Cleo Thurmond***Campus Police Officer—Evening***Alejandra Torres***Education Center Technician***Estela Torres-Byrd***Instructional Assistant
I—Bilingual***Rebeca Toth***Facilities Leasing and Events
Coordinator***Myrna Tucker***Student Services Assistant***Neiro Uribe***Custodian***Elizabeth Valdez***Clerical Assistant III***Melody Valencia***EOPS Technician***Robert Valerio***Disabled Student Services
Technician***Monica Veinbergs***Student Employment Services
Specialist***Luz Velasco***Senior Project Clerk***Melody Valencia***EOPS Technician***Suzanna Vergara***Admissions and Records
Assistant—Day***Kindu Vidal***Admissions and Records
Technician*

Maribel Vidal
Clerical Assistant II

Santiago Vilaboy
Custodian

Blanca Villa
*Teacher, Child Development
Center*

Julie Villanueva
Clerical Assistant III

Lauren Villareal
Administrative Secretary I

John Vinson
*Instructional Lab
Technician—Microcomputer*

David Walwick
Audio Visual Repair Technician

Peggy Washington
Administrative Secretary I

Mary Watters
Vocational Education Specialist

Carolyn Wiley
Senior Project Clerk

Bertha Williams
Administrative Secretary II

Deborak Williams
Bookstore Buyer

Robert Wilson
*Communications Energy
Management Specialist*

Jeanine Wong
Clerical Assistant II

William Woodward
Custodian

George Ybarra
Custodian

Ayan Yusuf
*LRC Operations
Assistant—Evening*

Richard Zasueta
*Instructional Lab
Technician—Horticulture*

Eileen Zwierski
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 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 Admissions.

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 prior to the first day.

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 Education (CWEE)

Internship opportunities are available through CWEE. You can earn up to 16 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 will 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 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

- Associate Degree
- General Education Plan—Required for AA/AS Degree
- General Education Breadth Requirement—Acceptable for CSU
- IGETC—Acceptable for CSU or UC
- TAG—Transfer Guarantees. See your counselor for details.

Good Academic 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 Course

A hybrid 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 may 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 will 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 Disqualification

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 Admissions. 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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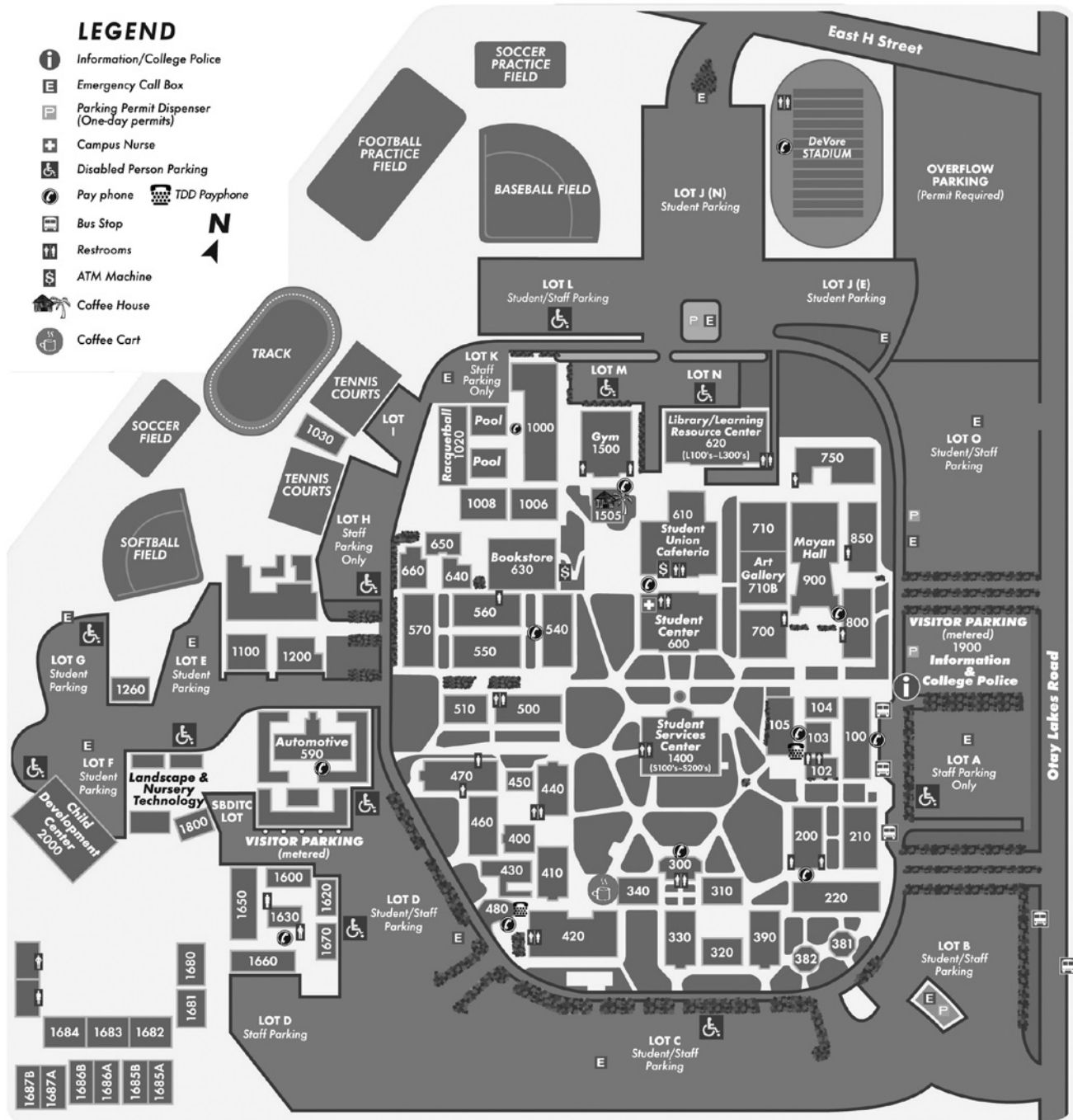
Zoology. *See Biology*

Chula Vista Campus

900 Otay Lakes Road • Chula Vista, CA 91910-7299
619-421-6700

LEGEND

- Information/College Police
- Emergency Call Box
- Parking Permit Dispenser (One-day permits)
- Campus Nurse
- Disabled Person Parking
- Pay phone TDD Payphone
- Bus Stop
- Restrooms
- ATM Machine
- Coffee House
- Coffee Cart



• Academic Affairs	210	• Career Center	1400	• Human Resources	1650	• Payroll Services	1660	• Small Business Development & International Trade Center	1600
• Academic Information Services	620	• Child Development Center	2000	• Information	1900	• Planetarium	382	• Snack Bar	480
• Academic Success Center	420	• Coffee House	1505	• Instructional Support Services	210	• Purchasing	1650	• Staff Development	620
• Administrative Affairs	1660	• College Police Department	1900	• Landscape & Nursery Technology	1800	• Reading Lab	420	• Student Accounts & Cashiering	1400
• Admissions & Records	1400	• Community & Media Relations	100	• Language Acquisition Center	440	• R.O.P.	210	• Student Activities Center	600
• AmeriCorps/Service Learning	1400	• Computer Systems Services	210	• Learning Resource Center	620	• SBDC Regional Network	1681	• Student Affairs	1400
• Art Gallery	710	• Custodial	1200	• Library	620	School of:	700	• Student Employment Services	1400
• Articulation	1400	• Disability Support Services	1400	• Lost & Found	1900	• Arts & Communication	210	• Superintendent/President	100
• ASO	600	• DSS High Tech. Center	420	• Maintenance	1200	• Business & Information Systems	210	• Tennis Center	1030
• Assessment	1400	• E.O.P.S.	1400	• Math Lab	420	• Continuing Education, Economic & Workforce Development	1600	• Theatre/Mayan Hall	900
• Athletics	1000	• Evaluations	1400	• Math/Science Center	390	• Counseling & Personal Development	1400	• Transfer Center	1400
• Automotive Technology	590	• Facilities Planning	1650	• MESA Center	390	• Health, Exercise Science, and Athletics	1000	• Veterans Services	1400
• Basic Police Academy	560	• Financial Aid	1400	• Office of Institutional Advancement	100	• Languages & Humanities	430	• Warehouse/Receiving	1100
• Bookstore	630	• Fiscal Services	1660	• Office of Instruction	210	• Mathematics, Science, & Engineering	340	• Women's Resource Center/CTECS	1400
• Business & Operations	1650	• Fitness Center	1000	• Office Support Services	100	• Social Science & International Studies	470	• Writing Center	420
• Business Resource Center	1620	• Grounds	1260	• Online Learning Support Center	620	• Technology & Human Services	570		
• Cafeteria/Student Union	610	• Gymnasium	1500	• Outreach	1400				
• CalWORKs	650	• Health Services/Campus Nurse	600						

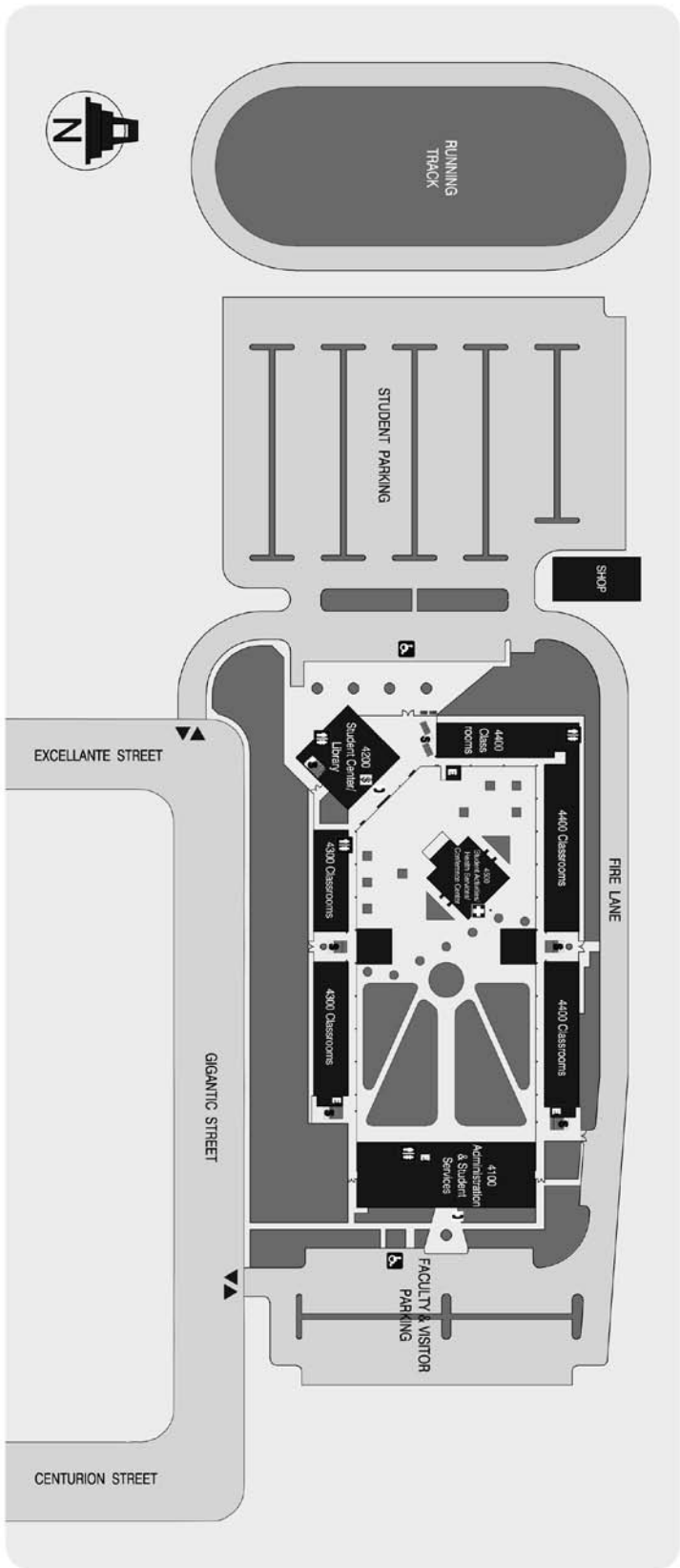
Higher Education Center at Otay Mesa

8100 Gigantic Street • San Diego, CA 92154
619-216-6750

ADMINISTRATION	4100	ENVIRONMENTAL TECHNOLOGY	4400	LIBRARY	4200
ADMISSIONS & RECORDS	4100	EOPS	4100	NURSING PROGRAM	4400
ASSESSMENT	4100	FINANCIAL AID	4100	POLICE ACADEMY	4300
BOOKSTORE	4200	FIRE SCIENCE	4400	READING LAB	4400
CAREER & TRANSFER CENTER	4100	FITNESS CENTER	4300	SCIENCE LABS	4400
COMPUTER LABS	4400	FOOD SERVICES	4200	SECURITY	4100
CONFERENCE CENTER	4500	HEALTH SERVICES	4500	STUDENT ACTIVITIES	4300
COUNSELING	4100	INSTRUCTIONAL SERVICES	4100	STUDENT CENTER	4200
DISABILITY SUPPORT SERVICES	4100	INTERNATIONAL BUSINESS PROGRAM	4300	STUDENT SERVICES	4100
EMT / PARAMEDIC PROGRAM	4400	LEARNING RESOURCE CENTER	4200		

LEGEND

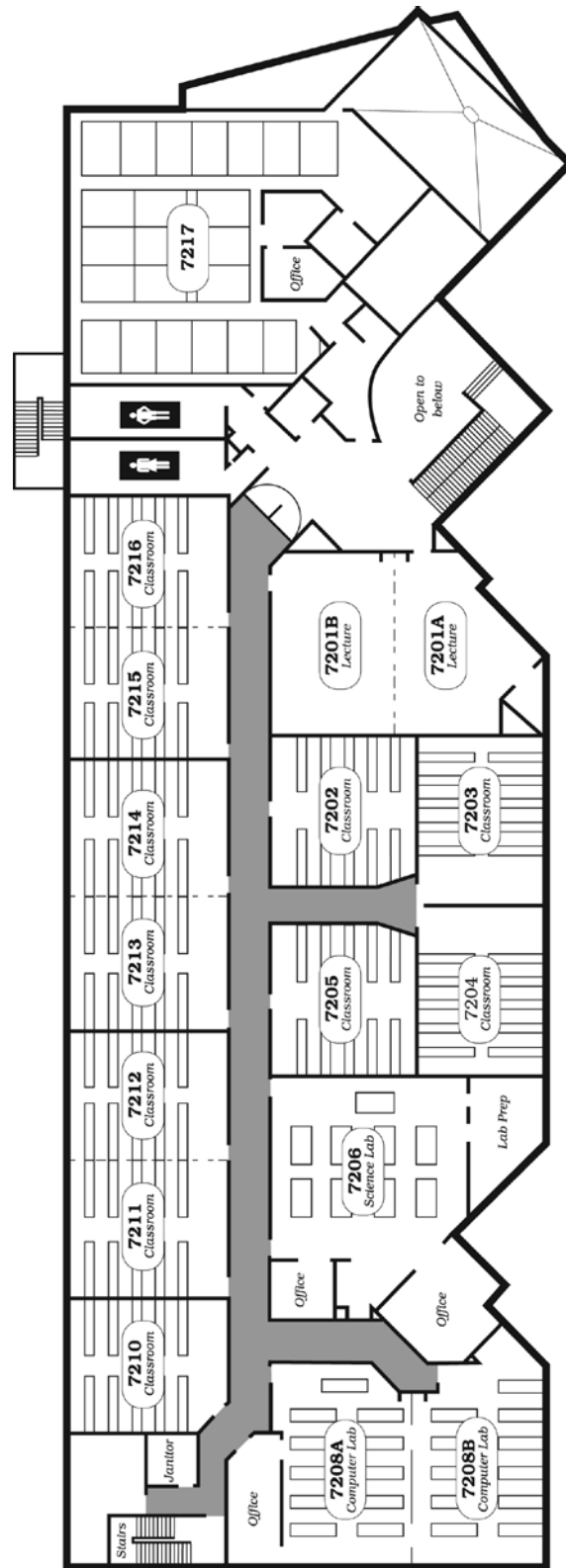
- ACCESSIBLE PARKING
- RESTROOM
- ELEVATOR
- STAIRS
- ATM
- PAY PHONE
- CAMPUS NURSE



Higher Education Center at National City

880 National City, Blvd. • National City, CA 91950-1123

619-216-6665



National City Blvd.



Southwestern College Campus Locations and Off-Campus Sites

Campus Locations

- 1** Chula Vista Campus
900 Otay Lakes Rd.
Chula Vista, CA 91910-7299
- 2** Higher Education Center at San Ysidro
Closed for Remodeling until 2009!
- 3** Higher Education Center at National City
880 National City Blvd.
National City, CA 91950-1123
619-216-6665
- 4** **NEW LOCATION!**
Higher Education Center at Otay Mesa
8100 Gigantic Street
San Diego, CA 92154
619-216-6750

4 **New Location!**
Higher Education Center
at Otay Mesa

4. SOUTH COUNTY CAREER CENTER
1111 Bay Blvd., Suite E
Chula Vista, CA 91911-2692
619-424-1112

5. CHULA VISTA NATURE CENTER
1000 Gunpowder Point Dr.
Chula Vista, CA 91910-1201
619-421-6700, ext. 5488

6. REACHOUT TO FAMILIES RESOURCE CENTER
1237 Elder Ave.
Imperial Beach, CA 91932-2909
619-421-6700, ext. 5488

7. CROWN COVE AQUATIC CENTER
Silver Strand Blvd.
5000 Hwy. 75
Coronado, CA 92118-3215
619-575-6176

8. SALT CREEK GOLF COURSE
525 Hunte Parkway
Chula Vista, CA 91914-4137
619-421-6700, ext. 5353

9. BRUNSWICK PREMIER LANES
845 Lazo Court
Chula Vista, CA 91910
619-421-6700, ext. 5353

10. JAMUL RURAL FIRE STATION
14145 Highway 94
Jamul, CA 91935
619-482-6428



SOUTHWESTERN COLLEGE

900 Otay Lakes Road
Chula Vista, CA 91910-7299

