

2012-2013

# CATALOG

*Southwestern College. Where great moments happen.*



SOUTHWESTERN COLLEGE

ACCREDITED SINCE 1964.

# SOUTHWESTERN COLLEGE

## 2012-2013 ACADEMIC CALENDAR



AUGUST 2012

S	M	T	W	TH	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	(17)	18
19	20	21	22	23	24	25
26	27	28	29	30	31	



SEPTEMBER 2012

S	M	T	W	TH	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23/30	24	25	26	27	28	29



OCTOBER 2012

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



NOVEMBER 2012

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



DECEMBER 2012

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



JANUARY 2013

S	M	T	W	TH	F	S
		1	2	3	4	5
6	7	8	9	10	(11)	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		



FEBRUARY 2013

S	M	T	W	TH	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

**AUGUST 2012**

- 16 Flex Day Independent
- (17) Pre-semester Opening Day
- 20 Fall Semester begins

**SEPTEMBER 2012**

- 3 Labor Day Holiday

**NOVEMBER 2012**

- 11 Veteran's Day Holiday
- 12 No Classes
- 21 No Evening Classes starting 4:30 or later
- 22 Thanksgiving Holiday
- 23 District Holiday ~ No Classes
- 24-25 No Classes

**DECEMBER 2012**

- 13 Flex Day (Independent)
- 14-20 Finals Week
- 21-31 Winter Break

**JANUARY 2013**

- 1 New Year's Day Holiday
- 10 Flex Day (Independent)
- (11) Pre-semester Opening Day
- 14 Spring Semester begins
- 21 Martin Luther King Holiday

**FEBRUARY 2013**

- 15-18 President's Holiday

**MARCH 2013**

- 25-31 Spring Break
- 29 Good Friday

**APRIL 2013**

- 1 Cesar E. Chavez Holiday

**MAY 2013**

- 17 Flex Day (Independent)
- 18-24 Finals Week
- 24 Commencement
- 27 Memorial Day
- 29 Classified Staff Development Day

**JUNE 2013**

- 3 Eight-week Summer Session begins
- 10 Seven-week Summer Session begins

**JULY 2013**

- 4 Independence Day Holiday
- 25 Eight week and Seven-week Summer Session ends

**LEGEND**

- ( ) Flex Days (Required)
- Flex Days (Independent)
- No Classes
- State Mandated Holiday
- District Holiday
- Classified Staff Development Day



MARCH 2013

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



APRIL 2013

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



MAY 2013

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



JUNE 2013

S	M	T	W	TH	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23/30	24	25	26	27	28	29



JULY 2013

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



AUGUST 2013

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

## MISSION:

Southwestern Community College District serves a diverse community of students by providing a wide range of dynamic and high quality educational programs and comprehensive student services. The District provides educational opportunities in the following areas:

associate degree and certificate programs  
transfer  
professional, technical, and career advancement  
basic skills  
personal enrichment  
noncredit adult education  
community services; and  
economic, workforce, and community development

We promote student learning and success by committing to continuous improvement that includes planning, implementation, assessment, and evaluation.

## 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 our region. 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 make. The following pages present a complete listing of programs, degree requirements and courses, as well as information about the many services the College District provides to assist students in reaching their educational goals.

Southwestern College offers many transfer and vocational/career programs in a variety of departments which are needed to prepare a student for transfer to a college or university or employment in business and industry. In addition to the major educational programs taught at the Chula Vista campus, the College District also offers courses at Higher Education Centers throughout the South County area and the Crown Cove Aquatic Center in Coronado.



Faculty and staff at Southwestern College have earned an outstanding reputation. Faculty possess substantial academic and professional backgrounds. 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.

## COLLEGE CATALOG ADDENDUMS:

Addendums to the Southwestern Community College Catalog can be found at [www.swccd.edu](http://www.swccd.edu). Addendums contain important updates to graduation, degree and transfer information after the catalog has been printed. It is the responsibility of students to check for Catalog Addendums.

## 2012-2013 CATALOG TEAM

**Cover Art:** Brenda Mora

**Editorial:** Veronica Burton, Mark Samuels, Susan Soy, Jeffrey Fischer, Brian Ebaló

**Curriculum Contents:** Veronica Burton, Mark Samuels, Susan Soy, Jeffrey Fischer, Brian Ebaló

**Design and Layout:** Brenda Mora

**Photography:** Jeff Dillon, Jose Islas, Brenda Mora

# PRESIDENT'S MESSAGE

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Welcome to Southwestern College and the new 2012-13 academic year.

More than 500,000 students have followed their dreams of higher education at Southwestern College since it opened in 1961. As you join the legacy of students who have attended our institution, I encourage you to use this catalog to chart the course to achieve your goals.

Southwestern College offers more than 312 degree and certificate options at our Chula Vista campus and Higher Education Centers in National City, San Ysidro, Otay Mesa and the Crown Cove Aquatic Center. Whether this is your first semester with us, or you are finishing the last classes before you transfer, our dedicated faculty, staff and administrators are here to help you achieve your goals.

For the past five years, we have seen the effects of a faltering economy. This economic downturn continues to challenge our ability to offer our students all the courses and services you need. To preserve as much of our academic program as possible, all of our employees took a 5 percent pay cut this year. I thank them for their dedication to you, the students. This sacrifice allows us to keep more classes open and more services available to you.

We know the economy will improve, and Southwestern College wants to be prepared for the educational changes and emerging industries that will face your future. This fall and spring, our campus community will engage our faculty, staff, students and the public in a master planning process that will guide Southwestern's future. I encourage you to become involved in this effort.

I wish you the best for a successful year.

A handwritten signature in black ink, appearing to read 'Melinda Nish'.

Melinda Nish, Ed.D.  
*Superintendent/President*

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## GOVERNING BOARD OF THE SOUTHWESTERN COMMUNITY COLLEGE DISTRICT

---

Norma L. Hernandez, *President*

Humberto Peraza, *Vice President*

Tim Nader

Jean Roesch, Ed.D.

Terri Valladolid

Juan Luis Espinoza, *Student Trustee*  
(June 2012–May 2013)

Melinda Nish, Ed.D.  
*Superintendent/President*

## EXECUTIVE LEADERSHIP TEAM

---

### Superintendent/President

Melinda Nish

*Superintendent/President*

Ed.D., Fielding Graduate University

M.A., University of Utah

### Vice Presidents

**Steven Crow**

*Vice President for Business and Financial Affairs*

MED., Northern Arizona University

B.A., Prescott College, Arizona

**Albert Romàn, D.P.A.**

*Vice President for Human Resources*

D.P.A., University of La Verne

M.P.A., University of La Verne

**Angelica L. Suarez, Ph.D.**

*Vice President for Student Affairs*

*Loyola University Chicago, Ph.D.*

B.S., M.S., California State University, Long Beach

A.A., East Los Angeles College

**Kathy Tyner, M.S.**

*Vice President for Academic Affairs*

M.S., University of Southern California, Los Angeles

B.S., Pepperdine University

## COLLEGE LEADERSHIP—DEANS

### **Donna Arnold**

*Dean, School of Arts and Communication*  
B.A., University of San Diego  
M.S., San Diego State University

### **Silvia Cornejo**

*Dean, Higher Education Centers at Otay Mesa and San Ysidro*  
B.A., M.A., University of San Diego

### **Terry Davis**

*Dean, School of Health, Exercise Science, and Athletics; and Departments of Applied Technology, CIS/Electronics, Administration of Justice*  
B.S., San Diego State University  
M.H.A., Chapman University

### **Richard Fielding**

*Interim Dean, School of Mathematics, Science, and Engineering*  
B.S., University of California, Davis  
M.S., California State University, Hayward

### **Joel Levine**

*Dean, School of Language and Literature*  
M.Ed., Ed.D., Columbia University

### **Mia McClellan**

*Dean, Office of Student Services*  
A.A., Mira Costa College  
B.A., San Diego State University  
M.Ed., University of San Diego

### **Mark Meadows, Ph.D.**

*Dean, School of Social Sciences and Humanities; and Department of Business, Accounting and Office Information Systems*  
B.S., M.S., Ph.D., University of Akron

### **Christine Perri**

*Dean, Higher Education Center at National City; and Crown Cove Aquatic Center*  
A.A.S., City University of New York  
B.S., M.A., New York University

### **Mink Stavenga**

*Dean, Instructional Support Services; and School of Continuing Education, Economics and Workforce Development*  
BSc, University of Kent at Canterbury, England  
M.B.A., DBA, United States International University, San Diego

### **Beatrice Zamora-Aguilar**

*Dean, School of Counseling and Matriculation*  
A.A., Mt. San Antonio Community College  
B.A., California State University, Fullerton  
M.S., San Diego State University

## SCHOOLS, CENTERS AND DEPARTMENTS

### **Arts & Communication**

Building 700

- Visual Arts
- Performing Arts
- Communication

### **Continuing Education, Economic & Workforce Development**

Building 660

- Center for International Trade
- Continuing Education
- Contracting Opportunities Center
- Small Business Development Center

### **Counseling & Personal Development**

Cesar E. Chavez Building S200

- CalWORKs
- Counseling and Personal Development
- Disability Support Services
- EOPS

### **Crown Cove Aquatic Center**

Silver Strand State Beach, Coronado

- Outdoor Aquatic Recreation
- Boating and Water Safety Instruction
- Community Safety Program
- Youth Camps and Group Programs

### **Departments of Accounting and Business Administration, Office Information Systems**

Room 215

- Accounting
- Business Administration
- Office Information Systems

### **Departments of Applied Technology, Administration of Justice, and CIS/Electronics**

Room 1000K

- Administration of Justice
- Applied Technology
- Computer Information Systems
- Electronics

### **Health, Exercise Science & Athletics**

Building 1000

- Health
- Exercise Science/Athletics

### **Higher Education Center at National City**

- Dental Hygiene
- Medical Laboratory Technology
- Medical Office Profession

### **Higher Education Center at Otay Mesa**

- Community, Economic and Urban Development
- Emergency Medical Technology (EMT)
- Fire Science Technology
- Insurance
- International Business
- International Logistics and Transportation
- Law Enforcement Training Academy
- Leadership and Supervision
- Nursing and Health Occupations
- Office Information Systems Bilingual
- Paramedic (EMTP)
- Payroll Clerk
- Travel and Tourism

### **Higher Education Center at San Ysidro**

- Child Development
- Legal Translation and Interpretation

### **Language and Literature**

Building 430

- English
- English as a Second Language (ESL)
- World Languages
- Reading

### **Learning Resources**

Building 210

- Distance Learning
- Library & Learning Resources

### **Mathematics, Science & Engineering**

Building 340

- Life Science
- Mathematics
- Physical Sciences

### **Social Sciences & Humanities**

Building 470

- Behavioral Sciences
- Humanities
- Social Sciences & Cultural Studies

# ACCREDITATIONS AND APPROVALS

## 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  
www.accjc.org

**American Dental Association Commission on Dental Accreditation**

211 E. Chicago Avenue  
Chicago, IL 60611-2678  
312-440-4653  
www.ada.org

**Commission on Accreditation of Allied Health Education Programs (CAAHEP)**

1361 Park Street  
Clearwater, Florida  
33756 727-210-2350  
www.caahep.org

**Commission on Accreditation of Allied Health Education Program (CAAHEP) in collaboration with:**

Accreditation Review Committee on Education in Surgical Technology and Surgical Assisting (ARC-ST)  
6 West Dry Creek Circle, Suite 110  
Littleton, CO 80120  
303-694-9262  
303-741-3655 Fax  
www.arcst.org

**CoAEMSP Committee on Accreditation of Educational Programs for the EMS Professions**

8301 Lakeview Pkwy., Suite 111-312  
Rowlett, TX 75088

**National Accrediting Agency for Clinical Laboratory Sciences**

5600 N. River Rd.  
Suite 720  
Rosemont, IL 60018-5119

**National League for Nursing Accrediting Commission, Inc. (NLNAC)**

3343 Peachtree Road NE Ste. 850  
Atlanta, Georgia 30326  
404-975-5000  
www.nlnac.org

**State of California Department of Justice Commission on Peace Officer Standards and Training**

1601 Alhambra Boulevard  
Sacramento, CA 95816-7083  
www.post.ca.gov

## Approvals

Southwestern College offers programs which are approved by:

**California State Approving Agency for Veterans Education**

1227 "O" Street, Ste 314  
Sacramento, CA 95814  
P.O. Box 989006  
West Sacramento, CA 95798-9006  
www.csaave.ca.gov

**California Board of Registered Nursing**

1625 North Market Blvd. Ste N217  
Sacramento, CA 95834-1924  
916-322-3350 www.rn.ca.gov

**California Board of Vocational Nursing and Psychiatric Technicians**

2535 Capitol Oaks Drive, Suite 205  
Sacramento, CA 95833-2919 916-263-7800  
www.bvnpt.ca.gov

**California Department of Health Services Licensing and Certification Aide and Technician Certification Section (ATCS)**

P.O. Box 997416, MS 3301  
Sacramento, CA 95899-7377  
Email: cna@cdph.ca.gov  
(916) 327-2445

**California Department of Public Health Laboratory Field Services Section (ATCS)**

850 Marina Bay Parkway Bldg. P  
Richmond, CA 94804-6403  
510-620-3800 www.cdph.ca.gov

**County of San Diego Emergency Medical Services (EMS)**

6255 Mission Gorge Road  
San Diego, CA 92120-3599  
619-285-6429  
www.sdcounty.ca.gov/hhsa/programs/phs/emergency\_medical\_services/

**International Association of Healthcare Central Service Material Management (IAHCSMM)**

213 West Institute Place, Suite 307  
Chicago, IL 60610-9432 312-440-0078  
www.iahcsmm.org/

**Laboratory Field Services**

850 Marina Bay Parkway  
Building P, 1<sup>st</sup> Floor  
Richmond, CA 95804-6304

**National Institute of Automotive Service Excellence (ASE)**

101 Blue Seal Drive, S.E. Suite 101  
Leesburg, Virginia 20175  
Ph. # (703) 669-6600

# FREQUENTLY CALLED NUMBERS

## Area Code 619

OFFICE	PHONE	EXT.	OFFICE	PHONE	EXT.
Academic Success Center.....	482-6348		Online Learning Center.....	482-6595	
Adjunct Faculty Voicemail.....	482-6565		Outreach.....	482-6518	
Admissions.....	482-6550		Prerequisite Review.....	216-6659	
Associated Student Organization (ASO).....	482-6443		Registration Information.....	482-6550	
Assessment (Placement Testing).....	482-6385		Schools and Departments:		
Athletics.....	482-6370		<i>School of Arts and Communication</i> .....	482-6372	
Basic Police Academy.....	482-6462		<i>School Continuing Education, Economic</i>		
Bookstore.....	482-6416		<i>and Workforce Development</i> .....	482-6479	
Cafeteria.....	482-6359		<i>School of Counseling and Personal</i>		
Career Center.....	421-6700.....	5247	<i>Development</i> .....	482-6471	
Cashier's Office.....	482-6307		<i>School of Health, Exercise Science, and Athletics</i>		
Center for Technical Education and			<i>Departments of Applied Technology, CIS/</i>		
Career Success (CTECS).....	421-6700.....	5805	<i>Electronics, Admistration of Justice</i> .....	216-6626	
College Police.....	482-6380		<i>School of Language and Literature</i> .....	482-6461	
Communications, Community and			<i>School of Mathematics, Science, and</i>		
Governmental Relations.....	482-6304		<i>Engineering</i> .....	482-6459	
Continuing Education.....	482-6376		<i>Social Sciences and Humanities</i> .....	482-6582	
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Disability Support Services.....	482-6512		<i>Office Information Systems</i> .....	421-6700.....	5746
Evaluations.....	482-6326		Security.....	482-6380	
Evening Administrator.....	216-6640		Student Accounts.....	482-6307	
Extended Opportunities Programs and			Student Activities.....	482-6568	
Services (EOPS).....	482-6456		Student Employment Services.....	482-6356	
Facilities Use.....	482-6319		Student Newspaper (Southwestern Sun).....	482-6368	
Financial Aid.....	482-6357		Superintendent/President.....	482-6301	
Fiscal Services.....	482-6312		Tennis Courts and Tennis Center.....	421-6622	
Grade Information.....	482-6550		Theatre Box Office.....	482-6367	
Health Services.....	482-6354		Transfer Center.....	482-6472	
Higher Education Center at National City.....	216-6665		Veterans.....	482-6324	
Higher Education Center at Otay Mesa.....	216-6750		Women's Resource Center.....	421-6700.....	5625
Higher Education Center at San Ysidro.....	216-6790				
Instructional Support Services.....	482-6442				
Learning Resource Center (Library).....	482-6397				
Nurse (Campus).....	482-6354				
Nursing Programs/Courses.....	482-6352				

## General Catalog 2012–2013

Effective fall 2012 through summer 2013

### Southwestern College

900 Otay Lakes Road  
Chula Vista, CA 91910-7299  
(619) 421-6700

To request this material in an alternate format, contact Disability Support Services at  
619-482-6512 OR TTY 619-482-6470.

# GETTING TO KNOW SOUTHWESTERN COLLEGE

## 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 Services, 619-482-6369. Inquiries regarding Equal Employment Opportunity (EEO) policies should be directed to the Director of Human Resources, 619-482-6330.

## Equal Employment Opportunity Policy Statement

The Southwestern Community College District shall not discriminate against any person in employment or in any program affiliated with the District on the basis of age, ancestry, color, ethnic group identification, national origin, religion, race, gender or sex, sexual orientation, physical or mental disability, veteran status, or on the basis of these perceived characteristics, or based on association with a person or group with one or more of these actual or perceived characteristics.

The District is committed to the implementation of its EEO Plan and to overcoming all forms of institutional and/or personal exclusion or discrimination within the District, whether purposeful or inadvertent. The Governing Board, administration, faculty and staff must recognize that equal employment opportunity is a shared responsibility. Each employee must be held accountable for application and enforcement of the EEO Plan within his or her area of authority. It is only through combined efforts that the District will successfully develop and maintain a workforce that is welcoming to all persons. The District will ensure that the recruitment, screening, selection, hiring and promotional processes are in accordance with principles of equal employment opportunity (District Policy & Procedure No. 7120, "Recruitment & Hiring"). In addition, the District will comply with Title I and Title II of the Americans with Disabilities Act of 1990, thereby promoting the values of diversity and inclusion, benefiting all members of the Southwestern Community College District, including individuals from all ethnic and other groups protected from discrimination by Title 5, section 53000 et seq.

The Governing Board supports the intent set forth by the California Legislature to assure continuing good faith efforts are made to build a community in which opportunity is equalized. Its goal is to foster a climate of acceptance, with the inclusion of faculty and staff from a wide variety of backgrounds. It agrees that diversity in the academic environment fosters cultural awareness, mutual understanding, harmony and respect, increase's student success and better enables students to flourish as citizens of the world. The Governing Board therefore commits itself to promoting the total realization of equal employment through a continuing equal employment opportunity program.

**Note:** The District's EEO Plan is posted on the website, and is available in hard copy in the Offices of the Superintendent/President, the Vice President for Human Resources, Vice President for Academic Affairs, Vice President for Student Affairs and Vice President for Business and Financial Affairs.

## 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 public higher 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 Chula Vista campus was held in 1963; by September 1964, initial construction was completed and classes were being held at the new campus on the corner of Otay Lakes Road and H Street in Chula Vista.

In 1988, Southwestern College established its Higher Education Center at San Ysidro on the memorial site of the McDonalds tragedy. The College again expanded its off-campus locations in 1998 by establishing the Higher Education Center at National City. A new Higher Educational Center at Otay Mesa opened its doors in 2007 as a regional center for educational training and development. In 2009, a new state-of-the-art facility replaced the previous San Ysidro site to serve its students and the community.

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 and the California Department of Parks and Recreation. Current enrollment—at all locations—exceeds 20,000 students. More than a half-million students have attended Southwestern College since opening its inception.

The Western Association of Schools and Colleges has continuously accredited SWC. The college offers a comprehensive curriculum, preparing students for transfer to four-year colleges or universities and for jobs and career advancement.



## HIGHER EDUCATION CENTERS AT:

National City

Otay Mesa

San Ysidro

# HIGHER EDUCATION CENTER AT NATIONAL CITY

Established in 1998, the Higher Education Center at National City (HEC, NC) was built in a collaborative effort with the City of National City and the San Diego County Office of Education (SDCOE) to serve the educational needs of the residents of National City and its surrounding communities. The Center is located at 880 National City Boulevard, which is approximately 10 miles from the Chula Vista campus. This state-of-the-art facility includes 15 “smart” classrooms, a 20-station computer lab, a biology lab, a medical assistant lab, yoga and step aerobics lab, a bookstore, a library, a health services center, a career/transfer center, a one-stop Student Services Center, a Family Resource Center, and a 22-chair Dental Hygiene Clinic.

The Center’s faculty and staff members are committed to serve the academic 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. General class offerings include full-semester, late start and fast track courses available in the day and evening. In addition, the Center offers a number of signature programs including the Dental Hygiene Program, Medical Laboratory Technician Program, and Medical Office Professional Program.

The nationally acclaimed Dental Hygiene Program houses a 22 chair state-of-the-art clinic where students offer free dental hygiene services to the community. Since the program’s inception in 2000, more than 400 students have graduated and passed rigorous State and National Dental Hygiene Board examinations. Most are employed as registered dental hygienists in San Diego County.

The Medical Laboratory Technician Program (established in 2009) is one of the only two nationally accredited programs in the state of California. Students are prepared for success on two national certification examinations, and subsequent state licensure, followed by fulfilling careers in medical laboratory science.

In 2010, the Medical Office Professions Program relocated to the National City Higher Education Center from the Chula Vista campus. The program prepares students to enter the medical assisting profession as clinical medical assistants, administrative medical assistants or billing and coding specialists. Students practice techniques and procedures in classroom, laboratory, and clinical settings. Upon program completion, students are able to apply for medical assistant certification.



Higher Education Center at National City  
880 National City Boulevard  
National City, CA 91950  
(619) 216-6665

# HIGHER EDUCATION CENTER AT OTAY MESA

Opening its doors in fall 2007 and located in Otay Mesa, only minutes away from the United States/Mexico International Border, the Higher Education Center at Otay Mesa reflects a full-service philosophy. It offers broad-based curriculum with over 200 different courses so students can pursue an associate degree, complete general education requirements for transfer or develop occupational skills for employment. The 70,000 square-foot facility has the capacity to serve up to 5,000 students.

The academic programs at the Center include courses in general education and transfer studies, as well as basic skills, community and business interest classes. In addition, this new facility houses a number of signature programs including the Police Academy, Nursing and Health Occupations, Fire Science Technology, Emergency Medical Technician, Paramedic, Office Information Systems–Bilingual, International Business, Logistics, and Community Development programs. To meet students' diverse scheduling needs, classes are offered at the Center and also online in a full-semester and short session format, during the day, evenings, and weekends.

To help students achieve success, the Center also provides the necessary student support services—admissions and records, counseling, tutoring, financial aid, and disability support services. Furthermore, the facility houses a career/transfer center, library, health services center, student center, bookstore, conference center, fitness center and science, and computer labs.



## Higher Education Center at Otay Mesa

8100 Gigantic Street

San Diego, CA 92154

(619) 216-6750

[www.swccd.edu/hecom](http://www.swccd.edu/hecom)

# HIGHER EDUCATION CENTER AT SAN YSIDRO

Academic excellence, learning, growth, and student success typify the educational program at the Higher Education Center at San Ysidro (HEC, SY).

First established in 1988, the HEC, SY is located only minutes away from the U.S.-Mexico international border. Rebuilt and reopened in 2009, the new state-of-the-art 18,000 sq. ft. building now has more classrooms and improved facilities to serve 2,000 students. The new HEC, SY continues to reflect a full service philosophy, providing quality instruction and student services in one convenient location.

The HEC, SY's instructional program is proud to house the Legal Interpretation and Translation program, in addition to offering courses for students wishing to pursue an associate degree, complete general education requirements for transfer, develop occupational skills for employment, or undertake personal development courses. Examples of courses offered include Art, Child Development, Communication, Computer Literacy, English, English as a Second Language, Interpretation and Translation, Mathematics, Reading, and Social Sciences. Courses are offered via a flexible schedule, including day and evening classes, in a full-semester or fast track format.

In support of students' academic achievement, the HEC, SY offers a variety of student services including, but not limited to, admissions, counseling, EOPS, financial aid, health services, disability support services and tutoring. Additionally, the Center features a student center, library, and open computer lab.

## A Living Memorial

Located at the front of the Center is the San Ysidro Memorial, which honors the memory of the 21 victims of the 1984 tragedy on the McDonalds restaurant site. Southwestern College officials worked with civic leaders to solicit contributions for the construction of the memorial. The San Ysidro Memorial was dedicated in December 1990, and today the memorial continues to serve as a tribute and a promise to enhance the lives of the people of San Ysidro and its neighboring communities through education.



## Higher Education Center at San Ysidro

460 W. San Ysidro Boulevard

San Ysidro, CA 92173

(619) 216-6790

[www.swccd.edu/Hecsy](http://www.swccd.edu/Hecsy)

# 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 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

**Benjamin S. Green**  
Green & Green LLP

**Vice President – Hank Murphy**  
Retired Fire Chief

**Secretary—Joseph Martinez**  
Seltzer, Caplan, McMahon, Vitek

**Treasurer—David Hoffman**  
Hoffman Hanono Insurance

**Ex-Officio—Jean Roesch**  
Governing Board Member  
Southwestern Community College District

**Ex-Officio—Melinda Nish, Ed.D.**  
Superintendent/President  
Southwestern College

## Foundation Board of Directors

**Melyn Acasio**  
Security Business Bank of San Diego

**Patti Finnegan**  
Niederfrank's Ice Creams, Inc.

**Ruben Garcia**  
U.S. Small Business Administration

**Holly Hidinger**  
CPA

**Chayo Moreno**  
Junior Achievement

**Kimberly Paul**  
San Diego Community Housing Corporation

**Jesse Navarro**  
San Diego County District Attorney's Office

**Cynthia Reyna**  
USE Credit Union

**Mitch Thompson**  
T & T Community Properties

**Robert "Dukie" Valderrama**  
A-D & D Drywall

**Executive Director**  
**Linda Gilstrap**  
Southwestern College

# HOW TO APPLY AND REGISTER

## Steps to Success—Matriculation Overview

Matriculation services are coordinated by the Dean of Counseling and Matriculation. 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, 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.
- Complete assessment and orientation.
- 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 or the Office of the Dean of Counseling and Matriculation Services.



## 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 Matriculation Services
- If a formal hearing procedure is necessary, the Matriculation Appeals Committee membership shall consist of the Dean of Student 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 or the Office of the Dean of Matriculation Services. You must provide compelling evidence to support the petition.

## Matriculation Process

All non-exempt students are required to complete the six steps of the matriculation process: admission; assessment, orientation, and advisement; registration; pay fees and apply for financial aid; send transcripts; and access college services. These steps are described more fully on the following pages.

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

- Already have an associate or bachelor's degree.
- Are attending Southwestern for personal enrichment.
- Are enrolled only in noncredit 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: APPLY FOR ADMISSION TO SOUTHWESTERN COLLEGE

Admission to Southwestern College is open to anyone who has graduated from high school or has equivalency, or is 18 years of age or older and is able to benefit from instruction at Southwestern College. Persons must be 18 years of age by the day preceding the opening day of the semester. In addition, high school students are admitted, if qualified, while concurrently completing their high school programs (Policy No. 5010). Anyone under 18 years of age must provide proof of high school graduation.

## Application Procedure

All new and returning students must submit an application and be admitted to the college before registering. Go to the college website at [www.swccd.edu](http://www.swccd.edu) and click on “apply online” for information and instruction to file an application.

Computer terminals are available to apply online in the lobby of the Student Services Center in the Cesar E. Chavez Building at the Chula Vista campus, or the Higher Education Centers located in National City, Otay Mesa and San Ysidro.

## 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. Contact the Department of Aerospace Studies at San Diego State University for enrollment information.

### 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. Contact the Department of Military Science at San Diego State University for enrollment information.

### High School Students

High school students enrolled in 9<sup>th</sup> through 12<sup>th</sup> grades may apply for concurrent enrollment at Southwestern College to enroll in Advanced Scholastic or Career and Technical Education courses not offered at their high school. 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. High School Special forms are available at [www.swccd.edu](http://www.swccd.edu). Click on Admissions, then select printable forms.

Students must 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. 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. Students enrolled in home school programs must meet one of the following criteria:

1. Home school program must be affiliated with a County Department of Education program;
2. Be taught by a person holding a California teaching credential;
- or**
3. Hold a current private school affidavit filed with the State Superintendent of Public Instruction. Documentation must be provided at the time of application.

## AB 540 Eligibility

On October 12, 2001, Governor Davis signed into law Assembly Bill 540, which adds a new section to the California Education Code. It creates a new exemption from payment of nonresident tuition for certain nonresident students who have attended high school in California and received a high school diploma or its equivalent. This law provides an exemption from paying non-resident fees, however, it does not give the student resident classification status for any other purpose. Students who receive this exemption would be required to establish residency for any state-funded program (EOPS, BOGW, Financial Aid). For more information contact Admissions, (619) 482-6550

## International Students

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

Prospective students must file an application by April 30 for the fall semester or by October 1 for the spring semester. The following must be provided:

- A minimum TOEFL (Test of English as a Foreign Language) score of 45 points on the Internet-based Test Official Score if his/her native language is not English;
- College work completed to date as evidenced by a transcript in English translation;
- High school graduation equivalent to the United States High School with a “B” (or 3.0 on a 4.0 scale) grade average;
- Financial means of support in the estimated amount of \$21,500 per academic year (including summer); and
- The educational objectives of the international student in a 300–500 word essay.

View additional requirements on the Southwestern College Website at [www.swccd.edu](http://www.swccd.edu).

International students 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. International students may not be eligible for a Certificate of Achievement under the F-1 visa.

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

- Fulfill all the admissions requirements previously listed; and
- Be in valid F-1 Student Visa status (currently attending the school specified on the Visa.

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 Admissions and Records;
- Pay the nonresident tuition and other fees as required at registration. (International students may not work while attending Southwestern College unless the Immigration and Naturalization Service and the International Student Advisor grant approval); and
- Enroll in a "Student's Accident and Sickness Medical Expenses Plan" or present satisfactory evidence of an active health and accident insurance policy. *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 will be notified of acceptance in writing by May 30 for the fall semester and by October 30 for the spring semester. The College will issue the I-20 form after the date of the letter of acceptance. Upon acceptance, students are required to be available for the International Student Orientation scheduled two weeks prior to the start of the semester.

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.

### **Mexican Nationals/Commuting from Mexico to the United States**

Admissions Requirements:

- Must verify permanent residence in Mexico within 75 miles of the college and as an international student;
- Must maintain residency in Mexico
- Must verify residence address in Mexico (ex: driver license, utility bill, voter registration)
- Must have a declared educational goal
- Must determine and verify funds for tuition and other fees per term
- Enrollment limited to 11 units maximum per semester

### **General Information:**

- Students will be admitted for the start date of the full semester or the start date of the second eight-week session
- Students will be admitted for the first summer session only (no one admitted for late start summer sessions)

### **Application Deadline:**

- Must apply a minimum of 1 month prior to the beginning of term. There may be delays when scheduling an appointment with the U.S. Consulate.

For more information go online at [www.swccd.edu](http://www.swccd.edu), click on Admissions and Records, then International Students.

### **Center for International Studies**

Center for International Studies ensures that students studying at Southwestern College and local students who wish a global experience have full access to a wealth of curricula and services.

- Study abroad programs offer semester-length and short-term study abroad options in a variety of disciplines.
- 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](http://www.swccd.edu) or contact Center for International Studies, Room 651, 619-482-6504.*

### **Center for Health and Law Enforcement Occupation Programs**

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

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

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

### **Contact Information:**

Dental Hygiene Program  
Higher Education Center at National City  
619-216-6663

EMT and Paramedic  
Higher Education Center at Otay Mesa  
Room 4105A, 619-216-6760

Fire Science  
Higher Education Center at Otay Mesa  
Room 4105A, 619-216-6760

Law Enforcement Training Academy  
Higher Education Center at Otay Mesa  
Room 4315, 619-482-6462

Medical Laboratory Technician Program  
Higher Education Center at National City  
619-216-6673

## 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 be classified as a 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 two categories listed below.

#### Resident

A resident is classified as an applicant whose legal residence is in the Southwestern Community College District and who is classified as a resident of the state of California.

#### Nonresident

A nonresident is classified as an 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 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 no one factor is controlling and 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 (LES) 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 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.

### Conduct Inconsistent with a Claim for California Residence

Conduct inconsistent with a claim of California residency includes, but is not limited to:

- 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 any Southwestern College Admissions Office or log onto [www.swccd.edu](http://www.swccd.edu) select Admissions, then Residency.

## 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 24, 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 preceding the semester of admission.
- Student has lived with parent(s) who is/are agricultural laborer(s) as specified above and is claimed as a tax dependent.
- Minor student has been under continuous care and control of adult(s) not a parent, for more than two years prior to the semester of admission. Such adult(s) must have been a California resident during the most recent year. Minor students must be enrolled full time.
- Student is active military.

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

- Minor student in continuous full-time attendance, whose parents had established California residency (one year) and left the state, may be classified as a resident until he/she has attained the age of 18 and can achieve residency on his/her own.
- Student is a dependent natural or adopted child, stepchild, or spouse of active military service person stationed in California.
- Student is a full-time contract/regular 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.

## 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 and Records.

## 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 Cesar E. Chavez Student Services 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 Student Services 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.

## 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.

# STEP 2 : ASSESSMENT, ORIENTATION & ADVISEMENT

## Complete the College Assessment

Computerized assessment (basic skills placement testing) is available at the Assessment Center located in Room 107 in the Cesar E. Chavez Student Services Building. You should plan to take the assessment prior to completing orientation.

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

### Why should I take the assessment?

Assessment is a key component to effectively helping you start your college career at the levels most appropriate with your skills. Southwestern College has taken steps to ensure that our placement tests exceed state standards for effective placement so that you will not have to begin college in math and English courses that are too easy for you or too difficult for you.

### Do I need to study or review any material for this assessment?

Assessment is an important process that evaluates your English, reading, and math skill levels. While you cannot “fail” these tests, it is critical that you take the assessment seriously and that you take the time to prepare for the tests as your results will directly impact the coursework you will need to complete at Southwestern College.

It is recommended that you become familiar with the types of test items you will experience when you take the College Assessment. Practice tests and test guides are available online at <http://www.swccd.edu/assessment>. These free practice tests and guides are also available at the Assessment Center located in Room S107 in the Cesar E. Chavez Student Services Building. More extensive math practice tests are available at the College Bookstore for a nominal fee.

### 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 (ESL) 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. English, reading, and math 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.

ESL placement results are valid for only one year. The ESL assessment may be repeated after one year.

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 “Pass”) at another college or university 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)

**Or**

- assessment results from other colleges or universities (proof of assessment results must be submitted with a Prerequisite Evaluation Request form to the Assessment Center).

### **When and where is the assessment given?**

Assessment is offered at the Assessment Center located in Room S107 in the Cesar E. Chavez Student Services Building. Assessment is also often available at all three Higher Education Centers.

Assessment schedules for all sites are listed on the College website at <http://www.swccd.edu/assessment>. Placement tests are given on a walk-in basis within the times listed on the schedules.

### **Are the placement tests timed?**

Yes. Most students complete the English, reading, and math tests in about two hours and 15 minutes. Students with disabilities may request additional time to complete the tests.

### **When will I receive the results from my assessment?**

You will receive English, reading, and mathematics results immediately upon completion of your assessment. ESL placement results are available at the Assessment Center within two weeks after you tested. You can also access all of your placement results in the Academic Profile section of WebAdvisor.

### **Are special accommodations available for students with disabilities?**

Individualized accommodations are provided to meet the needs of students with disabilities. Accommodations offered include extended testing time, reader and/or writer, large-print tests, and Zoom Text. Students needing such accommodations should contact Disability Support Services (Room 108 in the Cesar E. Chavez Student Services Building) prior to scheduling an assessment.

### **Will the assessment affect my acceptance to Southwestern College?**

The assessment will not affect your acceptance to the college. However, the results may affect acceptance into some programs at the college, such as Nursing.

## **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 115 (ENGL 115).

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

- Satisfactory completion (with a grade of “C” or better, or “Pass”) of MATH 60 (Intermediate Algebra I) or a higher-numbered math course;

**Or**

- Mathematics assessment results that indicate eligibility for MATH 70 (Intermediate Algebra II) or a higher-numbered math course.

The writing proficiency requirement cannot be met by an assessment but requires satisfactory completion of ENGL 115.

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. 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). You must provide the Assessment Center with proof of completion of this coursework and/or assessment. For Graduation and Certification Requirements, see page 51.

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.

## **Orientation and Advisement**

Visit [www.swccd.edu](http://www.swccd.edu), Counseling and Guidance link to complete the required online Orientation module. If after completing the online Orientation you have questions, stop by the Counseling Center at the Chula Vista, National City, Otay Mesa, or San Ysidro sites to seek guidance from the counselors. Several guided orientation/preregistration workshops are available if needed. Bring your assessment results to the orientation/preregistration workshop for advisement. For an in-depth orientation to college, enroll in Personal Development/Learning Skills 116, Student Seminar. Remember to visit the online orientation at [www.swccd.edu](http://www.swccd.edu), under the Counseling and Guidance link.

Orientation and Advisement can be accessed online or in person. We recommend you visit the online Orientation prior to completing the Assessment and then, for best results, revisit the online Orientation to carefully select the most appropriate classes.

Orientation Topics include:

- Assessment results
- Course selection
- Degree requirements
- Recommended course preparation
- Prerequisites
- Campus resources
- Student Rights and Responsibilities

### Information about Orientation

For more information, please contact one of the following: the Counseling Center, located at the Chula Vista campus in the Cesar E. Chavez Student Services Building, 619-482-6817; the Higher Education Center at National City, 619-216-6665, the Higher Education Center at Otay Mesa at 619-216-6750; or the Higher Education Center at San Ysidro at 619-216-6790.

We strongly recommend you visit the online orientation on the College web site, [www.swccd.edu](http://www.swccd.edu), Counseling and Guidance link. You can visit this site as often as you need.

## STEP 3: REGISTRATION

### Register for Classes

Each student is responsible for registering for their classes, attending every class meeting, and informing instructors in case of absence.

### Change of Records

#### Change of Address

Update your contact information (mailing address, email address, and telephone number) online on WebAdvisor. Go to <https://webadvisor.swccd.edu>, log in, and 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; attending every class meeting, informing instructors in case of absence, and officially withdrawing from classes. Furthermore, each student is responsible for following the rules and regulations in this catalog (Policy No. 5070).

### Educational Program

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

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 online on WebAdvisor at [www.swccd.edu](http://www.swccd.edu) or in Admissions located in the Cesar E. Chavez Student Services Building at the Chula Vista campus, the Higher Education Centers at National City, Otay Mesa or San Ysidro. Southwestern College provides an online schedule of classes prior to the beginning of each semester. The schedule delineates registration timelines, enrollment procedures, fees and tuition, and a complete listing of courses to be offered that term.

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 develop a Student Educational Plan (SEP) to determine the classes you need to take.

Many courses restrict enrollment to students who have not met or are currently meeting— the 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 or recommended concurrent enrollment that will enhance your chances of success in these classes.

Recognizing that the proper establishment of prerequisites, corequisites, limitations on enrollment, and/or recommendations are 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 before you enroll in these courses.

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

## Open Enrollment

It is the policy of the Southwestern Community College District that every course and course section offered by the District, shall be open to enrollment and participation by any person who is eligible for admission and who meets such prerequisites as may be established pursuant to Title 5 of the California Administrative Code. (Policy No. 5052).

## Priorities for Enrollment

Each person attending a class must complete the registration process to be officially enrolled. In accordance with the provisions of the California Code of Regulations, Title 5, Sections 51006, 58106, and 58108, the following enrollment priorities have been established:

1. District high school early admission students (limited to 50% of class maximum for Fall terms only).
2. Students enrolled in the following programs: Veterans, Extended Opportunity Programs & Services (EOPS), Disability Support Services (DSS)/Vocational Rehabilitation and Foster Youth (Title 5 specifies special enrollment priorities and assistance for disadvantaged students.)
  - a. 50 to 90 units completed at Southwestern College
  - b. 30 to 49 units completed at Southwestern College
  - c. 0 to 29 units completed at Southwestern College
  - d. 90+ units completed at Southwestern College
3. Continuing students
  - a. 50 to 90 units completed at Southwestern College
  - b. 30 to 49 units completed at Southwestern College
  - c. 0 to 29 units completed at Southwestern College
  - d. 90+ units completed at Southwestern College
4. New and former students on a first come, first served basis (Policy No. 5055).

*\*The California State Legislature will make changes in enrollment priorities effective Fall 2013. Please contact Admissions and Records for the most recent changes.*

## Prerequisite

A prerequisite is a course or qualification that must be satisfactorily completed before you may register for another course. The skills or knowledge provided in the prerequisite course has been deemed necessary for your success in the subsequent course. A minimum grade of "C" or "Pass" must be earned in the prerequisite course.

Prerequisites are enforced at Southwestern College. If you have not met the listed prerequisites, you will not be able to enroll in courses requiring the prerequisites. Prerequisites may be met by satisfactory completion of courses at Southwestern College or equivalent coursework at another college or university. Some prerequisites may also be fulfilled by satisfactory results on the appropriate validated Southwestern College Assessment. If prerequisites were completed at another college or university, you will need to bring copies of appropriate transcripts/grade reports and/or assessment results to the Assessment Center to clear the requirements prior to registration. The Assessment Center is located in the Cesar E. Chavez Student Services Building. Students may challenge prerequisites. For more information, see Requisite Challenge Form on page 22 (Policy No. 7025).

## 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, chorus, forensic 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. Students are part of a special program such as a Learning Community or Puente.

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

Limitations on enrollment are enforced at Southwestern College. Students may challenge limitations on enrollment. For more information, see Requisite Challenge below (Policy No. 7025).

## Corequisite

A corequisite is a course which must be taken during the same semester as the indicated course. Students who do not take corequisites will be dropped from the courses requiring the corequisites. Corequisites are enforced at Southwestern College. Students may challenge corequisites. For more information, see Requisite Challenge below (Policy No. 7025).

## Requisite Challenge

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. Ten working days (15 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, Department Chair, and the Vice President for Academic Affairs or designee.

## 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. To improve your chances for success, you are strongly encouraged to follow recommended preparation whenever it is listed in the class schedule. Enrollment may not be denied to any student not meeting a recommended preparation.

## 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 concurrent enrollment whenever it is listed in the catalog to improve your success in Southwestern College courses. Enrollment may not be denied to any student not meeting a recommended concurrent enrollment.

## Thirty Unit Remediation Limit

Students will not receive credit for more than 30 units of remedial or basic skills courses in the District. ESL and DSS related courses are exempt from this policy. A student who exhausts this unit limitation will be referred to appropriate non-credit continuing education services with certain exceptions.

## Class Changes

Students are responsible for each course he/she enrolls in during registration. Official class withdrawals are made the first week through the end of the third week of classes for a regular semester and will not appear on the student’s record, (deadlines are published for fast track courses or summer session). (Policy No. 5070).

## Adding Class(es) after the Semester or Session Begins

Students may add a class only during the official class change period by attending class and obtaining an add code from the instructor. For online courses, students must email the instructor to obtain an add code. Students may register with the add code online on WebAdvisor, or by submitting the add code in person at Admissions on the Chula Vista campus or at the Higher Education Center at National City, Otay Mesa, or San Ysidro during the class change period. Students must present a valid Student Identification Card.

*Note: A class enrollment is official when the add code is processed and fees are paid. A request to add a course may be accepted but later denied if found to be a repeated course or prerequisites have not been met. In addition, an instructor adding a student’s name to the class roster does not enroll the student.*

## Withdrawing From Classes

Students are responsible to officially withdraw from a course he/she no longer wishes to attend. Students may drop classes online on WebAdvisor or by filing a Add/Drop Slip in Admissions on the Chula Vista campus, or the Higher Education Centers at National City, Otay Mesa, or San Ysidro. Students who do not withdraw from a course in a timely manner, may incur a financial obligation, in addition to a sub-standard grade.

Students must withdraw from a course prior to the end of the second week of the semester to be eligible for a refund. Students must withdraw from classes prior to the end of the third week of the semester to ensure there will be no record of their enrollment and no “W” withdrawal grade on their transcript.

Students who withdraw from a course from the fourth week through the thirteen week of the regular semester ( deadline established for short session 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, P, or NP).

## Waiver or Substitution of a Course

A student may request permission to waive or substitute a course 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 Student Services. Petitions are available in Admissions Office, Evaluations Office and the Information Desk located in the Cesar E. Chavez Student Services Building or online at [www.swccd.edu](http://www.swccd.edu), click on Admissions and Registration, and then click on printable forms.

## Dropping Students from Classes

- Instructors will 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 lacking 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.
- The student’s total hours of absence for any reason exceed twice the number of hours the class meets per week.

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

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 (Policy No. 6093).

## Leave of Absence

In case of an 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 available from Admissions Office and the Information Desk at the Chula Vista campus, the Higher Education Centers at National City, Otay Mesa, or San Ysidro, or online at [www.swccd.edu](http://www.swccd.edu) (click on Admissions and Registration, then on printable forms.)



# STEP 4: PAY FEES AND APPLY FOR FINANCIAL AID

## Enrollment Fees and Nonresident Tuition

All students are required to pay an enrollment fee if applicable, nonresident tuition. The fee structure is as follows:

### Enrollment Fee

.5 unit.....	\$23
1 unit or more.....	\$46 per unit

### Nonresident Tuition

In addition to Enrollment Fees

Fee per unit .....	\$190
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*Note: The fees listed in this catalog are 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. Please consult the current class schedule for the appropriate fee.*

### Nonresident Fee Exemption

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

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

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

### 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 short session courses. Short session classes have a refund period of 10% of the actual class meeting days which may be the first day of class. Check with Admissions or check on WebAdvisor 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 the following spring semester.

### Parking Fees

\* Parking Fees for Southwestern Main Campus, Chula Vista/ Higher Education Center at National City/ Higher Education Center at San Ysidro/ Higher Education Center at Otay Mesa

### Fall/Spring Semester

Multi vehicle/car.....	\$40
Motorcycle.....	\$20*
Eligible Financial Aid BOGFW Recipients .....	\$20**
Automobiles Replacement fee .....	\$40
Motorcycle Replacement fee .....	\$20

### Summer Semester

Multi vehicle/car.....	\$22
Motorcycle.....	\$12*
Eligible Financial Aid BOGFW Recipients.....	\$20**
Automobiles Replacement fee.....	\$22
Motorcycle Replacement fee.....	\$12

Daily/visitor parking only valid in student spaces ..... \$3 per day

#### \*\*\* NOTE:

\* Free with a purchase of a Car Parking Permit

\*\* Only for students who are receiving BOGG Waiver A, B, C

- Financial Aid (Veteran Dependent must pay the original price of the permit).
- Refunds must be requested by the refund date (located on the Important Dates and Deadlines page). This must be submitted with a student petition and the permit must be attached.
- Refunds for Fast Track/Summer classes have a refund period of 10% of the actual class meeting days. This is the first day of class.
- If submitting after the refund date no refund will be given.
- Southwestern College is not responsible for lost or stolen permits. Replacement of a Parking Permit will be the full value of the permit.

### Health Fee/Accident Insurance/Liability Fee

Health Fee (includes the accident insurance/liability fee)

#### Fall/Spring Semester

.5 unit to 5.5 units.....	\$15
6 units or more.....	\$18

Summer Session..... \$15

*\*Health Fee may be subject to increase of \$1.00 in Spring 2013.*

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 (Ed Code 76355).

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 (available online at [www.swccd.edu](http://www.swccd.edu)).
- Students who qualify for a Board of Governors Fee Waiver A (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 health services are not available.
- Travel study classes which meet outside of California.

### Student Activities Sticker

Student Activities Sticker ..... \$8

Student Activities sticker holders 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 sticker 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 sticker, coupons, and other information can be picked up at the Information Window in the Student Center.

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

### 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.

### Course Materials Fees for 2012-2013

Courses may require additional materials fees for a credit or noncredit course, provided such materials are of continuing value to the student outside the classroom and provided that such materials are not solely or exclusively available from the District. 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. These are subject to change without notice. See the current schedule of classes for most recent fees. (See course descriptions for materials fees) (Ed Code 76365, Title 5 Section 59400, Policy No. 5030).

### 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 first two official Southwestern College transcripts are free. Additional official copies may be obtained for a fee. See the Fee Schedule for Southwestern College Transcripts. Unofficial transcripts may be printed from WebAdvisor at no charge (Ed Code 762223, Policy No. 5030).

### Exercise Science Facilities Fees

Where the District incurs additional expenses because a physical education course is required to use non-District facilities, students enrolled in the course shall be charged a fee for participating in the course. Such fee shall not exceed the student's calculated share of the additional expenses incurred by the District (Ed Code 76395, Policy No. 5030).

# FINANCIAL AID

The Financial Aid Office provides funding options for students to assist them in attaining resources from Federal and State agencies. Students are able to apply for grants, loans, Federal work-study and scholarships. Students who need financial assistance to attend Southwestern College are urged to contact the Financial Aid Office located in the Cesar E. Chavez Student Services 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 Waiver Program

The Board of Governors Fee Waiver (BOGFW) 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; or
- Student must meet specific income standards; or
- Student must demonstrate eligibility for state and/or federal need-based financial aid; or
- Students must establish California residency as specified by Admissions guidelines.

*BOGFW requirements are currently being reviewed and are subject to change through California State Legislature. Students will be required to meet all new requirements when the California State Legislature takes action.*

## 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 \$609 to \$5,550 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 fund availability.

## Federal Work Study (FWS)

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

## William D. Ford Direct Loan

Direct loans are low-interest loans for students to help pay for the cost of education. These loans are available to students who demonstrate financial need based on income and other information provided on the Free Application for Federal Student Aid (FAFSA). The federal government pays the interest on these loans until six months after the student is no longer enrolled at least half time.

## 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 \$150. 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 offices are located in the Cesar E. Chavez Student Services 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 Financial Aid Office located in the Cesar E. Chavez Student Services 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, first 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](http://www.finaid.org) or [www.fastweb.com](http://www.fastweb.com).

# STEP 5: SUBMIT TRANSCRIPTS (FROM OTHER COLLEGES ATTENDED)

## 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: Once you have enrolled in classes and your transcripts from other colleges have been received by the college Admissions Center, stop by the Evaluations Office to request an official evaluation of your college courses.*

## Withholding of Student Records

Students or former students who have been provided with written notice that they have failed to pay a proper financial obligation shall have grades, transcripts, diplomas, and registration privileges withheld. Any item withheld shall be released when the student satisfactorily meets the financial obligation (Title 5 Section 59410, Policy No. 5035).



# STEP 6: ACCESS COLLEGE SERVICES

There are many Student Services available for students to utilize for their success. Please see page 67 for a list of Student Services.

## The Counseling Center

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

Before you are scheduled for a counseling appointment, you will be asked to complete the Student Services Needs Assessment process. Here you will be asked a series of questions that will help Southwestern College to provide you with targeted assistance. Take care to answer all of the questions on the Self-Assessment. Within a few days of filing this form, you will receive an email letter from a college counselor directing you to your next steps for success. You may be asked to attend a workshop to learn more about careers and educational goals.

Once you have completed your steps for success, you will be scheduled for an individual counseling appointment session. 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. Be sure to come to your appointment well-prepared. Have a list of questions ready for your counselor, arrive on time for your appointment, and have paper and pencil ready to take notes during your appointment. This is a very important step in planning your future college and career success.

Additional Student Services are located at most Center locations and at the Cesar E. Chavez Student Services Building at the Chula Vista campus.

## How to Achieve an AA/AS Degree

- Complete each of the 8 steps to earn an AA/AS Degree.
- Earn a minimum of 60 degree-applicable units.
- Complete the major requirements as listed in the catalog.
- 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.)
- Complete 21 units of General Education Requirements as listed on page 51.
  - Language and Analytical Thinking—6 units
  - Natural Science—3 units
  - Humanities—6 units
  - Social Sciences—6 units
  - Complete SWC Graduation requirements, see page 54.
  - 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 Cesar E. Chavez Student Services 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, Otay Mesa, and San Ysidro.

## SWC Learning Communities

Southwestern College is committed to your educational success. We know that some students are more successful when they participate in a community of learners. We have developed specialized programming just for your needs.

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.

## Bayan Learning Community

The word Bayan implies a place where one feels welcome in the Tagalog language. This community provides a scholarly home for students to explore Filipino American issues. Bayan scholars will learn life and college skills to help them transition from Southwestern College to a four-year university or college. For more information, 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 49 or reading higher than the level 56. For more information, call 619-421-6700 extension 5878.

*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 49 or reading (lectura) más avanzado del nivel 56. Para más información llame al 619-421-6700 extensión 5878.

*Note: 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.

## PAIR – A Basic Skills Initiative Program

Preparation, Achievement, Interdependence, and Responsibility is a learning community designed to assist students in developing essential skills for college and work force success. PAIR is available each semester and students enroll in a Learning Skills Course and either a Mathematics, Reading or Writing course to complete the learning community coursework. Each student receives tutorial support and ongoing counseling support. The classes focus upon skills that assist you in building a foundation for college study. For more information call the Counseling Center at 619-482-6317.

## Puente Program

The mission of the Puente Program 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 619-421-6317.

## TELA

The TELA Program is a learning community designed to assist students in their goal of university transfer while focusing on an African American experience in a supportive environment. Students enroll in linked courses for one academic year. During the Fall semester, students enroll in Communication 103, English 114, and Personal Development 116. In Spring semester, students will take English 115 and PD 114. Students also participate in extracurricular activities throughout the year. For more information call contact the Counseling Center at 619-421-6317.

## Tips for College and Career Success: How to achieve a transfer to another college or university

### Step 1.

**Identify your major field of study.**

- Research careers in the Career Center, Cesar E. Chavez Student Services Building, or in the Library.
- Discuss options in the Transfer or Counseling Center.
- Discuss your field of interest and goals with faculty in the discipline(s) you are considering.

### Step 2.

**Identify universities offering your major.**

Visit the Transfer Center or Library to:

- 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 Cesar E. Chavez Student Services 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 (Policy No. 7027).

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).*

## Universal Design

In order to provide an accessible education that develops the human potential of all its students, Southwestern College shall comply with the Title III of the Americans with Disabilities Act (ADA) of 1990 and conform to the principles of Universal Design in Education (UDE) as defined by the Center for Universal Design at North Carolina State University: “the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.” Promoting the values of diversity and inclusion, UDE recognizes the full spectrum of user abilities and thus benefits all members of the Southwestern College community (Policy No. 3415).

This policy applies to, but is not limited to, the following:

- Instruction
- Student Services
- Facilities
- Institutional Technology
- Public Information
- Other campus goods, services, and environments

## How to Maintain Good Academic Standing

SWC is governed by Title 5 of the Education Code that requires that you maintain Good Academic Standing. The SWC policy governing this requirement is Policy 4250.

### 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 50).
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 “NP,” 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.

### Progress Disqualification

If you do not maintain the good academic standing for two consecutive semesters, you will be disqualified from the College (See page 52).

### 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, visit the Academic Success Center in building 420.

## Course Classification and Student Learning Outcomes

### 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.

### Thirty Unit Remediation Limit

Students will not receive credit for more than 30 units of remedial or basic skills courses in the District. ESL and DSS related courses are exempt from this policy. A student who exhausts this unit limitation will be referred to appropriate non-credit continuing education services with certain exceptions.

### Carnegie Unit Standard

Title 5, Section 5502.5. A minimum of 48 hours on the semester system of lecture, study, lab work is required for one unit of credit. The following examples apply to the semester units:

- One hour of lecture (plus two hours of homework) per week equals one unit.
- Three hours of laboratory per week equals one unit.

## Course Classification

### 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.

## Experimental Courses

An experimental course is offered with the intent to eventually make it part of the regular curriculum. Each experimental course is designated with the number 295 and may be followed by a letter.

## 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 (Policy No. 6019).

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 35 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. 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.

These courses are taught 100% online either synchronously or asynchronously through use of technology on a CMS, such as Blackboard. All assignments are given and completed online. Exams and Orientations may be given F2F in a classroom or at an approved testing center with supervision; however, 100% of instruction is online. The instructor provides student assistance and maintains appropriate student contact through F2F meetings, email, Bb postings, or voicemail, as necessary. The same level of technology as used with Hybrid classes is required.

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

### Online

These courses are taught 100% online either synchronously or asynchronously through use of technology on a CMS, such as Blackboard. All assignments are given and completed through email, postings, or voicemail. Exams and Orientation may be given F2F in a classroom or at an approved testing center with supervision; however, 100% of instruction is online. The instructor provides student assistance and maintains appropriate student contact through F2F meetings, email, Bb postings, or voicemail, as necessary. The same level of technology as used with Hybrid classes is required.

### Hybrid

Course features a combination of online and face-to-face (F2F) format utilizing a course management system (CMS), such as Blackboard (Bb) to post assignments, documents and or discussion board activities. Hybrid classes meet on campus at least half of their class meetings, with remaining class work conducted via the internet. There may be F2F orientation meetings and periodic F2F testing. To access the class, regular access to a computer with a reliable and fast internet connection, and a Web browser software such as Mozilla Firefox or Microsoft Explorer is required. You will need access to an Internet service provider.

***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://www.swccd.edu/~olss/Media/Students%20Starter%20PacketC.camrec/Student%20Starter%20PacketC.camrec.html>

#### Option 2:

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

### Option 3:

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

<http://swccd.edu/~olss>

Or call toll free 1-866-556-6718

## Online Learning Center

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

**Email:** [OnlineLearning@swccd.edu](mailto:OnlineLearning@swccd.edu)

**Telephone:** 619-482-6595

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

**Hours:** Monday–Thursday: 9 a.m.–6 p.m.

**Friday:** 9 a.m.–4 p.m.

Saturday and Sunday and all School Holidays: Closed

*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 the Online Learning Center at 888-556-6718.

## 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 52. 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.

Many online courses are transferable to 4-year colleges and universities. However students are advised to consult a counselor regarding some transfer institutions policies and restrictions for online coursework.

## Student Learning Outcomes

Academic Student Learning Outcomes (SLOs) identify what skills/knowledge the successful student will develop as a result of their participation in academic college courses and programs. Our faculty and staff are committed to communicating and assisting in the development of these skills. All college SLOs are based in four common core competency areas we have identified as the critical skills for students to develop during their experiences in college courses and programs.

The core competency areas include:

1. Communication Skills (Listening, Speaking, Reading, Writing)
  - a. Listen and speak actively and critically to identify a person's position and then analyze it to determine its quality.
  - b. Present their ideas in a clear and organized way to others.
  - c. Analyze and evaluate text in writing.
2. Thinking and Reasoning (Creative Thinking, Critical Thinking, Quantitative Reasoning)
  - a. Formulate and share ideas, analyze the ideas of others, integrate them into their thinking.
  - b. Assess and analyze data and information as they investigate issues and solve problems.
  - c. Use quantitative reasoning to identify, analyze and solve quantitative problems.
3. Information Competency (Research and Technology)
  - a. Research topics by identifying, analyzing, and assessing the ideas from a variety of sources to conduct research.
  - b. Students will use print material and technology to identify research needs and develop and evaluate information effectively and responsibly.
4. Global Awareness (Social, Cultural, and Civic Responsibility)
  - a. Collegially work with diverse groups of people.
  - b. Identify and examine the cultural values of different ethnic groups in a sensitive and respectful manner.
  - c. Analyze and assess historical, political, economic, scientific, and social issues in a way that enables them to participate in their community, nation, and world.

SLOs by Academic Program can be found on our web site. SLOs for each course can be found by a "search by course" in CurricUNET at:

<http://www.curricunet.com/Southwestern/search/course/>.

## 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 from the instructor of record, including his or her signature authorizing audit registration in the class.
- A maximum of two courses per semester may be audited in any regular instruction term (fall, spring, or summer).
- All college policies and procedures apply to audit students.
- Classroom attendance of students auditing a course shall not be included in computing the apportionment due the District.

Audit petitions are available in Admissions at the Chula Vista campus, the Higher Education Center at National City, Otay Mesa, San Ysidro, or online at [www.swccd.edu](http://www.swccd.edu) (click on Admissions and Registration, then on printable forms.) (Policy No. 6011).

### 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 that are not exempt. A list of courses exempt from challenge by 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 Centers at National City, Otay Mesa, or San Ysidro, or online at [www.swccd.edu](http://www.swccd.edu) (click on Admissions and Registration, then click on printable forms.) (Policy No. 6077).

### 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 non-probationary 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 Pass (P) or No Pass (NP) [formerly 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 a 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 (Policy No. 5160).

Title 5 Regulations establish the basis of eligibility for work experience. To be eligible for CWEE, you must:

- Recommended concurrent enrollment in one other major related course and have successfully completed one to two major related courses to qualify for a CWEE class for fall and spring semesters, or summer session.
- 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/agency representative, include new or expanded responsibilities or learning opportunities beyond those experienced during previous employment/Internship.
- 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/agency representative.
- If you are self-employed, you must identify a person who is approved by your instructor/CWEE 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 a minimum of 60 hours of work experience (75 hours if paid) per each unit earned. Students can enroll in up to four (4) units each semester for a total of 16 elective units overall. For further information or enrollment procedures, contact the CWEE office located upstairs in the Cesar E. Chavez Student Services Building, office S205H or phone 619-482-6537.

### **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 the CWEE office located upstairs in the Cesar E. Chavez Student Services Building, office S205H or phone 619-482-6537.

### **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 non-degree level course work. Southwestern College will honor articulation agreements made with other postsecondary institutions (Policy No. 6027).

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 non-probationary 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 Centers at National City, Otay Mesa, or San Ysidro, or online at [www.swccd.edu](http://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 (Policy No. 6091).

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.

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 first floor of the Student Services Center in the Cesar E. Chavez Building.

### Transfer Studies/General Studies Majors

Effective with the 2008-09 Catalog, we are not offering an associate degree in General Studies or in Transfer Studies. These programs are not approved by the Chancellor's Office. Any student who is following a previous catalog to attain a degree in either of the two and has maintained continuous enrollment, will be granted their degree if all requirements are met.

## Honors Program

The Southwestern College Honors Program Mission Statement:  
"To serve students by creating exceptional academic experiences."

### What are the benefits?

- Enhanced admission opportunities to the most selective transfer institutions.
- Increased scholarship opportunities.
- Special recognition on transcript.
- Intellectual growth and exploration of new ideas and concepts.
- Increased learning opportunities through research, study and independent projects.
- One-on-one mentoring from faculty members in the field of interest.
- Networking opportunities through research, study and independent projects.
- Career and employment networking opportunities.

### Admission Requirements

1. Entering freshman—Have an overall minimum GPA of 3.5 in all high school work.  
Continuing student—Have completed a minimum of 12 units of college-level courses with a GPA of 3.2 in college work.
2. Complete Honors Program Application.
3. Provide copies of transcripts of previous academic work. Unofficial copies will be accepted. Entering freshman submit high school transcript and continuing college student submit college transcript.
4. Must be eligible for English 115 and proficient in college-level reading.  
Interested students may register for an Honors course during the registration period and complete an Honors application during the first four weeks of class. Each Honors course taken and accepted by the Honors Committee is recorded as such on the transcript.

### Program Completion Requirements

1. Complete a minimum of 15 units in Honors courses.
2. Maintain a minimum GPA of 3.2 in all Honors courses and a minimum overall GPA of 3.2.

For general information and to apply to the Honors Program, contact the designated Honors counselor in the Transfer Center at 619-482-6472.

# INTERNATIONAL BACCALAUREATE CREDIT

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 on page 38 is a sampling of credit recommendations for the listed exams:*



# INTERNATIONAL BACCALAUREATE (IB)

Examination	Score	Southwestern College Units	Southwestern College GE Area	CSU-GE Certification	CSU Units Towards Transfer	IGETC Certification	UC Units Towards Transfer
Biology HL	4	4 sem. units	Area B	N/A	N/A	N/A	N/A
Biology HL	5-7	4 sem. units	Area B	3 sem. units Area B2	6 sem. units	3 sem. units 5B without Lab	5.3 sem. units
Chemistry HL	5-7	5 sem. units	Area B	3 sem. units Area B1	6 sem. units	3 sem. units 5A without Lab	5.3 sem. units
Economics HL	4	3 sem. units	Area D	N/A	N/A	N/A	N/A
Economics HL	5-7	3 sem. units	Area D	3 sem. units	6 sem. units	3 sem. units 4B	5.3 sem. units
Geography HL	4	6 sem. units	Area D	N/A	N/A	N/A	N/A
Geography HL	5-7	6 sem. units	Area D	3 sem. units	6 sem. units	3 sem. units 4E	5.3 sem. units
History (any region) HL	5-7	N/A	N/A	3 sem. units Area C2 or D6	6 sem. units	3 sem. units 3B or 4F	5.3 sem. units
History (Americas)	4-7	6 sem. units	Area D	N/A	N/A	N/A	N/A
Language A1 (any language) HL	4	N/A	N/A	3 sem. units Area C2	6 sem. units	N/A	N/A
Language A1 (any language) HL	5-7	N/A	N/A	3 sem. units Area C2	6 sem. units	3 sem. units Area 3B	5.3 sem. units
Language A1 (English) HL	4-7	6 sem. units	Area A1 and C	N/A	N/A	N/A	N/A
Language A2 (any language) HL	4	N/A	N/A	3 sem. units Area C2	6 sem. units	N/A	N/A
Language A2 (any language) HL	5-7	N/A	N/A	3 sem. units Area C2	6 sem. units	3 sem. units Area 3B	5.3 sem. units
Language A2 (Spanish) HL	4-7	6 sem. units	Area C	N/A	N/A	N/A	N/A
Language B (any language) HL	4	N/A	N/A	N/A	6 sem. units	N/A	N/A
Language B (any language) HL	5-7	N/A	N/A	N/A	6 sem. units	3 sem. units Area 6A	5.3 sem. units
Language B (Spanish) HL	4-7	6 sem. units	Area C	N/A	N/A	N/A	N/A
Mathematics HL	4	N/A	N/A	3 sem. units Area B4	6 sem. units	N/A	N/A
Mathematics HL	5	N/A	N/A	3 sem. units Area B4	6 sem. units	3 sem. units Area 2A	5.3 sem. units
Mathematics HL	6-7	6 sem. units	Area A2 and Mathematics Competency	3 sem. units Area B4	6 sem. units	3 sem. units Area 2A	5.3 sem. units
Physics HL	4	N/A	N/A	3 sem. units B1	6 sem. units	3 sem. units Area 5A (without Lab)	5.3 sem. units
Psychology HL	5-7	3 sem. units	Area D	3 sem. units D9	3 sem. units	3 sem. units Area 4I	5.3 sem. units
Theatre HL	4	6 sem. units	N/A	3 sem. units Area C1	6 sem. units	N/A	N/A
Theatre HL	5-7	6 sem. units	N/A	3 sem. units Area C1	6 sem. units	3 sem. units Area 2A	5.3 sem. units

**N/A = Not Applicable HL = Higher Level**

Credit may not be awarded for exams which duplicate credit for the same content earned through other means.

\*IB tests may be requested from your high school.

**Please consult with a counselor for questions regarding the exams.**

# ADVANCED PLACEMENT (AP) TEST

Southwestern College grants Advanced Placement (AP) credit towards its Associate Degree, California State University (CSU) General Education (GE) requirements and the Intersegmental General Education Transfer Curriculum (IGETC) certification for scores of 3, 4, or 5. To obtain credit, students should complete a petition in the Admissions Office. 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 to the following: PSAT/NMSQT Office, P.O. Box 6720, Princeton, NJ 08541-6720. Information on the AP Examination can be accessed by visiting the website at <http://www.collegeboard.com>.

Art History	3, 4, 5	6 sem. units	ART 150, 151	3 sem. units Area C1 or C2	6 sem. units	3 sem. units Area 3A or 3B	8 quarter/5.3 sem. units
Biology	3, 4, 5	4 sem. units	BIOL 100, 101	4 sem. units Area B2 and B3	6 sem. units	3 sem. units Area 5B with Lab	8 quarter/5.3 sem. units
*Calculus AB or BC/AB	3, 4, 5	5 sem. units	MATH 250	3 sem. units Area B4	3 sem. units	3 sem. units Area 2A	*4 quarter/2.6 sem. units
*Calculus BC	3, 4, 5	9 sem. units	MATH 250, 251	3 sem. units Area B4	6 sem. units	3 sem. units Area 2A	*8 quarter/5.3 sem. units
Chemistry (prior to 9/1/2009)	3	5 sem. units	CHEM 200	6 sem. units Area B1 and B3	6 sem. units	4 sem. units Area 5A with Lab	8 quarter/5.3 sem. units
Chemistry (prior to 9/1/2009)	4 or 5	10 sem. units	CHEM 200, 210	6 sem. units Area B1 and B3	6 sem. units	4 sem. units Area 5A with Lab	8 quarter/5.3 sem. units
Chemistry (on or after 9/1/2009)	3	5 sem. units	CHEM 200	4 sem. units Area B1 and B3	6 sem. units	4 sem. units Area 5A with Lab	8 quarter/5.3 sem. units
Chemistry (on or after 9/1/2009)	4 or 5	10 sem. units	CHEM 200, 210	4 sem. units Area B1 and B3	6 sem. units	4 sem. units Area 5A with Lab	8 quarter/5.3 sem. units
Chinese Language and Culture	3, 4, 5	5 sem. units	CHIN 120	3 sem. units Arts Area C2	6 sem. units	3 sem. units Area 3B and 6A	8 quarter/5.3 sem. units
		5 sem. units	CHIN 130		6 sem. units		
Comparative Government and Politics	3, 4, 5	3 sem. units	PS 103	3 sem. units Area D8	3 sem. units	3 sem. units Area 4H	4 quarter/2.6 sem. units
*Computer Science A	3, 4, 5	3 sem. units	N/E	N/A	3 sem. units	N/A	*2 quarter/1.3 sem. units
		3 sem. units	MATH 130				
*Computer Science AB	3, 4, 5	6 sem. units	MATH 130	N/A	6 sem. units	N/A	*4 quarter/2.6 sem. units
			MATH 130, 140				
*English Language	3, 4, 5	4 sem. units	ENGL 115	3 sem. units Area A2	6 sem. units	3 sem. units Area 1A	*8 quarter/5.3 sem. units
*English Literature	3, 4, 5	7 sem. units	ENGL 115, 220 or 270	6 sem. units Area A2 and C2	6 sem. units	3 sem. units Area 1A or 3B	*8 quarter/5.3 sem. units
Environmental Science (prior to 9/1/2009)	3	N/A	N/E	4 sem. units	4 sem. units	3 sem. units Area 5A with Lab	4 quarter/2.6 sem. units
Environmental Science (prior to 9/1/2009)	4 or 5	N/A	N/E	4 sem. units Area B1 and B3 or B2 and B3	4 sem. units	3 sem. units Area 5A with Lab	4 quarter/2.6 sem. units
Environmental Science (on or after 9/1/2009)	3	N/A	N/E	4 sem. units Area B1 and B3	4 sem. units	3 sem. units Area 5A with Lab	4 quarter/2.6 sem. units

N/A = Not Applicable\*Mathematics/Calculus – UC 8 quarter unit maximum for both tests\*\*Physics – UC 8 quarter unit maximum for all three tests

N/E = No Equivalency\*Computer Science – UC 4 quarter unit maximum for both tests\*\*Studio Art UC – 8 quarter unit maximum for all three tests

\*English Language/Literature – UC 8 quarter unit maximum for both tests

Please consult with a counselor for questions regarding exams.

(See next page for continuation of Advanced Placement scores)

## Continued Advanced Placement (AP) Test

Environmental Science (on or after 9/1/2009)	4 or 5	N/A	N/E	4 sem. units Area B1 and B3	4 sem. units	3 sem. units Area 5A with Lab	4 quarter/2.6 sem. units
European History	3, 4, 5	6 sem. units	HIST 104 and 105	3 sem. units Area C2 or D6	6 sem. units	3 sem. units Area 3B	8 quarter/5.3 sem. units
French Language (prior to 9/1/2009)	3, 4, 5	6 sem. units	FREN 220	6 sem. units Area C2	6 sem. units	3 sem. units Area 3B and 6A	8 quarter/5.3 sem. units
French Language (on or after 9/1/2009)	3, 4, 5	5 sem. units	FREN 201	3 sem. units Area C2	6 sem. units	3 sem. units Area 3B and 6A	8 quarter/5.3 sem. units
French Literature (prior to 9/1/2009)	3, 4, 5	6 sem. units	FREN 230	3 sem. units Area C2	6 sem. units	3 sem. units Area 3B and 6A	8 quarter/5.3 sem. units
French Literature (on or after 9/1/2009)	3, 4, 5	5 sem. units	FREN 202	3 sem. units Area C2	6 sem. units	3 sem. units Area 3B and 6A	8 quarter/5.3 sem. units
German Language (prior to 9/1/2009)	3, 4, 5	6 sem. units	N/E	6 sem. units Area C2	6 sem. units	3 sem. units Area 3B and 6A	8 quarter/5.3 sem. units
German Language (on or after 9/1/2009)	3, 4, 5	5 sem. units	N/E	3 sem. units Area C2	6 sem. units	3 sem. units Area 3B and 6A	8 quarter/5.3 sem. units
Human Geography	3, 4, 5	3 sem. units	GEOG 120	3 sem. units Area D5	3 sem. units	3 sem. units Area 4E	4 quarter/2.6 sem. units
Italian Language and Culture	3, 4, 5	5 sem. units	ITAL 201	3 sem. units Area C2	6 sem. units	3 sem. units Area 3B and 6A	8 quarter/5.3 sem. units
Japanese Language and Culture	3, 4, 5	5 sem. units	JPN 201	3 sem. units Area C2	6 sem. units	3 sem. units Area 3B and 6A	8 quarter/5.3 sem. units
Latin Literature (prior to 9/1/2009)	3, 4, 5	5 sem. units	N/E	3 sem. units Area C2	6 sem. units	3 sem. units Area 3B and 6A	4 quarter/2.6 sem. units
Latin: Vergil	3, 4, 5	5 sem. units	N/E	3 sem. units Area C2	3 sem. units	3 sem. units Area 3B and 6A	4 quarter/2.6 sem. units
Macroeconomics	3, 4, 5	3 sem. units	ECON 101	3 sem. units Area D2	3 sem. units	3 sem. units Area 4B	4 quarter/2.6 sem. units
Microeconomics	3, 4, 5	3 sem. units	ECON 102	3 sem. units Area D2	3 sem. units	3 sem. units Area 4B	4 quarter/2.6 sem. units
Music Theory (prior to 9/1/2009)	3, 4, 5	4 sem. units	MUS 101, 102	3 sem. units Area C1	6 sem. units	N/A	8 quarter/5.3 sem. units
**Physics B (prior to 9/1/2009)	3, 4, 5	N/A	NE	6 sem. units Areas B1 and B3	6 sem. units	4 sem. units Area 5A with Lab	* 8 quarter/5.3 sem. units
**Physics B (on or after 9/1/2009)	3, 4, 5	N/A	NE	4 sem. units Areas B1 and B3	6 sem. units	4 sem. units Area 5A with Lab	* 8 quarter/5.3 sem. units
**Physics C (Mechanics)	3 or 4 5	3 sem. units 3 sem. units	PHYS 170 PHYS 270	4 sem. units Areas B1 and B3	4 sem. units	3 sem. units Area 5A with Lab	* 4 quarter/2.6 sem. units
**Physics C (Electricity and Magnetism)	3 or 4 5	3 sem. units 3 sem. units	PHYS 172 PHYS 272	4 sem. units Areas B1 and B3	4 sem. units	3 sem. units Area 5A with Lab	* 4 quarter/2.6 sem. units
Psychology	3, 4, 5	3 sem. units	PSYC 101	3 sem. units Area D9	3 sem. units	3 sem. units Area 4I	4 quarter/2.6 sem. units

N/A = Not Applicable\*Mathematics/Calculus – UC 8 quarter unit maximum for both tests\*\*Physics – UC 8 quarter unit maximum for all three tests

N/E = No Equivalency\*Computer Science – UC 4 quarter unit maximum for both tests\*\*Studio Art UC – 8 quarter unit maximum for all three tests

\*English Language/Literature – UC 8 quarter unit maximum for both tests

Please consult with a counselor for questions regarding exams.

(See next page for continuation of Advanced Placement scores)

## Continued Advanced Placement (AP) Test

Spanish Language 3 or 4 or 5	3 or 4 or 5	5 sem. units 5 sem. units	SPAN 201 SPAN 202	6 sem. units Area C2	6 sem. units 3 sem. units Area 3B and 6A	8 quarter/5.3 sem. units
Spanish Language (on or after 9/1/2009)	3 or 4 or 5	5 sem. units 5 sem. units	SPAN 201 SPAN 202	3 sem. units Area C2	6 sem. units 3 sem. units Area 3B and 6A	8 quarter/5.3 sem. units
Spanish Literature (prior to 9/1/2009)	3, 4, 5	5 sem. units	SPAN 215	6 sem. units Area C2	3 sem. units Area 3B and 6A	8 quarter/5.3 sem. units
Spanish Literature (on or after 9/1/2009)	3, 4, 5	5 sem. units	SPAN 215	3 sem. units Area C2	6 sem. units Area 3B and 6A	8 quarter/5.3 sem. units
Statistics	3, 4, 5	3 sem. units	MATH 119	3 sem. units Area B4	3 sem. units Area 2A	4 quarter/2.6 sem. units
**Studio Art – 2D	3, 4, 5	6 sem. units	ART 100, 101	N/A	N/A	* 8 quarter/5.3 sem. units
**Studio Art – 3D	3, 4, 5	6 sem. units	ART 100, 101	N/A	N/A	* 8 quarter/5.3 sem. units
**Studio Art – Drawing	3, 4, 5	12 sem. units	ART 100, 101, 102, 103	N/A	N/A	* 8 quarter/5.3 sem. units
+U.S. Government and Politics	3, 4, 5	3 sem. units	PS 102	3 sem. units Area D8 and US-2	3 sem. units Area 4H	4 quarter/2.6 sem. units
+U.S. History	3, 4, 5	6 sem. units	HIST 100 and 101	3 sem. units Area D6 and US-1	6 sem. units Area 4F	8 quarter/5.3 sem. units
World History	3, 4, 5	6 sem. units	HIST 106 and 107	3 sem. units Area C2 or D6	6 sem. units Area 3B	8 quarter/5.3 sem. units

N/A = Not Applicable\*Mathematics/Calculus – UC 8 quarter unit maximum for both tests\*\*Physics – UC 8 quarter unit maximum for all three tests

N/E = No Equivalency\*Computer Science – UC 4 quarter unit maximum for both tests\*\*Studio Art UC – 8 quarter unit maximum for all three tests

\*English Language/Literature – UC 8 quarter unit maximum for both tests

**Please consult with a counselor for questions regarding exams.**

(See next page for continuation of Advanced Placement scores)

**US-1 = U.S. History, Constitution and American Ideals/Area 1 US-2 = U.S. History, Constitution and American Ideals/Area 2**

Credit may not be awarded for exams which duplicate credit for the same content earned through other means.

**\*CSU Advanced Placement Policies**

The AP exams listed above may be incorporated into certification of CSU General Education Breadth Requirements. All CSU campuses will accept the minimum units shown if the examination is included in full or subject area certification; individual CSU campuses may choose to accept more than those specified towards completion of general education breadth requirements. The CSU Minimum Semester Admission unit column reflects what each campus system wide will minimally accept toward CSU Admission.

**+These exams only partially fulfill the CSU U.S. History, Constitution and American Ideals graduation requirement but can be used toward the requirement.**

**\*\*UC Advanced Placement Policies**

Each AP exam may be applied to one IGETC area, as satisfying one course requirement, with the exception of Language Other Than English. The final column reflects what the University of California will award per AP exam for admission to any UC campus.

**Please consult with a counselor for questions regarding exams.**

# 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](http://www.collegeboard.com/clep)

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



# COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

Examination	Score	Southwestern College Units and/or GE Area	CSU-GE Certification	CSU Units Towards Transfer	IGETC Certification
American Government	50	3 sem. units Area D	3 sem. units Area D8	3 sem. units	N/A
American Literature	50	6 sem. units Area C	3 sem. units Area C2	3 sem. units	N/A
Analyzing and Interpreting Literature	50	6 sem. units Area C	3 sem. units Area C2	3 sem. units	N/A
Biology	50	3 sem. units Area B	3 sem. units Area B2	3 sem. units	N/A
Calculus	50	5 sem. units Area A2 and Mathematics Competency	3 sem. units Area B4	3 sem. units	N/A
Chemistry	50	3 sem. units Area B	3 sem. units Area B1	3 sem. units	N/A
College Algebra	50	5 sem. units Area A2 and Mathematics Competency	3 sem. units Area B4	3 sem. units	N/A
College Algebra-Trigonometry (prior to 7/1/2007)	50	3 sem. units Area A2 and Mathematics Competency	3 sem. units Area B4	3 sem. units	N/A
College Mathematics	50	3 sem. units Area A2 and Mathematics Competency	N/A	N/A	N/A
English Composition (no essay)	50	3 sem. units Elective	N/A	N/A	N/A
English Composition with Essay	50	3 sem. units Elective	N/A	N/A	N/A
English Literature	50	6 sem. units Area C	3 sem. units Area C2	3 sem. units	N/A
Financial Accounting	50	4 sem. units Elective	N/A	3 sem. units	N/A
French Level I	50	5 sem. units Area C	N/A	6 sem. units	N/A
French Level II	59	10 sem. units Area C	3 sem. units Area C2	12 sem. units	N/A
Freshman Composition	50	3 sem. units Elective	N/A	N/A	N/A
German Level I	50	5 sem. units Area C	N/A	6 sem. units	N/A
German Level II	60	10 sem. units Area C	3 sem. units Area C2	12 sem. units	N/A
History, United States I	50	3 sem. units Area D	3 sem. units Area D6 and US-1	3 sem. units	N/A
History, United States II	50	3 sem. units Area D	3 sem. units Area D6 and US-1	3 sem. units	N/A
Human Growth and Development	50	3 sem. units Area D	3 sem. units Area E	3 sem. units	N/A
Humanities	50	3 sem. units Area C	3 sem. units Area C2	3 sem. units	N/A
Information Systems and Computer Applications	50	3 sem. units Area A2	N/A	3 sem. units	N/A
Introduction to Educational Psychology	50	3 sem. units Area D	N/A	3 sem. units	N/A
Introduction to Business Law	50	3 sem. units Elective	N/A	3 sem. units	N/A
Introductory Psychology	50	3 sem. units Area D	3 sem. units Area D9	3 sem. units	N/A
Introductory Sociology	50	3 sem. units Area D	3 sem. units Area D10	3 sem. units	N/A
Natural Sciences	50	3 sem. units Area B	3 sem. units Area B1 or B2	3 sem. units	N/A
Pre-Calculus	50	3 sem. units Area A2 and Mathematics Competency	3 sem. units Area B4	3 sem. units	N/A
Principles of Accounting	50	4 sem. units Elective	N/A	3 sem. units	N/A
Principles of Macroeconomics	50	3 sem. units Area D	3 sem. units Area D2	3 sem. units	N/A
Principles of Management	50	3 sem. units Elective	N/A	3 sem. units	N/A
Principles of Marketing	50	3 sem. units Elective	N/A	3 sem. units	N/A

## Continued College Level Examination Program (CLEP)

Principles of Microeconomics	50	3 sem. units Area D	3 sem. units Area D2	3 sem. units	N/A
Social Sciences and History	50	3 sem. units Area D	N/A	N/A	N/A
Spanish Level I	50	5 sem. units Area C	N/A	6 sem. units	N/A
Spanish Level II	63	10 sem. units Area C	3 sem. units Area C2	12 sem. units	N/A
Trigonometry	50	3 sem. units Area A2 and Mathematics Competency	3 sem. units Area B4	3 sem. units	N/A
Western Civilization I	50	3 sem. units Area C or D	3 sem. units Area C2 or D6	3 sem. units	N/A
Western Civilization II	50	3 sem. units Area C or D	3 sem. units Area D6	3 sem. units	N/A

**N/A = Not Applicable**      **US-1 = American Institutions Area 1**      **US-2 = American Institutions Area 2**

Credit may not be awarded for exams which duplicate credit for the same content earned through other means.

To request an official CLEP transcript, write to: Educational Testing Service, P.O. Box 6600, Princeton, NJ 08541-6600

**Please consult with a counselor for questions regarding the exams.**

# DEFENSE ACTIVITY FOR NON-TRADITIONAL EDUCATION SUPPORT (DANTES)

Examination	Score	Southwestern College Units and/or GE Area	CSU-GE	IGETC
A History of the Vietnam War	50 or higher	3 semester units Elective	N/A	N/A
An Introduction to the Modern Middle East	50 or higher	3 semester units Area D	N/A	N/A
Art of the Western World	50 or higher	3 semester units Area C	N/A	N/A
Astronomy	50 or higher	3 semester units Area B	N/A	N/A
Business Mathematics (on or after 9/1/2009)	400 or higher	3 semester units Elective	N/A	N/A
Business Mathematics (prior to 9/1/2009)	50 or higher	3 semester units Area A2 and Math Competency	N/A	N/A
Criminal Justice (on or after 1/1/2008)	400 or higher	3 semester units Elective	N/A	N/A
Criminal Justice (prior to 1/1/2008)	50 or higher	3 semester units Elective	N/A	N/A
Environment and Humanity: The Race to Save the Planet	50 or higher	3 semester units Elective	N/A	N/A
Ethics in America (on or after 1/1/2008)	400 or higher	3 semester units Elective	N/A	N/A
Ethics in America (prior to 1/1/2008)	50 or higher	3 semester units Elective	N/A	N/A
Foundations of Education	50 or higher	3 semester units Elective	N/A	N/A
Fundamental College Algebra (on or after 1/1/2008)	400 or higher	3 semester units Area A2 and Mathematics Competency	N/A	N/A
Fundamental College Algebra (prior to 1/1/2008)	50 or higher	3 semester units Area A2 and Mathematics Competency	N/A	N/A
Fundamentals of Counseling	50 or higher	3 semester units Elective	N/A	N/A
General Anthropology	50 or higher	3 semester units Elective	N/A	N/A
Here's to Your Health	50 or higher	3 semester units Health Education	N/A	N/A
Human Resource Management	50 or higher	3 semester units Elective	N/A	N/A
Human/Cultural Geography	50 or higher	3 semester units Elective	N/A	N/A
Introduction to Business (on or after 9/1/2009)	400 or higher	3 semester units Area D	N/A	N/A
Introduction to Business (prior to 9/1/2009)	50 or higher	3 semester units Area D	N/A	N/A
Introduction to Computing (on or after 1/1/2008)	400 or higher	3 semester units Elective	N/A	N/A
Introduction to Computing (prior to 1/1/2008)	50 or higher	3 semester units Elective	N/A	N/A
Introduction to Law Enforcement	50 or higher	3 semester units Area D	N/A	N/A
Introduction to World Religions (on or after 1/1/2008)	400 or higher	3 semester units Area C	N/A	N/A
Introduction to World Religions (prior to 1/1/2008)	50 or higher	3 semester units Area C	N/A	N/A

**N/A = Not Applicable**

Credit may not be awarded for exams which duplicate credit for the same content earned through other means.

To request an official DANTES transcript, write to: PROMETRIC ATTN: DSSST Program, 1260 Energy Lane, St. Paul, MN 55108. You can also call the toll free number 877-471-9860 or 651-603-3011 (not toll free) or request a transcript via email at <http://getcollegetcredit.com/resources>.

**Please consult with a counselor for questions regarding the exams.**

## Continued Defense Activity for Non-Traditional Education Support (Dantes)

Lifespan Developmental Psychology	50 or higher	3 semester units Elective	N/A	N/A
Organizational Behavior	50 or higher	3 semester units Elective	N/A	N/A
Personal Finance (on or after 1/1/2008)	400 or higher	3 semester units Elective	N/A	N/A
Personal Finance (prior to 1/1/2008)	50 or higher	3 semester units Elective	N/A	N/A
Principles Geology	50 or higher	3 semester units Area B	N/A	N/A
Principles of Finance (prior to 9/1/2009)	400 or higher	3 semester units Elective	N/A	N/A
Principles of Physical Science I	50 or higher	3 semester units Area B	N/A	N/A
Principles of Public Speaking	50 or higher	3 semester units Area A2	N/A	N/A
Principles of Statistics (on or after 1/1/2008)	400 or higher	3 semester units Area A2 and Mathematics Competency	N/A	N/A
Principles of Statistics (prior to 1/1/2008)	50 or higher	3 semester units Area A2 and Mathematics Competency	N/A	N/A
Principles of Supervision (on or after 9/1/2009)	400 or higher	3 semester units Elective	N/A	N/A
Principles of Supervision (prior to 9/1/2009)	50 or higher	3 semester units Elective	N/A	N/A
Technical Writing	50 or higher	3 semester units Elective	N/A	N/A
Western Europe Since 1945	50 or higher	3 semester units Area C	N/A	N/A

### N/A = Not Applicable

Credit may not be awarded for exams which duplicate credit for the same content earned through other means.

To request an official DANTES transcript, write to: PROMETRIC ATTN: DSST Program, 1260 Energy Lane, St. Paul, MN 55108. You can also call the toll free number 877-471-9860 or 651-603-3011 (not toll free) or request a transcript via email at <http://getcollegetcredit.com/resources>.

**Please consult with a counselor for questions regarding the exams.**

## Fee Schedule for Southwestern College Transcripts

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 (Policy No 5030).

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)* .....	\$10
Fax (Outside San Diego County)*.....	\$15
Federal Express* .....	\$20

(includes emergency fee)

\* Fee for transcripts may be increased in Fall 2012 pending Governing Board Approval.

*Southwestern College is currently in the process of implementing new methods of electronic transcript submissions to transferring institutions. Subsequently, transcripts fees as well as methods of ordering transcript are subject to change. Please contact Admissions and Records for current fees or ordering information.*

## 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.

Due to State budget cuts and workload reductions, Southwestern College reserves the right to restrict the maximum units into which students can enroll during the first three weeks of the registration periods. Please contact the Dean of Student Services for current information.

The maximum number of units for which a student may register is 19. Anyone who would like to enroll for more than the maximum per semester must petition for exception with the Dean of Counseling and Matriculation prior to adding the classes. Prior to filing a petition of exception, a student should consult with a counselor to discuss the advisability of enrolling in additional units. Petitions are filed with Counseling.

### Course Overlays

State law prohibits a student from enrolling in courses that meet at the same time. Should a slight time overlap of 15 minutes per week occur, an overlay petition may be submitted to Admissions for approval. The petition should specifically indicate when the time will be made up, and it should also include the instructor's signature. Petitions and information are available in Admissions and Information Desk at the Chula Vista campus, the Higher Education Centers at National City, Otay Mesa, or San Ysidro, or online at [www.swccd.edu](http://www.swccd.edu) (click on Admissions and Registration, then click on printable forms.)

## Course Repetition and Course Withdrawal

Course repetitions are permitted under the following conditions (Policy No. 4225):

A student may repeat a course a maximum of three times in which either substandard academic work (D, F or NP grade) or Withdrawal "W" was earned. If the student can demonstrate extenuating circumstances requiring one additional repetition, the student may petition. The student must submit a petition with the attached documentation to be evaluated by the Dean of Student Services or Petition Review Committee. Extenuating circumstances are verified cases of accidents, illnesses or other circumstances beyond control of the student.

When course repetition and/or course withdrawal occurs, the permanent academic record shall be annotated in such a manner that all student work is transcribed and remains legible, ensuring a true and complete academic history.

The Governing Board, or its sole designee in collaboration with the Academic Senate, shall establish procedures regarding course repetition/course withdrawal as per Policy 2515 the Governing Board-Approved "10+1 Agreement."

### 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. When a course is repeated pursuant to this section, the grade received each time shall be included for the purposes of calculating the student's grade point average.

\* *The California State Legislature will make changes in repeatable activity courses effective Fall 2013. Please contact Admissions and Records for the most recent changes.*

### Field Trips

Throughout the academic year, the District may sponsor voluntary field trips and excursions in connection with courses. Students should be advised 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 (Policy No. 7011).

### Transportation

Throughout the academic year, some 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 (Policy No. 6023).

The two types of grading systems are the grading scale and the Pass/No Pass 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 Pass/No Pass basis. A student transferring to a four-year institution should check its policy on acceptance of Pass/No Pass 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 consistently monitor their grade point standing.

## Grade Assignment, Grade Change, and Disputes

Final grades will be available at the end of each Fall and Spring 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 (Policy No. 5500).

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:

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

Any change to a grade after it has been submitted to the Admissions Office must be done within one year following the end of the term in which the grade was assigned (see "Grade Dispute Procedure").

## 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 fall and spring semester or summer session (Policy No. 6025).

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

## Pass/No Pass Grades (Formerly Credit/No Credit)

P (CR) Pass/Credit (at least satisfactory; units are awarded not computed in GPA)

NP (NC) No Pass/No Credit (less than satisfactory or failing; no units are awarded nor computed in GPA)

## Non-Evaluative Symbols

I	Incomplete
IP	In Progress
W	Withdrawal
MW	Military Withdrawal
RD	Report Delayed

## Pass/No Pass Grade (P/NP)

Pass/No Pass grades are used in two ways:

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

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

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

Students may take courses during a semester, fast track, or summer session on a Pass/No Pass basis whenever that option is offered. 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. Pass/No Pass petitions are available in Admissions and Records at the Chula Vista campus, Higher Education Centers at National City, Otay Mesa, or San Ysidro, or online at [www.swccd.edu](http://www.swccd.edu) (click on Admissions and Registration, then on printable forms).

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

All units earned on a Pass/No Pass 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 "NP" 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 Pass/No Pass 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 and a copy will be maintained in Admissions. 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. 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 Admissions 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.

### **Withdrawal Grade (W)**

Students should always officially withdraw from a class by processing a Withdrawal on WebAdvisor or coming to Admissions. No record of course enrollment will be posted for students withdrawing from courses during the first three weeks of the semester. A withdrawal initiated either by student or instructor from the fourth 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, P, NP or an I). For procedures go to page 23, withdrawing from Classes.

Students enrolled in less-than-semester-length courses who withdraw during the first 20 percent of class will have no record of enrollment posted. Students, who withdraw after the first 20 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, P, NP, or I).

### **Military Withdrawal Grade (MW)**

Students should always officially withdraw from a class by processing a Withdrawal Form in the Admissions Office. Military withdrawal occurs when a student who is a member of an active or reserve United States military service receives orders compelling a withdrawal from courses. No record of course enrollment will be posted for students withdrawing from courses during the first three weeks of the semester. A withdrawal initiated either by student or instructor from the fourth week through the eighteenth week of the semester will be recorded on the student's permanent record as an "MW" grade. Military withdrawals shall not be counted in progress probation and dismissal calculations. Incompletes may be assigned during the weeks of the fourteen through eighteen, in lieu of military withdrawal with mutual content between student and instructor. This may include completing and early final exam or assignments.

### **Report Delayed Grade (RD)**

The report delayed "RD" is a temporary notation on the transcript in those circumstances when an instructor does not assign a grade. The "RD" 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 School Dean. (Policy No. 7013).

### **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 (Pass/No Pass courses are not included). The grade point average (GPA) required for academic recognition is defined as follows (Policy No. 6069):

#### **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 in degree-applicable units (in all college work completed, including coursework taken elsewhere) will be graduated with honors. This status as an honor graduate will be noted on both the degree and the permanent record (transcripts) for all such students.

## Academic Progress, Probation, and Disqualification

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

The District's probation policy 4250 sets the standards for implementation.

### 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. Contact the Counseling Center at the Chula Vista campus for more details at 619-482-6317.

### 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 "NP" grades. All students placed on progress probation will be required to attend an academic success seminar prior to registering for subsequent semesters. Contact the Counseling Center at the Chula Vista campus for more details at 619-482-6317.

### 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 "NP" 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 "NP" 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 "NP" 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 sitting out 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 sitting out 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 for reinstatement may be approved for serious and compelling reasons, 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 at all locations and may be submitted prior to the beginning of the semester.

### Academic Renewal: Elimination of Substandard Course Work

Given that past performance does not always reflect a student's actual ability, the Southwestern Community College District allows for previously recorded substandard academic performance (grades D, F or NP) to be disregarded if it is not reflective of a student's current demonstrated ability (Policy No. 4240).

Southwestern College will honor the academic renewal policy of other accredited institutions in disregarding or removing previous work 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, under certain circumstances, to have the College disregard 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:

- At least two years must have elapsed since the most recent coursework to be disregarded was completed;
- The student must have completed, at any accredited post-secondary 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.

Substandard coursework completed at Southwestern College may be eliminated from consideration in the computation of cumulative grade point average as follows:

- Any 9 units of substandard coursework may be eliminated  
**or**
- One complete semester (not to exceed 24 units) may be eliminated  
**or**
- Two complete semesters (not to exceed 24 units) may be eliminated.

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

When academic renewal procedures permit previously recorded substandard coursework to be disregarded in the computation of a student's grade point average, the student's permanent academic record shall be annotated in such a manner that all coursework remains legible to ensure a complete academic history.

A student may be granted academic renewal only once at Southwestern College and academic renewal decisions are irreversible and permanent.

Academic renewal procedures may not conflict with the District's obligation to retain and destroy records or with the instructor's ability to determine a student's final grade.

Petitions to request academic renewal without course repetition are available in Admissions and Records at the Chula Vista campus, the Higher Education Centers at National City, Otay Mesa, or San Ysidro, or online at [www.swccd.edu](http://www.swccd.edu) (click on Admissions and Registration, then click on printable forms.). Official transcripts of all academic work, from all accredited post-secondary institutions, must be on file in the Admissions and Records Office at the time of request for academic renewal.

Petitions will be reviewed by Southwestern College's Petition Review Committee.

This petition has no bearing on the District's Course Repetition/Withdrawal procedure 4225 (Title 5, Section 55044).

Southwestern College recognizes the educational achievement of its students by granting the Associate in Arts Degree, Associate in Science Degree, Certificate of Achievement and Certificate of Proficiency. 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 Evaluations. 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 to obtain the associate degree at Southwestern College.

*Note: Hand-carried copies of other college/universities official transcripts will not be 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 (Policy No. 6039).

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 coursework which will satisfy all graduation requirements. This means either credit earned on a Pass/No Pass basis or cumulative grade point average of 2.0 or better for credit earned on a grading scale basis for all college coursework attempted, for all Southwestern College course work attempted, and all courses required for the major.

## Minimum grade of "C" Requirement

Effective for all students admitted for the fall 2009 term or any term thereafter, all courses applicable toward the unit requirement for the major or area of emphasis for associate degrees and Certificates of Achievement or Proficiency must be completed with a "C" or better, or "P" if the course is taken on a Pass/No Pass basis.

## Computer Literacy Requirement

The requirement for the associate degree is satisfactory completion (grade "C" or better or "Pass") 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 Associate Degree Nursing (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
GEOG 145	Introduction to Mapping and Geographic Information Science
GEOG 150	Geographic Information Science and Spatial Reasoning
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/	
RA&T 100	Music Technology
MUS 155/	
RA&T 105	Electronic Music Technology

**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.

## Exercise Science Requirements

Students must satisfactorily complete (grade of "C" or better or "Pass") 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 by and has enrolled in the Associate Degree Nursing (ADN) Program.

The following courses DO NOT fulfill the exercise science requirement for graduation:

DANC 200	Dance History and Appreciation
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 "Pass") 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:** Students are not eligible to take the health inventory test after receiving an unsatisfactory grade in HLTH 101.

## 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 60 or 70). 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 (grade of “C” or better or “Pass”) of MATH 60 (Intermediate Algebra I) or a higher-numbered mathematics course;

OR

- Mathematics assessment results that indicate eligibility for MATH 70 (Intermediate Algebra II), or a higher-numbered mathematics course.

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

### 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 “Pass”) of RDG 158 or ENGL 115.

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.

### Writing Proficiency Requirement

English writing proficiency requires satisfactory completion (grade of “C” or better or “Pass”) in the following:

ENGL 115 Reading and Composition: Exposition and Argumentation

*Note: Proficiency requirements may also be met by satisfactory scores on specified Advanced Placement (AP), College-Level Examination Program (CLEP), or International Baccalaureate (IB) exams (see pages 37–44).*

A student who has received a college degree from an accredited U.S. institution will not be required to meet proficiency requirements for graduation.

## Residency Requirement

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



Associate Degree  
for Transfer<sup>SM</sup>

## Student Transfer Achievement Reform (STAR) Act (SB 1440-Padilla) Associate Degrees

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

To view the most current list of Southwestern College Associate Degrees for Transfer and to find out which CSU campuses accept each degree, please go to [www.sb1440.org](http://www.sb1440.org). Current and prospective community college students are encouraged to meet with a counselor to review their options for transfer and to develop an educational plan that best meets their goals and needs.

# ASSOCIATE DEGREE (A. S. OR A.A.) GENERAL EDUCATION REQUIREMENTS 2012–2013

This plan meets the 21-unit general education requirement for an associate degree awarded by Southwestern College. A minimum of 60 total units should include general education courses, degree/program course requirements and elective courses are 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

ENGL 115 Reading and Composition: Exposition and Argumentation

### Group 2: Analytical Thinking

CIS 101 Introduction to Computers and Information Processing  
 COMM 160 Argumentation and Debate  
 ENGL 116 Critical Thinking and Composition  
 + GEOG 145 Introduction to Mapping and Geographic Information Science  
 GEOG 150 Geographic Information Science and Spatial Reasoning  
 RDG 158 College Reading  
 MATH 60 or 65 Intermediate Algebra (or any higher-numbered math course)  
 MATH 130 Introduction to Computer Programming  
 PHIL 103 Logic and Critical Thinking  
 PSYC/SOC 270 Statistical Methods of Sociology

OR

### 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  
 GEOL 104 Introduction to Earth Science  
 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 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 273 Principles of Physics Laboratory II  
 PHYS 274 Principles of Physics III  
 PHYS 275 Principles of Physics Laboratory 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  
 ART130/TELE 113 History of Film as Art  
 ART/TELE 131 Introduction to Video and Film Production  
 ART/TELE 132 Intermediate Video and Film Production  
 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 161	Graphic Design—Draw
ART 170	Beginning Ceramics
ART 182	Design in Wood I
ART 185A	Jewelry and Metalwork I
ART 185B	Jewelry and Metalwork II
COMM 111	Oral Interpretation
COMM 142	Oral History
COMM/TELE 180	Introduction to Electronic Media
COMM 185/TELE 114	Cinema as a Form of Expression
+ DANC 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 155/RA&T 105	Electronic Music Technology
MUS 195	World Music
MUS 202	Development of Mariachi: Style and Culture
MUS/TELE 151/RA&T 120	Recording Techniques
RA&T 105/MUS 155	Electronic Music Technology
RA&T 120/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 120	Theatre Workshop—Performance
TA/TELE 115	Acting for Television and Film
TA/TELE 150	Technical Design and Production
TA/TELE 152	Lighting Techniques
TA/TELE 242	Television and Film Directing
TELE 110	Writing for Film and Electronic Media
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
TELE/ART 131	Introduction to Video and Film Production
TELE/ART 132	Intermediate Video and Film Production
TELE/TA 150	Technical Design and Production
TELE/MUS 151/RA&T 120	Recording Techniques
TELE/TA 152	Lighting and Sound Techniques
TELE 163	Video Post-production and Special Effects
TELE/COMM 180	Introduction to Electronic Media
TELE 183	Video Studio Production
TELE 233	Film Production
TELE 234	Documentary Video Production
TELE/TA 242	Television and Film Directing

### Group 2: Cultural Studies

ASL 120	American Sign Language I
ASL 130	American Sign Language II
^ CHIN 101	Mandarin Chinese I
^ CHIN 102	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
ENGL241	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
^ FIL 101	Elementary Filipino I
^ FIL 102	Elementary Filipino II
^ FIL 201	Intermediate Filipino I
FREN 101	Elementary French I
FREN 102	Elementary French II
FREN 201	Intermediate French I
FREN 202	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
ITAL 202	Intermediate Italian II
JPN 101	Beginning Japanese I
JPN 101A	Introductory Elementary Japanese
JPN 101B	Continuation of Elementary Japanese
JPN 102	Beginning Japanese II
JPN 201	Intermediate Japanese I
JPN 202	Intermediate Japanese II
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
PORT 101	Elementary Portuguese I
PORT 102	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 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 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 Mexican-American Cultures in the United States

### Group 4: Gender Studies

HIST 132	Women in World History
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### Group 5: Geography

BIOL 143	Biology, Oceanography, and Geoscience of Baja California
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	Women in World History
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
GEOG 150	Geographic Information Science and Spatial Reasoning
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 106	Human Sexuality
PSYC/SOC 116	Introduction to Social Psychology
PSYC 211	Learning
PSYC 230	Developmental Psychology
PSYC 250	Abnormal Psychology
+ PSYC 255	Introduction to Psychological Research
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 105	Masculinity
SOC 110	Contemporary Social Problems
SOC/PSYC 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 and/or number
+	New Courses
#	Courses include lecture and laboratory

# CALIFORNIA STATE UNIVERSITY (CSU) GENERAL EDUCATION BREADTH REQUIREMENTS 2012–2013

## (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. ENGLISH LANGUAGE, COMMUNICATIONS AND CRITICAL THINKING

### 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. SCIENTIFIC INQUIRY 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

GEOL 100	Principles of Geology
GEOL 104	Introduction to Earth Science
PHS 101	Introduction to the Physical Sciences
PHS 110	Introduction to Oceanography
PHS/PS 250	Our Global Future—Values for Survival
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 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 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 273	Principles of Physics Laboratory II
	PHYS 275	Principles of Physics Laboratory III

**Group 4: Mathematics/Quantitative Reasoning (Must pass with a grade of “C” or better)**

	MATH 100	Mathematics for General Education
	MATH 101	College Algebra
	MATH 104	Trigonometry
	MATH 110	Mathematics for Elementary School Teachers I
	MATH 111	Mathematics for Elementary School Teachers II
	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. ARTS AND HUMANITIES**

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 (Art, Cinema, Dance, Music, Theater)**

	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 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 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 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 155/ RA&T 105	Electronic Music Technology
	MUS 195	World Music
	MUS 202	Development of Mariachi: Style and Culture
	RA&T 105/ MUS 155	Electronic Music Technology
	TA 100	Survey of Drama
	TA 101	Introduction to the Theatre
	TA 105	Survey Hispanic–American Theatre
	TA 110	Elementary Acting I
	TA/TELE 115	Acting for TV and Film
	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 (Literature, Philosophy, Language Other than English)**

	ASL 120	American Sign Language I
	ASL 130	American Sign Language II
^	CHIN 101	Mandarin Chinese I
^	CHIN 102	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
^	FIL 101	Elementary Filipino I
^	FIL 102	Elementary Filipino II
^	FIL 201	Intermediate Filipino I
	FREN 101	Elementary French I
	FREN 102	Elementary French II
	FREN 201	Intermediate French I

FREN 202	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/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
ITAL 202	Intermediate Italian II
JOUR 171	Writing for Publication
JPN 101	Beginning Japanese I
JPN 101A	Introductory Elementary Japanese
JPN 101B	Continuation of Elementary Japanese
JPN 102	Beginning Japanese II
JPN 201	Intermediate Japanese I
JPN 202	Intermediate Japanese II
PHIL 101	Introduction to Philosophy
PHIL 106	World Religions
PHIL 107	Asian Philosophy
PHIL 120	Ethics: Theory and Practice
PORT 101	Elementary Portuguese I
PORT 102	Elementary Portuguese II
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 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 SCIENCES

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/SOC151	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 Mexican-American Cultures in the United States

### Group 4: Gender Studies

HIST 132	Women in World History
+ SOC 105	Masculinity

### Group 5: Geography

BIOL 143	Biology, Oceanography, and Geoscience of Baja California
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	Women in World History
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/	Introduction to Mass Communication and Society
JOUR 101	
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 106	Human Sexuality
PSYC/SOC 116	Introduction to Social Psychology
PSYC 211	Learning
PSYC 230	Developmental Psychology
PSYC 250	Abnormal Psychology
+ PSYC 255	Introduction to Psychological Research
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/PSYC 116	Introduction to Social Psychology
SOC 135	Sociology of the Family

## E. LIFELONG LEARNING AND SELF DEVELOPMENT

Three units must be distributed as follows: one course. Ethnic Studies, Gender Studies or history courses emphasizing artistic or humanistic perspectives may be categorized in Area C.

CD 170	Principles of Child Development
+ DANC 121	Dance Choreography I
+ DANC 122	Dance Choreography II
+ DANC 123	Dance Choreography III
+ DANC 124	Dance Choreography IV
HLTH 101	Principles of Healthful Living
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
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	Introduction to American Government
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 course
- + New Courses
- ^ Modified course name and/or number
- \* Less than three units
- \*\* Acceptance only with prior or concurrent enrollment in BIOL 145
- # Courses include lecture and laboratory

# INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM (IGETC) 2012–2013

## University of California (UC) and California State University (CSU) Requirements

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

### 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 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

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 130/TELE 113	History of Film as 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
MUS 105	Introduction to Music
MUS 106	Introduction to Jazz
MUS 107	American Popular Music
MUS 195	World Music
MUS 202	Development of Mariachi: Style and Culture
TA 100	Survey of Drama
TA 101	Introduction to the Theatre
/ TELE/ART 113/130	History of Film as Art

### Group B: Humanities

*^ CHIN 102	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 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
*^ FIL 102	Elementary Filipino II
*^ FIL 201	Intermediate Filipino I
* FREN 201	Intermediate French I
* FREN 202	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
+ ITAL 202	Intermediate Italian II
* JPN 201	Intermediate Japanese I
+ JPN 202	Intermediate Japanese II
PHIL 101	Introduction to Philosophy
PHIL 106	World Religions
PHIL 107	Asian Philosophy
PHIL 120	Ethics: Theory and Practice
* PORT 102	Elementary Portuguese II
* SPAN 102	Elementary Spanish II
* SPAN 201	Intermediate Spanish I
* SPAN 202	Intermediate Spanish II
* 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
MAS/SOC 150	Mexican and Mexican-American Cultures in the United States

### Group D: Gender Studies

* HIST 132	Women in World History
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### Group E: Geography

BIOL 143	Biology, Oceanography, and Geoscience of Baja California
GEOG 120	Introduction to Geography: Cultural Elements

### Group F: History

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

### Group G: Interdisciplinary, Social and Behavioral Sciences

CD 170	Principles of Child Development
COMM 176	Intercultural Communication
* COMM 200/* JOUR 101	Introduction to Mass Communication and Society
* 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 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/SOC 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/* JOUR 101	Introduction to Mass Communication and Society
SOC 101	Introduction to Sociology
SOC 110	Contemporary Social Problems
SOC/PSYC 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
	GEOL 104	Introduction to Earth Science
	PHS 110	Introduction to Oceanography
	PHS 111	Oceanography Laboratory
*	PHS/PS 250	Our Global Future: Values for Survival
	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 273	Principles of Physics Laboratory II
**	PHYS 274	Principles of Physics III
	PHYS 275	Principles of Physics Laboratory 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

#### Group C: Group C: Laboratory Activity

This requirement can be satisfied by completion of any laboratory course in Area 5A or 5B.

## AREA 6: LANGUAGES OTHER THAN ENGLISH (UC REQUIREMENT ONLY)

1. Proficiency equivalent to two years of high school study in the same language with a grade of "C" or better.
2. Satisfactory completion, with "C" grades or better, of two years of formal schooling at the sixth grade level or higher in an institution where the language of instruction is not English. The appropriate documentation such as a letter from the ministry of education must be presented to the evaluation office to substantiate that the required coursework was completed. High school transcripts are not acceptable unless they clearly state that the two years of instruction were done in the student's native language other than English. Students who cannot provide such documentation should either pass one of the examinations or test listed below in 3 through 5, or satisfactorily complete an appropriate language course at Southwestern College, as outlined in 6 below.
  - A score of three or higher on the College Board Advanced Examination in Languages other than English.
3. Satisfactory score, 500 or higher, in the SAT II: Subjects Test in languages other than English. Consult the College Board for exact scores over 500 after May 1995 and requirements before May 1995.
4. Satisfactory score, 3 or higher, in the College Board Advanced Placement Examinations in languages other than English.
5. Satisfactory score, 5 or higher, in the International Baccalaureate Higher Level Examinations in languages other than English.
6. 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 101	Mandarin Chinese I
*^	CHIN 102	Mandarin Chinese II
^	FIL 101	Elementary Filipino I
*^	FIL 102	Elementary Filipino II
*^	FIL 201	Intermediate Filipino I
	FREN 101	Elementary French I
	FREN 102	Elementary French II
*	FREN 201	Intermediate French I
*	FREN 202	Intermediate French II
	ITAL 101	Elementary Italian I
	ITAL 102	Elementary Italian II
*	ITAL 201	Intermediate Italian I
+	ITAL 202	Intermediate Italian II
	JPN 101	Beginning Japanese I
	JPN 101A and B	Introductory Elementary Japanese
	JPN 102	Beginning Japanese II
*	JPN 201	Intermediate Japanese I
+	JPN 202	Intermediate Japanese II
	PORT 101	Elementary Portuguese I
*	PORT 102	Elementary Portuguese II
	SPAN 101	Elementary Spanish I
	SPAN 101A and B	Introduction to Elementary Spanish
*	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 II
HIST 100	American Civilization I
HIST/AFRO 110	African-American History I
HIST 121	Comparative History of the Americas I
HIST/MAS 141	Mexican-American History I
MAS/HIST 141	Mexican-American History I

### Group 2:

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

### Group 3:

PS 102	Introduction to American Government and Politics
AND one of the 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/or number
- \* Course may be listed under more than one general education area
- \*\* 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

## 2012 – 2013

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 Inter-segmental General Education Transfer Curriculum (IGETC)

### AFRICAN AMERICAN STUDIES

AFRO/HIST 110  
AFRO/HIST 111  
AFRO/SOC 151

### ADMINISTRATION OF JUSTICE

AJ 111

### ANTHROPOLOGY

ANTH 101  
ANTH 102  
ANTH 103  
ANTH 110  
ANTH 112

### ART

ART 104  
ART 112  
ART 113  
ART 129  
ART 130/TELE 113  
ART 149  
ART 150  
ART 151  
ART 156  
ART 157

### ASIAN-AMERICAN STUDIES

ASIA/HIST112  
ASIA/HIST 113  
ASIA/HIST 114  
ASIA/SOC 115

### AMERICAN SIGN LANGUAGE

ASL 120  
ASL 130

### ASTRONOMY

ASTR 100  
ASTR 120  
ASTR 150  
ASTR 170  
ASTR 180  
ASTR 205

### BIOLOGY

BIOL 100  
BIOL 130  
BIOL 140

BIOL 143  
BIOL 145  
BIOL 160  
BIOL 180  
BIOL 185  
BIOL 190  
BIOL 210  
BIOL 211  
BIOL 212  
BIOL 260  
BIOL 261  
BIOL 265

### CHEMISTRY

CHEM 100  
CHEM 110  
CHEM 170  
CHEM 200  
CHEM 210  
CHEM 240  
CHEM 250

### CHINESE

CHIN 101  
CHIN 102

### CHILD DEVELOPMENT

CD 170

### COMMUNICATION

COMM 103  
COMM 104  
COMM 176  
COMM 200/JOUR 101

### ECONOMICS

ECON 101  
ECON 102

### 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  
ENGL 272  
ENGL 273  
ENGL 274  
ENGL 280

### FILIPINO

FIL 101  
FIL 102  
FIL 201

### FRENCH

FREN 101  
FREN 102  
FREN 201  
FREN 202

### GEOGRAPHY

GEOG 100  
GEOG 120  
GEOG 130

### GEOLOGY

GEOL 100  
GEOL 104

### HISTORY

HIST 100  
HIST 101  
HIST 104  
HIST 105  
HIST 106  
HIST 107  
HIST/AFRO 110  
HIST/AFRO 111  
HIST/ASIA 112  
HIST/ASIA 113  
HIST/ASIA 114  
HIST 121  
HIST 122  
HIST 132  
HIST/MAS 141  
HIST/MAS 142

### HUMANITIES

HUM 101  
HUM 102  
HUM 104  
HUM/TELE 112  
HUM 140

### ITALIAN

ITAL 102  
ITAL 201  
ITAL 202

### JAPANESE

JPN 101  
JPN 101A  
JPN 101B  
JPN 102  
JPN 201  
JPN 202

### MEXICAN-AMERICAN STUDIES

MAS/HIST 141  
MAS/HIST 142

### MUSIC

MUS 105  
MUS 106  
MUS 107  
MUS 195  
MUS 202

### PHILOSOPHY

PHIL 101  
PHIL 103  
PHIL 106  
PHIL 107  
PHIL 120

### PHYSICAL SCIENCE

PHS 110  
PHS/PS 250

### PHYSICS

PHYS 170  
PHYS 171  
PHYS 172  
PHYS 173  
PHYS 174  
PHYS 175  
PHYS 270  
PHYS 271  
PHYS 272  
PHYS 273  
PHYS 274  
PHYS 275

### PORTUGUESE

PORT 101  
PORT 102

### POLITICAL SCIENCE

PS 101  
PS 102  
PS 103  
PS 104  
PS/PHS 250

### PSYCHOLOGY

PSYC 101  
PSYC/SOC 116  
PSYC 211  
PSYC 230  
PSYC 250  
PSYC 260  
PSYC/SOC 270

### SOCIOLOGY

SOC 101  
SOC 110  
SOC/PSYC 116  
SOC 135  
SOC/PSYC 270

### SPANISH

SPAN 102  
SPAN 201  
SPAN 202  
SPAN 215  
SPAN 216  
SPAN 221  
SPAN 225  
SPAN 226

### THEATRE ARTS

TA 100  
TA 101  
TA 105

### TELEMEDIA

TELE 113/ART 130

*Note: Course common to all three patterns effective fall 2012.*

# 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 require 18 or more units in an approved program. 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 courses required for that specific certificate;
- Achieve a grade point average of "C" (2.0) for all courses attempted at Southwestern College that are required for that specific certificate;
- 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.

## Certificate of Proficiency

Certificates of Proficiency are designed for the student who needs to be prepared to enter an entry-level job. Approved Certificate of Proficiency programs have less than 18 units. Certificates of Proficiency are not awarded automatically. It is the responsibility of the student to ensure satisfactory completion of the certificate requirements. When all requirements are completed or in-progress, students should submit a petition for Certificate of Proficiency form to the Evaluations Office. Petitions are available in the Evaluations Office, Counseling Center, and online. These certificates will not be listed on a student's transcript. Certificates of Proficiency are not awarded at the Southwestern College commencement ceremony.

## Certificate of Completion

Certificates of Completion are approved non-credit certificates.

## 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 (Policy No. 6037).

## Associate in Arts Degree

A degree program consisting of a minimum of 18 units in the major 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 in the major 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.



## Associate Degree for Transfer<sup>SM</sup>

### Student Transfer Achievement Reform (STAR) Act (SB 1440-Padilla)

#### Associate Degrees for Transfer

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

To view the most current list of Southwestern College Associate Degrees for Transfer and to find out which CSU campuses accept each degree, please go to [www.sb1440.org](http://www.sb1440.org). Current and prospective community college students are encouraged to meet with a counselor to review their options for transfer and to develop an educational plan that best meets their goals and needs.

#### Associate in Arts Degree - Transfer

A degree program consisting of a minimum of 18 units in the major 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 - Transfer

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

### Multiple Degrees

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

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

## Special Notes

### Continuous Enrollment

Continuous enrollment is defined as completion of a course during at least one semester in a calendar year excluding summer session. Completing a course is defined as receiving a grade of A, B, C, D, F, I, Pass (P), or No Pass (NP). Receiving a grade of "W" will not satisfy the requirement for completing a course (Policy No. 6087).

### 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 (Policy No. 6041).

### 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 COLLEGE SERVICES FOR STUDENTS

## Student Services Center in the Cesar E. Chavez Student Services Building

The Student Services Center in the Cesar E. Chavez Student Services 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, Office of Student Services, Assessment Center, 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 building.

### Admissions Office

The Admissions Office provides information and assists students with admissions applications, residency, petitions, registration, enrollment in classes to include adding and/or dropping. In addition, Admissions processes official transcripts, maintains academic records, processes grade changes, and enforces academic policies. Students can email Admissions with general questions at [admissions@swccd.edu](mailto:admissions@swccd.edu).

### Assessment Center

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

A highly qualified and trained staff ensures a secure yet relaxed testing environment aimed at minimizing student anxiety. 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.

## Career Center

Experienced career and academic counselors are available 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. The office 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 in which they are interested.

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, and/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 disabilities, sign language interpreters, note-taking, test proctoring, liaison with campus personnel, and other disability services based on students' needs.

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 504 Compliance Officer/Dean of Student Services.

Disability Support Services also offers classes in adaptive computers and basic academic skills for students with verified disabilities. Adaptive Exercise Science classes, including individualized fitness, sports activities, and aquatics, are offered through the Exercise Science department (ES/L).

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

Interested students can obtain more information about these programs and services and start their application process by contacting the Disability Support Services Office located in the Cesar E. Chavez Student Services Building, by telephone 619-482-6512 or TTY 619-482-6470 or email [dss@swccd.edu](mailto:dss@swccd.edu) for an appointment or visit the DSS website at <http://swccd.edu/DSS>.

## Evaluations Office

The Evaluations Office evaluates academic records for general education certification, certificates of achievement, and associate degrees; determines course-to-course equivalencies; and 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 58 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
- Are judged to be educationally disadvantaged

Students are deemed “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
- 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 Cesar E. Chavez Student Services Building, by telephone 619-482-6456, or email [eops@swccd.edu](mailto:eops@swccd.edu).

## Financial Aid

The Financial Aid Office helps students who might otherwise be unable to continue their education because of financial need. Students who need financial assistance to attend Southwestern College are urged to contact the Financial Aid Office located in the Cesar E. Chavez Student Services Building for information and application forms. For Financial Aid information, see page 26.

## 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 at the College to enrolled students as part of their student health service fee. The main goals of the personal wellness services are to help support student emotional health, academic success, and retention at the college. These services include confidential individual and group personal counseling provided by Psychological as well as Marriage and Family Therapy Interns. All services are supervised directly by a licensed psychologist on campus. For more information contact the Counseling Center at ext. 5242.

## 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 Cesar E. Chavez Student Services Building, telephone 619-482-6356, email [ses@swccd.edu](mailto:ses@swccd.edu) or website [www.swccd.edu/~ses/](http://www.swccd.edu/~ses/) for additional information, referral hours, and to complete an employment information form.

## Service Learning

AmeriCorps/Service Learning programs provide an opportunity for students to participate in valuable volunteer opportunities to help the community, gain experience, earn an educational award, enhance classroom learning, and get course credit.

## 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 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, social sciences, and 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 to UCSC for a fall term.

## Veterans Services

The 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 Cesar E. Chavez Student Services Building. Every student who plans to attend under veterans benefits is required to complete and keep current the appropriate paper work for each semester of attendance.

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, 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.

## Other College 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 all 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 at the Chula Vista Campus and at the Higher Education Centers in National City, Otay Mesa, and San Ysidro.

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.

Fee-based services include tutoring for students in grades 5–12 through the T3 program, as well as test proctoring for non-Southwestern College students.

## 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 Office is housed under the Office of Instructional Support Services at Southwestern College. The Office is responsible for the development and implementation of articulation agreements for the purpose of ensuring a smooth transfer process for students. Agreements can be accessed in the Counseling and Transfer Centers at the Chula Vista campus or the Higher Educational Centers in National City, Otay Mesa, and San Ysidro.

For the most recent information on course articulation for the University of California and California State Universities, please visit [www.assist.org](http://www.assist.org). This website is the official repository for course articulation. Please consult with a counselor regarding any questions or concerns.

## Health Services

Health Services is located in Room 601F in the Student Center and is open Monday through Friday. The hours vary during the week at the Higher Education Centers at National City, Otay Mesa, and San Ysidro. A registered nurse is on duty to provide first aid, emergency treatment, health counseling, and referrals to appropriate agencies. Various immunizations and blood testing (cholesterol, glucose, and anemia) are available at cost. TB skin tests are also available at cost. All students (day and evening) who register on campus and pay the health fee are eligible for services and are also covered by an insurance policy which applies to accidents in college-sponsored and supervised activities. This does not apply to students enrolled in non-credit or fee-based courses.

## Learning Resource Center

The three-story 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 Learning Resource Center, is open Monday through Saturday. See the Library's website <http://www.swccd.edu/~library> for current hours. Its resources, including in excess of 95,000 books, approximately 25,000 electronic books, and approximately 300 current periodical subscriptions, are available to Southwestern College students, staff, faculty, and to adult residents of San Diego County. Library collection information may be accessed through the easy-to-use online catalog on the library website.

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 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. Library services are also available at the National City, San Ysidro, and Ota Mesa Higher Education Centers.

## STUDENT LIFE

Students will find that the college experience is enhanced by active participation in some social or extracurricular activities. The College encourages each student to participate in extracurricular activities. A master calendar of events is located in the Office of Student Activities 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 (Ed Code 76060-76065, Title 5 Section 54801, 54803, Policy No. 5400, 5410, and 5420).

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 twenty-three at large, school, and Center 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 coursework.
- 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 coursework 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

The School of Arts and Communication offers a variety of courses 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.

## 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/her 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 2006 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, 19.63 percent of the SWC cohort attained a certificate or degree or became transfer-prepared from fall 2006 to spring 2009. In addition, 12.48 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. SWC contributes significantly to the lives of thousands of students in assisting them to meet their educational goals.*

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

### Academic Accommodations Policy

The Southwestern Community College District is committed to providing support programs and services for students with verified disabilities in accordance with Section 504 of the Rehabilitation Act of 1973 (1) and the Americans with Disabilities Act of 1990. The fundamental principles of non-discrimination and accommodation in academic programs provide that (Policy No. 5140):

- No student with a qualified disability shall, on the basis of the disability, be excluded from participation in, be denied the benefit of, or otherwise be subjected to discrimination under any post-secondary education activity or program; ([84.43(a)] Section 504, Fed. Rehab. Act, 1973); and
- Reasonable accommodations or adjustments to academic activities shall be made as are necessary to ensure that such requirements do not discriminate or have the effect of discrimination on the basis of the disability; and
- The District shall maintain an educational environment where students with disabilities have equal access to instruction without compromising the essential components of the course, educational program or degree.

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 504 Compliance Officer/Dean of Student Services, 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 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 Director. If the concern continues to be unresolved, the next step is to contact the 504 Compliance Officer/Dean of Student Services as outlined in number 5 below. Student must then file an 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 Services as soon as possible for review. The 504 Compliance Officer/Dean of Student Services 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 Services, if either the instructor or the student disagrees with the decision, they will notify the 504 Compliance Officer/Dean of Student Services 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 Services 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 Officer/Dean of Student Services 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 Services. The 504 Compliance Officer/Dean of Student Services is located on campus, in the Cesar Chavez Building, Room S109, 619-482-6369.

1. The 504 Compliance Officer/Dean of Student Services 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 Services within five (5) instructional days to review the complaint. The hearing will be convened within ten (10) instructional days. The committee will be composed of the following voting members:
  - a. DSS Director 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 Services shall serve as Chairperson and will vote only in case of a tie and will be responsible for appointing a secretary or providing 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 testament 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 Services 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 Services 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 Services 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 504 Compliance Officer/Dean of Student Services located on campus, in the Cesar E. Chavez Building, Room S109, 619-482-6369.

### Service Animals at Southwestern College Facilities

In accordance with the Americans with Disabilities Act (ADA) of 1990, people with disabilities may bring their service animals into all Southwestern Community College District facilities.

A service animal is defined as "any animal that is individually trained to do work or perform tasks for the benefit of a person with a disability." Under the ADA, a service animal is not considered a pet. Service animals must be permitted to accompany a person with a disability everywhere on campus or off campus as the activity (e.g., internship, field work, etc.) pertains to the curriculum. If there are any questions as to whether an animal qualifies as a service animal, a determination will be made by the Section 504 Compliance Officer/Dean of Student Services and/or DSS Director (542. U.S. Code Sections 12101, Policy No. 5143).

### 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 14.

### Student Conduct

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 (Policy No 7029).

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 Standard of Student Conduct Procedures (Policy No. 5500).

## Standards of Student Conduct

In joining the academic community, the student enjoys the right and shares the responsibility of exercising the freedom to learn. Like other members of the academic community, each student's conduct is expected to be in accordance with the standards of the College that are designed to promote its educational purposes. A charge of misconduct may be imposed upon a student for violating provisions of college policy and the state education and administrative codes. Where a student is subject to charges of misconduct, such charges shall be processed in accordance with the Southwestern Community College District's policy and procedure.

The Superintendent/President's designee shall, in consultation with the Academic Senate, establish procedures for the imposition of discipline on students in accordance with the requirements for due process of the Federal and State law and regulations (Ed Code 66300, Policy No. 5500).

The procedures shall clearly define the conduct that is subject to discipline, and shall identify potential disciplinary actions, including, but not limited to, the removal, suspension or expulsion of a student. The procedures shall be made widely available to students through the College Catalog and other means.

### Violations

1. Cheating, plagiarism (including plagiarism in a student publication), or engaging in other academic dishonesty.
2. Disruptive behavior, willful disobedience, or the open and persistent defiance of the authority, or persistent abuse of college personnel which may or may not include habitual profanity or vulgarity.
3. Assault or battery upon another person or causing, attempting to cause, or threatening to cause physical injury to another person.
4. Possession, sale or otherwise furnishing any firearm, knife, explosive, or other dangerous object including, but not limited to, any facsimile firearm, knife or explosive, unless in the case of possession of any object of this type, the student has obtained written permission to possess the item from the Superintendent/President or his/her designee.
5. Unlawful possession, use, sale, offer to sell, furnishing, or being under the influence of any controlled substance, alcoholic beverage, or intoxicant of any kind; or unlawful possession of, offering, arranging, or negotiating the sale of any drug paraphernalia.
6. Committing or attempting to commit robbery or extortion.
7. Causing or attempting to cause damage and/or defacing District property or private property on District-controlled facilities.

8. Theft or attempting to steal, or knowingly receiving stolen district property or private property.
9. Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the District.
10. Engaging in harassing or discriminatory behavior based on race, sex, gender, religion, sexual orientation, age, national origin disability, or any other status protected by law.
11. Committing sexual harassment as defined by law or by District policies and procedures.
12. Willful misconduct which results in injury or death to a student or to college personnel.
13. Dishonesty, forgery, alteration, or misuse of college documents, records or identification, or knowingly furnishing false information to the District.
14. Unauthorized entry upon or use of District facilities.
15. Lewd, indecent or obscene conduct on District-owned or controlled property, or at District-sponsored or supervised functions.
16. Engaging in expression which is obscene, libelous, or slanderous, or which so incites students as to create a clear and present danger of the commission of unlawful acts on college premises, or the violation of lawful District administrative procedures, or the substantial disruption of the orderly operation of the District.
17. Engaging in physical or verbal disruption of instructional or student services activities, administrative procedures, public service functions, authorized curricular or co-curricular activities, or prevention of authorized guests from carrying out the purpose for which they are on District property.
18. Engaging in physical or verbal intimidation or harassment of such severity or pervasiveness as to have the purpose or effect of unreasonably interfering with a student's academic performance, or District employee's work performance, or of creating an intimidating, hostile or offensive educational or work environment. This may include threats of violence.
19. Stalking, defined as a pattern of conduct by a student with intent to follow, alarm, or harass another person, and which causes that person to reasonably fear for his or her safety, and where the student has persisted in the pattern of conduct after the student has been asked to cease.
20. Persistent, serious misconduct where other means of correction have failed to bring about proper conduct or where the presence of the student causes a continuing danger to the physical safety of students or others.
21. Violation of College regulations or state law.

Standard of Student Conduct Policy and Procedures revisions will be sent to the Governing Board for approval in Fall 2012. Please contact the Office of Student Services for updates.

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

In the event a student is involved in either an unethical practice or a 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 disciplinary action procedures.

The instructor has the right to exercise immediate disciplinary action and may temporarily exclude the student with respect to disruptive actions in the 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.

### Disciplinary Action Procedures

1. The faculty, staff member, or administrator concerned who believes disruptive behavior has occurred shall first attempt to resolve the misconduct by informal consultation with the student.
2. If this proves to be less than satisfactory, the faculty, staff member, or administrator will inform the Dean or Supervisor of the area. The Dean or Supervisor should meet with the faculty, staff member, or administrator, and the student(s) involved in an attempt to resolve the problem.
3. If the faculty/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 Services. In cases in which the College Police has been called or in which the situation has become an issue of safety, steps 1 and 2 need not be adhered to.
4. The Dean of Student Services shall confer with the student for the purpose of reviewing the misconduct and attempting to resolve the matter.
5. The Dean of Student Services, or designee, may also obtain information relating to the misconduct from other parties involved. Whenever appropriate, the Dean of Student Services shall assess damage to property and injury to person(s).
6. 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):
  - a. **Verbal Warning:** Student receiving a warning will have met with the Dean of Student Services to discuss the inappropriate behavior.
  - b. **Written 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.
  - c. **Disciplinary Probation:** Any misconduct during the probation period will be cause for suspension or other disciplinary action.
  - d. **Disciplinary Suspension:** Exclusion from class, privileges, or activities for a specified period of time as set forth in the notice of suspension.
  - e. **Expulsion:** Termination of student status. Expulsion requires formal action by the Governing Board.
  - f. Remand the case to formal hearing.

It should be noted that the Dean of Student Services shall have the power to impose suspension and to recommend expulsion. If the student does not accept the action of the Dean of Student Services, the student has the right to challenge and request a formal hearing under the Guidelines for Due Process. Students who have been suspended and waiting for a hearing will not be able to attend any on-campus or college sponsored activities. If the student wishes, he/she may contact his/her instructor(s) or appropriate College office by email or voicemail to receive class assignments or other information. Assignments or College documents can be turned into the College Police to be forwarded to the appropriate parties.

The Governing Board shall consider any recommendation from the Superintendent/President for expulsion. The Governing Board shall consider an expulsion recommendation in closed session unless the student requests that the matter be considered in a public meeting. Final action by the Governing Board on the expulsion shall be taken at a public meeting.

*Standard of Student Conduct Policy and Procedures revisions will be sent to the Governing Board for approval in Fall 2012. Please contact the Office of Student Services for updates.*

### Student Grade Dispute Procedures

If a student feels that an instructor has given him/her a grade based on prejudiced or capricious action in the evaluation of the student's academic performance, the student must be able to substantiate the claim by showing evidence of a mistake, fraud, bad faith, and/or incompetence.

California 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."

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:

1. The student must contact his/her professor to discuss, clarify, and attempt to resolve the grade dispute in person, via electronic mail, or in writing within 30 working days of the time the official grade report was sent to the student. If the concern is not resolved satisfactorily, then:
2. The student must discuss the matter with the School Dean or designee in person, via electronic mail, or in writing within 10 working days. The School Dean or designee will try to resolve the dispute and will respond to the student in writing.
3. If the concern is still unresolved, the student must, within 10 working days, discuss the matter with the Vice President for Academic Affairs in person, via electronic mail, or in writing. The Vice President for Academic Affairs, in consultation with the Academic Senate President, will render a final decision in writing within 15 working days.
4. The decision made by the Vice President of Academic Affairs, in consultation with the Academic Senate President, will be final. There will be no requests granted for a due process hearing.

## Student Grievance Procedures

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 the end of the term during which the incident occurred. Where a student believes an injustice has been done, the student may seek redress through the following policy and procedure.

Students may initiate grievance for any of the following reasons:

1. Intimidation, assault, battery, or harassment\*
2. 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.

\* In case of 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.

### Preliminary Action Procedure

1. The student who believes an injustice has occurred shall attempt to resolve the grievance by informal consultation with the student, staff, faculty, or administrator concerned.
2. If this proves to be less than satisfactory, the student will inform the Dean or Supervisor of the area.
3. 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 Services. In cases in which the College Police has been called or in which the situation has become an issue of safety, steps 1 and 2 need not be adhered to.
4. The Dean of Student Services shall confer with the student for the purpose of reviewing the grievance and attempting to resolve the matter.
5. The Dean of Student Services or designee, may also obtain information relating to the grievance from other parties involved. Whenever appropriate, the Dean of Student Services shall assess damage to property and injury to person(s).

The Dean of Student Services 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.
- Charge the student with misconduct (See Disciplinary Action Procedures).
- Remand the case to a formal hearing (See Guidelines for Due Process).
- Recommend expulsion to the Governing Board.

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 (3) working days. Any appeal shall be made in writing and delivered to the office of the Dean of Student Services.

The Dean of Student Services shall arrange a review of the case by formal hearing to consider the disposition. Please see Guidelines for Due Process.

## 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.

The implementation of procedural due process on campus, will consist of the following due process procedures, and will take place within a reasonable length of time.

### I. Preliminary Action Procedure

#### A. Submitting of Official Forms

The Dean of Student Services 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 Services hereafter called "Administrator."

#### B. Notification of Charges

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

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

#### C. Preliminary Meeting

The meeting with the Administrator shall consist of the following:

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

#### D. 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 person(s). 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:
  1. **Verbal Warning:** Student receiving a warning will have met with the Dean of Student Services to discuss the inappropriate behavior.
  2. **Written 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.
  3. **Disciplinary Probation:** Any misconduct during the probation period will be cause for suspension or other disciplinary action.
  4. **Disciplinary Suspension:** Exclusion from class, privileges, or activities for a specified period of time as set forth in the notice of suspension.
  5. **Expulsion:** Termination of student status. Expulsion requires formal action by the Governing Board.
  6. Remand 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 the 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.

#### E. 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 (3) working days. Any appeal shall be made in writing and delivered to the office of the Dean of Student Services.

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

## II. Hearing Appeal Procedure

#### A. 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 position.

#### B. The Hearing Panel

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

1. Two students and two alternates (enrolled in 6 or more units) who shall be appointed by ASO president, and
2. Two full-time academic staff and two alternates, except those designated as management, who shall be appointed by the Academic Senate, and
3. Two full-time classified personnel and two alternates, except those designated as management, who shall be appointed by the Classified Senate and/or Classified Union, and
4. 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 Services.

#### C. Scope of the Student Grievance and Order Committee Hearing

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

1. Determine if the evidence supports the findings of the Administrator.
2. Determine if the disciplinary action levied by the Administrator is within range of disciplinary actions delineated in the Standards of Student Conduct Procedures.
3. Make recommendations to the Dean of Student Services or designee.

#### D. Responsibilities of the Chairperson

The Chairperson 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).

#### E. 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.

#### F. Formal Hearing Procedure

##### 1. Opening

The Chair shall call the hearing to order, introduce the participants, explain 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."

##### 2. Evidence for hearing

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

##### 3. Challenge of a Committee member

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

#### 4. *Request for Open Hearing*

- All hearings are closed, unless otherwise requested open by student. Refer to Section area III, E.

#### 5. *Identification of witnesses*

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

#### 6. *Swearing in of both parties*

- Swear in both the complainant and defendant.

#### 7. *Opening Statements*

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

#### 8. *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.

#### 9. *Calling witnesses*

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

#### 10. *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

#### A. **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.

#### B. **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.

#### C. **Evidence**

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

#### D. **Right to Challenge Committee Composition**

The student charged in the Report of Student Misconduct or Report of Student Grievance may challenge any 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. Validity of any such challenges shall be determined by the Chair of the Committee. A majority of five (5) panel members will be the minimum number to conduct a hearing.

#### E. **Open/Closed Hearings**

1. 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.
2. 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.
3. A brief caucus may be called by the Chairperson or any member, with all other persons excused except for the Grievance and Order Committee.
4. The hearing shall be recorded. The recording may be used by the Superintendent/President in case of an appeal.

#### F. **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(s) and/or the college staff person(s) who are involved in the Report of Student Misconduct or Report of Student Grievance do 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.

#### G. **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 may be present to advise. 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 Chairperson 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
- Written warning
- Disciplinary Probation: conditional continued enrollment
- Disciplinary Suspension: specified period of time
- Expulsion (see section V)
- Any other recommendation(s) that the committee members deem necessary for a successful resolution.

#### IV. Final Action

Upon receiving the findings of the Committee, the Administrator shall render a decision within three (3) 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 (3) 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 President or designee specifying the date of mailing such letter.

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

#### V. Expulsion

A student may be expelled only when other means of correction fail to bring about pro per 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 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.

#### Maintenance of Student Records

The facts of any disciplinary action, as provided in Section IV (D)(2)(b) through Section IV (D)(2)(g), and the reasons therefore, shall be documented in the student's disciplinary record, subject to access, review, and comment by the student as authorized by the Family Educational Rights and Privacy Act (10 USC Section 2332g) and Education Code Section 76200 et seq. All access to, or release of such records to members of the public shall also be in accordance with State and Federal law. The student's disciplinary record will be maintained in the office of the Dean of Student Services for three years for a minor offense of disciplinary probation or less, and for ten years for suspension. The condition for the expulsion will be stated in the student's disciplinary record.

#### Glossary of Terms

- ADMINISTRATOR—The Dean of Student Services or Designee.
- PRESIDENT—The Superintendent/President of the College or Designee.
- CAMPUS POLICE—Southwestern College District College Police.
- DAY—When the College is in session and regular classes are held.
- REPORT OF STUDENT MISCONDUCT OR REPORT OF STUDENT GRIEVANCE
  - Complainant - Person filing a Report of Student Misconduct or Report of Student Grievance.
  - Defendant - Person being charged.
- COLLEGE—Southwestern Community College District.
- VERBAL WARNING—Oral notice to the student that continuation or repetition of misconduct may be cause for further disciplinary action.
- WRITTEN REPRIMAND—An admonishment by the Dean of Student Services that becomes part of the student file and may be considered in the event of future violations; a written censure by the Administrator for violation of specific regulations.
- DISCIPLINARY PROBATION—Specific period of conditional participation in campus and academic affairs, which may involve any or all of the following:
  - Ineligibility for all student organization offices.
  - Removal from any student organization office held.
  - Revocation of the privilege of participating in College and/or student-sponsored activities.
- SUSPENSION—Denial of all campus privileges for a specified period of time.
- EXPULSION—The removal of a student from any and all classes of the college; permanent termination of the student.

## 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, District Policy 5117.)

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.

## SWC Policy & Procedure No. 3430 Prohibition of Harassment & Discrimination

**References:** Education Code §§212.5, 44100, 66010.2, 66030, and 66281.5; Title IX, Education Amendments of 1972, (20 U.S.C. §1681); Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. §794); Title VI of the Civil Rights Act of 1964, (42 U.S.C. §2000e); Government Code §§11135-11139.5 and 12950.1; Title 5, §§59320 - 59339, and 59300 et seq.; 34 Code of Federal Regulations §106.8(b) Americans with Disabilities Act of 1990 (42 U.S.C. §12100 et seq.) Age Discrimination Act (42 U.S.C. §6101).

### I. UNLAWFUL DISCRIMINATION

The District is committed to providing an academic and work environment free of unlawful discrimination. "Unlawful discrimination" is defined as harassment based on age, ancestry, color, ethnic group identification, national origin, religion, race, gender, sexual orientation, physical or mental disability, veteran status or on the basis of these perceived characteristics, or based on association with a person or group with one or more of these actual or perceived characteristics. The definition of "sexual harassment" and other terms are set forth below. This procedure describes the process for the investigation and resolution of complaints of

unlawful discrimination by or against any employee or student within the District.

Failure to report harassment and discrimination impedes the District's ability to stop discriminatory behavior; the District strongly encourages employees and students who believe they are being harassed or discriminated against to file a complaint. The District also strongly encourages the filing of such complaints within 30 days of the alleged incident. While all complaints are taken seriously and will be reviewed promptly, delay in filing impedes the District's ability to investigate and remediate. The District further encourages students and staff to let the offending person know immediately and firmly that the conduct or behavior is unwelcome, offensive, in poor taste and/or inappropriate.

All supervisors and managers have a mandatory duty to report incidents of harassment and discrimination; the existence of a hostile, offensive, or intimidating work environment, and acts of retaliation.

The District is legally obligated to investigate when it discovers the possibility that harassment is, or may be occurring, regardless of whether a complaint is filed. The Vice President for Human Resources is charged with receiving complaints of discrimination or harassment, and coordinating their investigation. The actual investigation of complaints may be assigned by the Vice President for Human Resources to other staff or to outside persons or organizations under contract with the District. Such assignment shall occur whenever the Vice President for Human Resources is named in the complaint or implicated by the allegations in the complaint. All employees shall cooperate with a District investigation into allegations of harassment or discrimination.

District Policy and Procedure No. 3430, "Prohibition of Harassment & Discrimination," will be available to all students and employees in hard copy and electronic format. Beginning January 1, 2010, new employees shall be required to sign that they have received the policy and procedures, and the signed acknowledgment of receipt will be placed in each new employee's personnel file. In addition, these policies and procedures shall be incorporated into the District's course catalogs and orientation materials for new students.

### II. DEFINITIONS

**Disability.** A physical or mental impairment as defined in Government Code, section 12926 which limits (makes difficult) one or more major life activities. A person may be considered disabled who has a record of such an impairment, or is regarded as having such an impairment.

**Environmental Harassment.** A hostile academic or work environment is one permeated by insults or abusive comments directed at an individual or group; or gratuitous comments regarding any of the protected categories, which are not relevant to the subject matter of the class or activities of the job. It can also be created by an unwarranted focus on, or stereotyping of, particular racial or ethnic groups, sexual orientations, genders, or other protected characteristics. An environment may also be hostile toward anyone who witnesses unlawful discrimination in his or her immediate surroundings, although the conduct is directed at others. The determination of whether an environment is hostile is based on the totality of the circumstances, including such factors as the frequency of the conduct, the severity of the conduct, whether the conduct is humiliating or physically threatening, and whether the

conduct unreasonably interferes with an individual's ability to learn or perform work duties.

**Gender.** Sex, including a person's gender identity and gender-related appearance and behavior, whether or not stereotypically associated with the person's assigned sex at birth. Gender-based harassment does not necessarily involve conduct that is sexual. Any hostile or offensive conduct based on gender can constitute prohibited harassment.

**Physical Harassment.** Inappropriate or offensive touching, assault, or physical interference with free movement. This may include, but is not limited to, any physical intimidation or assault directed at an individual or group.

**Protected Categories.** Those characteristics contained within the definition of unlawful discrimination: age, ancestry, color, ethnic group identification, national origin, religion, race, gender, sexual orientation, physical or mental disability, and veteran status.

**Sexual Harassment.** Sexually harassing conduct can occur between people of the same or different genders. Such conduct includes unwelcome sexual advances, requests for sexual favors, kissing, patting, lingering or intimate touches, grabbing, pinching, leering, staring, unnecessarily brushing against or blocking another person, whistling or sexual gestures, and other conduct of a sexual nature when:

- (a) submission to the conduct is made a term or condition of an individual's employment, academic status, or progress;
- (b) submission to, or rejection of, the conduct by the individual is used as a basis of employment or academic decisions affecting the individual;
- (c) 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 educational environment; or
- (d) 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 the District.

There are two types of sexual harassment:

- (1) "Quid pro quo" sexual harassment occurs when a person in a position of authority makes educational or employment benefits conditional upon an individual's willingness to engage in or tolerate unwanted sexual conduct.
- (2) "Hostile environment" sexual harassment occurs when unwelcome conduct based on a person's gender is sufficiently severe or pervasive so as to alter the conditions of an individual's learning or work environment, unreasonably interfere with an individual's academic or work performance, or create an intimidating, hostile, or abusive learning or work environment. A hostile environment can arise from continual sexual innuendo, an unwarranted focus on sexual topics, or sexually suggestive statements in the classroom or work environment. The victim must subjectively perceive the environment as hostile, and the harassment must be such that a reasonable person of the same gender would perceive the environment as hostile.

**Verbal Harassment.** Inappropriate or offensive remarks, slurs, jokes, or innuendoes based on one or more protected categories. This may include, but is not limited to, inappropriate comments regarding an individual's body, physical appearance, attire, sexual prowess, marital status or sexual orientation; unwelcome flirting or propositions; verbal abuse, threats, or intimidation; or demeaning, patronizing, or ridiculing statements that convey derogatory attitudes based on one or more of the protected categories.

**Visual or Written Harassment.** The display or circulation of visual or written material that degrades an individual or group. This may include, but is not limited to, posters, cartoons, drawings, graffiti, reading materials, computer graphics, or electronic media transmissions.

### III. UNLAWFUL DISCRIMINATION & HARASSMENT COMPLAINTS

(Title 5 §59328-59339)

#### A. Filing a Complaint

1. The complaint shall be filed by one who alleges that he or she has personally suffered unlawful discrimination or by one who has learned of such unlawful discrimination in his or her official capacity as a faculty member or administrator.
2. The complaint must be submitted using a form prescribed by the California Community College Chancellor's Office. The form must be completed in its entirety. The form is available from the office of the Vice President for Human Resources and at the following URL:  
**[www.cccco.edu/divisions/legal/discrimination/discrimination.htm](http://www.cccco.edu/divisions/legal/discrimination/discrimination.htm)**
3. Any complaint not involving employment shall be filed within one year of the date of the alleged unlawful discrimination or within one year of the date on which the complainant knew or should have known of the facts underlying the allegation of unlawful discrimination.
4. Any complaint alleging discrimination in employment shall be filed within 180 days of the date the alleged unlawful discrimination occurred, except that this period shall be extended by no more than 90 days following the expiration of the 180 days if the complainant first obtained knowledge of the facts of the alleged violation after the expiration of the 180 days.

#### B. Where to File a Complaint

The completed Unlawful Discrimination Complaint form must be filed with the Southwestern Community College District Vice President for Human Resources; or the Chancellor of the California Community Colleges at 1102 Q Street, Sacramento, California 95811.

Any District employee who receives a harassment or discrimination complaint shall immediately provide a copy to the Vice President for Human Resources.

### C. District Response to Complaint

Upon receiving an unlawful discrimination complaint, the District shall take action as follows:

1. **Defective Complaint:** Determine whether the complaint is properly filed and/or whether an investigation is required. If the District finds the complaint to be defective, it shall notify the complainant within ten (10) working days that the complaint has been rejected and specify in what requirement the complaint is defective.
2. **Informal Resolution:** If the complaint is properly filed, undertake efforts to informally resolve the charges, including but not limited to, mediation, rearrangement of work/academic schedules, obtaining apologies, providing informal counseling and/or training, etc. The complainant shall be advised that he or she need not participate in an informal resolution of the complaint. When informal resolution is reached to the satisfaction of the parties, the matter will be closed and the Chancellor's Office shall be notified.
3. **Additional Notifications:** All properly filed complaints not informally resolved will be investigated. Notify complainant that he or she may file a complaint with the Office of Civil Rights of the U.S. Department of Education. Employee complainants shall be notified that they may file employment discrimination complaints with the U.S. Equal Employment Opportunity Commission (EEOC) or the Department of Fair Employment and Housing (DFEH). The District shall also notify the Chancellor of California Community Colleges of the complaint.
4. **Investigation:** The District shall take reasonable steps to ensure the confidentiality of the investigation and to protect the privacy of all parties to the extent possible without impeding the District's ability to investigate and respond effectively to the complaint.
  - (a) Commence an impartial fact-finding investigation of the complaint and inform the complainant and the Chancellor's Office of the name of the investigator. The investigation will include interviews with the complainant, the accused, and any other persons who may have relevant knowledge concerning the complaint. This may include alleged victims of similar conduct.
  - (b) Set forth the results in a written investigation report, including a description of the circumstances giving rise to the complaint, a summary of the testimony of each witness, an analysis of any relevant data or other evidence collected during the investigation, a specific finding as to whether there is probable cause to believe that discrimination did or did not occur with respect to each allegation in the complaint, and any other appropriate information.

5. **Administrative Determination:** Within ninety (90) days from the date the District received the complaint, the District shall complete its investigation and issue the administrative determination of the Vice President for Human Resources as to whether there is probable cause to believe that harassment or other discriminatory conduct did or did not occur with respect to each allegation in the complaint. The complainant shall also be provided with a copy or summary of the investigation report (at the District's discretion), a description of action taken, if any, to prevent similar problems from occurring in the future, the proposed resolution of the complaint, and notice of his or her right to appeal to the District's Governing Board. The results of the investigation and the determination as to whether harassment or other discriminatory conduct occurred shall also be reported to the accused, and the appropriate academic or administrative official(s). Reports to the complainant shall be prepared so as not to violate any applicable privacy rights of the accused.

- **Extensions of Time:** The District may request an extension of time in which to complete its investigation if it is unable to comply with the 90-day requirement for reasons beyond its control. The request shall be submitted to the Chancellor's Office no later than ten (10) days prior to the expiration of the deadline and shall set forth the reasons for the request and the date by which the District expects to be able to complete its investigation and issue an administrative determination. A copy of the request for an extension shall be sent to the complainant, who shall be notified that he or she may file written objections with the Chancellor within five (5) days of receipt. The Chancellor may grant the request unless delay would be prejudicial to the investigation.

6. **Appeals to Governing Board:** If the complainant is not satisfied with the results of the administrative determination, he or she may, within fifteen (15) days, file a written appeal to the Governing Board. The appeal must be in writing and must bear the complainant's name, original signature, address, and telephone number. The appeal must include the reasons the administrative decision is not acceptable to the complainant. The Board shall review the original complaint, the investigative report, the administrative determination, and the appeal. The Board shall issue a final District decision within forty-five (45) days after receiving the appeal. If the Governing Board does not act within forty-five (45) days, the administrative determination shall be deemed approved and shall become the final District decision. The District shall notify the complainant and the Chancellor's Office of the final District decision.

### D. Results of Complaint

If the final District decision concludes that harassment, discrimination, and/or retaliation occurred, the District shall take disciplinary action against the accused and any other remedial action it determines to be appropriate. The action will be prompt, effective, and commensurate with the severity of the offense. If discipline is imposed, the nature of the discipline will not be communicated to the complainant.

Disciplinary actions against faculty, staff, and students will conform to all relevant statutes, regulations, and personnel policies and procedures, including the provisions of any applicable collective bargaining agreement.

The District shall also take reasonable steps to protect the complainant from further harassment and/or discrimination, and to protect the complainant and witnesses from retaliation as a result of communicating the complaint and/or assisting in the investigation.

#### IV. MANDATORY TRAINING

The Southwestern Community College District shall provide sexual harassment training and education to each supervisory employee once every two years. All new supervisory employees must be provided with the training and education within six months of their assumption of a supervisory position.

The training and education required by this procedure shall include information and practical guidance regarding the federal and state statutory provisions concerning the prohibition against and the prevention and correction of harassment and discrimination in employment. The training and education shall also include practical examples aimed at instructing supervisors in the prevention of harassment, discrimination, and retaliation, and shall be presented by trainers or educators with knowledge and expertise in the prevention of harassment, discrimination, and retaliation.

Participants in training programs will be required to sign a statement that they have either understood the policies and procedures, their responsibilities, and their own and the district's potential liability, or that they did not understand the policy and desire further training.

## Student Records: Privacy and Rights Policy

### Student Access

A cumulative record of enrollment, scholarship, and educational progress shall be kept for each student.

Former and currently enrolled students have the right of access to their student records. Student records maintained by the College District include information relevant to admissions, registration, academic history, student benefits or services, extracurricular activities, counseling and guidance. Access to a student's own records shall be granted to any student filing a written request with the Dean of Student Services or designee. Access shall be granted no later than 15 working days following the request.

### Access and Confidentiality

No instructor, official, employee, or member of the Board of Trustees of the Southwestern Community College District shall authorize access to student records by any person except under the following circumstances:

- The College 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.
- Student records may be released to officials and employees of the College District only when such they have a legitimate educational interest to inspect a record.

- Student records may include a student's academic history. Students who wish to dispute a course grade need to follow the Student Grade Dispute procedure #5500 – Student Code of Conduct.

Student records may be released to authorized representatives of the Comptroller General of the United States, the Secretary of Education, an administrative head of an educational agency, 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 federal supported education program or pursuant to a federal or state law.

- Student records may be released to officials of other public or private schools or school systems, including local, county or state correctional facilities where educational programs are provided, where the student seeks or intends to enroll, or is directed to enroll.
- Student records may be released to agencies or organizations in connection with a student's application for, or receipt of financial aid .
- Student records may be released to organizations conducting studies for, or on behalf of accrediting organizations, educational agencies or institutions for the purpose of developing, validating, or administering predictive tests, administering financial aid programs, and/or improving instruction.
- Outside individuals, groups or organizations who wish to submit a written and formal request for a specific research project may submit their request to the SWC Institutional Research Board (IRB) or cognizant Vice President (s).
- Student records may be released to appropriate persons in connection with an emergency if the knowledge of that information is necessary to protect the health or safety of a student or other persons, subject to applicable federal or state law.
- Student records shall be released pursuant to a federal judicial order that has been issued regarding an investigation or prosecution of an offense concerning an investigation or prosecution of terrorism.
- Student records shall be released pursuant to a judicial order or a lawfully issued subpoena.
- The following information shall be released to military recruiters, in compliance with the Solomon Act for the purposes of military recruitment; Student names, addresses, telephone listings, dates and places of birth, levels of education, degrees received, prior military experience, and/or most recent previous educational institutions enrolled by students.

### Use of Social Security Numbers

Southwestern College has not used a student Social Security Number as a student identifier since January 1, 2007, when legislation was passed. All employees of the College District are prohibited from the following:

- Publicly posting or displaying individual's social security number;
- Printing an individual's social security number on a card required to access products or services;
- Requiring an individual to transmit his or her social security number over the internet using a connection that is not secured or encrypted;
- Requiring an individual to use his or her social security number to access an Internet Web site without requiring a password or unique personal identification number or other authentication device; or

- Printing, in whole or in part, an individual's social security number that is visible on any materials that are mailed to the individual, except those materials used for:
- Application or enrollment purposes;
- Establishing, amending, or terminating an account, contract, or policy; or confirming the accuracy of the social security number.

### 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. There is a fee for transcripts. However, each student is entitled to two free transcripts by regular mail. See page 49 or Schedule of Fees for Transcripts.

### Public Directory Information

Directory information may be released in accordance with the definitions in Governing Board Policy 5040. Directory information is defined as: student's name, email address; participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, and degrees and awards received.

The directory information may be released by Admissions and Records, unless prior written objection is received from the student and placed on file in Admissions and Records. Students can elect to withhold their directory information on the college application. At any point, students can check their withholding status at Admissions and Records.

### Reporting of Violations and Challenging Content

Any student may file a written request with the Dean of Student Services or designee to correct or remove information recorded in his or her student records, as defined in Policy 5040. Information that the student challenges may include: (1) inaccurate; (2) unsubstantiated personal conclusion or inference; (3) conclusion or inference outside of the staff person's area of competence; or (4) not based on the personal observation of the student by the staff person with the time and place of the observation noted.

Within 30 working days of receipt of the request, the Dean of Student Services or designee shall meet with the student and the employee who recorded the information in question, if the employee is presently employed by the District. The Dean of Student Services or designee shall then sustain or deny the allegations.

If the Dean of Student Services or designee sustains any or all of the allegations, he or she shall order the correction or removal and destruction of the information. If the Dean of Student Services or designee denies any or all of the allegations and refuses to order the correction or removal of the information, the student may appeal to the Vice President for Student Affairs in writing within 10 working days of the refusal.

If the Vice President of Student Affairs or designee sustains any or all of the allegations, he or she shall order the correction or removal and destruction of the information. If the Vice President of Student Affairs or designee denies any or all of the allegations and refuses to order the correction or removal of the information, the student may appeal to the Superintendent/President in writing within 10 working days of the refusal.

If the Superintendent/President or designee sustains any or all of the allegations, he or she shall order the correction or removal and destruction of the information. If the Superintendent/President or designee denies any or all of the allegations and refuses to order the correction or removal of the information, the student may appeal to the Governing Board in writing within 10 working days of the refusal.

Within 30 days of receipt of an appeal, the Governing Board shall in closed session with the student and the employee who recorded the information in question to determine whether to sustain or deny the allegations. If the Governing Board sustains any or all of the allegations, it shall order the Superintendent/President 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.

If the final decision of the Governing Board is unfavorable to the student, the student shall have the right to submit a written statement of objection. The statement shall become part of the student's record until the information objected to is corrected or removed.

### Disciplinary Records:

Whenever there is any information in the student disciplinary record concerning an action, the student shall be allowed to include a written statement or response concerning the disciplinary action. Appeals to any disciplinary action will follow the guidelines in the Standards of Student Conduct Procedure – 5500.

When there is any student disciplinary record information concerning any action in connection with any alleged sexual assault or physical abuse, threat of sexual assault, or any conduct that threatens the health and safety of the alleged victim, the alleged victim shall be informed within three days of the results of the disciplinary action and the results of any appeal. The alleged victim shall keep the results of that disciplinary action and appeal confidential.

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.

Policy 5040 and 5045 – Student Records, Directory and Privacy

## Smoking and Tobacco Products Policy

1. Smoking and other uses of tobacco products are prohibited in all enclosed places of employment, including enclosed patios, lobbies, lounges, elevators, stairwells, and restrooms under the direct jurisdiction of Southwestern Community College District. This prohibition shall apply to all properties owned or leased by the District. Smoking and other uses of tobacco products are prohibited in all District-owned vehicles.
2. Smoking and other uses of tobacco products are prohibited within the confines of the perimeter road (Chula Vista campus), and in the walkways adjoining the perimeter road.
3. Smoking and other uses of tobacco products are prohibited in any outdoor area within 20 feet of a main entrance, exit, or operable window of any building under the direct jurisdiction of Southwestern Community College District.
4. Smoking and other uses of tobacco products are permitted only within designated smoking areas.
  - Chula Vista Campus: A minimum of four locations adjacent to existing parking lots will be designated as smoking areas, one at each of the four sides of the campus (north, south, east and west).
  - Higher Education Centers: One location will be designated as a smoking area at each of the Centers.
5. The sale of, advertisement for, and/or promotion of tobacco products is prohibited on any property under the jurisdiction of the District.
6. All smoking materials must be extinguished before being discarded in a receptacle provided by the District in the designated smoking areas.
7. Violations of this policy shall be reported to the Campus Police Department.
8. Violation of this policy by District employees will result in disciplinary action pursuant to current District policies and procedures.
9. Violation of this policy by students will result in disciplinary action pursuant to District Policy No. 5500, "Standards of Student Conduct."
10. The Student Health Services Office will maintain a current listing of tobacco use cessation programs available to assist employees and students.

Policy No. 3570

# MAJORS LIST

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CIS—Web Designer			X				139
CIS—Web Flash Designer			X				139
CIS—Web Flash Developer and Gaming Animator		X	X				135, 139
CIS—Web Site Designer and Developer		X	X				135, 140
CIS—Web Site eCommerce Administrator		X	X				135, 140
CIS ++Certificate			X				140
Computer Science	X	X	X				142
Computer Systems Intensive Certification Training		X		X		X	152, 153

**A.A.** = Associate in Art Degree  
**A.S.** = Associate in Science Degree

**Inter. Cert.** = Intermediate Certificate  
**Adv. Cert.** = Advanced Certificate

**Cert.** = Certificate  
**Bas. Cert.** = Basic Certificate

Majors	A.A. Degree	A.S. Degree	Cert.	Basic Cert.	Inter. Cert.	Adv. Cert.	Page(s)
Construction Inspection		X	X				144, 145
Construction Management		X	X				144, 145
Criminal Justice	X						94
Criminal Scene Investigator		X	X				96
Culinary Arts—Cooking and Baking		X				X	146
Culinary Arts—Cooking Essentials				X			146
Dance	X						148
Design Technology		X	X				129, 130
Dental Hygiene		X					149
eBusiness		X		X	X		117, 118
Economics	X						150
Electronics—Computer Technician		X		X		X	152, 153, 154
Electronics—Internetwork Technician		X		X		X	152, 154
Electronics—Network Administrator		X		X		X	153, 154, 155
Emergency Medical Technology and Paramedic		X	X				156
Engineering		X					157
English	X						158
Entrepreneurship Education—Areas of Emphasis							
• Automotive Technology			X				120
• Event and Convention Planning			X				121
• Landscape Construction			X				121
• Recording Arts			X				121
• Web Designer			X				121
Entrepreneurship and Small Business		X		X	X		117, 118, 119
Environmental Management		X	X				162
Event and Convention Planning				X		X	163
Exercise Science	X						164
Family Childcare—Bilingual (English/Spanish)			X				125
Family Support Specialist				X			125
Finance	X						114
Financial and Investment Services				X			119
Fire Science Technology		X	X				166
Fitness Specialist Certification				X		X	165
French	X						167
Geographic Information Science— Continuing Students and Working Professionals			X				169
Geospatial Technology Technician			X				169
Geography	X						168
Geology		X					170
Golf and Sports Turf Management		X	X				184, 187
Graphic Applications			X				103
Graphic Design	X						102
History	X						171
Hospitality: Culinary Arts—Food Services Management		X		X		X	173, 175
Hospitality: Event and Convention Management		X		X		X	173, 176
Hospitality: Hotel Operations Management		X		X		X	174, 176, 177
Hospitality: Travel and Tourism Management		X		X		X	174, 177
Humanities	X						178
Information Systems	X						132
Insurance		X		X		X	179, 180
International Business	X			X	X		181
International Business Emphasis	X						114, 181
International Logistics and Transportation		X		X	X		209
Italy							182
Journalism	X						183

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<b>Majors</b>	<b>A.A. Degree</b>	<b>A.S. Degree</b>	<b>Cert.</b>	<b>Basic Cert.</b>	<b>Inter. Cert.</b>	<b>Adv. Cert.</b>	<b>Page(s)</b>
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Landscape Design			X				188
Landscape Occupations		X	X				185, 188
Law Enforcement Training Academy			X				190
Leadership and Supervision		X		X	X		191, 192
Legal Interpretation—Basic (English/Spanish)				X			193
Legal Interpretation and Translation—Intermediate (English/Spanish)					X		193
Legal Office Assistant—Bilingual (Spanish/English) Intensive Training			X				235
Legal Office Management		X		X	X		194, 195
Legal Office Professional		X		X			196
Legal Office Professional—Areas of Specialties:							
• Business Law Specialty			X				196
• Civil Litigation Specialty			X				197
• Criminal Law Specialty			X				197
• Family Law Specialty			X				197
• Immigration Law Specialty			X				197
• International Business Law Specialty			X				198
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Legal Office Professional—Bilingual (English/Spanish)		X		X			199, 200
Legal Office Professional: Bilingual—Areas of Specialty							
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• Criminal Law Specialty			X				200
• Family Law Specialty			X				201
• Immigration Law Specialty			X				201
• International Business Law Specialty			X				201
• Wills, Trusts, and Estates Specialty			X				201
Liberal Arts: Areas of Emphasis							
• Arts and Humanities	X						203
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• Social and Behavioral Sciences	X						205
Liberal Studies—Elementary Education	X						207
Literature	X						159
Management	X	X		X	X		115, 117, 120
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Mathematics	X						210
Medical Assistant: Administrative		X		X	X		212, 214
Medical Assistant: Administrative Intensive Training							214
Medical Assistant: Administrative Intensive Training Bilingual (English/Spanish)			X				214
Medical Assistant: Clinical		X		X	X		213, 215
Medical Assistant: Clinical—Intensive Training			X				215
Medical Assistant: Coding and Insurance				X	X		215, 216
Medical Interpreter: (English/Spanish)				X	X		216
Medical Laboratory Technician		X					218
Medical Office Management		X		X		X	213, 216, 217
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Micro Technician Bookkeeper			X				93
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Majors	A.A. Degree	A.S. Degree	Cert.	Basic Cert.	Inter. Cert.	Adv. Cert.	Page(s)
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OIS: Microsoft Office Specialist (MOS)				X		X	232
Operating Room Nursing			X				230
Paralegal Studies		X	X				236, 237
Paralegal Studies—Bilingual (English/Spanish)		X	X				237, 238, 239
Payroll Clerk			X				235
Pharmaceutical and Laboratory Science		X	X				240
Philosophy	X						241
Phlebotomy			X				242
Photography	X						103
Physical Science		X					243
Physics		X					244
Political Sciences	X						245
Professional Baking and Pastry			X				147
Professional Photography			X				103
Project Management			X				141
Psychology	X						246
Public Administration	X						245
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Sociology	X						251
Social Work	X						252
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Spanish for Bilinguals	X						253
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Sustainable Landscape Practices		X					255
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Telemedia Technology		X	X				257, 258
Theatre Arts—Performance	X						259
Travel and Tourism		X		X		X	260, 261
Transfer Education/Preparation for Nursing	X						226
Virtual Office Professional		X		X	X		262
Vocational Nursing		X	X				229, 230
Women's Studies	X						263

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# ASSOCIATE DEGREE AND CERTIFICATE PROGRAMS

Some courses within these programs may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

*Notes: The reference to "other limitations on enrollment" covers other course requisites such as certification or license. The same or a similar statement may be necessary for the SEP.*

## Accounting

### Departments of Business, Accounting, and Office Information Systems

**Dean** Mark Meadows, Ph.D., Office 215, 619-482-6460

**Faculty** Dick Wasson, M.B.A.

**Department Chair** Victoria Lopez, J.D.

#### General Description

Accountancy is the study of theories, principles, and practices in the recording, analyzing, and communication of financial information. This discipline 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. Students can also enter the field through the certificate programs—Micro Technician Bookkeeper and Payroll Clerk. The ability to move upward in an organization requires continued education.

#### Career Options

Following 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

	Major Code
<b>Associate in Arts Degree: Transfer Preparation</b>	
Accounting	01110
<b>Associate in Science Degree: Career/Technical</b>	
Accounting	02011
<b>Certificate of Achievement</b>	
Accounting	02012
<b>Certificates of Proficiency</b>	
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
<b>Total units</b>		<b>29</b>

*To earn an associate degree, additional general education and graduation requirements must be completed.  
See page 51.*

\* 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 COURSES INFORMATION section on page 33 for further information.**

## ASSOCIATE IN SCIENCE DEGREE

### Accounting

Career/Technical (Major Code: 02011)

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. Prepares 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	Computerized Accounting	3
ACCT 101	Principles of Accounting I	4
ACCT 102	Principles of Accounting II—Managerial	4
ACCT 105	Intermediate Accounting	3
ACCT 109	Federal Income Tax	3
BUS 123	Introduction to Investments	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
	<b>OR</b>	
BUS 212	Business Communication	3
BUS 290–293	Work Experience in Business I–IV (2–4)	2
CIS 101	Introduction to Computers and Information Processing	4
CIS 133	Advanced Microcomputer Spreadsheets Software	1
<b>Total units</b>		<b>37</b>

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## CERTIFICATES

### Accounting

Certificate of Achievement

Career/Technical (Major Code: 02012)

Provides training in accounting theory and practice, sole proprietorship, partnership, corporate accounting procedures, cost or income tax accounting, and the application of microcomputers to accounting problems.

ACCT 12	Computerized Accounting	3
ACCT 101	Principles of Accounting I	4
ACCT 102	Principles of Accounting II—Managerial	4
ACCT 105	Intermediate Accounting	3
ACCT 109	Federal Income Tax	3
BUS 123	Introduction to Investments	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
	<b>OR</b>	
BUS 212	Business Communication	3
BUS 290–293	Work Experience in Business I–IV (2–4)	2
CIS 101	Introduction to Computers and Information Processing (4)	2–4
	<b>OR</b>	
CL 120	Computer Literacy (1)	
CIS 122B	Spreadsheet Software—Excel (1)	
<b>Total units</b>		<b>34–36</b>

### Micro Technician Bookkeeper

Certificate of Proficiency

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	Computerized Accounting	3
ACCT 101	Principles of Accounting I	4
CIS 122B	Spreadsheet Software—Excel	1
CIS 133	Advanced Microcomputer Spreadsheets Software	1
<b>Total units</b>		<b>9</b>



# Administration of Justice

## Departments of Applied Technology, CIS/ Electronics, and Administration of Justice

**Dean** Terry Davis, M.H.A., Office 1000K, 619-482-6551

**Faculty** Paul Azevedo, J.D.; Gary Creason, A.S.; Janet DeLay, Ph.D.

**Department Chair** Gary Creason, A.S.

### General Description

Administration of justice and Criminal Justice are the study of theories, concepts, statutes, laws, procedures, and methodologies governing the criminal justice system. These programs explore the historical development of criminal law, the interrelationship between criminal law and the criminal justice system, and its contemporary application in juvenile and adult crime.

### Career Options

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

#### 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
PS 102	Introduction to American Government and Politics	3
SOC 101	Introduction to Sociology	3
SOC 110	Contemporary Social Problems	3
MATH 119	Elementary Statistics (4)	3-4
<b>OR</b>		
PSYC/SOC 270	Statistical Methods of Psychology (3)	3

**Total units** **27-28**

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

- \* 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 COURSES INFORMATION section on page 33 for further information.**

*Note: For Police Academy, see Law Enforcement Training Academy, page 190.*

# 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
AJ 167	Written Communication in Administration of Justice	3
AJ 181	Juvenile Law and Procedures	3
AJ 188	Community Relations	3
<b>Total units</b>		<b>24</b>

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
<b>Total units</b>		<b>30</b>

**Recommended Electives:** MAS 141; PSYC 101 or SOC 101.

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## 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
<b>Total units</b>		<b>29</b>

**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 51.*

*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
Plus Common Core courses for Administration of Justice		24
<b>Total units</b>		<b>28</b>

**Recommended Electives:** AJ 216; BUS 210; MAS 141; PSYC/SOC 101.

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

*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.*



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## 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 222	Digital Forensic Photography	4
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
<b>Total units</b>		<b>39</b>

**Recommended Electives:** ANTH 101; BIOL 260; CAD 220; PHIL 103; TELE 100.

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## CERTIFICATES

### Administration of Justice: Corrections Emphasis

Certificate of Achievement

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
<b>Total units</b>		<b>30</b>

### Administration of Justice: Forensics Emphasis

Certificate of Achievement

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
<b>Total units</b>		<b>29</b>

\* 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

Certificate of Achievement

Career/Technical (Major Code: 02710)

Designed for students seeking careers with local, state, and federal enforcement agencies, and private security.

AJ 166	Principles of Investigation	4
Plus Common Core courses for Administration of Justice		24
<b>Total units</b>		<b>28</b>

### Crime Scene Investigator

Certificate of Achievement

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 222	Digital Forensic Photography	4
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
<b>Total units</b>		<b>39</b>

# African-American Studies

## School of Social Sciences and Humanities

**Dean** Mark Meadows, Ph.D., Office 470K, 619-482-6582

**Faculty** Stanley James, M.A.

**Department Chair** Stanley James, 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/		
HIST 110	African-American History I	3
AFRO/		
HIST 111	African-American History II	3
AFRO/		
SOC 151	Introduction to African-American Culture	3
Complete 9	units from electives	9
<b>Total units</b>		<b>18</b>

**Electives:** ASIA 112, 113; DANC 145, 146, 147, 148; HIST 106, 107; MAS 141, 142.

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

\* 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 COURSES INFORMATION section on page 33 for further information.**



# Anthropology

## School of Social Sciences and Humanities

**Dean** Mark Meadows, Ph.D., Office 470K, 619-482-6582

**Faculty** Erin Browder, Ph.D.

**Department Chair** Christopher Hayashi, M.A.

### General Description

Anthropology is the broadest of the social sciences and is the study of human biological and cultural origins and change. The anthropology program goals and objectives have been developed to provide students with a broad introduction to the anthropological perspective including the cross-cultural and comparative approach. The program aims to introduce a wide variety of biologically and culturally relevant topics including, but not confined to, evolution, social organization, genetics, language, cultural bias, globalization, religion, technology, and recovery and study of material remains relevant to the human past. The anthropology program emphasizes the role of the scientific method in evaluating humans biologically and culturally, as well as in the development of theoretical perspectives relevant to studying human societies past and present including evolution and contemporary existence in a technological age.

### Career Options

Anthropology has a high degree of relevance to many careers and occupations. Some of the following careers require education beyond the bachelor's degree. A sample of possible career options includes: archaeologist, cultural anthropologist, environmental anthropologist, exhibit designer, expedition guide, film ethnographer, folklorist, forensic anthropologist/archaeologist, health researcher, linguist, medical anthropologist, museum curator, paleoanthropologist, peace studies, primatologist, professor, public health employee, trans-cultural nurse specialist, teacher, travel consultant, urban planner, zoological collections.

### 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
ANTH 103	Archaeology and Prehistory	3
PSYC 270	Statistical Methods of Psychology	3
	<b>OR</b>	
SOC 270	Statistical Methods of Sociology	3
	Foreign Language	6
<b>Total units</b>		<b>18</b>

*To earn an associate degree, additional general education and graduation requirements must be completed.  
See page 51.*

- \* 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 COURSES INFORMATION section on page 33 for further information.**

# Architecture

## Departments of Applied Technology, CIS/ Electronics, and Administration of Justice

**Dean** Terry Davis, M.H.A., Office 1000K, 619-482-6551

**Faculty** Thomas Rogo, M.Arch.

**Department Chair** David Preciado, A.A.

### 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
<b>Associate in Science Degree: Transfer Preparation</b>	
Architecture	01940
<b>Associate in Science Degree: Career/Technical</b>	
Architecture Technology	02840
<b>Certificates of Achievement</b>	
Architecture Technology—Basic	02842
Architecture Technology—Advanced	02841

*Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.*

## 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

*To earn an associate degree, additional general education and graduation requirements must be completed.  
See page 51.*



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

- \* 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 COURSES INFORMATION section on page 33 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

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**Total units** **37**

*To earn an associate degree, additional general education and graduation requirements must be completed.  
See page 51.*

## CERTIFICATES

### Architecture Technology—Basic

Certificate of Achievement

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

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**Total units** **37**

# Architecture Technology—Advanced

Certificate of Achievement

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

**Total units** 43

# Art

## School of Arts and Communication

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

**Faculty** John O. Lewis, M.F.A.; David Quattrociocchi, M.F.A.; Marisol Rendon Ober, M.F.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** Marisol Rendon, 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 art making 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
<b>Associate in Arts Degree: Transfer Preparation</b>	
Art	01210
Graphic Design	01090
Photography	01380
<b>Certificate of Achievement</b>	
Professional Photography	01381
<b>Certificate of Proficiency</b>	
Graphic Applications	02574

*Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.*



# ASSOCIATE IN ARTS DEGREE

## Art

### Transfer Preparation \* (Major Code: 01210)

Stresses the study of art as form and content. Designed to develop the student's perceptual and conceptual abilities in the context of art history and society. Designed to give the student an opportunity to develop his/her technical skills, aesthetic awareness, personal expression, and critical analysis.

The art courses listed fulfill lower-division requirements at most universities. Most universities require students to present a portfolio for evaluation to be admitted; therefore, students should keep a portfolio of their work 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
Complete 3 units from Art History courses listed below *		3

#### Third Semester

ART 197	Professional Practices and Portfolio Development for Visual Artists	3
Complete 3 units from Art History courses listed below *		3
Complete 3 units from electives		3

#### Fourth Semester

Complete 6 units from electives		6
<b>Total units</b>		<b>30</b>

#### \*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 51.*

- \* 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 COURSES INFORMATION section on page 33 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	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, 192.

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

- \* 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 COURSES INFORMATION section on page 33 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 (9)

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 (7)

ART 137	Web Site Development for Artists and Graphic Designers (4)
ART 138	Advanced Digital Imaging for Photography, Art, and Graphics (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 51.*

\* 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 COURSES INFORMATION section on page 33 for further information.**

# CERTIFICATE

## Graphic Applications

Certificate of Proficiency

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	3
ART 192	Introduction to Digital Imaging	3
CL 120	Computer Literacy	1

**Total units** 10

## Professional Photography

Certificate of Achievement

Career/Technical (Major Code: 01381)

Prepares individuals to use artistic techniques to effectively communicate ideas and information to business and consumer audiences, and to record events and people, via digital, film, and still photography. Includes instruction in specialized camera and equipment operation, applications to commercial and industrial needs, and business operations.

ART 138	Advanced Digital Imaging for Photography, Art, and Graphics	3
ART 192	Introduction to Digital Imaging	3
ART 205	Beginning Digital Photography	3
ART 207	Studio and Lighting Techniques	3
ART 209	Photography Business Practices	2
ART 211	Editorial and Advertising Photography	3
ART 210	Portrait Photography	3
ART 197	Professional Practices and Portfolio Development for Visual Artists	3

### OR

ART 290	Cooperative Work Experience in Applied Visual Arts	2-4
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**Total units** 22-24



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

# Asian-American Studies

## School of Social Sciences and Humanities

**Dean** Mark Meadows, Ph.D., Office 470K, 619-482-6582

**Faculty** Felix Tuyay, M.A.

**Department Chair** Stanley James, 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/ HIST 112	Asian-American History I	3
ASIA/ HIST 113	Asian-American History II	3
HIST 106	World History I	3
HIST 107	World History II	3
ASIA/ SOC 115	Filipino-American Culture Foreign Language	3 6-10

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**Total units** **21-25**

*To earn an associate degree, additional general education and graduation requirements must be completed.  
See page 51.*

- \* 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 COURSES INFORMATION section on page 33 for further information.**

# Astronomy

## School of Mathematics, Science, and Engineering

**Interim Dean** Richard Fielding, M.S., Office 345A, 619-482-6344

**Faculty** Grant J. Miller, M.S.; Jeffrey Veal, Ph.D.

**Department Chair** Tinh-Alfredo V. Khuong, 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

#### Associate in Science Degree: Transfer Preparation

Astronomy 01500

#### 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 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 3

PHYS 273 Principles of Physics Laboratory II 1

#### Fourth Semester

PHYS 274 Principles of Physics III 3

PHYS 275 Principles of Physics Laboratory III 1

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**Total units** 28

**Recommended Elective:** CHEM 200.

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

\* 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 COURSES INFORMATION** section on page 33 for further information.



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

# Automotive Technology

## Department of Applied Technology, CIS/Electronics, and Administration of Justice

**Dean** Terry Davis, M.H.A., Office 1000K, 619-482-6551

**Faculty** Jose Ibarra, A.S.; David Preciado, A.S.

**Department Chair** David Preciado, A.A.

### 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

#### Associate in Science Degree: Career/Technical

	Major Code
Automotive Technology	02870
Small Engine and Service Repair	02650

#### Certificates of Achievement

Advanced Emission Specialist	02766
Automotive Performance Systems	02765
Automotive Technology	02871
Small Engine and Service Repair	02651

#### Certificate of Proficiency

Automotive Brake and Suspension Systems (ABS and Four-Wheel Alignment)	02750
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#### Areas of Preparation for ASE Certification Exam:

- ASE Brakes
- ASE Suspension
- ASE Engine Performance
- ASE Automotive Heating, Cooling, and Air Conditioning
- ASE Electrical Systems
- ASE Engine Repair
- ASE Automotive Manual 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 247	Automotive Emission Systems and Computerized Engine Controls	3

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<b>Total units</b>	<b>42</b>
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**Recommended Electives:** AT 290–293.

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## 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

Complete 9 units from electives	9
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**Total units** 32

**Electives:** AT 101, 109, 130, 140, 230, 290-293.

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## CERTIFICATES

### Advanced Emission Specialist

Certificate of Achievement

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 247	Advanced Emission Systems and Computerized Engine Controls	3

#### Third Semester

AT 242	Clean Air Car	3
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**Total units** 27

### Automotive Brake and Suspension Systems (ABS and Four-Wheel Alignment)

Certificate of Proficiency

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

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**Total units** 12

### Automotive Performance Systems

Certificate of Achievement

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 247	Advanced Emission Systems and Computerized Engine Controls	3

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**Total units** 18



## Automotive Technology

Certificate of Achievement

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 247	Advanced Emission Systems and Computerized Engine Controls	3

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**Total units** 42

**Recommended Electives:** AT 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 Automotive Emission Systems and Computerized Engine Controls—AT 247.

## Small Engine and Service Repair

Certificate of Achievement

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

Complete 9 units from electives	9
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**Total units** 32

**Electives:** AT 101, 109, 130, 140, 230, 290–293.

# Baja California Studies

## School of Mathematics, Science, and Engineering

**Interim Dean** Richard Fielding, M.S., Office 345A, 619-482-6344

**Faculty** Deana Alonso-Post, M.A.; Esther Alonso, M.A.; Margarita Andrade, M.A.; Francisco Bustos, M.A.; Linda Hensley, M.A.; Patricia Kelly, M.A.; Margery Stinson, M.S.; Ken Yanow, M.S.; Rebecca Wolniewicz, Ph.D.

**Department Chair** Margie Stinson, M.S.

### General Description

The Baja California Studies certificate allows students to develop a concentration of study devoted to Baja California that complements any major. The certificate is based on interdisciplinary courses that focus on Baja California. It is not a major but provides students a list of courses that help fulfill general education requirements in various disciplines while focusing intensively on Baja California. Students develop a keen appreciation of the rich connections between the arts, humanities, social life, and physical sciences.

### Career Options

The Baja California Studies certificate complements any major; therefore, it is an asset to those who seek employment opportunities in a variety of fields. It prepares recipients to assume leadership roles in the complex educational, environmental, civic, and health issues facing Baja California and the border region. In addition to expanding employment opportunities, it prepares students to transfer to a four-year degree institution to continue interdisciplinary, Mexican-American, or Latin American studies.

### Degree/Certificate Options

#### Major Code

#### Certificate of Proficiency

Baja California Studies	02891
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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.*

## CERTIFICATE

### Baja California Studies

Certificate of Proficiency

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 U.S. – Mexico Borderlands 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:** COMM 142.

*You will have met four GE requirements in Plan AA–AS, Plan CSU, and IGETC Plan at the completion of this certificate.*

#### General Education Plan

	AA-AS Plan	CSU Plan	IGETC Plan
BIOL 143	Group D5	Group D5	Area 4E
BIOL 145	Group B	Group B2	Area 5B
COMM 176	Group D7	Group D7	Area 4G
ENGL 274	Group C2	Group C2	Area 3B



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

# Biology

## School of Mathematics, Science, and Engineering

**Interim Dean** Richard Fielding, M.S., Office 345A, 619-482-6344

**Faculty** Jonathan Atwater, Ph.D.; Nouna Bakhiet, Ph.D.; David Brady, M.S.; Lukas Buehler, Ph.D.; 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.; Margie Stinson, M.S.; John Tolli, Ph.D.

**Department Chair** Margie Stinson, 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

*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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<b>Total units</b>	<b>28</b>
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*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

\* 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 COURSES INFORMATION section on page 33 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

**Interim Dean** Richard Fielding, M.S., Office 345A, 619-482-6344

**Faculty** Jonathan Atwater, Ph.D.; Nouna Bakhiet, Ph.D.

**Department Chair** Margie Stinson, 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 industry 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 include but are not limited to the biotechnology industry: food, oil, genomics, pharmaceutical industry, forensic science, agriculture, anthropology, NASA projects, and basic research in academic or nonprofit institutions.

<b>Degree/Certificate Options</b>	<b>Major Code</b>
<b>Associate in Science Degree: Transfer Preparation</b>	
Biotechnology	01512
<b>Certificate of Achievement</b>	
Biotechnology	01511
<b>Certificate of Proficiency</b>	
Step-Up Biotechnology	01513

*Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.*



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

# 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 70 Intermediate Algebra II 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 170 Preparation for General Chemistry (4) \*\*  
OR 4-5

CHEM 200 General Chemistry I (5) \*\*

### 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 31-32**

\*\* 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 be replaced by higher-numbered chemistry courses; and MATH 70 can be replaced by higher-numbered math courses.

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

\* 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 COURSES INFORMATION section on page 33 for further information.**

# CERTIFICATE

## Biotechnology

Certificate of Achievement

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 70 Intermediate Algebra II \* 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 170 Preparation for General Chemistry (4)  
OR 4-5

CHEM 200 General Chemistry I (5)

### 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 31-32**

\* Higher-numbered courses are also acceptable: BIOL 210 can replace BIOL 100/101; CHEM 170 or 200 can be replaced by higher-numbered chemistry courses; and MATH 70 can be replaced by higher-numbered math courses.

## Step-Up Biotechnology

Certificate of Proficiency

Career/Technical (Major Code: 01513)

Provides students with training for entry-level employment in a biotechnology laboratory in industry or research. Introduces students to laboratory skills utilized by this rapidly expanding field of biology, which has a significant future potential for both improving life and providing a growing source of technical jobs. Exposes students to concepts in biotechnology, which is the science of using and modifying biological materials in order to develop products and organisms for specific uses.

BIOL 75 Introduction to Biotechnology 1.5

BIOL 76 Basic Biotechnology Laboratory Computations 1.5

BIOL 77 Biotechnology Laboratory Skills 3

BIOL 78 Biotechnology Job Success Skills 1.5

**Total units 7.5**

# Business Administration

## Departments of Business, Accounting, and Office Information Systems

**Dean** Mark Meadows, Ph.D., Office 215, 619-482-6460

**Faculty** Yvonne Lucas, M.B.A.; Frank Paiano, M.B.A.; Elizabeth Shapiro, J.D.; Gail Stockin, M.A.

**Department Chair** Dick Wasson, M.B.A.

### 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

### Major Code

#### Associate in Arts Degree: Transfer Preparation

Business Administration	01100
International Business Emphasis	01101
Finance	01120
Management	01150
Marketing	01160

*Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.*

## ASSOCIATE IN ARTS DEGREE

### Business Administration

Transfer Preparation \* (Major Code: 01100)

Prepares the student in the field of business administration with an understanding of the concepts of accounting, business law, business communications, computers and information processing, economics, statistics, and calculus.

ACCT 101	Principles of Accounting I	4
ACCT 102	Principles of Accounting II—Managerial	4
BUS 120	Introduction to Business	3
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** **35**

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

\* 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 COURSES INFORMATION section on page 33 for further information.**



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## International Business Emphasis

Transfer Preparation \* (Major Code: 01101)

Prepares students for work in the fields of international business and trade. Provides a practical approach to the study of international business and 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
BUS 177	Principles of International 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
LEGL 256	International Law for business	3
MATH 119	Elementary Statistics	4
	Foreign Language	6–10
<b>Total units</b>		<b>37–41</b>

**Recommended Electives:** HIST 104, 105.

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

- \* 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 COURSES INFORMATION section on page 33 for further information.**

## Finance

Transfer Preparation \* (Major Code: 01120)

Prepares students in the field of finance with an understanding of the concepts of accounting, legal environment, business communications, economics, statistics, financial planning, money management, and securities.

ACCT 101	Principles of Accounting I	4
ACCT 102	Principles of Accounting II—Managerial	4
BUS 121	Financial Planning and Money Management	3
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
<b>Total units</b>		<b>35</b>

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

- \* 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 COURSES INFORMATION section on page 33 for further information.**

## Management

Transfer Preparation \* (Major Code: 01150)

Prepares students in the field of management with an understanding of the concepts of accounting, human resources, production and operations, organizational behavior, statistics and management science, legal environment, business communications, and economics.

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 150	Principles of Management	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
<b>Total units</b>		<b>35</b>

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

- \* 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 COURSES INFORMATION section on page 33 for further information.**

## Marketing

Transfer Preparation \* (Major Code: 01160)

Prepares students in the field of marketing with an understanding of the concepts of marketing functions such as sales, advertising, marketing research, product development, distribution, and pricing. Covers additional concepts of accounting, economics, legal environment, and business communication.

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 174	Modern Promotion and Marketing Practices	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
<b>Total units</b>		<b>35</b>

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

- \* 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 COURSES INFORMATION section on page 33 for further information.**



# Business Management

## Departments of Business, Accounting, and Office Information Systems

**Dean** Mark Meadows, Ph.D., Office 215, 619-482-6460

**Faculty** Victoria López, J.D.; Yvonne Lucas, M.B.A.; Frank Paiano, M.B.A.;

Elizabeth Shapiro, J.D.; Gail Stockin, M.A.

**Department Chair** Dick Wasson, M.B.A.

### General Description

Study in this area explores management theories, history, principles, and contemporary practices utilized in our increasingly global business environment. The program encompasses a variety of specialized areas including management, marketing, financial services, entrepreneurship, leadership and supervision, eBusiness, human resources, international trade, and community development.

### Career Options

Below is a sample of the career options available for the business management or related major. Most require an associate degree, some require a bachelor's or graduate-level degree: administrator, manager, human resources, small business owner/operator, supervisor, office manager, 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
Management	01151

#### Certificates of Achievement

eBusiness—Intermediate	02457
Entrepreneurship and Small Business—Intermediate	01155
Management—Intermediate	01153

#### Certificates of Proficiency

eBusiness—Basic	A2444
Entrepreneurship and Small Business—Basic	A2442
Financial and Investment Services—Basic	A2027
Management—Basic	01152

#### Entrepreneurship Education

Automotive Technology Emphasis	02192
Event and Convention Planning Emphasis	02968
Landscape Construction Emphasis	02193
Recording Arts Emphasis	02194
Web Design Emphasis	02339

*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	Computerized Accounting (3)	
	<b>OR</b>	3-4
ACCT 102	Principles of Accounting II—Managerial (4)	
BUS 120	Introduction to Business	3
	<b>OR</b>	
BUS 121	Financial Planning and Money Management	
BUS 136	Diverse Workforce Management and Communication (2)	
	<b>OR</b>	2-3
BUS 152	Human Relations in Organizations (3)	
BUS 150	Principles of Management	
	<b>OR</b>	3
BUS 177	Principles of International Business	
BUS 183	Business Mathematics	3
CIS 133	Advanced Microcomputer Spreadsheets Software	
	<b>OR</b>	1
CIS 134	Microcomputer Database Software—Access	
LDR 148	Business Presentation Skills—Bilingual (English/Spanish)	
	<b>OR</b>	2
LDR 149	Business Presentation Skills	
	Plus the courses required for the eBusiness—Intermediate certificate	20-26
<b>Total units</b>		<b>37-45</b>

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

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

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## 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	1
	<b>OR</b>	
CIS 134	Microcomputer Database Software—Access	1
LDR 148	Business Presentation Skills—Bilingual (English/Spanish)	2
	<b>OR</b>	
LDR 149	Business Presentation Skills	2
LDR 151	Human Resources and Labor Relations	3
Plus the required courses for the Management Intermediate certificate		31-32
<b>Total units</b>		<b>43-44</b>

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## CERTIFICATES

### eBusiness—Basic

Certificate of Proficiency

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)	1-4
	<b>OR</b>	
CL 120	Computer Literacy (1)	1
CIS/LIB 151	Research Using the Internet	1
<b>Total units</b>		<b>7-10</b>

**Recommended Electives:** BUS 148, 149.



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## eBusiness—Intermediate

Certificate of Achievement

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)		
	<b>OR</b>		3–4
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)		
	<b>OR</b>		1–3
BUS 174	Modern Promotion and Marketing Practices (3)		
BUS 211	Communication in Business and Industry		
	<b>OR</b>		3
BUS 212	Business Communication		
BUS 290–293	Work Experience in Business I–IV (2–4)	2	
Plus the courses required for the eBusiness—Basic certificate			13–16
<b>Total units</b>			<b>26–32</b>

*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

Certificate of Proficiency

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	Entrepreneurship Operating and Managing a Small Business		3
CIS/LIB 151	Research Using the Internet		1
CL 120	Computer Literacy (1)		
	<b>OR</b>		1–4
CIS 101	Introduction to Computers and Information Processing (4)		
LDR 152	Business Innovation and Creativity		1
LEGL 272	Business Organizations		2
<b>Total units</b>			<b>13–16</b>

## Entrepreneurship and Small Business—Intermediate

Certificate of Achievement

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		
	<b>OR</b>	3	
ACCT 12	Computerized Accounting		
BUS 120	Introduction to Business		
	<b>OR</b>	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 144	Advertising and Promotional Strategy (1)		
	<b>OR</b>	1–3	
BUS 147	Successful Selling Techniques (1)		
	<b>OR</b>		
BUS 174	Modern Promotion and Marketing Practices (3)		
BUS 145	Financial Management for Small Business	1	
BUS 211	Communication in Business and Industry		
	<b>OR</b>	3	
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
<b>Total units</b>			<b>30–35</b>

*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

Certificate of Proficiency

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 7	Basic Business Bookkeeping (3)		
	<b>OR</b>		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		3
BUS 183	Business Mathematics		3
<b>Total units</b>			<b>15–16</b>

## Management—Basic

Certificate of Proficiency

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)		
	<b>OR</b>		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
<b>Total units</b>			<b>11–12</b>



## Management—Intermediate

Certificate of Achievement

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

*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.*

## Entrepreneurship Education

Career/Technical

Common Core Courses

Prepares students with the understanding of entrepreneurship and small business management which includes developing, planning, organizing, and operating. Provides students interested in self-employment and those working within small firms with the knowledge and skills to foster small business. Entrepreneurship training contributes to the student's financial independence, career success, and the world's economy. Linking entrepreneurship education with program specific areas, prepares students from a wide spectrum of disciplines with the practical tools to build and maintain small businesses or to work successfully within a small business.

### Common Core

BUS 143	eStrategic Business Planning	2
BUS 145	Financial Management for Small Business	1
BUS 148	Developing and Starting a New Business	3
BUS 149	Entrepreneurship Operating and Managing a Small Business	3
<b>Total units</b>		<b>9</b>

**Plus completion of one of the following certificates of emphasis:**

- Automotive Technology
- Event and Convention Planning
- Landscape Construction
- Recording Arts
- Web Designer

## Automotive Technology Emphasis

Certificate of Proficiency

Career/Technical (Major Code: 02192)

Prepares students for self-employment and work within small companies in the business aspects of the automotive industry. Builds on their industry education in automotive repair. Expands their education in entrepreneurship and small business management. Contributes to the student's financial independence, career success, and the world's economy. Prepares them to own businesses in the automotive industry or for positions in business management, sales, and customer service.

AT 101	Introduction to Basic Automotive Service	3
AT 102	Automotive Science and Basic Mechanics	3
Plus the Common Core courses for Entrepreneur Education		9
<b>Total units</b>		<b>15</b>

## Event and Convention Planning Emphasis

Certificate of Proficiency

Career/Technical (Major Code: 02968)

Prepares students for self-employment and work within small businesses in the dynamic hospitality industry. Builds on their industry education in event and convention planning, event marketing, and corporate project management. Expands their education in entrepreneurship and small business management. Contributes to the student's financial independence, career success, and the world's economy. Prepares them for private practice or for key roles within event management firms.

EVNT 154	Introduction to Event and Convention Planning	3
EVNT 155	Event Marketing	3
	<b>OR</b>	
EVNT 157	Corporate Event Project Management	3
	Plus the Common Core courses for Entrepreneur Education	9
	<b>Total units</b>	<b>15</b>

## Landscape Construction Emphasis

Certificate of Proficiency

Career/Technical (Major Code: 02193)

Prepares students for self-employment and work within small businesses in the landscape industry. Builds on their industry education in project estimating, sprinkler system repair, and working with concrete, masonry, and wood. Expands their education in entrepreneurship and small business management. Contributes to the student's financial independence, career success, and the world's economy. Prepares them to work for others and after passing the state contractor's examination, to own their own landscape construction business.

LNT 91	Sprinkler System Maintenance: Sprinklers, Pipes, and Backflow Devices	1
LNT 92	Sprinkler System Maintenance: Valves and Wiring	1
LNT 125	Landscape Construction: Concrete and Masonry Skills	1
LNT 126	Landscape Construction: Fence, Deck, and Lumber Skills	1
LNT 127	Landscape Construction: Sprinkler Installation	1
LNT 131	Landscape Contracting and Estimating	3
	Plus the Common Core courses for Entrepreneur Education	9
	<b>Total units</b>	<b>17</b>

## Recording Arts Emphasis

Certificate of Proficiency

Career/Technical (Major Code: 02194)

Prepares students for self-employment and work within small businesses in the dynamic entertainment industry. Builds on their recording industry technical education in recording arts and recording techniques. Expands their education in entrepreneurship and small business management. Contributes to the student's financial independence, career success, and the world's economy. Prepares them for business ownership or key roles within the audio recording and sound mixing fields.

MUS 150/ RA&T 110	Music Business/Career Overview	3
MUS 151/ TELE 151/ RA&T 120	Recording Techniques	3
MUS 152	Advanced Recording Techniques	2
	Plus the Common Core courses for Entrepreneur Education	9
	<b>Total units</b>	<b>17</b>

## Web Designer Emphasis

Certificate of Proficiency

Career/Technical (Major Code: 02339)

Prepares students for self-employment and work in small businesses in any industry that relies on websites for marketing. Builds on their industry education in web design and usability. Expands their education in entrepreneurship and small business management. Contributes to the student's financial independence, career success, and the world's economy. Prepares them for business ownership and key roles in web design or maintenance positions.

CIS 123	Web Publishing With Dreamweaver	6
CIS 162	Web Site Universal Design	2
	Plus the Common Core courses for Entrepreneur Education	9
	<b>Total units</b>	<b>17</b>



# Chemistry

## School of Mathematics, Science, and Engineering

**Interim Dean** Richard Fielding, M.S., Office 345A, 619-482-6344

**Faculty** David R. Brown, Ph.D.; David Hecht, Ph.D.; Tinh-Alfredo V. Khuong, Ph.D.; Jacquelyn Thomas, M.S.

**Department Chair** Tinh-Alfredo V. Khuong, 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.*

*Note: See also Pharmaceutical and Laboratory Science, page 239.*

### Web sites for chemistry majors:

<b>SDSU:</b>	<a href="http://www.chemistry.sdsu.edu">http://www.chemistry.sdsu.edu</a>
<b>UCSD:</b>	<a href="http://www.chemistry.ucsd.edu">http://www.chemistry.ucsd.edu</a>
<b>CSU, San Marcos:</b>	<a href="http://www.csusm.edu/chemistry">http://www.csusm.edu/chemistry</a>
<b>Articulation:</b>	<a href="http://www.assist.org">http://www.assist.org</a>

## 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 to give priority 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	3
PHYS 273	Principles of Physics Laboratory II	1

### Fourth Semester

CHEM 250	Analytical Chemistry	5
	<b>OR</b>	
CHEM 242	Organic Chemistry II	

<b>Total units</b>	<b>41</b>
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*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 51.*

\* 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 COURSES INFORMATION section on page 33 for further information.

# Child Development

## Higher Education Center at San Ysidro

**Dean** Silvia Cornejo, M.A., Office 4118B, 619-482-6755

**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

Degree/Certificate Options	Major Code
<b>Associate in Arts Degree: Transfer Preparation</b>	
Child Development	01750
<b>Associate in Arts Degree: Career/Technical</b>	
Child Development Teacher	B2721
<b>Certificates of Achievement</b>	
Child Development Teacher Permit	B2722
<b>Certificates of Proficiency</b>	
Family Childcare—Bilingual (English/Spanish)	B2725
Family Support Specialist—Basic	A2726
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 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
	<b>OR</b>	
PSYC 101	Introduction to Psychology	3
SOC/ PSYC 270	Statistical Methods of Sociology	3
<b>Total units</b>		<b>28</b>

**Recommended Electives:** CD 175, 177, 282B.

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

\* 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 COURSES INFORMATION section on page 33 for further information.**



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## Child Development Teacher

Career/Technical (Major Code: B2721)

Designed to prepare students to qualify as teachers of young children. A practicum component allows students to apply theoretical knowledge to student teaching experience.

### First Semester

CD 170	Principles of Child Development	3
CD 170L	Principles of Child Development Laboratory	1
CD 180	Observation and Guidance for Child Development	3

### Second Semester

CD 181	Curriculum Planning for Child Development	3
CD 184	Observation and Documentation	3
CD 283	Emerging Literacy	3

### Third Semester

CD 175	Nutrition, Health, and Safety for Children*	3
CD 275	Art for Children	3
CD 282A	Child Development Field Practicum	3

### Fourth Semester

CD 282B	Advanced Child Development Field Practicum	3
CD 284	Child, Family, and Community	3
<b>OR</b>		
CD 135	Principles of Family Development	3

**Total units** **31**

**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 51.*

*Note: After completion of this coursework, student will qualify for the teacher level of the State of Education's permit. ([www.childdevelopment.org](http://www.childdevelopment.org))*

\* Students who successfully complete CD 175—Nutrition, Health, and Safety for Children, will receive certification in Infant and Children, First Aid, and CPR.

## CERTIFICATES

### Child Development Teacher Permit

Certificate of Achievement

Career/Technical (Major Code: B2722)

Designed to prepare students as preschool teachers and qualify for State Permit on the Teacher Permit level.

### First Semester

CD 170	Principles of Child Development	3
CD 170L	Principles of Child Development Laboratory	1
CD 284	Child, Family, and Community	3
<b>OR</b>		
CD 135	Principles of Family Development	3
CD 283	Emerging Literacy	3

### Second Semester

CD 180	Observation and Guidance for Child Development	3
CD 181	Curriculum Planning for Child Development	3
CD 184	Observation and Documentation	3
Complete 3 units from Group 1		3

### Third Semester

CD 282A	Child Development Field Practicum	3
ENGL 115	Reading and Composition: Exposition and Argumentation (4)	4
<b>OR</b>		
SPAN 101	Elementary Spanish I (5)	5
<b>OR</b>		
SPAN 215	Spanish for Bilinguals I (5) *	5
<b>OR</b>		
COMM 103	Oral Communication (3)	3
Complete 6 units from Group 2		6

### Fourth Semester

CD 282B	Advanced Child Development Field Practicum	3
BIOL 140	Environmental Biology (3)	3
<b>OR</b>		
LNT 100	Plant and Horticulture Science (4)	4
<b>OR</b>		
SOC/ PSYC 270	Statistical Methods of Sociology (3)	3
<b>OR</b>		
MATH 101	College Algebra (3)	3
Complete 6 units from Group 3 (or 3 units if SPAN 101 or 215 were completed)		3–6

**Total units** **43–49**

**Group 1**

CD 130	Math for Young Children (1)
CD 131	Science for Young Children (1)
CD 132	Technology for Young Children (1)

**OR**

CD 173	Development of Infants and Toddlers (3)
CD 175	Nutrition, Health, and Safety for Children (3)
CD 176	Music and Movement for Young Children (3)
CD 275	Art for Children (3)

**Group 2**

ART 101	Design I (3)
ART 104	Introduction to Art (3)
ENGL 270	Multicultural Literature (3)
MUS 105	Introduction to Music (3)
MUS 195	World Music (3)

**Group 3**

PSYC 101	General Psychology (3)
SOC 101	Introduction to Sociology (3)
HIST 104	Western Civilization I (3)
HIST/ MAS141	Mexican-American History I (3)
PS 101	Introduction to Political Science (3)

## Family Childcare—Bilingual (English/Spanish)

### Certificate of Proficiency

Career/Technical (Major Code: B2725)

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.

CD 80	The Business of Family Childcare	1
CD 81	Children in Family Childcare—Crisis, Challenges, and Change	1
CD 82	Family Childcare Environment	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 87	Family Childcare Curriculum	1
CD 89	Fundamentals of Child Development	1
CD 90	Family Childcare School-Age Environment	1
CD 91	Family School-Age Childcare Partnerships	1
CD 93	Early Childhood Environmental Rating Scale	1
<b>Total units</b>		<b>11</b>

## Family Support Specialist

### Certificate of Proficiency

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 and transition.

**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 290	Family Support Specialist Work Experience	2

**Total units****17**

## Spanish-to-English Associate Teacher Certificate

### Certificate of Proficiency

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.

**First Semester**

CD 170	Principles of Child Development	3
ESL 27A	ESL for Child Development: Principles of Child Development	2

**Second Semester**

CD 180	Observation and Guidance for Child Development	3
ESL 27B	ESL for Child Development: Child Guidance	1

**Third Semester**

CD 181	Curriculum Planning for Child Development	3
ESL 27C	ESL for Curriculum	1

**Fourth Semester**

CD 284	Child, Family, and Community	3
ESL 27D	ESL for Child, Family and Community	1

**Total units****17**

Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

# Communication

## School of Arts and Communication

**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** Eric Maag, 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 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

#### Associate in Arts Degree: Transfer Preparation

Communication

### Major Code

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

#### Complete 18 units from the following electives: 18

COMM 104	Public Speaking (3)	
COMM 111	Oral Interpretation (3)	
COMM 160	Argumentation and Debate (3)	
COMM 174	Interpersonal Communication (3)	
COMM 176	Intercultural Communication (3)	
COMM/ TELE 180	Introduction to Electronic Media (3)	
COMM 185/ TELE 114	Cinema as a Form of Expression and Communication (3)	
COMM 200/ JOUR 101	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)	

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**Total units 21**

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

*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 COURSES INFORMATION section on page 33 for further information.

## ASSOCIATE IN ARTS DEGREE

### Communication Studies for Transfer

Student Transfer Achievement Reform (STAR) Act (SB1440)  
Transfer Preparation \* (Major Code: 01475)



Associate Degree  
for Transfer™

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.

#### Required:

COMM 104 Public Speaking 3

#### List A-Any 2:

6 units required

COMM 160 Argumentation and Debate 3

COMM 174 Interpersonal Communication 3

#### List B-Any 2:

6 units required 6

COMM 103 Oral Communication (3)

COMM 176 Intercultural Communication (3)

COMM 200 Introduction to Mass Communication and Society (3)

#### List C (3-4 units):

Or any single COMM course not used for List B 3-4

ANTH 102 Cultural Anthropology (3)

PSYC 101 General Psychology (4)

SOC 101 Introduction to Sociology (3)

ENGL 116 Critical Thinking and Composition (3)

**Total units 18-19**

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

\* 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 COURSES INFORMATION section on page 33 for further information.**

# Community, Economic and Urban Development

## Higher Education Center at Otay Mesa

**Dean** Silvia Cornejo, M.A., Office 4118D, 619-482-6755

**Faculty** Victoria Lopez, J.D.; Yvonne Lucas, M.B.A.; Gail Stockin, M.A.; Frank Paiano, M.B.A.; Elisabeth Shapiro, J.D.; Vern Jorgensen, M.B.A.; Dick Wasson, M.B.A.

**Department Chair** Marisa Soler-McElwain, LL.M.

### General Description

In recent years, governmental entities and community planning groups have undertaken urban revitalization by focusing on initiatives that develop the local economy, create jobs, and maximize the use of local resources including the development of real property, transportation, water and other natural resources. Southwestern College has developed the Community, Economic, and Urban Development Program to provide students with the skills and knowledge required to be successful in this and related career fields. The program discusses the concepts of city planning, architectural design, land use, innovation, creativity, leadership, real estate, transportation, economics principles, and workforce development.

A work experience component offers volunteer or paid internship opportunities on local civic boards, commissions, councils, committees, private businesses, government agencies, or non-profit organizations located throughout San Diego County focusing on the south county region. Students gain practical skills and can work toward employment in the field or transfer to a four-year college or university that has related programs in the area of urban planning.

### Career Options

Urban planner has been considered one of the “best careers” in surveys conducted by various organizations. The following list is a sample of the career options available for individuals who complete studies in the Community, Economic, and Urban Development major. Some of these options require an advanced certificate or an associate degree; some require a bachelor’s or master’s degree: urban/city planner or designer, transportation planner, environmental technician, research analyst, title examiner, construction manager, operations manager, architect, real estate and land use designer, property and community association manager, economic developer, housing specialist, parks and recreation planner, surveying and mapping technician, workforce developer, community activist, charitable and social service organization worker/manager, and entrepreneur involved in urban planning and design.

### Degree/Certificate Options

#### Associate in Science Degree: Career/Technical

	<b>Major Code</b>
Community, Economic and Urban Development	01061

#### Certificates of Achievement

Community, Economic and Urban Development—Basic	01062
Community, Economic and Urban Development—Intermediate	01063

*Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.*



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## ASSOCIATE IN SCIENCE

### Community, Economic and Urban Development

Career/Technical (Major Code: 01061)

Prepares students to work in leadership roles in private, public, and nonprofit organizations engaged in various community planning, economic, development, and residential/commercial revitalization activities. Develops skills in community land-use planning, economic development, business planning, community leadership, design concepts, economics, and real estate principles and practices.

ACCT 101	Principles of Accounting I	4
BUS 52	Basics of Government Contracting	2
BUS 83	Principles of Economic Development	3
BUS 84	Grant Research and Writing Fundamentals	1
BUS 100	Introduction to Community, Economic, and Urban Planning	3
BUS 140	Business Law/The Legal Environment of Business	3
BUS 142	Business Ethics—Corporate and Personal	1
BUS 211	Communication in Business and Industry	3
	<b>OR</b>	
BUS 212	Business Communication	3
ECON 101	Principles of Economics I	3
ECON 102	Principles of Economics II	3
GEOG 145	Introduction to Mapping and Geographic Information Science (GIS)	3
LDR 152	Business Innovation and Creativity	1
LDR 154	Community and Collaborative Leadership	3
LDR 155	Strategic Planning and Sustainability	3
	<b>OR</b>	
RE 101	Real Estate Principles	3
LDR 156	Microfinance and Sustainable Development	3
	<b>OR</b>	
LEGL 266	Mediation, Negotiation, and Conflict Management	2
BUS 290-293	Work Experience in Business	2-4
	<b>Total units</b>	<b>40-43</b>

To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.

## CERTIFICATES

### Community, Economic and Urban Development—Basic

Certificate of Achievement

Career/Technical (Major Code: 01062) Basic

Prepares students to work in private, public, and nonprofit organizations engaged in various community, and economic development activities. Provides an overview of the key areas involved in the field, including concepts of sustainability, strategic planning, microfinance, community design, real estate, economics, and legal issues related to the field.

BUS 100	Introduction to Community, Economic and Urban Planning	3
BUS 83	Principles of Economic Development	3
BUS 211	Communication in Business and Industry	3
	<b>OR</b>	
BUS 212	Business Communication	3
ECON 101	Principles of Economics I	3
GEOG 145	Introduction to Mapping and Geographic Information Science (GIS)	3
LDR 152	Business Innovation and Creativity	1
LDR 154	Community and Collaborative Leadership	3
LDR 155	Strategic Planning and Sustainability	3
	<b>OR</b>	
RE 101	Real Estate Principles	3
	<b>Total units</b>	<b>22</b>

### Community, Economic and Urban Development—Intermediate

Certificate of Achievement

Career/Technical (Major Code: 01063)

Prepares students to work in private, public, and nonprofit organizations engaged in various community planning, economic development, and residential/commercial revitalization activities. Develops skills in project management, accounting, business ethics, human resources, labor relations, and business communications.

ACCT 101	Principles of Accounting I	4
BUS 52	Basics of Government Contracting	2
BUS 84	Grant Research and Writing Fundamentals	1
BUS 140	Business Law/The Legal Environment of Business	3
BUS 142	Business Ethics—Corporate and Personal	1
ECON 102	Principles of Economics II	3
LDR 156	Microfinance and Sustainable Development	3
	<b>OR</b>	
LEGL 266	Mediation, Negotiation, and Conflict Management	2
BUS 290-293	Work Experience in Business	2-4
	Plus the courses required for the Community, Economic and Urban Development—Basic certificate	22
	<b>Total units</b>	<b>40-43</b>

# Computer Aided Design and Drafting

Departments of Applied Technology, CIS/  
Electronics, and Administration of Justice

**Dean** Terry Davis, M.H.A., Office 1000K, 619-482-6551

**Department Chair** David Preciado, A.A.

## General Description

Designed to provide students with the skills and technical knowledge requested by employers using Computer Aided Design and Drafting (CADD) in a variety of disciplines. This 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.

The CADD technology associate in science degree prepares the student for various job opportunities in a wide variety of disciplines. 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—Advanced	A2576
Design Technology	A2577

### Certificate of Proficiency

Computer Aided Design and Drafting—Basic	02569
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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

### 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.

CAD 220	Introduction to CADD/CAM Systems	3
CAD 222	CAD Mechanical Design I	3
ENGR 110	Engineering Design and Graphics	3
CAD 223	CAD Detailing and Dimensioning	3
CAD 224	CAD Mechanical Design II	3
MATH 104	Trigonometry	3
<b>Total units</b>		<b>18</b>

**Recommended Electives:** CAD 240, 272, 276.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.

### 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.

ENGR 101	Introduction to Engineering Careers	1
ENGR 110	Engineering Design and Graphics	3
ARCH 200	Introduction Computer Aided Design	3
<b>OR</b>		
CAD 220	Introduction to CADD/CAM Systems	3
MATH 104	Trigonometry	
ARCH 205	Advanced Architectural CAD	3
<b>OR</b>		
CAD 222	CAD Mechanical Design I	6
Complete 6 units from electives		
<b>Total units</b>		<b>19</b>

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

To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

# CERTIFICATES

## Computer Aided Design and Drafting—Basic

Certificate of Proficiency

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
<b>Total units</b>		<b>15</b>

## Computer Aided Design and Drafting—Advanced

Certificate of Achievement

Career/Technical (Major Code: A2576)

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
MATH 104	Trigonometry	3
<b>Total units</b>		<b>18</b>

## Design Technology

Certificate of Achievement

Career/Technical (Major Code: A2577)

ENGR 101	Introduction to Engineering Careers	1
ENGR 110	Engineering Design and Graphics	3
ARCH 200	Introduction to Computer Aided Design	3
<b>OR</b>		
CAD 220	Introduction to CADD/CAM Systems	3
MATH 104	Trigonometry	3
ARCH 205	Advanced Architectural CAD	3
<b>OR</b>		
CAD 222	CAD Mechanical Design I	3
Complete 6 units from electives		6
<b>Total units</b>		<b>19</b>

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

# Computer Information Systems

## Departments of Applied Technology, CIS/ Electronics, and Administration of Justice

**Dean** Terry Davis, M.H.A., Office 1000K, 619-482-6551

**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.

**Department Chair** Thomas Luibel, B.S.

### 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

Following 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
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#### Associate in Science Degree: Career/Technical

CIS—Computer Programming With an Emphasis on Applications	02273
CIS—eCommerce Emphasis	02071
CIS—Internet Emphasis	02083
CIS—Internetwork Technician Emphasis	02088
CIS—Microcomputer Applications Emphasis	02335
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
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—Advanced	02073
CIS—Entry-Level Database Administrator	02017
CIS—Internet Emphasis—Advanced	02093
CIS—Internetwork Technician Emphasis—Advanced	02097

CIS—Microcomputer Applications Emphasis—Advanced	02338
CIS—Operations/PC Support Specialist Emphasis—Advanced	02098
CIS—Systems Programming Emphasis	02099
CIS—Web Flash Developer and Gaming Animator	02134
CIS—Web Site Designer and Developer	02122
CIS—Web Site eCommerce Administrator	02128
Microcomputer Office and Technical Support Skills—Advanced	02141

### Certificates of Proficiency

CIS—eCommerce Emphasis—Basic	02072
CIS—Internet Emphasis—Basic	02074
CIS—Internetwork Technician Emphasis—Basic	02089
CIS—Microcomputer Applications Emphasis—Basic	02337
CIS—Operations/PC Support Specialist Emphasis—Basic	02082
CIS—Web Database Programmer/Administrator—LAMP (Linux, Apache, MySQL, PHP)	02107
CIS—Web Designer	02108
CIS—Web Flash Designer	02109
C++ Certificate	01064
Microcomputer Office and Technical Support Skills—Basic	02139
Project Management	02276
Software Quality Assurance	02013

*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
<b>Total units</b>		<b>32</b>

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

\* 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 COURSES INFORMATION section on page 33 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	
<b>OR</b>		
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	
<b>OR</b>		
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/BUS 239	Project Management	3
CIS 290–291	Work Experience CIS Applications I–II (2–4)	2–4

**Plus Group A and Group B 22**

#### **Group A—Open Source (10)**

CIS 108	PHP (Personal Home Page) and MySQL (6)
CIS 153	Internet Programming Using Java/J++ (4)

#### **Group B: Microsoft (12)**

CIS 117	Windows Programming Using Visual BASIC (4)
CIS 139	Windowing Environments (1)
CIS 166	C# Programming (3)

**Total units 57–59**

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## Computer Information Systems

Career/Technical

### Common Core

BUS 211	Communication in Business and Industry		3
<b>OR</b>			
BUS 212	Business Communication		
BUS 290–293	Work Experience in Business I–IV (2–4)	2–4	
CIS/ELEC 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
<b>Total units</b>			<b>17–19</b>

*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 103A	eCommerce IIIa—Miva Merchant Online Stores Using Fireworks (4)		
<b>OR</b>			
CIS 104	eCommerce IV—Beginning ColdFusion (3)		3–4
Plus Common Core courses for Computer Information Systems			17–19
<b>Total units</b>			<b>25–28</b>

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## 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 re-engineer 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/LIB 151	Research Using the Internet		1
CIS 152	Using XHTML and CSS to Create Web Pages		1
CIS 158	Imaging for the World Wide Web (Photoshop and ImageReady)		3
TELE/ART 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			17–19
<b>Total units</b>			<b>34–36</b>

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## 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/ELEC 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
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			17–19
<b>Total units</b>			<b>46–48</b>

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## 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/ ELEC 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 137	Advanced Word Processing Software	1
CIS 146	Introduction to Structured Query Language (SQL)	2
Plus Common Core courses for Computer Information Systems		17–19
<b>Total units</b>		<b>29–31</b>

**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 51.*

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

## 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.

ELEC 109/ CIS 119	Office Support and Network Technician (6)	
<b>OR</b>		<b>6</b>
CIS/ELEC 10B	Microcomputer Hardware and Software Upgrade (2)	
CIS/ELEC 14	Office Automation Equipment Repair (2)	
ELEC 15	Data, Voice, and Video Cable Installation (2)	
CIS/ELEC 142	Networking Academy Fundamentals (Cisco Certification Preparation)	3
ELEC 260	Microcomputer Systems and A+ Certification	4
Plus Common Core courses for Computer Information Systems		17–19
<b>Total units</b>		<b>30–32</b>

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## 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. Prepares 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 117	Windows Programming Using Visual BASIC	4
CIS 153	Internet Programming Using Java/J++	4
Plus Common Core courses for Computer Information Systems		17–19
<b>Total units</b>		<b>36–38</b>

**Recommended Electives:** CIS 133, 137; MATH 140.

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## CIS—Web Flash Developer and Gaming Animator

Career/Technical (Major Code: 02129)

Prepares 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.

BUS 134	eBusiness I: Principles of Electronic Commerce	3
BUS 211	Communication in Business and Industry	3
CIS 124	Web Imaging With Fireworks	6
CIS 125	Flash Motion Graphics	6
CIS 126	Advanced Flash ActionScript	6
CIS 162	Web Site Universal Design	2
CIS 290–291	Work Experience CIS Applications I–II (2–4)	2–4

**Total units** **28–30**

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## CIS—Web Site Designer and Developer

Career/Technical (Major Code: 02121)

Prepares students to work in web design studios, computer firms, or as independent freelance Web designers or search engine marketers. Creates dynamic Web sites using Dreamweaver with Cascading Style Sheets (CSS) and open-source shopping cart software. Develops maximum search engine visibility. Formats web sites for computer and portable devices.

BUS 134	eBusiness I: Principles of Electronic Commerce	3
BUS 211	Communication in Business and Industry	3
CIS 123	Web Publishing With Dreamweaver	6
	<b>OR</b>	
CIS 108	PHP (Personal Home Page) and MySQL	6
CIS 124	Web Imaging With Fireworks	6
CIS 162	Web Site Universal Design	2
CIS 255	Web Search Engine Visibility	2
CIS 256	Web Shopping Cart With Advanced Dreamweaver	3
CIS 290–293	Work Experience CIS Applications I–IV (2–4)	2–4

**Total units** **27–29**

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## 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 Site Universal Design	2

**Total units** **26**

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## 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	3
	<b>OR</b>	
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	3
	<b>OR</b>	
BUS 212	Business Communication	3
CIS/ELEC 10A	Microcomputer Repair and Service	2
CIS/ELEC 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
	<b>OR</b>	
CIS 146	Introduction to Structure Query Language (SQL) (2)	2–4
CIS 133	Advanced Microcomputer Spreadsheets Software	1
CIS 139	Windows Environments	1
CIS 150	Introduction to Telecommunications and the Internet	1
CIS 152	Using XHTML and CSS to Create Web Pages	1
CIS 165	JavaScript Programming	3
CIS 290–291	Work Experience CIS Applications I–II (2–4)	2–4

**Total units** **29–33**

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## CERTIFICATES

### CIS—Computer Programming With an Emphasis on Applications—Basic

Certificate of Achievement

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
<b>Total units</b>		<b>21</b>

### CIS—Computer Programming With an Emphasis on Applications—Advanced

Certificate of Achievement

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	3
<b>OR</b>		
BUS 211	Communication in Business and Industry	3
<b>OR</b>		
BUS 212	Business Communication	4
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/BUS 239	Project Management	3
CIS 290–291	Work Experience CIS Applications I–II (2–4)	2–4

**Complete one of the following groups:**

**Group A—Open Source (10)**

CIS 108	PHP (Personal Home Page) and MySQL (6)
CIS 153	Internet Programming Using Java/J++ (4)

**OR**

**10–12**

**Group B—Microsoft (12)**

CIS 117	Windows Programming Using Visual BASIC (4)
CIS 139	Windowing Environments (1)
CIS 166	C# Programming (3)

**Total units**

**38–42**

## CIS—eCommerce Emphasis—Basic

Certificate of Proficiency

Career/Technical (Major Code: 02072)

BUS 134	eBusiness I: Principles of Electronic Commerce	3
CIS 146	Introduction to Structured Query Language (SQL)	2
CIS 103A	eCommerce IIIa—Miva Merchant Online Stores Using Fireworks (4)	4
<b>Total units</b>		<b>9</b>

## CIS—eCommerce Emphasis—Advanced

Certificate of Achievement

Career/Technical (Major Code: 02073)

BUS 134	eCommerce I: Principles of Electronic Commerce	3
CIS 146	Introduction to Structured Query Language (SQL)	2
CIS 103A	eCommerce IIIa—Miva Merchant Online Stores Using Fireworks (4)	4
Plus Common Core courses for Computer Information Systems		17–19
<b>Total units</b>		<b>26–28</b>

## CIS—Entry-Level Database Administrator

Certificate of Achievement

Career/Technical (Major Code: 02017)

Prepares students to work as a first-level database administrator within mainframe or distributed computing environments (Oracle Academy hosted).

BUS 96	Customer Service and Communication Techniques	1
BUS 290–293	Work Experience in Business I–IV (2–4)	2–4
CIS 168A	Database Design	5
CIS 168B	Database Programming with SQL	5
CIS 168C	Database Programming with PL/SQL	5
<b>Total units</b>		<b>18–20</b>

## CIS—Internet Emphasis—Basic

Certificate of Proficiency

Career/Technical (Major Code: 02074)

CIS/LIB 151	Research Using the Internet	1
CIS 152	Using XHTML and CSS to Create Web Pages	1
CIS 158	Imaging for the World Wide Web (Photoshop and ImageReady)	3
<b>Total units</b>		<b>5</b>

## CIS—Internet Emphasis—Advanced

Certificate of Achievement

Career/Technical (Major Code: 02093)

ART 192	Introduction to Digital Imaging	3
CIS/LIB 151	Research Using the Internet	1
CIS 152	Using XHTML and CSS to Create Web Pages	1
CIS 158	Imaging for the World Wide Web (Photoshop and ImageReady)	3
TELE/ ART 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		17–19
<b>Total units</b>		<b>31–33</b>

## CIS—Internetwork Technician Emphasis—Basic

Certificate of Proficiency

Career/Technical (Major Code: 02089)

CIS/ ELEC 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
<b>Total units</b>		<b>12</b>

## CIS—Internetwork Technician Emphasis—Advanced

Certificate of Achievement

Career/Technical (Major Code: 02097)

CIS/ ELEC 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
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		17–19
<b>Total units</b>		<b>42–46</b>



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## CIS—Microcomputer Applications Emphasis—Basic

Certificate of Proficiency

Career/Technical (Major Code: 02337)

BUS 70	Keyboarding I *	1
BUS 120	Introduction to Business	3
CIS/ ELEC 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
<b>Total units</b>		<b>13</b>

\* Students who know touch-typing do not need to take BUS 70.

## CIS—Microcomputer Applications Emphasis—Advanced

Certificate of Achievement

Career/Technical (Major Code: 02338)

BUS 120	Introduction to Business	3
CIS/ ELEC 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 137	Advanced Word Processing Software	1
CIS 146	Introduction to Structured Query Language (SQL)	2
Plus Common Core courses for Computer Information Systems		17–19
<b>Total units</b>		<b>29–31</b>

## CIS—Operations/PC Support Specialist Emphasis—Basic

Certificate of Proficiency

Career/Technical (Major Code: 02082)

ELEC 109/ CIS 119	Office Support and Network Technician (6)	6
<b>OR</b>		
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)	
ELEC 15	Data, Voice, and Video Cable Installation (2)	
CIS 139	Windowing Environments	1
CIS/ ELEC 142	Networking Academy Fundamentals (Cisco Certification Preparation)	3
CL 120	Computer Literacy	1
ELEC 260	Microcomputer Systems and A+ Certification	4
<b>Total units</b>		<b>15</b>

## CIS—Operations/PC Support Specialist Emphasis—Advanced

Certificate of Achievement

Career/Technical (Major Code: 02098)

ELEC 109/ CIS 119	Office Support and Network Technician (6)	6
<b>OR</b>		
CIS/ELEC 10B	Microcomputer Hardware and Software Upgrade (2)	
CIS/ELEC 14	Office Automation Equipment Repair (2)	
ELEC 15	Data, Voice, and Video Cable Installation (2)	
CIS/ELEC 142	Networking Academy Fundamentals (Cisco Certification Preparation)	3
ELEC 260	Microcomputer Systems and A+ Certification	4
Plus Common Core courses for Computer Information Systems		17–19
<b>Total units</b>		<b>30–32</b>

## CIS—Systems Programming Emphasis

Certificate of Achievement

Career/Technical (Major Code: 02099)

CIS 106	Programming Logic and Design	3
CIS 115	Introduction to Programming Using C++	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		17–19
<b>Total units</b>		<b>32–34</b>

**Recommended Electives:** CIS 133, 137; MATH 140.

## CIS—Web Database Programmer/ Administrator—LAMP (Linux, Apache, MySQL, PHP)

Certificate of Proficiency

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 Site Universal Design	2
<b>Total units</b>		<b>14</b>

## CIS—Web Designer

Certificate of Proficiency

Career/Technical (Major Code: 02108)

Prepares 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 Site Universal Design	2
<b>Total units</b>		<b>14</b>

## CIS—Web Flash Designer

Certificate of Proficiency

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 Site Universal Design	2
<b>Total units</b>		<b>14</b>

## CIS—Web Flash Developer and Gaming Animator

Certificate of Achievement

Career/Technical (Major Code: 02134)

Prepares 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.

BUS 134	eBusiness I: Principles of Electronic Commerce	3
BUS 211	Communication in Business and Industry	3
CIS 124	Web Imaging With Fireworks	6
CIS 125	Flash Motion Graphics	6
CIS 126	Advanced Flash ActionScript	6
CIS 162	Web Site Universal Design	2
CIS 290–291	Work Experience CIS Applications I–II (2–4)	2–4
<b>Total units</b>		<b>28–30</b>

## CIS—Web Search Engine Marketer

Certificate of Achievement

Career/Technical (Major Code: 02334)

Builds a marketing strategy to ensure top placement of a website in web searches. Provides hands-on introduction to search engine visibility, including optimization techniques, keywords, trends, and measuring tools. Includes designing for portable devices and using social media.

CIS 123	Web Publishing with Dreamweaver	6
<b>OR</b>		
CIS 108	PHP (Personal Home Page) and MySQL	6
CIS 124	Web Imaging with Fireworks	6
CIS 152	Using XHTML and CSS to Create Web Pages	2
CIS 162	Web Site Universal Design	2
CIS 255	Web Search Engine Visibility	2
<b>Total units</b>		<b>18</b>

## CIS—Web Shopping Cart Developer

Certificate of Achievement

Career/Technical (Major Code: 02333)

Builds dynamic multimedia websites with shopping cart. Uses open-source software to build an online storefront and catalog. Uses effective business practices and design techniques., follows accessibility standards to sell products online to target consumer audiences. Provides hand-on instruction with multimedia equipment, uploading to the web, and quality control testing.

CIS 123	Web Publishing with Dreamweaver	6
CIS 124	Web Imaging with Fireworks	6
CIS 152	Using XHTML and CSS to Create Web Pages	2
CIS 162	Web Site Universal Design	2
CIS 256	Web Shopping Cart with Advanced Dreamweaver	3
<b>Total units</b>		<b>19</b>



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## CIS—Web Site Designer and Developer

Certificate of Achievement

Career/Technical (Major Code: 02122)

BUS 134	eBusiness I: Principles of Electronic Commerce	3
BUS 211	Communication in Business and Industry	3
CIS 123	Web Publishing With Dreamweaver	6
<b>OR</b>		
CIS 108	PHP (Personal Home Page) and MySQL	6
CIS 124	Web Imaging With Fireworks	6
CIS 152	Using XHTML and CSS to Create Web Pages	2
CIS 162	Web Site Universal Design	2
CIS 255	Web Search Engine Visibility	2
CIS 256	Web Shopping Cart With Advanced Dreamweaver	3
CIS 290–293	Work Experience CIS Applications I–IV (2–4)	2–4
<b>Total units</b>		<b>29–31</b>

## CIS—Web Site eCommerce Administrator

Certificate of Achievement

Career/Technical (Major Code: 02128)

BUS 134	eBusiness I: Principles of Electronic Commerce	3
BUS 211	Communication in Business and Industry	3
BUS 290–293	Work Experience in Business I–IV (2–4)	2–4
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 Site Universal Design	2
<b>Total units</b>		<b>28–30</b>

## C++ Certificate

Certificate of Proficiency

Career/Technical (Major Code: 01064)

Provides training in the C++ programming language to prepare for employment in the software industry.

CIS 106	Programming Logic and Design	3
CIS 115	Introduction to Programming Using C++	4
CIS 167	Quality Assurance and Software Testing	3
<b>Total units</b>		<b>10</b>

## Microcomputer Office and Technical Support Skills—Basic

Certificate of Proficiency

Career/Technical (Major Code: 02139)

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

CIS/ ELEC 10A	Microcomputer Repair and Service	2
CIS/ ELEC 10B	Microcomputer Hardware and Software Upgrade	2
CIS 92	Microsoft Office Suite (3)	3–4
<b>OR</b>		
CIS 101	Introduction to Computers and Information Processing (4)	1
CIS 139	Windowing Environments	1
CIS 150	Introduction to Telecommunications and the Internet	1

**Total units**

**9–10**

## Microcomputer Office and Technical Support Skills—Advanced

Certificate of Achievement

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	3
<b>OR</b>		
BUS 211	Communication in Business and Industry	3
<b>OR</b>		
BUS 212	Business Communication	3
CIS 117	Windows Programming Using Visual BASIC (4)	2–4
<b>OR</b>		
CIS 146	Introduction to Structure Query Language (SQL) (2)	2–4
CIS 133	Advanced Microcomputer Spreadsheets Software	1
CIS 152	Using XHTML and CSS to Create Web Pages	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

**Total units**

**21–26**

## Project Management

Certificate of Proficiency

Career/Technical (Major Code: 02276)

Provides training that includes the application of project management skills for employment in industry.

BUS 211	Communication in Business and Industry	3
<b>OR</b>		
BUS 212	Business Communication	3
CIS 167	Quality Assurance and Software Testing	3
CIS 106	Programming Logic and Design (3)	3
<b>OR</b>		
BUS/CIS 239	Project Management (3)	3
<b>Total units</b>		<b>9</b>

## Software Quality Assurance

Certificate of Proficiency

Career/Technical (Major Code: 02013)

Provides software quality assurance training and industry software testing techniques to prepare for employment in the software development industry.

CIS 106	Programming Logic and Design	3
CIS 167	Quality Assurance and Software Testing	3
BUS 211	Communication in Business and Industry	3
<b>OR</b>		
BUS 212	Business Communication	3
<b>Total units</b>		<b>9</b>

# Computer Science

## School of Mathematics, Science, and Engineering

**Interim Dean** Richard Fielding, M.S., Office 345A, 619-482-6344

**Faculty** Melanie Branca, Ph.D.; Martha Carey, M.S.; Karen Cliffe, M.A.; ; Valentina Goldberg, M.A.; Peter Herrera, M.A.; Shannon Gracey, M.S.; Irene Hollman, M.A.; Alexander Juden, M.S.; Randy Krauss, M.S.; Janet Mazzarella, M.A.; Andrew Medin, M.A.; Myriam Moody, M.A.; Maria Olivas, M.A.; Nghiep Quan, M.A.; Miriam Rasky, M.A.; Carl Scarbnick, Ph.D.; Bruce Smith, M.S.; Patrick Staley, M.S.; Romina Tehrani, M.A.; Val Villegas, M.A.

**Department Chair** Alexander Juden, 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.



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## Degree/Certificate Options

### Associate in Arts Degree: Transfer Preparation

Computer Science

## Major Code

01180

### Associate in Science Degree: Career/Technical

Computer Science

02190

### Certificate of Achievement

Computer Science

02191

*Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.*

# ASSOCIATE IN ARTS DEGREE

## Computer Science

Transfer Preparation \* (Major Code: 01180)

Most careers in computer science require a 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

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<b>Total units</b>	<b>27</b>
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**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 51.*

- \* 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 COURSES INFORMATION section on page 33 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	Computer Organization and Architecture	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 51.*

## CERTIFICATE

### Computer Science

Certificate of Achievement

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	Computer Organization and Architecture	4
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**Total units** **21**

# Construction Inspection

Departments of Applied Technology,  
CIS/Electronics, and Administration of Justice

**Dean** Terry Davis, M.H.A., Office 1000K, 619-482-6551

**Department Chair** David Preciado, A.A.

### 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	Building Plans and Construction Details	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

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**Total units** 24

**Recommended Elective:** CI 90.

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## 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
CI 60	Building Codes I	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 65	Building Codes II	3

### Third Semester

ARCH 235	Structures	3
ARCH 265	Architectural Practice II	2
CI 80	Soils Engineering	3

### Fourth Semester

ARCH 115	Architectural Graphics	3
ARCH 266	Architectural Practice III	2
BUS 140	Business Law/The Legal Environment of Business	3

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**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 51.*

## CERTIFICATES

### Construction Inspection

Certificate of Achievement

Career/Technical (Major Code: 02882)

#### First Semester

CI 10	Building Plans and Construction Details	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

Certificate of Achievement

Career/Technical (Major Code: 02883)

#### First Semester

ACCT 101	Principles of Accounting I	4
CI 60	Building Codes I	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 65	Building Codes II	3

#### Third Semester

ARCH 235	Structures	3
ARCH 265	Architectural Practice II	2
CI 80	Soils Engineering	3

#### Fourth Semester

ARCH 115	Architectural Graphics	3
ARCH 209	Construction Surveying	3
ARCH 266	Architectural Practice III	2
BUS 140	Business Law/The Legal Environment of Business	3

**Total units** **37**

## Culinary Arts

### Departments of Business, Accounting, and Office Information Systems

**Dean** Mark Meadows, Ph.D., Office 215, 619-482-6460

**Department Chair** Dick Wasson, M.B.A.

#### General Description

The Culinary Arts program has two components—the Baking and Pastry certificate and the Cooking and Baking certificate/degree programs. These programs prepare students for work in the restaurant and hospitality industry by focusing on the development of kitchen skills and food handling techniques in both the baking and culinary specialty areas. Students will understand how to work with foods and the function of ingredients, baking and cooking methods, food economics, nutrition, and kitchen safety and sanitation. A dual focus in baking and pastry as well as culinary kitchen skills is emphasized. Oral and written communications and computer literacy skills are an integral part of the program, and a work experience internship is required at the advanced certificate and associate degree levels.

#### Career Options

Students completing these certificate/degree programs can gain employment at the entry level or higher depending on their previous experience. Employment exists in bakeries, large grocery chains, cafes, restaurants, hotels, resorts, childcare facilities, cafeterias, hospitals, food preparation centers, casinos, and catering facilities. Career options in the field of baking and pastry: baker, baker assistant, bakery production finisher/supervisor, pastry chef, pastry decorator, caterer, and bakery entrepreneur. Career options in the field of Culinary: entry-level prep cook, head cook, assistant chef, chef, food service supervisor, catering manager, and restaurant entrepreneur.

#### Degree/Certificate Options

##### Associate in Science Degree

Culinary Arts: Cooking and Baking 01825

##### Certificate of Achievement

Culinary Arts: Cooking and Baking—Advanced 01824  
Professional Baking and Pastry 01820

##### Certificate of Proficiency

Culinary Arts: Cooking Essentials—Basic 01826

*Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.*



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## ASSOCIATE IN SCIENCE DEGREE

### Culinary Arts—Cooking and Baking

Career/Technical (Major Code: 01825)

Prepares the student for the workplace in the restaurant and hospitality industry by focusing on the development of kitchen skills and food handling techniques. Covers the preparation of food and the functions of ingredients, cooking methods, food economics, nutrition, safety and sanitation in the kitchen. Emphasizes baking and pastry skills and the culinary kitchen.

BUS 183	Business Mathematics	3
BUS 210	Business English	3
BUS 211	Communication in Business and Industry	3
<b>OR</b>		
BUS 212	Business Communication	3
BUS 290–293	Work Experience in Business I–IV (2–4)	2–4
CA 170	Professional Cooking—Basic Skills	3
CA 171	Soups, Stocks, and Sauces	3
CA 172	Professional Cooking—Advanced Skills	3
CA 173	Professional Cooking—Cultural Foods	3
CA 181	Food Service Safety, Sanitation, and Nutrition	1
CA 182	Introduction to Baking Skills and Culinary Arts	3
CA 183	Food Purchase and Control	2
CA 184	Professional Baking and Pastry Production Basics	3
CA 185	Professional Pastry Design and Decorating	3
CA 186	Professional Baking and Pastry Production—Breads	3
CL 120	Computer Literacy	1

**Total units** **39–41**

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## CERTIFICATES

### Culinary Arts: Cooking and Baking—Advanced

Certificate of Achievement

Career/Technical (Major Code: 01824)

Prepares students for work in the restaurant and hospitality industry by focusing on the development of kitchen skills and food handling techniques. Covers the preparation of food and the functions of ingredients, cooking methods, food economics, nutrition, safety, and sanitation in the kitchen. Emphasizes baking and pastry skills and the culinary kitchen.

BUS 183	Business Mathematics	3
BUS 210	Business English	3
BUS 290–293	Work Experience in Business I–IV (2–4)	2–4
CA 170	Professional Cooking—Basic Skills	3
CA 171	Soups, Stocks, and Sauces	3
CA 172	Professional Cooking—Advanced Skills	3
CA 173	Professional Cooking—Cultural Foods	3
CA 181	Food Service Safety, Sanitation, and Nutrition	1
CA 182	Introduction to Baking Skills and Culinary Arts	3
CA 183	Food Purchase and Control	2
CA 184	Professional Baking and Pastry Production Basics	3
CA 185	Professional Pastry Design and Decorating	3
CA 186	Professional Baking and Pastry Production—Breads	3
CL 120	Computer Literacy	1

**Total units** **36–38**

### Culinary Arts: Cooking Essentials—Basic

Certificate of Proficiency

Career/Technical (Major Code: 01826)

Prepares students for work in the restaurant and hospitality industry by focusing on the development of kitchen skills and food handling techniques. Covers the preparation of food and the functions of ingredients, cooking methods, food economics, nutrition, safety, and sanitation in the kitchen.

CA 170	Professional Cooking—Basic Skills	3
CA 171	Soups, Stocks, and Sauces	3
CA 172	Professional Cooking—Advanced Skills	3
CA 173	Professional Cooking—Cultural Foods	3
CA 181	Food Service Safety, Sanitation, and Nutrition	1
CA 183	Food Purchase and Control	2
CL 120	Computer Literacy	1

**Total units** **16**

## Professional Baking and Pastry

Certificate of Achievement

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.

BUS 290–293

	Work Experience in Business I–IV (2–4)	2
CA 181	Food Service Safety, Sanitation, and Nutrition	1
CA 182	Introduction to Baking Skills and Culinary Arts	3
CA 183	Food Purchase and Control	2
CA 184	Professional Baking and Pastry Production Basics	3
CA 185	Professional Pastry Design and Decorating	3
CA 186	Professional Baking and Pastry Production—Breads	3
CL 120	Computer Literacy	1

**Total units** **18**

**Recommended Electives:** BUS 78, 120, 142, 145, 148, 174; HLTH 204.

*Note: For other options in Culinary Arts, see Hospitality, page 172.*

## Dance

### School of Arts and Communication

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

**Faculty** Mary Jo Horvath, M.F.A.

**Department Chair** Cynthia McGregor, Ph.D.

#### 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

#### Major Code

##### Associate in Arts Degree: Transfer Preparation

Dance A1350

*Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.*



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

# 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	1.5
DANC 110	Modern Dance II	1.5
DANC 113	Ballet I	1.5
DANC 114	Ballet II	1.5
DANC 115	Ballet III	1.5
DANC 117	Jazz Dance I	1.5
DANC 118	Jazz Dance II	1.5
DANC 200	Dance History and Appreciation	3
PSYC 101	General Psychology	3
<b>Total units</b>		<b>24.5</b>

**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 51.*

\* 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 COURSES INFORMATION section on page 33 for further information.**

# Dental Hygiene

## Higher Education Center at National City

**Dean** Christine M. Perri, M.A., Office 7103D, 619-216-6665, ext. 6668  
**Faculty** Kesa Hopkins, M.S., Linda Lukacs, D.D.S., Teresa Poulos, M.Ed.  
**Director** Vickie Kimbrough-Walls, M.B.

### General Description

A dental hygienist is a licensed health care professional, oral health educator, and clinician who, as a co-therapist with a dentist, provides preventive, educational, and therapeutic services supporting total health for the control of oral diseases and the promotion of oral health. A registered dental hygienist has graduated from a minimum of two year college program that includes classroom studies and extensive supervised clinical experience.

The program prepares student for a career in dental hygiene through the study of humanities, social and natural sciences, and the field of dental hygiene. Emphasis is on clinical practice in the context of dental hygiene care. Graduates are eligible to apply to take national and state examinations to earn the RDH license.

Generally, the dental hygienist may work in general and specialty oral health practices. Other areas of employment include programs for research, professional education, and community health; hospital and institutional care of disabled persons; federal programs, such as the armed services; or other health service locations as specified in statute or as authorized by the state board of dentistry/dental hygiene.

### Career Options

Although the dental hygienist primarily provides preventive and therapeutic services in a private dental office or clinic, the hygienist 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:

- Demonstrate the knowledge to pass the National Board Dental Hygiene Examination (NBDHE).
- Demonstrate the clinical skills necessary to pass the California Registered Dental Hygienist Licensure Examination.
- Demonstrate the knowledge to pass the California Dental Law and Ethics Examinations.
- Secure entry-level employment as a dental hygienist.

### 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	3
	<b>OR</b>	
COMM 174	Interpersonal Communication	3
	<b>OR</b>	
COMM 176	Intercultural Communication	
ENGL 115	Reading and Composition: Exposition and Argumentation	4
PSYC 101	General Psychology	3
SOC 101	Introduction to Sociology	3
	<b>OR</b>	
SOC 110	Contemporary Social Problems	
<b>Total units</b>		<b>38</b>

## 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 113A	Clinical Concepts I	1
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 113B	Clinical Concepts II	1
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	2.5

**Total units** **55**

*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 51.*



# Economics

## School of Social Sciences and Humanities

**Dean** Mark Meadows, Ph.D., Office 470K, 619-482-6582

**Faculty** Peggy Crane, M.S.; Alexandria Davidson, M.A.

**Department Chair** Christopher Hayashi, M.A

### 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
<b>Total units</b>		<b>24–29</b>

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

\* 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 COURSES INFORMATION section on page 33 for further information.**

# Education

## School of Language and Literature

**Dean** Joel M. Levine, Ed.D., Office 430F, 619-482-6349

**Faculty** John Randall Beach, M.A.; Elisa Hedrick, M.A.; Cynthia McDaniel, Ed.D.; Michael Wickert, M.F.A.; Leslie Yoder, C.Phil.; Susan Yonker, M.A.

**Department Chair** Leslie Yoder, M.A.

### General Description

The Education program focuses on the acquisition of skills and knowledge necessary to complete a degree in education or to obtain a job in the teaching profession. Coursework explores philosophies of education and pedagogy while emphasizing career exploration through public speaking experience, tutor training, and early fieldwork in public school classrooms.

### Career Options

Employment opportunities in private and public schools for credentialed teachers are excellent due to pending retirements and the demand for graduates with bilingual or special education credentials. Below is a sample of the career options available for the Education major. A few of these require a significant accumulation of units, most require a bachelor's degree, and some require a California teaching credential or graduate-level degree: tutor, after-school program specialist, teaching assistant, substitute teacher, K–12 public school teacher, K–12 special education teacher, post-secondary teacher, self-enrichment teacher, speech-language pathologist, education administrator, counselor, adult literacy specialist, librarian, childcare worker, and psychologist.

### Degree/Certificate Options

#### Career/Technical: Certificate of Achievement

Teacher Education Preparation

### Major Code

01415

*Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.*

## CERTIFICATE

### Teacher Education Preparation

Certificate of Achievement

Career/Technical (Major Code: 01415)

Designed for students initiating their preparation to enter the education field. Includes early field experience in K–12 public school classrooms and the skills necessary for success as a teacher through specified coursework. Program participants must attend one STEP program orientation per semester.

COMM 103	Oral Communication	3
ED 100	Tutor Training: Level I	2
ED 110	Teaching and Learning Practicum	2
ED/ENGL 200	Teaching as a Profession	3
ENGL 115	Reading and Composition: Exposition and Argumentation*	4
<b>Total units</b>		<b>14</b>

\* Required ENGL 115 must be fulfilled by taking a section of ENGL 115 designated for "For Future Teachers".

# Electronics

## Departments of Applied Technology, CIS/Electronics, and Administration of Justice

**Dean** Terry Davis, M.H.A., Office 1000K, 619-482-6551

**Faculty** William Snell, M.S.; Russell Bonine

**Department Chair** Thomas Luibel, B.S.

### 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. Computer electronics is also emphasized with programs focused on microsoft certified systems. Intensive Training and Computer Systems Intensive Certification training. 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

#### Associate in Science Degree: Career/Technical

	Major Code
Computer Systems Intensive Certification Training	02135
Electronics—Computer Technician	A2907
Electronics—Internetwork Technician	A2911
Electronics—Network Administrator	A2913

#### Certificates of Achievement

Computer Systems Intensive Certification Training—Basic	02242
Computer Systems Intensive Certification Training—Advanced	A2136
Electronics—Computer Technician—Advanced	A2916
Electronics—Internetwork Technician—Advanced	A2918
Electronics—Network Administrator—Advanced	A2919

#### Certificates of Proficiency

Electronics—Computer Technician—Basic	A2908
Electronics—Internetwork Technician—Basic	A2912
Electronics—Network Administrator—Basic	A2914
Mobile Electronics—Basic	02902

*Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.*



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## ASSOCIATE IN SCIENCE DEGREE

### Computer Systems Intensive Certification Training

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.

ELEC 147	Computer Repair and Networking	12
ELEC 148	A+, Network+, and Server+ Certification Preparation	12
ELEC 149	Microsoft Certified Desktop Support Technician (MCDST) Certification	6
ELEC 290–293	Electronics Cooperative Work Experience I–IV (2–4)	2–4
<b>Total units</b>		<b>32–34</b>

To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.

### Electronics—Computer Technician

Career/Technical (Major Code: A2907)

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 260	Microcomputer Systems and A+ Certification	4
ELEC 266	Network Management for Technicians	4
ELEC 109/ CIS 119	Office Support and Network Technician (6)	6
<b>OR</b>		
ELEC/ CIS 10B	Microcomputer Hardware and Software Upgrade (2)	6
ELEC/ CIS 14	Office Automation Equipment Repair (2)	
ELEC 15	Data, Voice, and Video Cable Installation (2)	12
ELEC 147	Computer Repair and Networking	
ELEC 290	Electronics Cooperative Work Experience I	2–4
<b>Total units</b>		<b>33–35</b>

To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.

#### Independent National Certification Objectives

Designed to prepare students to take certification exams:

**A+ Computer Technician**

### Electronics—Internetwork Technician

Career/Technical (Major Code: A2911)

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/ CIS 142	Networking Academy Fundamentals (Cisco Certification Preparation)	3
ELEC 147	Computer Repair and Networking	12
ELEC 260	Microcomputer Systems and A+ Certification	4
ELEC 266	Network Management for Technicians	4
ELEC 290	Electronics Cooperative Work Experience I	2–4
<b>Total units</b>		<b>36–38</b>

To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.

#### 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

Career/Technical (Major Code: A2913)

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/ CIS 142	Networking Academy Fundamentals (Cisco Certification Preparation)	3
ELEC 147	Computer Repair and Networking	12
ELEC 260	Microcomputer Systems and A+ Certification	4
ELEC 265	Computer Networking for N+ Certification	4
ELEC 266	Network Management for Technicians	4
ELEC 290–293	Electronics Cooperative Work Experience I–IV (2–4)	2–4

Electronics Cooperative Work Experience I–IV (2–4) 2–4

**Total units** **31–33**

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

### Independent National Certification Objectives

Designed to prepare students to take certification exams in the following areas:

- \* A+ Computer Technician
- \* N+ Network Technician

## CERTIFICATES

### Computer Systems Intensive Certification Training—Basic

Certificate of Achievement

Career/Technical (Major Code: 02242)

Introduces students to basic computer repair and networking skills. Prepares students to take the Microsoft Certified Desktop Support Technician (MCDST) certification.

ELEC 147	Computer Repair and Networking	12
ELEC 148	A+, Network+, and Server+ Certification Preparation	12
<b>Total units</b>		<b>24</b>

### Computer Systems Intensive Certification Training—Advanced

Certificate of Achievement

Career/Technical (Major Code: A2136)

Reviews basic and advanced computer repair, operating systems, networking basics and server systems operation and prepares the students to pass the CompTIA certifications.

ELEC 147	Computer Repair and Networking	12
ELEC 148	A+, Network+, and Server+ Certification Preparation	12
ELEC 149	Microsoft Certified Desktop Support Technician (MCDST) Certification	6
ELEC 290–293	Electronics Cooperative Work Experience I–IV (2–4)	2–4
<b>Total units</b>		<b>32–34</b>

### Electronics—Computer Technician—Basic

Certificate of Proficiency

Career/Technical (Major Code: A2908)

Provides intensive training in the operation and maintenance of computers, computer peripherals, and computer networks.

#### Complete 6–8 units from the following:

ELEC 109/ CIS 119	Office Support and Network Technician (6)	6–8
<b>OR</b>		
ELEC/ CIS 10A	Microcomputer Repair and Service (2)	
ELEC/ CIS 10B	Microcomputer Hardware and Software Upgrade (2)	
ELEC/CIS 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
<b>Total units</b>		<b>15–17</b>



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## Electronics—Computer Technician— Advanced

Certificate of Achievement

Career/Technical (Major Code: A2916)

Provides intensive training in the theory and practice of the operation and maintenance of computers, computer peripherals, and computer networks.

CAD 220	Introduction to CADD/CAM Systems	3
CIS 130	Microcomputer Disk Operating System	1
CIS 139	Windowing Environments	1

### Complete 6 units from the following:

ELEC 109/ CIS 119	Office Support and Network Technician (6)	
	<b>OR</b>	6
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 147	Computer Repair and Networking	12
ELEC 260	Microcomputer Systems and A+ Certification	4
ELEC 266	Network Management for Technicians	4
ELEC 290	Electronics Cooperative Work Experience I	2-4
	<b>Total units</b>	<b>33-35</b>

## Electronics—Internetwork Technician— Basic

Certificate of Proficiency

Career/Technical (Major Code: A2912)

CIS/ ELEC 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
	<b>Total units</b>	<b>14</b>

## Electronics—Internetwork Technician— Advanced

Certificate of Achievement

Career/Technical (Major Code: A2918)

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 / CIS142	Networking Academy Fundamentals (Cisco Certification Preparation)	3
ELEC 147	Computer Repair and Networking	12
ELEC 260	Microcomputer Systems and A+ Certification	4
ELEC 266	Network Management for Technicians	4
ELEC 290	Electronics Cooperative Work Experience I	2-4
	<b>Total units</b>	<b>36-38</b>

## Electronics—Network Administrator— Basic

Certificate of Proficiency

Career/Technical (Major Code: A2914)

ELEC/ CIS 10A	Microcomputer Repair and Service	2
ELEC/ CIS 10B	Microcomputer Hardware and Software Upgrade	2
ELEC/ CIS 145	Networking Academy Fundamentals (Cisco Certification Preparation)	3
ELEC 260	Microcomputer Systems and A+ Certification	4
ELEC 265	Computer Networking for N+ Certification	4
	<b>OR</b>	4
ELEC 266	Network Management for Technicians	
	<b>Total units</b>	<b>15</b>

## Electronics—Network Administrator—Advanced

Certificate of Achievement

Career/Technical (Major Code: A2919)

ELEC/ CIS 10B	Microcomputer Hardware and Software Upgrade	2
ELEC 147	Computer Repair and Networking	12
ELEC 260	Microcomputer Systems and A+ Certification	4
ELEC 265	Computer Networking for N+ Certification	4
ELEC 266	Network Management for Technicians	4
ELEC 290–293	Electronics Cooperative Work Experience I–IV (2-4)	2–4
<b>Total units</b>		<b>28–30</b>

## Mobile Electronics—Basic

Certificate of Proficiency

Career/Technical (Major Code: 02902)

Provides entry-level training in the installation and troubleshooting of audio, video, and security systems in automobiles. Introduces students to installation and testing of related systems and technology for businesses and homes.

<b>Complete 6 to 10 units from the following:</b>		6–10
ELEC 15	Data, Voice, and Video Cable Installation (2)	
ELEC 20A	Mobile Electronics Certification I (2)	
ELEC 20B	Mobile Electronics Certification II (2)	
<b>OR</b>		
ELEC 109/ CIS 119	Office Support and Network Technician (6)	
ELEC 20A	Mobile Electronics Certification I (2)	
ELEC 20B	Mobile Electronics Certification II (2)	
<b>Total units</b>		<b>6–10</b>

# Emergency Medical Technology and Paramedic

## Higher Education Center at Otay Mesa

**Dean** Silvia Cornejo, M.A., Office 4118D, 619-482-6755

**Faculty** Clark Binley, B.S.; Joanne Stonecipher, M.S.; Ronald Ungar, M.A.

**Department Chair** Gary Creason, M.S.

### General Description

Emergency medical technology and paramedic is the study of emergency medical care and the evaluation and treatment of injuries. These programs focus on both technical and practical knowledge while providing requisite skills to evaluate and treat a wide variety of medical and trauma emergencies in the prehospital setting. Students learn to administer medication, start intravenous lines, interpret EKG rhythm strips, and defibrillate patients in cardiac arrest, as well as to administer many other advanced life support procedures.

### Career Options

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
<b>Associate in Science Degree: Career/Technical</b>	
Emergency Medical Technology and Paramedic	02340
<b>Certificate of Achievement</b>	
Emergency Medical Technology and Paramedic	02341

*Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.*



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## ASSOCIATE IN SCIENCE DEGREE

### Emergency Medical Technology and Paramedic

Career/Technical (Major Code: 02340)

Prepares students to give prehospital emergency care with classroom work and training in hospitals and in first-response vehicles in the field. Upon program completion, the students are eligible to take the exam for national certification. Students desiring to earn the associate in science degree should consult a counselor.

#### Department acceptance required for this program.

##### Prerequisites:

BIOL 190	Human Anatomy and Physiology	4
EMT 113	Emergency Medical Technician—Basic (Theory)	5
EMT 113L	Emergency Medical Technician—Basic (Laboratory)	3

##### First Semester

EMTP 200	Advanced Life Support Paramedic Theory I	8
EMTP 200L	Advanced Life Support Paramedic Laboratory I	3
EMTP 202	EMS Community Experience I	1

##### Second Semester

EMTP 201	Advanced Life Support Paramedic Theory II	8
EMTP 201L	Advanced Life Support Paramedic Laboratory II	3
EMTP 203	EMS Community Experience II	1

##### Summer Session

EMTP 225	Hospital Clinical Experience for Paramedics	2
EMTP 230	Field Training for Paramedics I	8
EMTP 231	Field Training for Paramedics II	1

**Total units** **47**

#### Required courses for an associate in science degree

COMM 104	Public Speaking	
	<b>OR</b>	3
COMM 174	Interpersonal Communication	
ENGL 115	Reading and Composition: Exposition and Argumentation	
	<b>OR</b>	4
ENGL 116	Critical Thinking and Composition	
PSYC 101	General Psychology	3
<b>Total units</b>		<b>10</b>

**Recommended Elective:** SOC 135.

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

#### 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 6.5 units for previous EMT-1 training. The student may receive a maximum of 35 units for previous EMTP training.

**Note:** Grade of "C" is required for each course for progression and completion.

## CERTIFICATE

### Emergency Medical Technology and Paramedic

Certificate of Achievement

Career/Technical (Major Code: 02341)

#### Department acceptance required for this program.

##### Prerequisites:

BIOL 190	Human Anatomy and Physiology	4
EMT 113	Emergency Medical Technician—Basic (Theory)	5
EMT 113L	Emergency Medical Technician—Basic (Laboratory)	3

##### First Semester

EMTP 200	Advanced Life Support Paramedic Theory I	8
EMTP 200L	Advanced Life Support Paramedic Laboratory I	3
EMTP 202	EMS Community Experience I	1

##### Second Semester

EMTP 201	Advanced Life Support Paramedic Theory II	8
EMTP 201L	Advanced Life Support Paramedic Laboratory II	3
EMTP 203	EMS Community Experience II	1

##### Summer Session

EMTP 225	Hospital Clinical Experience for Paramedics	2
EMTP 230	Field Training for Paramedics I	8
EMTP 231	Field Training for Paramedics II	1

**Total units** **47**

# Engineering

## School of Mathematics, Science, and Engineering

**Interim Dean** Richard Fielding, M.S., Office 345A, 619-482-6344

**Faculty** Lauren Zinola, M.A.

**Department Chair** Tinh-Alfredo V. Khuong, 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

#### Associate in Science Degree: Transfer Preparation

Engineering

#### Major Code

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
MATH 250	Analytic Geometry and Calculus I	5

#### Second Semester

ENGR 120C	Engineering Problem Analysis—C/C++ Language	3
MATH 251	Analytic Geometry and Calculus II	4
PHYS 270	Principles of Physics I	3

#### Third Semester

ENGR 250	Engineering Statics	3
MATH 252	Analytic Geometry and Calculus III	4
PHYS 272	Principles of Physics II	3
PHYS 273	Principles of Physics Laboratory II	1

#### Fourth Semester

ENGR 204	Engineering Dynamics for Electrical Engineers (1.5)	1.5–3
	<b>OR</b>	
ENGR 251	Engineering Dynamics (3)	
ENGR 270	Electrical Circuits	3
PHYS 274	Principles of Physics III	3
PHYS 275	Principles of Physics Laboratory III	1

**Total units** 42.5–44

**Recommended Elective:** ENGR 101.

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

\* 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 COURSES INFORMATION section on page 33 for further information.**

*The program outlined fulfills the requirements for San Diego State University and the California State University system.*



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

# English

## School of Language and Literature

**Dean** Joel M. Levine, Ed.D., Office 430F, 619-482-6349

**Faculty** John Randall Beach, M.A.; Francisco Bustos, M.F.A.; Heather Eudy, M.F.A.; Dagmar Fields, M.A.; Elisa Hedrick, M.A.; Steve Kowit, M.F.A.; Philip López, M.A.; Noreen Maddox, 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.; Michael Wickert, M.F.A.; Leslie Yoder, C.Phil.; Susan Yonker, M.A.; Eileen Zamora, M.A.

**Department Chair** Leslie Yoder, M.A.

### General Description

The English majors focus on the study of the language and literature of English. Majors explore the grammar and prose of the English language including expository, argumentative, and creative writing, critical and analytical reading, and literary genres (fiction, nonfiction, poetry, drama) and modes (comedy, tragedy, satire, and romance).

### Career Options

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

#### Associate in Arts Degree: Transfer Preparation

	Major Code
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	4
ENGL 116	Critical Thinking and Composition	4
ENGL 240	English Literature	3
ENGL 241	English Literature II	3
Complete 6 units from electives		6
<b>Total units</b>		<b>20</b>

**Electives:** Complete 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 51.*

- \* 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 COURSES INFORMATION section on page 33 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	4
ENGL 116	Critical Thinking and Composition	4
ENGL 220	Introduction to Literature	3
Complete 9 units from electives		9
<b>Total units</b>		<b>20</b>

**Electives:** Complete 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 51.*

- \* 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 COURSES INFORMATION section on page 33 for further information.**

# English as a Second Language

## School of Language and Literature

**Dean** Joel M. Levine, Ed.D., Office 430F, 619-482-6349

**Faculty** Surian Figueroa, M.A.; Patricia Kelly, M.A.; Courtney Leckey, 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.; Jessica Whitsett, M.A.

**Department Chair** Surian Figueroa, M.A.

### General Description

Learning English for academic purposes is designed to get students ready for transfer into academic programs. The classes focus on academic vocabulary and concepts. Language is taught using a content-based approach. Each level is taught using a theme that draws content from other disciplines on campus. English skills are integrated with an emphasis on reading and writing.

El programa Inglés con Propósitos Académicos ha sido diseñado para preparar a los estudiantes que desean ingresar en programas académicos. Las clases hacen énfasis en el vocabulario y en los conceptos académicos. La enseñanza del idioma está enfocada hacia el contenido. La enseñanza de cada nivel se basa en un tema de alguna de las otras disciplinas que se estudian en el campus. Se prepara en el idioma inglés de forma integral haciendo énfasis en la lectoescritura.

### 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.

Existen muchas opciones profesionales disponibles para aquellos que se puedan comunicar de forma efectiva en más de un idioma. El mundo de hoy es una comunidad global donde las oportunidades de empleo para los individuos que hayan tenido una educación formal se extienden a través de más de un continente, varios países y muchas culturas diferentes. Existen opciones profesionales que van desde el nivel principiante hasta las posiciones más altas dentro de los campos empresariales, industriales, educativos, religiosos y gubernamentales.

*Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.*

*Consulte con un asesor para desarrollar un Plan Educativo Estudiantil (SEP, por sus siglas en inglés) que incluya las materias necesarias para alcanzar sus metas académicas.*



## 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, intermediate high, or advanced levels.

#### First Semester

ESL 29A	Learning English for Academic Purposes 1A	4
ESL 29B	Learning English for Academic Purposes 1B	4
ESL 29C	Learning English for Academic Purposes 1C	2
Complete 3 or more units from electives		3

#### Second Semester

ESL 39A	Learning English for Academic Purposes 2A	4
ESL 39B	Learning English for Academic Purposes 2B	4
ESL 39C	Learning English for Academic Purposes 2C	2
Complete 3 or more units from electives		3

#### Third Semester

ESL 49A	Learning English for Academic Purposes 3A	4
ESL 49B	Learning English for Academic Purposes 3B	4
ESL 40C	Learning English for Academic Purposes 3C	2
Complete 3 or more units from electives		3

#### Fourth Semester

ESL 59A	Learning English for Academic Purposes 4A	2
ESL 59B	Learning English for Academic Purposes 4B	2
ESL 159A	Learning English for Academic Purposes 4C	4
ESL 159B	Learning English for Academic Purposes 4D	4

**Total units** 51

**Recommended Electives:** ESL 15 (may be taken after ESL 29); ESL 17 (may be taken at any level); ESL 51 (may be taken at ESL 39 or 49 level.) ESL 16 and 53 (may be taken at 49 level); other electives include ESL 21, 30, 31, 40.

It is recommended that students take the English Placement Assessment after completing the fourth semester of ESL.

*Note: The core program consists of four levels (beginning, intermediate, intermediate high, and advanced) of coordinated courses in Learning English for Academic Purposes. Special skill classes may also be taken (ESL 15, 16, 17, 51, 53). An ESL practicum program is offered only in summer.*

## Inglés Como Segunda Lengua

### Programa de Estudios

Las materias del programa de Inglés como Segunda Lengua han sido diseñadas pensando en los estudiantes cuyo primer idioma no es el inglés. La meta del programa es preparar a los estudiantes para ingresar en programas académicos o vocacionales a nivel superior.

El nivel de ingreso se determina con el Procedimiento de Evaluación de ESL. Los estudiantes pueden ingresar en el nivel principiante, intermedio, intermedio superior o avanzado.

#### Primer Semestre

ESL 29A	Aprendizaje del Inglés con Propósitos Académicos 1A	4
ESL 29B	Aprendizaje del Inglés con Propósitos Académicos 1B	4
ESL 29C	Aprendizaje del Inglés con Propósitos Académicos 1C	2
Completar 3 o más unidades en materias electivas		3

#### Segundo Semestre

ESL 39A	Aprendizaje del Inglés con Propósitos Académicos 2A	4
ESL 39B	Aprendizaje del Inglés con Propósitos Académicos 2B	4
ESL 39C	Aprendizaje del Inglés con Propósitos Académicos 2C	2
Completar 3 o más unidades en materias electivas		3

#### Tercer Semestre

ESL 4A	Aprendizaje del Inglés con Propósitos Académicos 3A	4
ESL 49B	Aprendizaje del Inglés con Propósitos Académicos 3B	4
ESL 49C	Aprendizaje del Inglés con Propósitos Académicos 3C	2
Completar 3 o más unidades en materias electivas		3

#### Cuarto Semestre

ESL 59A	Aprendizaje del Inglés con Propósitos Académicos 4A	2
ESL 59B	Aprendizaje del Inglés con Propósitos Académicos 4B	2
ESL 159A	Aprendizaje del Inglés con Propósitos Académicos 4C	4
ESL 159B	Aprendizaje del Inglés con Propósitos Académicos 4D	4

**Total de Unidades** 51

Materias Electivas Recomendadas: ESL 15 (puede tomarse después de ESL 29); ESL 17 (se puede tomar en cualquier nivel); ESL 51 (puede tomarse en el nivel ESL 39 ó 49); ESL 16 y 53 (se pueden tomar en el nivel 49); otras materias electivas incluyen ESL 21, 30, 31, 40.

Se recomienda que los estudiantes tomen la Prueba del Nivel de Inglés después de haber terminado el cuarto semestre de ESL.

*Nota: El programa básico consiste de cuatro niveles (principiante, intermedio, intermedio superior y avanzado) de materias coordinadas de Aprendizaje del Inglés con Propósitos Académicos. Se pueden también tomar materias de áreas específicas (ESL 15, 16, 17, 51, 53). Ofrecemos un programa práctico de ESL sólo durante el verano.*

# Environmental Technology

## School of Health, Exercise Science, and Athletics

**Dean** Terry Davis, M.H.A., Office 1000K, 619-482-6551

**Faculty** Marie Vicario-Fisher, M.P.H.

**Department Chair** Walt Justice, M.A.

### 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 230	Safety and Emergency Response	4
EHMT 290–293		

Environmental Technology Cooperative  
Work Experience I–IV 2–4

**Total units** 35–37

**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 51.*

A 40-hour HAZWOPER certification that meets OSHA requirements for 29 CFR 1910.120 is given upon the successful completion of EHMT 230.



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## 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
<b>Total units</b>		<b>33–37</b>

**Recommended Electives:** BIOL 211, 265; MATH 119

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

A forty-hour HAZWOPER certification that meets OSHA requirements for 29 CFR 1910.120 is given upon the successful completion of EHMT 230.

## CERTIFICATES

### Environmental Management

#### Certificate of Achievement

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 230	Safety and Emergency Response	4
<b>Total units</b>		<b>22</b>

### Occupational Health and Safety

#### Certificate of Achievement

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
<b>Total units</b>		<b>18</b>

**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.

# Event and Convention Planning

## Departments of Business, Accounting, and Office Information Systems

**Dean** Mark Meadows, Ph.D., Office 215, 619-482-6460

**Department Chair** Dick Wasson, M.B.A.

### 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, Professional & Technical Education in our basic and advanced certificate programs.

In addition to these career training programs, a transfer program, Hospitality and Tourism Management, has been developed for persons who desire to transfer to a four-year institution including San Diego State University or 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

#### Certificate of Achievement

Event and Convention Planning—Advanced	02967
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#### Certificate of Proficiency

Event and Convention Planning—Basic	02966
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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.*

## CERTIFICATES

### Event and Convention Planning—Basic

Certificate of Proficiency

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/LIB 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
<b>Total units</b>		<b>11</b>

### Event and Convention Planning—Advanced

Certificate of Achievement

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)	
	<b>OR</b>	3–4
ACCT 101	Principles of Accounting I (4)	
BUS 210	Business English	3
BUS 290–293		
	Work Experience in Business I–IV (2–4)	2
CIS 122B	Spreadsheet Software—Excel	1
CIS/LIB 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
<b>Total units</b>		<b>20–21</b>

*Note: For other options in Event and Convention Planning, see Hospitality, page 172.*



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

# Exercise Science

## School of Health, Exercise Science and Athletics

**Dean** Terry Davis, M.H.A., Office 1000K, 619-482-6551

**Faculty** Duro Agbede, Ph.D.; Edward A. Carberry, M.A.; 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.; Dionicio Monarrez, M.Ed.; Michael Meehan, M.Ed.; Michael Pompa, M.A.; Art Stone, M.A.; Mustafa Tont, M.A., M.Ed.

**Department Chair** Karen Day Cravens, M.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

	<b>Major Code</b>
<b>Associate in Arts Degree: Transfer Preparation</b>	
Exercise Science	A1360

### Certificate of Achievement

Fitness Specialist Certification—Advanced	01362
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### Certificate of Proficiency

Fitness Specialist Certification—Basic	01361
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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

### 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
Complete 1 unit from ES/Activity		1

#### Fourth Semester

BIOL 261	Principles of Human Physiology	4
PSYC 101	General Psychology	3
Complete 1 unit from ES/Activity		1

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<b>Total units</b>	<b>31</b>
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*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

\* 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 COURSES INFORMATION section on page 33 for further information.**

## CERTIFICATES

### Fitness Specialist Certification—Basic

Certificate of Proficiency

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
<b>Total units</b>		<b>16</b>

### Fitness Specialist Certification—Advanced

Certificate of Achievement

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	3
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
ES/T 250	Prevention and Care of Athletic Injuries	2
<b>Total units</b>		<b>21</b>

## Fire Science Technology

### Higher Education Center at Otay Mesa

**Dean** Silvia Cornejo, M.A., Office 4118D, 619-482-6755

**Faculty** Richard Sherard, A.A.

**Department Chair** Gary Creason, M.S.

#### General Description

Today, fire service personnel are faced with a diverse and complex environment. Fire fighters must possess sufficient knowledge and skills to deal effectively with the fire protection problem, emergency medical care response, and hazardous materials. The study of fire science includes the philosophy, history, chemistry, physics, laws, terminology, technology and detection, and prevention of fires.

#### Career Options

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

##### Associate in Science Degree: Career/Technical

Fire Science Technology	02845
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##### Certificate of Achievement

Fire Science Technology	02846
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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.*



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## 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
Complete 20 units from electives		20
<b>Total units</b>		<b>35</b>

**Electives:** EMT 109, 101, 112, 112L, FS 10, 12, 20, 40, 108, 110, 125, 126, 137, 140, 141, 144, 145, 150, 151, 290–293.

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## CERTIFICATE

### Fire Science Technology

Certificate of Achievement

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
Complete 20 units from electives		20
<b>Total units</b>		<b>35</b>

**Electives:** EMT 109, 101, 112, 112L, FS 10, 12, 20, 40, 108, 110, 125, 126, 137, 140, 141, 144, 145, 150, 151, 290.

# French

## School of Language and Literature

**Dean** Joel M. Levine, Ed.D., Office 430F, 619-482-6349

**Faculty** Nora Portillo, M.A.

**Department Chair** Dinorah Guadiana-Costa, 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 101 Elementary French I 5

#### Second Semester

FREN 102 Elementary French II 5

#### Third Semester

FREN 201 Intermediate French I 5

#### Fourth Semester

FREN 202 Intermediate French II 5

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**Total units** 20

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

\* 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 COURSES INFORMATION section on page 33 for further information.**



# Geography

## School of Mathematics, Science, and Engineering

**Interim Dean** Richard Fielding, M.S., Office 345A, 619-482-6344

**Faculty** Ken Yanow, M.S., M.A.

**Department Chair** Tinh-Alfredo V. Khuong, 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

#### Associate in Arts Degree: Transfer Preparation

	Major Code
Geography	01770

#### Certificates of Proficiency:

Geographic Information Science—Continuing Students and Working Professionals	01771
Geospatial Technology Technician	A1772

*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
<b>Total units</b>		<b>19–22</b>

**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; 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 51.*

\* 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 COURSES INFORMATION section on page 33 for further information.**

# CERTIFICATES

## Geographic Information Science— Continuing Students and Working Professionals

Certificate of Proficiency

Career/Technical (Major Code: 01771)

The following certificate track is designed for 1) continuing students seeking training in Geographic Information Science (GIS) for their specific discipline, and 2) working professionals seeking GIS training for their present job. The program introduces both GIS concepts and applications. Special emphasis is on hands-on experience with the hardware, software, and techniques employed in science, industry, and academia.

GIS integrates innovative tools and techniques that enables users to view and analyze temporal and spatial information in an exciting, dynamic, and productive fashion. Ultimately, a GIS helps you solve problems by looking at data in a way that is readily understood and easily shared. The ability of GIS to manage, correlate, predict, model, and share spatial information, visually and dynamically, makes GIS an essential component for any spatial discipline, including (but not limited to) geography, geology, environmental science, biology, political science, anthropology, humanities, criminal justice, health, history, education, economics, real estate, and military science.

GEOG 145	Introduction to Mapping and Geographic Information Science (GIS)	3
<b>OR</b>		
GEOG 150	Geographic Information Science and Spatial Reasoning	3
GEOG 151	Intermediate GIS—Techniques and Analysis	3
GEOG 152	Advanced GIS—Project Design and Applications	3
<b>Total units</b>		<b>9</b>

## Geospatial Technology Technician

Certificate of Achievement

Career/Technical (Major Code: A1772)

The following certificate track is designed for students seeking an entry-level position as a Geospatial Technology Technician. The program introduces both geospatial concepts and applications (including Geographic Information Systems (GIS), remote sensing, and image analysis). Special emphasis is on hands-on experience with the hardware, software, and techniques employed in science, industry, and academia. All of the core courses in this certificate track are short-track (8-weeks in length) and 100% online; the internship course (GEOG 153) will take place on campus or at a private or public entity.

Geospatial Technology integrates innovative tools and techniques that enables users to view and analyze temporal and spatial information in an exciting, dynamic, and productive fashion. Ultimately, geospatial technology (including GIS, remote sensing, and image analysis) helps one solve problems by looking at data in a way that is readily understood and easily shared. Today, a significant need exists within the workforce for personnel trained as Geospatial Technology Technicians. For further information visit <http://www.swccd.edu/~gis> or contact Professor Ken Yanow ([kyanow@swccd.edu](mailto:kyanow@swccd.edu)).

GEOG 145	Introduction to Mapping and Geographic Information Science (GIS)	3
<b>OR</b>		
GEOG 150	Geographic Information Science and Spatial Reasoning	3
GEOG 151	Intermediate GIS—Techniques and Analysis	3
GEOG 152	Advanced GIS—Project Design and Applications	3
GEOG 154	Introduction to Remote Sensing	3
<b>OR</b>		
PHS 154	Introduction to Remote Sensing	3
GEOG 155	Introduction to Image Analysis	3
<b>OR</b>		
PHS 155	Introduction to Image Analysis	3
GEOG 153	GIS Internship	2–4
<b>Total units</b>		<b>15–17</b>



# Geology

## School of Mathematics, Science, and Engineering

**Interim Dean** Richard Fielding, M.S., Office 345A, 619-482-6344

**Faculty** Ken Yanow, M.S., M.A.

**Department Chair** Tinh-Alfredo V. Khuong, 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

#### Associate in Science Degree: Transfer Preparation

Geology

#### Major Code

01780

*Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.*

## ASSOCIATE IN SCIENCE DEGREE

### Geology

Transfer Preparation \* (Major Code: 01780)

Designed for students who desire a general background in the field of geology in preparation for transfer to another college or university. Some of the courses listed below require the completion of prerequisites, and students should begin with the study of biology and mathematics.

Geology majors are advised to give first priority 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	3
PHYS 273	Principles of Physics Laboratory II	1

#### Fourth Semester

MATH 130	Introduction to Computer Programming	4
PHYS 274	Principles of Physics III	3
PHYS 275	Principles of Physics Laboratory III	1

**Total units** 47

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

\* 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 COURSES INFORMATION section on page 33 for further information.**

# History

## School of Social Sciences and Humanities

**Dean** Mark Meadows, Ph.D., Office 470K, 619-482-6582

**Faculty** Victor Chavez, M.A.; Rosalinda González, Ph.D.; Barry Horlor, M.A.; Stanley James, M.A.; Norris S. Nagao, M.A.; Laura Ryan, M.A.; Felix Tuyay, M.A.

**Department Chair** Stanley James, 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

#### Associate in Arts Degree: Transfer Preparation

History

### Major Code

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.

**Complete 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)

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**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 51.*

\* 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 COURSES INFORMATION section on page 33 for further information.**



# Hospitality and Tourism Management

## Departments of Business, Accounting, and Office Information Systems

**Dean** Mark Meadows, Ph.D., Office 215, 619-482-6460

**Faculty** 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** Dick Wasson, M.B.A.

### 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, Professional & Technical Education 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, Professional & Technical Education 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, Hospitality and Tourism Management, has been developed for students who desire to transfer to four-year institutions including San Diego State 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. 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, rooms 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

### Major Code

#### Associate in Science Degree: Career/Technical

Hospitality: Culinary Arts—Food Services Management	A1821
Hospitality: Event and Convention Management	02994
Hospitality: Hotel Operations Management	02991
Hospitality: Travel and Tourism Management	02997

#### Certificates of Achievement

Hospitality: Culinary Arts—Food Services Management—Basic	A1822
Hospitality: Culinary Arts—Food Services Management—Advanced	A1823
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 SCIENCE DEGREE

## Hospitality: Culinary Arts—Food Services Management

Career/Technical (Major Code: A1821)

Prepares students with the expertise, commitment, and skills for management, marketing, and operations positions in the food service industry.

ACCT/	Hospitality Management Accounting	4
HTM 153		
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 211	Communication in Business and Industry	3
	<b>OR</b>	
BUS 212	Business Communication	3
BUS 290–293		
	Work Experience in Business I–IV (2–4)	2
EVNT 155	Event Marketing	3
HTM 156	Restaurant and Food Service Management	3

### Complete 12 units from Group A—Culinary or Group B—Baking and Pastry

#### Group A—Culinary

CA 170	Professional Cooking—Basic Skills (3)	
CA 171	Soups, Stocks, and Sauces (3)	
CA 172	Professional Cooking—Advanced Skills (3)	
CA 173	Professional Cooking—Cultural Foods (3)	
	<b>OR</b>	12

#### Group B—Baking and Pastry

CA 182	Introduction to Baking Skills and Culinary Arts (3)	
CA 184	Professional Baking and Production Basics (3)	
CA 185	Professional Pastry Design and Decorating (3)	
CA 186	Professional Baking and Pastry Production—Breads (3)	

Plus the required courses for the Hospitality:

Culinary Arts—Food Services Management—Basic certificate	19–20
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**Total units** 51–52

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## 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
	<b>OR</b>	
BUS 212	Business Communication	3
BUS 290–293		
	Work Experience in Business I–IV (2–4)	2
CIS 92	Microsoft Office Suite (3)	3–4
	<b>OR</b>	
CIS 101	Introduction to Computers and Information Processing (4)	3–4
CIS/LIB 151	Research Using the Internet	1
CA 183	Food Purchase and Control	2
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
<b>Total units</b>		<b>41–42</b>

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*



## 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/HTM 153	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
	<b>OR</b>	
BUS 212	Business Communication	
BUS 290–293	Work Experience in Business I–IV (2–4)	2
CIS 92	Microsoft Office Suite (3)	3–4
	<b>OR</b>	
CIS 101	Introduction to Computers and Information Processing (4)	
CIS/LIB 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
	<b>Total units</b>	<b>40–41</b>

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## 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
	<b>OR</b>	
BUS 212	Business Communication	
CIS 92	Microsoft Office Suite (3)	3–4
	<b>OR</b>	
CIS 101	Introduction to Computers and Information Processing (4)	
CIS/LIB 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 290–293	Cooperative Work Experience in Travel and Tourism I–IV (2–4)	2
	<b>Total units</b>	<b>44–45</b>

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## CERTIFICATES

### Hospitality: Culinary Arts—Food Services Management—Basic

Certificate of Achievement

Career/Technical (Major Code: A1822)

Prepares students with the expertise, commitment, and skills for entry-level operations positions in the food service industry.

ACCT 101	Principles of Accounting I	4
BUS 183	Business Mathematics	3
BUS 210	Business English	3
CA 181	Food Service Safety, Sanitation, and Nutrition	1
CA 183	Food Purchase and Control	2
CIS 92	Microsoft Office Suite (3)	3-4
<b>OR</b>		
CIS 101	Introduction to Computers and Information Processing (4)	
HTM 150	Introduction to Hospitality and Tourism Management	3
<b>Total units</b>		<b>19-20</b>

### Hospitality: Culinary Arts—Food Services Management—Advanced

Certificate of Achievement

Career/Technical (Major Code: A1823)

Prepares students with the expertise, commitment, and skills for management, marketing, and operations positions in the food service industry.

ACCT/ HTM 153	Hospitality Management Accounting	4
BUS 140	Business Law/The Legal Environment of Business	3
BUS 142	Business Ethics—Corporate and Personal	1
BUS 211	Communication in Business and Industry	3
<b>OR</b>		
BUS 212	Business Communication	
BUS 290-293	Work Experience in Business I-IV (2-4)	2
EVNT 155	Event Marketing	3
HTM 156	Restaurant and Food Service Management	3

#### Complete 12 units from Group A—Culinary or Group B—Baking and Pastry

##### Group A—Culinary

CA 170	Professional Cooking—Basic Skills (3)	12
CA 171	Soups, Stocks, and Sauces (3)	
CA 172	Professional Cooking—Advanced Skills (3)	
CA 173	Professional Cooking—Cultural Foods (3)	
<b>OR</b>		

##### Group B—Baking and Pastry

CA 182	Introduction to Baking Skills and Culinary Arts (3)
CA 184	Professional Baking and Production Basics (3)
CA 185	Professional Pastry Design and Decorating (3)
CA 186	Professional Baking and Pastry Production—Breads (3)

Plus the required courses for the Hospitality:

Culinary Arts—Food Services Management—Basic certificate	19-20
<b>Total units</b>	<b>50-51</b>



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## Hospitality: Event and Convention Management—Basic

Certificate of Achievement

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)		
	<b>OR</b>		
ACCT 101	Principles of Accounting I (4)	3–4	
BUS 210	Business English	3	
CIS 92	Microsoft Office Suite (3)		
	<b>OR</b>		
CIS 101	Introduction to Computers and Information Processing (4)	3–4	
CIS/LIB 151	Research Using the Internet	1	
CA 183	Food Purchase and Control	2	
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	
	<b>Total units</b>		<b>24–26</b>

## Hospitality: Event and Convention Management—Advanced

Certificate of Achievement

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
	<b>OR</b>		
BUS 212	Business Communication		3
BUS 290–293	Work Experience in Business I–IV (2–4)		2
CIS/LIB 151	Research Using the Internet		1
CIS 92	Microsoft Office Suite (3)		
	<b>OR</b>		
CIS 101	Introduction to Computers and Information Processing (4)		3–4
CA 183	Food Purchase and Control		2
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
	<b>Total units</b>		<b>41–42</b>

## Hospitality: Hotel Operations Management—Basic

Certificate of Achievement

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	Microsoft Office Suite (3)		
	<b>OR</b>		
CIS 101	Introduction to Computers and Information Processing (4)		3–4
CIS/LIB 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
	<b>Total units</b>		<b>23–24</b>

## Hospitality: Hotel Operations Management—Advanced

Certificate of Achievement

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/ HTM 153	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
	<b>OR</b>	
BUS 212	Business Communication	3
BUS 290–293	Work Experience in Business I–IV (2–4)	2
CIS 92	Microsoft Office Suite (3)	3–4
	<b>OR</b>	
CIS 101	Introduction to Computers and Information Processing (4)	3–4
CIS/LIB 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
	<b>Total units</b>	<b>40–41</b>

## Hospitality: Travel and Tourism Management—Basic

Certificate of Achievement

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	Microsoft Office Suite (3)	3–4
	<b>OR</b>	
CIS 101	Introduction to Computers and Information Processing (4)	3–4
CIS/LIB 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
	<b>Total units</b>	<b>21–22</b>

## Hospitality: Travel and Tourism Management—Advanced

Certificate of Achievement

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	3
	<b>OR</b>	
BUS 212	Business Communication	3
CIS 92	Microsoft Office Suite (3)	3–4
	<b>OR</b>	
CIS 101	Introduction to Computers and Information Processing (4)	3–4
CIS/LIB 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 290–293	Cooperative Work Experience Travel and Tourism I–IV (2–4)	2
	<b>Total units</b>	<b>44–45</b>



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

# Humanities

## School of Social Sciences and Humanities

**Dean** Mark Meadows, Ph.D., Office 470K, 619-482-6582

**Faculty** Peter Bolland, M.A.; Alejandro Orozco, M.A.; Vivien Vaughan, M.F.A.

**Department Chair** Peter Bolland, 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

#### Associate in Arts Degree: Transfer Preparation

Humanities

#### Major Code

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)	
	<b>OR</b>	3-6
HUM 104	Introduction to Humanities: Arts and Ideas (3)	
Complete 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 51.*

\* 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 COURSES INFORMATION section on page 33 for further information.**

# Insurance

## Higher Education Center at Otay Mesa

**Dean** Silvia Cornejo, M.A., Office 4118D, 619-482-6755

**Faculty** Frank Paiano, M.B.A.

**Department Chair** Marisa Soler-McElwain, LL.M.

### General Description

The Insurance program was developed as part of a statewide 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/or 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 claims and policy processing clerk, insurance underwriter, sales agent, claims adjuster/examiner, and investigator.

### Degree/Certificate Options

	Major Code
<b>Associate in Science Degree: Career/Technical</b>	
Insurance	02181
<b>Certificate of Achievement</b>	
Insurance—Advanced	02183
<b>Certificate of Proficiency</b>	
Insurance—Basic	02182

*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

### 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)	
	<b>OR</b>	3–4
ACCT 101	Principles of Accounting I (4)	
BUS 120	Introduction to Business	
	<b>OR</b>	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	
	<b>OR</b>	3
BUS 212	Business Communication	
BUS 290–293	Work Experience in Business I–IV (2–4)	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)	
	<b>OR</b>	2
LDR 149	Business Presentation Skills	
<b>Total units</b>		<b>41–42</b>

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*



## CERTIFICATES

### Insurance—Basic

Certificate of Proficiency

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
<b>Total units</b>		<b>11</b>

### Insurance—Advanced

Certificate of Achievement

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)	
<b>OR</b>		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 (3)	
<b>OR</b>		3
BUS 211	Communication in Business and Industry (3)	
<b>OR</b>		
BUS 212	Business Communication (3)	
BUS 290–293	Work Experience in Business I–IV	2–4
CIS 92	Microsoft Office Suite (3)	
<b>OR</b>		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
<b>Total units</b>		<b>26–30</b>

# International Business

## Higher Education Center at Otay Mesa

**Dean** Silvia Cornejo, M.A., Office 4118D, 619-482-6755

**Faculty** Elisabeth Shapiro, J.D.

**Department Chair** Marisa Soler-McElwain, LL.M.

### General Description

The International Business program at Southwestern College provides students with a small business approach to international business theory, import/export trade, logistics, e-business/e-commerce, cultural diversity, and international business law and regulation. Students explore the theoretical and practical aspects of working within our global business environment.

### Career Options

Most of the career options that follow require at least an associate degree and some require a bachelor's or graduate level degree. These include international business owner/entrepreneur, exporter, importer, logistics and transportation manager, accountant, financial officer, international banker, and human resources manager/director

### Degree/Certificate Options

### Major Code

#### Associate in Arts Degree: Career/Technical

International Business 02038

#### Certificate of Achievement:

International Business—Intermediate 02039

#### Certificate of Proficiency:

International Business—Basic A2119

*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

## International Business

Career/Technical (Major Code 02038)

Provides a practical approach to the study of international trade topics relevant in today's global economy.

ACCT 12	Computerized Accounting (3)		
	<b>OR</b>		3–4
ACCT 102	Principles of Accounting II—Managerial (4)		
	Complete 5 units in a foreign language at the intermediate level (201 level or higher or Spanish 215 or 216)	5	
	Plus the courses required for the International Business—Intermediate certificate program		31–35
<b>Total units</b>			<b>39–44</b>

To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.

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

# CERTIFICATES

## International Business—Basic

Certificate of Proficiency

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)	
	<b>OR</b>	1–4
CIS 101	Introduction to Computers and Information Processing (4)	
<b>Total units</b>		<b>13–16</b>

**Recommended Electives:** 3–5 units in a foreign language

## International Business—Intermediate

Certificate of Achievement

Career/Technical (Major Code: 02039)

Prepares students for work in multinational companies. Provides a practical approach to the study of international trade topics relevant in today's global economy.

ACCT 7	Basic Business Bookkeeping (3)		
	<b>OR</b>		3–4
ACCT 101	Principles of Accounting I (4)		
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		
	<b>OR</b>		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
<b>Total units</b>			<b>31–35</b>

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.



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

# Italian

## School of Language and Literature

**Dean** Joel M. Levine, Ed.D., Office 430F, 619-482-6349

**Faculty** Surian Figueroa, M.A., Concetta Calandra, M.A.

**Department Chair** Dinorah Guadiana-Costa, 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

Italian

#### Major Code

01390

*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

### Italian

Transfer Preparation \* (Major Code: 01390)

World language courses are intended: 1) to provide required instruction for students majoring in world languages; 2) to meet the world 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 world languages skill for personal development.

#### First Semester

ITAL 101	Elementary Italian I	5
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#### Second Semester

ITAL 102	Elementary Italian II	5
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#### Third Semester

ITAL 201	Intermediate Italian I	5
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#### Fourth Semester

ITAL 201	Intermediate Italian II	5
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<b>Total units</b>	<b>20</b>
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*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

\* 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 COURSES INFORMATION section on page 33 for further information.**

# Journalism

## School of Arts and Communication

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

**Faculty** Max Branscomb, M.S.

**Department Chair** Eric Maag, 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

#### Associate in Arts Degree: Transfer Preparation

#### Major Code

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
COMM 200		
JOUR 151	News Reporting and Writing	3
JOUR 171	Writing for Publication	3
JOUR 200	Campus Newspaper Production I	4
Complete 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 51.*

- \* 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 COURSES INFORMATION section on page 33 for further information.**



# Landscape Architecture/ Landscape and Nursery Technology

Departments of Applied Technology, CIS/  
Electronics, and Administration of Justice

**Dean** Terry Davis, M.H.A., Office 1000K, 619-482-6551

**Faculty** William Homyak, M.S.

**Department Chair** David Preciado, A.A.

## 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

	Major Code
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 turfgrass establishment and maintenance and the other based on business principles, budgeting, and personnel management. 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

LNT 104	Plant Identification: Broadleaf Trees	1
LNT 128	Sprinkler Design	3
LNT 131	Landscape Contracting and Estimating	3
LNT 136	Plant Pest and Disease Control	3

#### Fourth Semester

CE 290–293	Occupational Cooperative Education I–IV	4
LNT 133	Golf Course and Sport Turf Management * (Cuyamaca College OH 265)	3
LNT 148	Horticultural Business Practices	3

**Total unit** 37

**Recommended Electives:** ART 121; BUS 121; COMM 104; LA 200; PSYC 101; SPAN 101.

\* 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 51.

## 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 the other 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 104	Landscape Graphics and Planting Design	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 115	Architectural Graphics	3
LNT 106	Plant Identification: Flowering Shrubs (1)	3
LNT 107	Plant Identification: Foliage Shrubs I (1)	
LNT 108	Plant Identification: Foliage Shrubs II (1)	
	<b>OR</b>	
LNT 119	Plant Identification: Xeriphytic Plants (3)	3
LNT 128	Sprinkler Design	3

### Third Semester

LNT 100	Plant and Horticultural Science	4
LNT 120	Landscape Design I	4
LNT 131	Landscape Contracting and Estimating	3

### Fourth Semester

LA 200	Introduction to Computer Aided Landscape Design	3
LNT 122	Landscape Design II	4
LNT 134	Soils	3

**Total units** **39**

**Recommended Electives:** ART 121; BIOL 100, 101; CL 120; ECON 101; PSYC 101; SPAN 101.

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## Landscape Occupations

Career/Technical (Major Code: 02600)

Designed for students interested in landscape contracting and landscape maintenance careers, including park settings, schoolgrounds, residential landscapes, and commercial landscapes. Skills include hardscape installation, sprinkler systems, turfgrass management, and landscape installation and care.

### First Semester

LNT 100	Plant and Horticultural Science	4
LNT 102–116	Plant Identification*	3
	Complete 3 units from electives	3

### Second Semester

LNT 102–116	Plant Identification*	3
	<b>OR</b>	
LNT 119	Plant Identification—Xeriphytic Plants	3
LNT 134	Soils	3
	Complete 3 units from electives	3

### Third Semester

ACCT 7	Basic Business Bookkeeping	3
	<b>OR</b>	
LNT 148	Horticultural Business Practices	3
BIOL 100	Principles of Biology	3
BIOL 101	Principles of Biology Laboratory	1
	Complete 3 units from electives	3

### Fourth Semester

CE 290–293	Occupational Cooperative Education I–IV	4
LNT 136	Plant Pest and Disease Control	3
	Complete 3 units from electives	3

**Total units** **39**

**Electives:** LNT 72, 75, 120, 122, 123, 125, 126, 127, 128, 131, 132.

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

\* Students may select any of the plant identification classes, to total 6 units



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## Nursery Occupations

### Common Core:

LNT 100	Plant and Horticultural Science	4
LNT 136	Plant Pest and Disease Control	3
LNT 138	Floral Design I	3
LNT 144	House Plant Care and Production	1.5
LNT 146	Plant Propagation	1.5
LNT 148	Horticultural Business Practices	
	<b>OR</b>	3
ACCT 7	Basic Business Bookkeeping	
<b>Total units</b>		<b>16</b>

## Floral Design Emphasis

### Career/Technical (Major Code: 02821)

Designed to train students in the skills needed in the floral design industry. Students who successfully complete the degree are eligible for positions such as assistant floral designer, floral designer, floral shop manager, and floral shop owner. Positions may be found at floral shops, wholesale floral suppliers, retail nurseries, hotels and resorts, and as a private floral consultant. Students who have completed this degree have proven they can produce not only the normal bank of floral products but also new, creative, and innovative designs for all activities.

ART 121	Darkroom and Digital Photography I	3
BUS 148	Developing and Starting a New Business (3)	
	<b>OR</b>	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
CE 290–293	Occupational Cooperative Education I–IV	8
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	3
LNT 141	Floral Design III (1)	
	<b>OR</b>	1–2
LNT 147	Wedding Design and Event Planning (2)	
Plus Common Core courses for Nursery Occupations		16
<b>Total units</b>		<b>40–41</b>

**Recommended Elective:** BUS 174.

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## 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, or for owning and operating their own nursery. 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 requirements, plant propagation, and pest control.

BIOL 100	Principles of Biology	3
BIOL 101	Principles of Biology Laboratory	1
CE 290–293	Occupational Cooperative Education I–IV	4
LNT 102–119	Plant Identification*	6
LNT 134	Soils	3
Complete 7 units from electives		7
Plus Common Core courses for Nursery Occupations		16
<b>Total units</b>		<b>40</b>

**Electives:** LNT 72, 125, 126, 127, 131, 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 51.*

# CERTIFICATES

## Golf and Sports Turf Management

Certificate of Achievement

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

CE 290–293	Occupational Cooperative Education I–IV	4
LNT 133	Golf and Sport Turf Management * (Cuyamaca College OH 265)	3
LNT 148	Horticultural Business Practices	3

**Total units** **37**

**Recommended Electives:** ART 121; BUS 121; 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

Certificate of Achievement

Career/Technical (Major Code: 02611)

### First Semester

LA 104	Landscape Graphics and Planting Design	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 115	Architectural Graphics	3
LNT 106	Plant Identification: Flowering Shrubs (1)	3
LNT 107	Plant Identification: Foliage Shrubs I (1)	
LNT 108	Plant Identification: Foliage Shrubs II (1)	
<b>OR</b>		3
LNT 119	Plant Identification: Xeriphytic Plants (3)	3
LNT 128	Sprinkler Design	

### Third Semester

LNT 100	Plant and Horticultural Science	4
LNT 120	Landscape Design I	4
LNT 131	Landscape Contracting and Estimating	3

### Fourth Semester

LA 200	Introduction to Computer Aided Landscape Design	3
LNT 122	Landscape Design II	4
LNT 134	Soils	3

**Total units** **39**



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## Landscape Design

Certificate of Achievement

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	4
LNT 128	Sprinkler Design	3

### Fourth Semester

LA 200	Introduction to Computer Aided Landscape Design	3
LNT 122	Landscape Design II	4
<b>Total units</b>		<b>35</b>

## Landscape Occupations

Certificate of Achievement

Career/Technical (Major Code: 02603)

### First Semester

LNT 100	Plant and Horticultural Science	4
LNT 102–115	Plant Identification*	3
Complete 3 units from electives		3

### Second Semester

LNT 102–115	Plant Identification*	3
<b>OR</b>		
LNT 119	Plant Identification: Xeriphytic Plants	3
LNT 134	Soils	3
Complete 3 units from electives		3

### Third Semester

ACCT 7	Basic Business Bookkeeping	3
<b>OR</b>		
LNT 148	Horticultural Business Practices	3
BIOL 100	Principles of Biology	3
BIOL 101	Principles of Biology Laboratory	1
BIOL 170	Field Botany (4)	3
Complete 3 units from electives		3

### Fourth Semester

CE 290–293	Occupational Cooperative Education I–IV	4
LNT 136	Plant Pest and Disease Control	3
Complete 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	3
LNT 144	House Plant Care and Production	1.5
LNT 146	Plant Propagation	1.5
LNT 148	Horticultural Business Practices	3
<b>OR</b>		
ACCT 7	Basic Business Bookkeeping	3

**Total units** **16**

## Floral Design Emphasis

Certificate of Achievement

Career/Technical (Major Code: 02823)

BUS 148	Developing and Starting a New Business (3)	
	<b>OR</b>	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
CE 290–293	Occupational Cooperative Education I–IV	8
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	3
LNT 141	Floral Design III (1)	
	<b>OR</b>	1–2
LNT 147	Wedding Design and Event Planning (2)	
Plus Common	Core courses for Nursery Occupations	16
	<b>Total units</b>	<b>37–38</b>

**Recommended Elective:** BUS 174.

## Retail Nursery and Plant Production

Certificate of Achievement

Career/Technical (Major Code: 02824)

BIOL 100	Principles of Biology	3
BIOL 101	Principles of Biology Laboratory	1
CE 290–293	Occupational Cooperative Education I–IV	4
LNT 102–119	Plant Identification*	6
LNT 134	Soils	3
	Complete 7 units from electives	7
Plus Common	Core courses for Nursery Occupations	16
	<b>Total units</b>	<b>40</b>

**Electives:** LNT 72, 125, 126, 127, 143.

\* Students may select any of the plant identification classes, to total 6 units.



# Law Enforcement Training Academy

## Higher Education Center at Otay Mesa

**Dean** Silvia Cornejo, M.A., Office 4118D, 619-482-6755

### 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

#### Certificate 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

### Law Enforcement Training Academy

Certificate of Achievement

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 4315) 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	12.5
AJ 42	Basic Police Academy II	12
<b>Total units</b>		<b>24.5</b>

# Leadership and Supervision

## Higher Education Center at Otay Mesa

**Dean** Silvia Cornejo, M.A., Office 4118D, 619-482-6755

**Faculty** Yvonne Lucas, M.B.A.; Elisabeth Shapiro, J.D.

**Department Chair** Marisa Soler-McElwain, LL.M.

### General Description

The Leadership and Supervision program at Southwestern College focuses on two primary areas: (1) Management in the context of sustainability including micro enterprise innovation, strategic planning, and finance. (2) Management in the context of human resources including the study of basic management theories, labor relations, and management of people of diverse cultures and backgrounds.

### Career Options

Most of the following career options require at least an associate degree and some require a bachelor's or graduate level degree. A sample of the career options available in the area of leadership emphasizing sustainable micro enterprise innovation, strategic planning, and finance include micro enterprise developer/manager, entrepreneur, accountant, non-profit manager, financial officer, banker, real estate broker, and community and economic developer.

In the area of leadership emphasizing supervision, career options include human resources professional, business manager, entrepreneur, supervisor, office manager, insurance and benefits professional, union organizer, and labor relations manager.

### Degree/Certificate Options

**Associate in Science Degree: Career/Technical** Leadership and Supervision 02114

**Certificate of Achievement** Leadership and Supervision—Intermediate 01154

**Certificate of Proficiency** Leadership and Supervision—Basic A2117

*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

### 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	Computerized Accounting (3)	
	<b>OR</b>	3–4
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	
	<b>OR</b>	1
CIS 134	Microcomputer Database Software—Access	
Plus the required courses for the Leadership and Supervision—Intermediate certificate		32–37
<b>Total units</b>		<b>42–48</b>

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## CERTIFICATE

### Leadership and Supervision—Basic

Certificate of Proficiency

Career/Technical (Major Code: A2117)

Prepares students to be effective supervisors and leaders. Provides a choice of emphasis in the areas of human resources and/or sustainable micro enterprise development. Improves students' ability to work effectively and collaboratively in either of these important areas.

Choose from Group A or Group B 13-14 Units

Group A—Business Planning and Sustainability

LDR 150	Leadership and Supervision	3
LDR 152	Business Innovation and Creativity	1
LDR 154	Community and Collaborative Leadership	3
LDR 155	Strategic Planning and Sustainability	3
LDR 156	Microfinance and Sustainable Development	3
<b>Total units</b>		<b>13</b>

Group B—Human Resources

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
Complete five units from electives		5
<b>Total units</b>		<b>14</b>

**Electives:** BUS 136 or BUS 152, LDR 148 or LDR 149, LDR 154, LDR 155, LDR 156.



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## 🔒 Leadership and Supervision— Intermediate

Certificate of Achievement

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)	
	<b>OR</b>	3–4
ACCT 101	Principles of Accounting I (4)	
BUS 120	Introduction to Business	3
	<b>OR</b>	
BUS 134	eBusiness I: Principles of Electronic Commerce	3
BUS 140	Business Law/The Legal Environment of Business	1
BUS 142	Business Ethics—Corporate and Personal	3
BUS 174	Modern Promotion and Marketing Practices	
	<b>OR</b>	
BUS 121	Financial Planning and Money Management	3
BUS 211	Communication in Business and Industry	
	<b>OR</b>	
BUS 212	Business Communication	1–4
CL 120	Computer Literacy (1)	
	<b>OR</b>	
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
<b>Total units</b>		<b>32–37</b>

*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.*

# Legal Interpretation and Translation

## Departments of Business, Accounting, and Office Information Systems

**Dean** Mark Meadows, Ph.D., Office 215, 619-482-6460

**Faculty** Marisa Soler-McElwain, LL.M.; Luis Osuna, M.D.

**Department Chair** Marisa Soler-McElwain, LL.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 exist in local courts, legal clinics, related public and private agencies, and international business entities.

### Degree/Certificate Options

#### Certificate of Achievement

	<b>Major Code</b>
Legal Interpretation—Basic (English/Spanish)	02449
Legal Interpretation and Translation—Intermediate (English/Spanish)	A2451

# CERTIFICATE

## Legal Interpretation—Basic (English/Spanish)

Certificate of Achievement

Career/Technical (Major Code: 02449)

Designed for students desiring careers as interpreters in the legal field. Provides skills required for employment in government and the courts, as well as in public and private offices.

BUS 181	Spanish Computer Skills for Interpretation/Translation	3
BUS 210	Business English	3
BUS 226	Interpretation and Translation: Legal	3
SPAN 215	Spanish for Bilinguals I *	5

Complete 6 units from the following courses: 6

BUS 225	Interpretation/Translation: General Business (3)	
BUS 233	Interpretation/Translation: Immigration (3)	
BUS 227	Interpretation/Translation: Medical (3)	
BUS 229	Legal Terminology—Bilingual (English/Spanish) (3)	
MEDOP 229	Medical Terminology—Bilingual (English/Spanish) (3)	

**Total units 20**

\* 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 Interpretation and Translation—Intermediate (English/Spanish)

Certificate of Achievement

Career/Technical (Major Code: A2451)

Designed for students desiring careers as interpreters and translators in the legal field. Prepares students at the intermediate level with skills required for employment in government, the court system, and in private legal offices.

BUS 211	Communication in Business and Industry	
<b>OR</b>		
BUS 212	Business Communication	3
BUS 234	Advanced Interpretation and Translation: Legal	3
*SPAN 216	Spanish for Bilinguals II	5

Complete 3 units from the following courses: 3

BUS 225	Interpretation/Translation: General Business (3)	
BUS 233	Interpretation and Translation: Immigration (3)	
BUS 227	Interpretation and Translation: Medical (3)	
MEDOP 229	Medical Terminology—Bilingual (English/Spanish) (3)	

Plus the required courses for the Interpretation and Translation—Basic certificate 20

**Total units 34**

\* 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.



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

# Legal Office Management

## Departments of Business, Accounting, and Office Information Systems

**Dean** Mark Meadows, Ph.D., Office 215, 619-482-6460

**Faculty** Maria E. Martinez, M.B.A.; Marisa Soler-McElwain, LL.M.

**Department Chair** Marisa Soler-McElwain, LL.M.

### General Description

The law office manager plans, directs, and coordinates operations in a legal office, including managing daily operations, overseeing personnel, and organizing procedures within the office to facilitate the efficient flow of work. The law office managers should possess a strong understanding of the legal system and its procedures especially as they relate to legal specialty areas in which the legal office or agency is involved.

### Career Options

The following list is a sample of the career options available for individuals with legal managerial and supervisory skills. Most require a certificate or an associate degree, some require a bachelor's degree, and a few require a graduate-level degree: law office manager/administrator, office supervisor, human resources officer, personnel officer, small business owner/entrepreneur, and chief executive officer.

### Degree/Certificate Options

#### Associate in Science: Career/Technical

Legal Office Management	02461
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#### Certificates of Achievement

Legal Office Management—Intermediate	02463
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#### Certificates of Proficiency

Legal Office Management—Basic	02462
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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

### Legal Office Management

Career/Technical (Major Code: 02461)

Provides training for individuals who desire to work in supervisory and management positions in the legal office environment. Emphasizes leadership, supervision, management, and technical skills required in a legal office setting as well as an option to focus on legal English/Spanish language skills for bilingual managers.

#### Complete 5 to 6 units from the following: 5–6

- |             |  |  |
|-------------|--|--|
| BUS 181     | Spanish Computer Skills for Interpretation and Translation (3) |  |
| BUS 229     | Legal Terminology—Bilingual (English/Spanish) (3)              |  |
| BUS/CIS 239 | Project Management (3)   |  |
| LDR 148     | Business Presentation skills—Bilingual (English/Spanish) (2)   |  |
| LDR 149     | Business Presentation Skills (2)                               |  |
| LEGL 266    | Mediation, Negotiation, and Conflict Management (2)            |  |

Plus the courses required for the Legal Office Management—Intermediate certificate	42–43
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<b>Total units</b>	<b>47–49</b>
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*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## CERTIFICATES

### Legal Office Management—Basic

Certificate of Proficiency

Career/Technical (Major Code: 02462)

Provides training for individuals who desire to work in supervisory and management positions in the legal office environment. Emphasizes leadership, supervision, and management techniques as well as technical skills required in a legal office setting.

BUS 140	Business Law/The Legal Environment of Business	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
CIS/LIB 151	Research Using the Internet	1
LEGL 223	Legal Office Procedures	2.5
<b>Total units</b>		<b>16.5</b>

### Legal Office Management—Intermediate

Certificate of Achievement

Career/Technical (Major Code: 02463)

Provides training for individuals who desire to work in managerial positions in a legal office environment or who desire to advance in their careers. Emphasizes leadership, communication, supervisory, managerial, and technical skills required in the legal office setting.

ACCT 7	Basic Business Bookkeeping (3)	3–4
<b>OR</b>		
ACCT 101	Principles of Accounting I (4)	2.5
BUS 200B	Microsoft Word: Advanced	
BUS 211	Communication in Business and Industry	3
<b>OR</b>		
BUS 212	Business Communication	3
BUS 183	Business Mathematics	
CIS 101	Introduction to Computers and Information Processing	4
LEGL 225	Law Office Management	3
LEGL 270	Computer Skills for Legal Office Professionals	2.5
LEGL 290–293	Legal Cooperative Work Experience I–IV (2–4)	2
Plus the courses required for the Legal Office Management—Basic certificate		19
<b>Total units</b>		<b>42–43</b>

# Legal Office Professional

## Departments of Business, Accounting, and Office Information Systems

**Dean** Mark Meadows, Ph.D., Office 215, 619-482-6460

**Faculty** Marisa Soler-McElwain, LL.M.; Victoria López, J.D.; Maria E. Martinez, M.B.A.; Elisabeth Shapiro, J.D.

**Department Chair** Marisa Soler-McElwain, LL.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; and wills, trusts, and probate. Students that possesses a legal 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
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#### Certificates of Achievement

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

#### Certificate of Proficiency

Legal Office Professional—Basic	C2355
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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.*



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

# ASSOCIATE IN SCIENCE DEGREE

## Legal Office Professional

Career/Technical (Major Code: B2155)

Prepares students to work in a legal office. Emphasizes a comprehensive program of study regarding the court system, legal terminology, and the preparation of legal documents.

LEGL 225	Law Office Management	3
LEGL 258	Legal Communications	3
Plus completion of one of the following specialty certificates:		32.5–34.5
<b>Total units</b>		<b>38.5–40.5</b>

### Specialty Certificates

Business Law Specialty	(Major Code: A2252)
Civil Litigation Specialty	(Major Code: A2253)
Criminal Law Specialty	(Major Code: A2254)
Family Law Specialty	(Major Code: A2256)
Immigration Law Specialty	(Major Code: A2257)
International Business Law Specialty	(Major Code: A2258)
Wills, Trusts, and Estates Specialty	(Major Code: A2259)

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

*Note: Certificate of achievement or A.S. degree stating a legal specialty will be granted upon the completion of all requirements plus completion of one of the legal specialties listed above.*

# CERTIFICATES

## Legal Office Professional—Basic

Certificate of Proficiency

Career/Technical (Major Code: C2355)

Prepares students to work in a legal office. Emphasizes structure of the court system, legal terminology, and the preparation of legal documents in the areas of civil litigation, family law, wills and probate, and criminal law. Develops word processing and English language skills.

BUS 96	Customer Service and Communication Techniques	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
CIS 92	Microsoft Office Suite (3)	3–4
	<b>OR</b>	
CIS 101	Introduction to Computers and Information Processing (4)	2.5
	LEGL 223	
<b>Total units</b>		<b>16.5–17.5</b>

## Business Law Specialty

Certificate of Achievement

Career/Technical (Major Code: A2252)

Prepares students to work in a legal office in the area of business law. Emphasizes the research and preparation of legal documents and court forms. Reviews advanced legal terminology. Improves skills in legal word processing and English.

BUS 74	Keyboarding Speed and Accuracy II	1
BUS 140	Business Law/The Legal Environment of Business	3
BUS 200B	Microsoft Word: Advanced	2.5
BUS 211	Communication in Business and Industry	3
	<b>OR</b>	
BUS 212	Business Communication	
LEGL 270	Computer Skills for Legal Professionals	2.5
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—Basic certificate		16.5–17.5
<b>Total units</b>		<b>32.5–33.5</b>

## Civil Litigation Specialty

Certificate of Achievement

Career/Technical (Major Code: A2253)

Prepares students to work in a legal office. Emphasizes the research and preparation of legal documents and court forms. Reviews advanced legal terminology. Improves skills in legal word processing and English.

BUS 74	Keyboarding Speed and Accuracy II	1
BUS 200B	Microsoft Word: Advanced	2.5
BUS 211	Communication in Business and Industry	3
	<b>OR</b>	
BUS 212	Business Communication	3
LEGL 261	Civil Litigation I	3
LEGL 269	Civil Litigation Procedures	3
LEGL 270	Computer Skills for Legal Professionals	2.5
LEGL 290–293	Legal Cooperative Work Experience I–IV (2–4)	2
Plus courses required for the Legal Office Professional—Basic certificate		16.5–17.5
<b>Total units</b>		<b>33.5–34.5</b>

## Criminal Law Specialty

Certificate of Achievement

Career/Technical (Major Code: A2254)

Prepares students to work in a legal office. Emphasizes the research and preparation of legal documents and court forms. Reviews advanced legal terminology. Improves skills in legal word processing and English.

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 200B	Microsoft Word: Advanced	2.5
BUS 211	Communication in Business and Industry	3
	<b>OR</b>	
BUS 212	Business Communication	3
LEGL 270	Computer Skills for Legal Professionals	2.5
LEGL 290–293	Legal Cooperative Work Experience I–IV (2–4)	2
Plus courses required for the Legal Office Professional—Basic certificate		16.5–17.5
<b>Total units</b>		<b>33.5–34.5</b>

## Family Law Specialty

Certificate of Achievement

Career/Technical (Major Code: A2256)

Prepares students to work in a legal office in the area of family law. Emphasizes the research and preparation of legal documents and court forms. Reviews advanced legal terminology. Improves skills in legal word processing and English.

BUS 74	Keyboarding Speed and Accuracy II	1
BUS 200B	Microsoft Word: Advanced	2.5
BUS 211	Communication in Business and Industry	3
	<b>OR</b>	
BUS 212	Business Communication	3
LEGL 263	Family Law	3
LEGL 266	Mediation, Negotiation, and Conflict Management	2
LEGL 270	Computer Skills for Legal Professionals	2.5
LEGL 290–293	Legal Cooperative Work Experience I–IV (2–4)	2
Plus courses required for the Legal Office Professional—Basic certificate		16.5–17.5
<b>Total units</b>		<b>32.5–33.5</b>

## Immigration Law Specialty

Certificate of Achievement

Career/Technical (Major Code: A2257)

Prepares students to work in a legal office in the area of immigration law. Emphasizes the research and preparation of legal documents and court forms. Reviews advanced legal terminology. Improves skills in legal word processing and English.

BUS 74	Keyboarding Speed and Accuracy II	1
BUS 200B	Microsoft Word: Advanced	2.5
BUS 211	Communication in Business and Industry	3
	<b>OR</b>	
BUS 212	Business Communication	3
BUS 233	Interpretation and Translation: Immigration (3)	2–3
	<b>OR</b>	
LEGL 267	Interviewing and Investigation for Paralegals (2)	2
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
Plus courses required for the Legal Office Professional—Basic certificate		16.5–17.5
<b>Total units</b>		<b>32.5–34.5</b>



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## International Business Law Specialty

Certificate of Achievement

Career/Technical (Major Code: A2258)

Prepares students to work in a legal office in the area of international business law. Emphasizes the research and preparation of legal documents and court forms. Reviews advanced legal terminology. Improves skills in legal word processing and English.

BUS 74	Keyboarding Speed and Accuracy II	1
BUS 177	Principles of International Business	3
BUS 200B	Microsoft Word: Advanced	2.5
BUS 211	Communication in Business and Industry	
	<b>OR</b>	3
BUS 212	Business Communication	
LEGL 256	International Law for Business	3
LEGL 270	Computer Skills for Legal Professionals	2.5
LEGL 290–293		
	Legal Cooperative Work Experience I–IV (2–4)	2
Plus courses required for the Legal Office Professional—		
Basic certificate		16.5–17.5
<b>Total units</b>		<b>33.5–34.5</b>

## Wills, Trusts, and Estates Specialty

Certificate of Achievement

Career/Technical (Major Codes: A2259)

Prepares students to work in a legal office in the area of wills, trusts, and estates. Emphasizes the research and preparation of legal documents and court forms. Reviews advanced legal terminology. Improves skills in legal word processing and English.

BUS 74	Keyboarding Speed and Accuracy II	1
BUS 121	Financial Planning and Money Management	
	<b>OR</b>	3
RE 101	Real Estate Principles	
BUS 200B	Microsoft Word: Advanced	2.5
BUS 211	Communication in Business and Industry	
	<b>OR</b>	3
BUS 212	Business Communication	
LEGL 264	Wills, Trusts, and Estates	3
LEGL 270	Computer Skills for Legal Professionals	2.5
LEGL 290–293		
	Legal Cooperative Work Experience I–IV (2–4)	2
Plus courses required for the Legal Office Professional—		
Basic certificate		16.5–17.5
<b>Total units</b>		<b>33.5–34.5</b>

# Legal Office Professional- Bilingual (English/Spanish)

## Departments of Business, Accounting, and Office Information Systems

**Dean** Mark Meadows, Ph.D., Office 215, 619-482-6460

**Faculty** Victoria López, J.D.; Maria E. Martinez, M.B.A.; Marisa Soler-McElwain, LL.M.; Elisabeth Shapiro, J.D.

**Department Chair** Marisa Soler-McElwain, LL.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 law; immigration law; and wills, trusts, and probate. 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, court interpreter, legal documents translator, and entry-level paralegal.

### Degree/Certificate Options

#### Associate in Science: Career/Technical

	<b>Major Code</b>
Legal Office Professional (English/Spanish)	B2165

#### Certificates of Achievement

Legal Office Professional—Bilingual (English/Spanish)—Basic	C2365
Civil Litigation Specialty	A2263
Criminal Law Specialty	A2264
Family Law Specialty	A2266
Immigration Law Specialty	A2267
International Business Law Specialty	A2268
Wills, Trusts, and Estates Specialty	A2269

*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)

Prepares 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 more comprehensive program of study regarding the legal system, English/Spanish legal terminology, and legal office procedures.

LEGL 225	Law Office Management	3
LEGL 258	Legal Communications	3

Plus completion of one of the following specialty certificates

41.5–43.5

#### Total units

**47.5–49.5**

### Specialty Certificates

Civil Litigation Specialty	(Major Code: A2263)
Criminal Law Specialty	(Major Code: A2264)
Family Law Specialty	(Major Code: A2266)
Immigration Law Specialty	(Major Code: A2267)
International Business Law Specialty	(Major Code: A2268)
Wills, Trusts, and Estates Specialty	(Major Code: A2269)

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

*Note: Certificate of achievement or A.S. degree stating a legal specialty will be granted upon the completion of all requirements plus completion of one of the legal specialties listed above.*

- \* 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.



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## CERTIFICATES

### Legal Office Professional—Bilingual (English/Spanish)—Basic

Certificate of Achievement

Career/Technical (Major Code: C2365)

Prepares students to work in a bilingual (English/Spanish) legal office. Emphasizes the research and preparation of legal documents and court forms. Reviews advanced legal terminology. Improves skills in legal word processing in English and Spanish.

BUS 74	Keyboarding Speed and Accuracy II	1
BUS 96	Customer Service and Communication Techniques	1
BUS 200A	Microsoft Word: Beginning	2.5
BUS 210	Business English	3
BUS 229	Legal Terminology—Bilingual (English/Spanish)	3
CIS 92	Microsoft Office Suite (3)	3–4
	<b>OR</b>	
CIS 101	Introduction to Computers and Information Processing (4)	5
	<b>OR</b>	
SPAN 215	Spanish for Bilinguals I*	5
LEGL 223	Legal Office Procedures	2.5

**Total units** **21–22**

\* 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.

*Note: Students who have completed BUS 36 may waive the following courses: BUS 70, BUS 71, BUS 200A, BUS 229; LEGL 223.*

### Civil Litigation Specialty

Certificate of Achievement

Career/Technical (Major Code: A2263)

Prepares students to work in a bilingual (English/Spanish) legal office in the area of civil litigation. Emphasizes the research and preparation of legal documents and court forms. Reviews advanced legal terminology. Improves skills in legal word processing in English and Spanish.

BUS 181	Spanish Computer Skills for Interpretation and Translation	3
BUS 211	Communication in Business and Industry	3
	<b>OR</b>	
BUS 212	Business Communication	3
LEGL 261	Civil Litigation I	3
LEGL 269	Civil Litigation Procedures	3
LEGL 270	Computer Skills for Legal Professionals	2.5
LEGL 290–293	Legal Cooperative Work Experience I–IV (2–4)	2
	<b>OR</b>	
SPAN 216	Spanish for Bilinguals II	5
Plus courses required for the Legal Office		
Professional—Bilingual (English/Spanish)—Basic certificate		21–22
<b>Total units</b>		<b>42.5–43.5</b>

### Criminal Law Specialty

Certificate of Achievement

Career/Technical (Major Code: A2264)

Prepares students to work in a bilingual (English/Spanish) legal office in the area of criminal law. Emphasizes the research and preparation of legal documents and court forms. Reviews advanced legal terminology. Improves skills in legal word processing in English and Spanish.

AJ 151	Concepts of Criminal Law	3
AJ 161	Principles and Procedures of the Justice System	3
BUS 181	Spanish Computer Skills for Interpretation and Translation	3
BUS 211	Communication in Business and Industry	3
	<b>OR</b>	
BUS 212	Business Communication	3
LEGL 270	Computer Skills for Legal Professionals	2.5
LEGL 290–293	Legal Cooperative Work Experience I–IV (2–4)	2
SPAN 216	Spanish for Bilinguals II	5
Plus courses required for the Legal Office		
Professional—Bilingual (English/Spanish)—Basic certificate		21–22
<b>Total units</b>		<b>42.5–43.5</b>

## Family Law Specialty

Certificate of Achievement

Career/Technical (Major Code: A2266)

Prepares students to work in a bilingual (English/Spanish) legal office in the area of family law. Emphasizes the research and preparation of legal documents and court forms. Reviews advanced legal terminology. Improves skills in legal word processing in English and Spanish.

BUS 181	Spanish Computer Skills for Interpretation and Translation	3
BUS 211	Communication in Business and Industry	3
	<b>OR</b>	
BUS 212	Business Communication	3
LEGL 263	Family Law	3
LEGL 266	Mediation, Negotiation, and Conflict Management	2
LEGL 270	Computer Skills for Legal Professionals	2.5
LEGL 290–293	Legal Cooperative Work Experience I–IV (2–4)	2
SPAN 216	Spanish for Bilinguals II	5
Plus courses required for the Legal Office Professional—Bilingual (English/Spanish)—Basic certificate 21–22		
<b>Total units</b>		<b>41.5–42.5</b>

## Immigration Law Specialty

Certificate of Achievement

Career/Technical (Major Code: A2267)

Prepares students to work in a bilingual (English/Spanish) legal office in the area of immigration law. Emphasizes the research and preparation of legal documents and court forms. Reviews advanced legal terminology. Improves skills in legal word processing in English and Spanish.

BUS 181	Spanish Computer Skills for Interpretation and Translation	3
BUS 211	Communication in Business and Industry	3
	<b>OR</b>	
BUS 212	Business Communication	3
BUS 233	Interpretation and Translation—Immigration (3)	2–3
	<b>OR</b>	
LEGL 267	Interviewing and Investigation for Paralegals (2)	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 216	Spanish for Bilinguals II	5
Plus courses required for the Legal Office Professional—Bilingual (English/Spanish)—Basic certificate 21–22		
<b>Total units</b>		<b>41.5–43.5</b>

## International Business Law Specialty

Certificate of Achievement

Career/Technical (Major Code: A2268)

Prepares students to work in a bilingual (English/Spanish) legal office in the area of international business law. Emphasizes the research and preparation of legal documents and court forms. Reviews advanced legal terminology. Improves skills in legal word processing in English and Spanish.

BUS 177	Principles of International Business	3
BUS 181	Spanish Computer Skills for Interpretation and Translation	3
BUS 211	Communication in Business and Industry	3
	<b>OR</b>	
BUS 212	Business Communication	3
LEGL 256	International Law for Business	3
LEGL 270	Computer Skills for Legal Professionals	2.5
LEGL 290–293	Legal Cooperative Work Experience I–IV (2–4)	2
SPAN 216	Spanish for Bilinguals II	5
Plus courses required for the Legal Office Professional—Bilingual (English/Spanish)—Basic certificate 21–22		
<b>Total units</b>		<b>42.5–43.5</b>

## Wills, Trusts, and Estates Specialty

Certificate of Achievement

Career/Technical (Major Codes: A2269)

Prepares students to work in a bilingual (English/Spanish) legal office in the area of wills, trusts, and estates. Emphasizes the research and preparation of legal documents and court forms. Reviews advanced legal terminology. Improves skills in legal word processing in English and Spanish.

BUS 121	Financial Planning and Money Management	3
	<b>OR</b>	
RE 101	Real Estate Principles	3
BUS 181	Spanish Computer Skills for Interpretation and Translation	3
BUS 211	Communication in Business and Industry	3
	<b>OR</b>	
BUS 212	Business Communication	3
LEGL 264	Wills, Trusts, and Estates	3
LEGL 270	Computer Skills for Legal Professionals	2.5
LEGL 290–293	Legal Cooperative Work Experience I–IV (2–4)	2
SPAN 216	Spanish for Bilinguals II	5
Plus courses required for the Legal Office Professional—Bilingual (English/Spanish)—Basic certificate 21–22		
<b>Total units</b>		<b>42.5–43.5</b>



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

# Liberal Arts Areas of Emphasis

## General Description

The Associate of Arts in Liberal Arts Degree is designed for students who wish a broad knowledge of liberal arts and sciences plus additional coursework in an "Area of Emphasis". The Associate of Arts in Liberal Arts Degree would be an ideal choice for those students planning on transferring to the California State University or University of California as the student can satisfy their general education requirements, plus focus on transferable course work that relates to majors at CSU or UC.

- Choose either Option I or II or III for the General Education pattern related to your educational goal.
- Complete 18 units in one "Area of Emphasis" from those outlined below.

*(Note: Where appropriate, courses in the "area of emphasis may also be counted for a GE area)*

- For ALL OPTIONS: complete necessary Southwestern College Graduation and Proficiency requirements (See Southwestern College Catalog)
- All courses listed below transfer to CSU. Courses in BOLD are transferable to both CSU and UC. Refer to [www.assist.org](http://www.assist.org) for transfer details.

## OPTION 1 GE UNITS

### I. SOUTHWESTERN COLLEGE ASSOCIATE IN GE DEGREE:

This Option does not necessarily prepare student for transfer to four-year colleges or universities. Student who intent to transfer should consult a counselor to select the appropriate general education pattern.

Minimum units necessary to meet Southwestern Associate Degree requirement 21

### OPTION 2

#### II. CSU/GE:

Minimum units necessary to meet CSU/GE Certification requirements 40

### OPTION 3

#### III. IGETC:

Minimum units necessary to meet IGETC Certification requirements 37-39

## AREAS OF EMPHASIS:

- 18 units required from one Area of Emphasis listed below
- Courses selected can be used to also fulfill GE areas.
- All courses listed below transfer to CSU
- Courses in BOLD also transfer to CSU and UC

## TRANSFERABLE ELECTIVE UNITS

Electives may be necessary to total 60 overall units required for the Associate degree.

## Degree/Certificate Options

## Major Code

### Associate in Arts Transfer Preparation \* Options 2 & 3

Liberal Arts: Emphasis in Arts and Humanities	01640
Liberal Arts: Emphasis in Communication in the English Language	01650
Liberal Arts: Emphasis in Social and Behavioral Sciences	01730
Liberal Arts: Emphasis in Math and Science	01870

### Associate in Arts Non-Transfer \* Option 1

Liberal Arts: Emphasis in Arts and Humanities	01375
Liberal Arts: Emphasis in Communication in the English Language	01376
Liberal Arts: Emphasis in Social and Behavioral Sciences	01377
Liberal Arts: Emphasis in Math and Science	01378

*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 Arts: Emphasis in Arts and Humanities

Non-Transfer Option 1 (Major Code: 01375)

Transfer Preparation \* Options 2 & 3 (Major Code: 01640)

Select a minimum of 18 units from the following Arts & Humanities courses. For depth, include a minimum of two courses from a single discipline; for breadth, include at least two disciplines in your selection. These courses emphasize the study of cultural, literary, humanistic activities and artistic expression of human beings. Students will evaluate and interpret the ways in which people through the ages in different cultures have responded to themselves and the world around them in artistic and cultural creation. Students will also learn to value aesthetic understanding and incorporate these concepts when constructing value judgments.

\* 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 COURSES INFORMATION section on page 33 for further information.**

ARCH 208 World Architecture I (3)  
ARCH 210 World Architecture II (3)

ART 100 Drawing I (3)  
ART 101 Design I (3)  
ART 104 Introduction to Art (3)  
ART 105 Life Drawing I (3)  
ART 107 Painting I (3)  
ART 110 Sculpture I (3)  
ART 112 Arts of Africa, Oceania, and Native America (3)  
ART 113 Art and Culture of Pre-Hispanic Mexico (3)  
ART 116 Printmaking I (3)  
ART 121 Darkroom and Digital Photography I (3)  
ART 129 Asian Art (3)  
ART 130 History of Film as Art (3)  
ART 149 Women in Western Art History, 1550–Present (3)  
ART 150 Art History Survey—Stone Age to the Ages of Faith (3)  
ART 151 Art History—Renaissance to Modern (3)  
ART 156 History of Photography (3)  
ART 157 Nineteenth Through Twenty-First Century Art (3)  
ART 159 Graphic Design—Layout (3)  
ART 160 Graphic Design—Typography (3)  
ART 170 Beginning Ceramics (3)  
ART 182 Design in Wood I (3)  
ART 185A Jewelry and Metalwork I (3)  
ART 185B Jewelry and Metalwork II (3)

CHIN 101 Mandarin Chinese I (5)  
CHIN 102 Mandarin Chinese II (5)

COMM 111 Oral Interpretation (3)  
COMM 185 Cinema as a Form of Expression and Communication (3)

DANC 121 Dance Choreography I (2)  
DANC 200 Dance History and Appreciation (3)

ENGL 117A Creative Writing I (3)  
ENGL 170A Advanced Creative Writing: Fiction I (3)  
ENGL 172A Advanced Creative Writing—Poetry I (3)  
ENGL 175A Advanced Creative Writing: Creative Nonfiction I (3)  
ENGL 220 Introduction to Literature (3)  
ENGL 225 Introduction to Children's Literature (3)  
ENGL 230 World Literature I (3)  
ENGL 231 World Literature II (3)  
ENGL 240 English Literature I (3)  
ENGL 241 English Literature II (3)  
ENGL 250 American Literature I (3)  
ENGL 251 American Literature II (3)  
ENGL 255 Twentieth Century Literature (3)  
ENGL 256 Introduction to Shakespeare (3)  
ENGL 260 Mythology in Literature (3)  
ENGL 265 Literature and Film (3)  
ENGL 270 Multicultural Literature (3)  
ENGL 271 Latin American Literature (3)  
ENGL 272 Chicano Literature (3)  
ENGL 273 African American Literature (3)  
ENGL 274 Literature of the U.S. – Mexico Borderlands and Baja California (3)  
ENGL 280 Literature by Women (3)  
ENGL 281 Horror, Madness, and the Macabre (3)

FREN 101 Elementary French I (5)  
FREN 102 Elementary French II (5)  
FREN 201 Intermediate French I (5)  
FREN 202 Intermediate French II (5)

HIST 104 Western Civilization I (3)  
HIST 105 Western Civilization II (3)  
HIST 106 World History I (3)  
HIST 107 World History II (3)

HUM 101 Humanities Through the Arts I (3)  
HUM 102 Humanities Through the Arts II (3)  
HUM 104 Introduction to Humanities: Arts and Ideas (3)  
HUM 112 Culture and the Media (3)  
HUM 140 World Mythology (3)

ITAL 101 Elementary Italian I (5)  
ITAL 102 Elementary Italian II (5)  
ITAL 201 Intermediate Italian I (5)

JOUR 171 Writing for Publication (3)

JPN 101 Beginning Japanese I (5)  
JPN 101A Introductory Elementary Japanese (3)  
JPN 101B Continuation of Elementary Japanese (3)  
JPN 102 Beginning Japanese II (5)  
JPN 201 Intermediate Japanese I (5)



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

MUS 100 Music Technology (3)  
 MUS 101 Foundations of Music Theory I (3)  
 MUS 105 Introduction to Music (3)  
 MUS 106 Introduction to Jazz (3)  
 MUS 107 American Popular Music (3)  
 MUS 111 Sight Singing and Dictation I (1)  
 MUS 125 Applied Music—Individual Study I (1)  
 MUS 126 Applied Music—Individual Study II (1)  
 MUS 127 Applied Music—Individual Study III (1)  
 MUS 155 Electronic Music Technology (3)  
 MUS 166 Jazz Ensemble I (2)  
 MUS 167 Jazz Ensemble II (2)  
 MUS 168 Jazz Ensemble III (2)  
 MUS 170 Small Performance Groups I (1)  
 MUS 171 Small Performing Groups II (1)  
 MUS 172 Small Performance Groups III (1)  
 MUS 180 Chamber Singers I (2)  
 MUS 181 Chamber Singers II (2)  
 MUS 182 Chamber Singers III (2)  
 MUS 185 Concert Choir I (1)  
 MUS 186 Concert Choir II (1)  
 MUS 187 Concert Choir III (1)  
 MUS 189A Hand Drumming I (2)  
 MUS 189B Hand Drumming II (2)  
 MUS 189C Hand Drumming III (2)  
 MUS 189D Hand Drumming IV (2)  
 MUS 195 World Music (3)  
 MUS 202 Development of Mariachi: Style and Culture (3)

PHIL 101 Introduction to Philosophy (3)  
 PHIL 106 World Religions (3)  
 PHIL 107 Asian Philosophy (3)  
 PHIL 120 Ethics: Theory and Practice (3)

FIL 101 Elementary Tagalog I (5)  
 FIL 102 Elementary Tagalog II (5)  
 FIL 201 Intermediate Tagalog I (5)

PORT 101 Elementary Portuguese I (5)  
 PORT 102 Elementary Portuguese II (5)

SPAN 101 Elementary Spanish I (5)  
 SPAN 101A Introduction to Elementary Spanish (3)  
 SPAN 101B Continuation of Elementary Spanish (3)  
 SPAN 102 Elementary Spanish II (5)  
 SPAN 201 Intermediate Spanish I (5)  
 SPAN 202 Intermediate Spanish II (5)  
 SPAN 215 Spanish for Bilinguals I (5)  
 SPAN 216 Spanish for Bilinguals II (5)  
 SPAN 221 Introduction to Literature for Bilinguals (5)  
 SPAN 225 Intermediate Conversation and Writing on Spanish Culture (3)  
 SPAN 226 Intermediate Conversation and Writing on Latin American Culture (3)

TELE 112 Culture and the Media (3)  
 TELE 113 History of Film as Art (3)  
 TELE 114 Cinema as a Form of Expression and Communication (3)  
 TELE 115 Acting for Television and Film (3)

TA 100 Survey of Drama (3)  
 TA 101 Introduction to the Theatre (3)  
 TA 105 Survey of Hispanic-American Theatre (3)  
 TA 110 Elementary Acting I (3)  
 TA 115 Acting for Television and Film (3)  
 TA 120 Theatre Workshop—Performance (1.5–2)  
 TA 134 Improvisation for the Theatre (3)

## Liberal Arts: Emphasis in Communication in the English Language

Non-Transfer Option 1 (Major Code: 01376)

Transfer Preparation \* Options 2 & 3 (Major Code: 01650)

Select a minimum of 18 units from the following Communication in the English Language courses. For depth, include a minimum of two courses from a single discipline; for breadth, include at least two disciplines in your selection. These courses emphasize the content of communication as well as the form and should provide an understanding of the psychological basis and social significance of communication. Students will be able to assess communication as the process of human symbolic interaction. Students will also develop skills in the areas of reasoning and advocacy, organization, accuracy, reading and listening effectively. Students will be able to integrate important concepts of critical thinking as related to the development of analysis, critical evaluation, to reason inductively and deductively that will enable them to make important decisions regarding their own lives and society at large.

COMM 103 Oral Communication (3)  
 COMM 104 Public Speaking (3)  
 COMM 111 Oral Interpretation (3)  
 COMM 160 Argumentation and Debate (3)  
 COMM 174 Interpersonal Communication (3)  
 COMM 176 Intercultural 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)

ENGL 115 Reading and Composition: Exposition and Argumentation (4)  
 ENGL 116 Critical Thinking and Composition (4)

PHIL 103 Logic and Critical Thinking (3)

## Liberal Arts: Emphasis in Social and Behavioral Sciences

Non-Transfer Option 1 (Major Code: 01377)

Transfer Preparation \* Options 2 & 3 (Major Code: 01730)

Select a minimum of 18 units from the following Social & Behavioral Science courses. For depth, include a minimum of two courses from a single discipline; for breadth, include at least two disciplines in your selection. These courses emphasize the perspective, concepts, theories and methodologies of the disciplines typically found in the vast variety of disciplines that comprise study in the Social and Behavioral Sciences.

Students will study about themselves and others as members of a larger society. Topics and discussion to stimulate critical thinking about ways people have acted in response to their societies will allow students to evaluate how societies and social subgroups operate.

\* 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 COURSES INFORMATION section on page 33 for further information.**

AJ 110 Ethics and the Administration of Justice (3)  
 AJ 111 Introduction to Administration of Justice (3)  
 AJ 114 Fundamentals of Crime and Criminal Behavior (3)

ANTH 102 Cultural Anthropology (3)  
 ANTH 103 Archaeology and Prehistory (3)  
 ANTH 110 Indians of North America (3)  
 ANTH 112 Cultures of Mexico (3)

AFRO 110 African-American History I (3)  
 AFRO 111 African-American History II (3)  
 AFRO 151 Introduction to African-American Culture (3)

ASIA 112 Asian-American History I (3)  
 ASIA 113 Asian-American History II (3)  
 ASIA 114 Filipino-American History (3)  
 ASIA 115 Filipino-American Culture (3)

CD 135 Principles of Family Development (3)  
 CD 170 Principles of Child Development (3)  
 CD 284 Child, Family, and Community (3)

COMM 174 Interpersonal Communication (3)  
 COMM 176 Intercultural Communication (3)  
 COMM 200 Introduction to Mass Communication and Society (3)

ECON 100 Contemporary Economic Problems (3)  
 ECON 101 Principles of Economics I (3)  
 ECON 102 Principles of Economics II (3)

GEOG 106 World Regional Geography (3)  
 GEOG 120 Introduction to Geography—Cultural Elements (3)

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 110 African-American History I (3)  
 HIST 111 African-American History II (3)  
 HIST 112 Asian-American History I (3)  
 HIST 113 Asian-American History II (3)  
 HIST 114 Filipino-American History (3)  
 HIST 121 Comparative History of the Americas I (3)  
 HIST 122 Comparative History of the Americas II (3)  
 HIST 132 Women in World History (3)  
 HIST 141 Mexican-American History I (3)  
 HIST 142 Mexican-American History II (3)

JOUR 101 Introduction to Mass Communication and Society (3)

MAS 141 Mexican-American History I (3)  
 MAS 142 Mexican American History II (3)  
 MAS 150 Mexican and Mexican-American Cultures in the United States (3)

PHS 250 Our Global Future: Values for Survival (3)

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)  
 PS 250 Our Global Future: Values for Survival (3)

PSYC 101 General Psychology (3)  
 PSYC 106 Human Sexuality (3)  
 PSYC 116 Introduction to Social Psychology (3)  
 PSYC 211 Learning (3)  
 PSYC 230 Developmental Psychology (3)  
 PSYC 250 Abnormal Psychology (3)  
 PSYC 260 Introduction to Physiological Psychology (3)

SOC 101 Introduction to Sociology (3)  
 SOC 110 Contemporary Social Problems (3)  
 SOC 115 Filipino-American Culture (3)  
 SOC 116 Introduction to Social Psychology (3)  
 SOC 135 Sociology of the Family (3)  
 SOC 150 Mexican and Mexican-American Cultures in the United States (3)  
 SOC 151 Introduction to African-American Culture (3)



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## Liberal Arts: Emphasis in Math and Science

Non-Transfer Option 1 (Major Code: 01378)

Transfer Preparation \* Options 2 & 3 (Major Code: 01870)

Select a minimum of 18 units from the following Math & Science courses. For depth, include a minimum of two courses from a single discipline; for breadth, include at least two disciplines in your selection. These courses emphasize the natural sciences which examine the physical universe, its life forms and its natural phenomena. Courses in math emphasize the development of mathematical and quantitative reasoning skills beyond the level of intermediate algebra. Students will be able to demonstrate an understanding of the methodologies of science as investigative tools. Students will also examine the influence that the acquisition of scientific knowledge has on the development of the world's civilizations.

\* 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 COURSES INFORMATION section on page 33 for further information.**

ASTR 100 Principles of Astronomy (3)  
ASTR 109 Astronomy Laboratory (1)  
ASTR 120 Solar System Astronomy (3)  
ASTR 150 Discovery of the Cosmos (3)  
ASTR 170 The Radical Universe (3)  
ASTR 180 Life in the Universe (3)  
ASTR 205 Elementary Astrophysics (3)

ANTH 101 Biological Anthropology (3)

BIOL 100 Principles of Biology (3)  
BIOL 101 Principles of Biology Laboratory (1)  
BIOL 130 Animal Biology: A Behavioral Approach (3)  
BIOL 131 Animal Biology Laboratory (1)  
BIOL 140 Environmental Biology (3)  
BIOL 145 Ecomundo: Ecology and Environmental Science (3)  
BIOL 160 Marine Biology (3)  
BIOL 161 Marine Biology Laboratory (1)  
BIOL 180 Human Heredity, Evolution, and Society (3)  
BIOL 185 Biology of Alcohol and Other Drugs (3)  
BIOL 190 Human Anatomy and Physiology (4)  
BIOL 193 Principles of Human Anatomy and Physiology (5)  
BIOL 210 General Zoology (4)  
BIOL 211 Introduction to Cell and Molecular Biology (4)  
BIOL 212 Biology of Plants (4)  
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)  
CHEM 170 Preparation for General Chemistry (4)  
CHEM 200 General Chemistry I (5)  
CHEM 210 General Chemistry II (5)  
CHEM 240 Organic Chemistry I (5)  
CHEM 242 Organic Chemistry II (5)  
CHEM 244 Organic Analysis and Spectroscopy (2)  
CHEM 250 Analytical Chemistry (5)

CIS 101 Introduction to Computers and Information Processing (4)

GEOG 100 Introduction to Geography—Physical Elements (3)  
GEOG 101 Physical Geography Laboratory (1)

GEOL 100 Principles of Geology (3)  
GEOL 101 General Geology Laboratory (1)  
GEOL 104 Introduction to Earth Science (3)

MATH 100 Mathematics for General Education (3)  
MATH 101 College Algebra (3)  
MATH 104 Trigonometry (3)  
MATH 118 Finite Mathematics (3)  
MATH 119 Elementary Statistics (4)  
MATH 120 Calculus for Business Analysis (4)  
MATH 121 Applied Calculus I (3)  
MATH 122 Applied Calculus II (3)  
MATH 244 Pre-Calculus with Trigonometry (6)  
MATH 250 Analytic Geometry and Calculus I (5)  
MATH 251 Analytic Geometry and Calculus II (4)  
MATH 252 Analytic Geometry and Calculus III (4)  
MATH 253 Introduction to Differential Equations (3)  
MATH 254 Introduction to Linear Algebra (3)  
MATH 260 Discrete Mathematics (3)

PHS 101 Introduction to the Physical Sciences (3)  
PHS 110 Introduction to Oceanography (3)  
PHS 250 Our Global Future: Values for Survival (3)

PHYS 170 College Physics I (3)  
PHYS 171 College Physics Laboratory I (1)  
PHYS 172 College Physics II (3)  
PHYS 173 College Physics Laboratory II (1)  
PHYS 174 College Physics III (3)  
PHYS 175 College Physics Laboratory III (1)  
PHYS 270 Principles of Physics I (3)  
PHYS 271 Principles of Physics Laboratory I (1)  
PHYS 272 Principles of Physics II (3)  
PHYS 273 Principles of Physics Laboratory II (1)  
PHYS 274 Principles in Physics III (3)  
PHYS 275 Principles of Physics Laboratory III (1)

PS 250 Our Global Future: Values for Survival (3)

PSYC 270 Statistical Methods of Psychology (3)

SOC 270 Statistical Methods of Sociology (3)

# Liberal Studies— Elementary Education

## School of Language and Literature

**Dean** Joel M. Levine, Ed.D., Office 430F, 619-482-6349

**Department Chair** Leslie Yoder, M.A.

### 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

### Major Code

01800

Students are advised to please see a counselor for areas of specialization at San Diego State University

*Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.*

## ASSOCIATE IN ARTS DEGREE

### Liberal Studies—Elementary Education

Transfer Preparation \* (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 COURSES INFORMATION section on page 33 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: Exposition and Argumentation
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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
ENGL 270	Multicultural Literature

+ Transfer course acceptable for substitution to fulfill SDSU course requirement.

### History and Social Science

#### 1. Three units selected from the following:

AFRO/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	Introduction to American Government and Politics
	(Highly recommended for students seeking Social Science degree authorization)

#### 3. Complete the following course:

HIST 106	World History I
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Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## 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
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## 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
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### 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.

# Logistics and Transportation

## Higher Education Center at Otay Mesa

**Dean** Silvia Cornejo-Darcy, M.A., Office 4118D, 619-482-6755

**Department Chair** Marisa Soler-McElwain, LL.M.

## General Description

Students who wish to transfer, may take Logistics and Transportation to continue studies in logistics, supply chain management, and related fields. In addition to the transfer courses listed, elective courses which introduce students to the field may also be selected. These include studies in logistics, transportation, export/import trade, planning operations and management, legal issues, inventory, and warehousing.

The certificate/A.S. degree program in Logistics and Transportation prepares students to work in industries affected by the distribution of goods, such as global, international, and cross border trade. The program provides students with a foundation of knowledge to enter the field of logistics and transportation and addresses the changing industry needs as a result of globalization. The program focuses on logistics, transportation, and trade issues along the San Diego-Tijuana border region; however, the knowledge and skills acquired throughout the curriculum will prepare students for positions related to the field in a variety of organizations which are involved with the logistics industry at a local, national, and international/global level. A work experience component allows students to gain practical skills and to work toward employment. Students are introduced to the concepts of supply chain management, transporting goods, planning operations, inventory, and warehousing.

## Career Options

The following list is a sample of the career options available for individuals who focus on logistics and transportation. Most of these career options require a certificate or an associate degree; some require a bachelor's degree: cargo and freight agent/forwarder, global transportation agent, industrial engineer, international logistics manager, logistician, operations research analyst, production, planning and expediting clerk, supply chain executive/supply chain and logistics manager, transportation, storage, and distribution manager, and warehousing and materials handler.

## Degree/Certificate Options

### Associate in Science Degree: Career/Technical

International Logistics and Transportation	A1141
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### Certificates of Achievement:

Logistics and Transportation—Basic	A1143
Logistics and Transportation—Intermediate	A1144

*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

### International Logistics and Transportation

Career/Technical (Major Code: A1141)

Prepares students to work as managers in industries affected by, but not limited to, cross-border and international trade. Develops skills in planning operations, transporting goods, inventory and warehousing, basic security, and supply chain management.

ACCT 7	Basic Business Bookkeeping (3)		
	<b>OR</b>		3-4
ACCT 101	Principles of Accounting I (4)		
BUS 142	Business Ethics—Corporate and Personal	1	
BUS 177	Principles of International Business	3	
CIS 133	Advanced Microcomputer Spreadsheets Software	1	
GEOG 145	Introduction to Mapping and Geographic Information Science (GIS)	3	
LEGL 256	International Law for Business	3	
BUS 290-293	Work Experience in Business I-IV (2-4)	2-4	
Plus the courses required for the Logistics and Transportation—Basic certificate			22
<b>Total units</b>			<b>38-41</b>

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## CERTIFICATES

### International Logistics and Transportation—Basic

Certificate of Achievement

Career/Technical (Major Code: A1143)

Prepares students to work in industries affected by, but not limited to, cross-border and international trade. Develops skills in planning operations, transporting goods, inventory and warehousing, basic security, and supply chain management.

BUS 122	Principles of Importing and Exporting	3
BUS 126	Introduction to Business Logistics Management	3
BUS 151	Principles of Operations Management	3
BUS 173	Transportation Management	3
BUS 183	Business Mathematics	3
CIS 101	Introduction to Computers and Information Processing	4
BUS 211	Communication in Business and Industry	3
	<b>OR</b>	
BUS 212	Business Communication	3
<b>Total units</b>		<b>22</b>

### International Logistics and Transportation—Intermediate

Certificate of Achievement

Career/Technical (Major Code: A1144)

Prepares students to work in industries affected by, but not limited to, cross-border and international trade. Develops skills that can be utilized internationally, including planning operations, transporting goods, inventory and warehousing, basic security, and supply chain management.

ACCT 7	Basic Business Bookkeeping (3)	
	<b>OR</b>	3-4
ACCT 101	Principles of Accounting I (4)	
BUS 142	Business Ethics—Corporate and Personal	1
BUS 177	Principles of International Business	3
GEOG 145	Introduction to Mapping and Geographic Information Science (GIS)	3
LEGL 256	International Law for Business	3
CIS 133	Advanced Microcomputer Spreadsheets Software	1
BUS 290-293	Work Experience in Business I-IV (2-4)	2-4
Plus the courses required for the Logistics and Transportation—Basic certificate		22
<b>Total units</b>		<b>38-41</b>



# Mathematics

## School of Mathematics, Science, and Engineering

**Interim Dean** Richard Fielding, M.S., Office 345A, 619-482-6344

**Faculty** Martha Carey, M.S.; Karen Cliffe, M.A.; Valentina Goldberg, M.A.; Shannon Gracey, M.S.; Peter E. Herrera, M.A.; Irene Hollman, M.A.; Alexander Juden, M.S.; Randy Krauss, M.S.; Janet Mazzarella, M.A.; Andrew Medin, M.A.; Myriam S. Moody, M.A.; Maria Olivas, M.A.; Nghiep Quan, M.A.; Miriam Rasky, M.A.; Carl Scarbnick, Ph.D.; Bruce Smith, M.S.; Patrick Staley, M.S.; Romina Tehrani, M.A.; Val Villegas, M.A.

**Department Chair** Alexander Juden, 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. In addition to college-level mathematics courses (numbered 100 or above) that will meet the lower-division needs of college transfer students, Southwestern College offers developmental courses consisting of arithmetic through intermediate algebra.

Students may opt to take their developmental courses in one of several formats. All formats require students to study and complete assignments outside of class. Variable sections are self-paced and computer-aided, have no fixed class meetings, and may permit a student to complete more than one course per semester. Interactive sections have regular class meeting with an instructor who uses computer-aided instruction. Hybrid classes meet with an instructor, but with less-frequent campus meetings, and require additional computer-aided instruction outside of class. Traditional lecture sections may include computer-aided instruction or online assignments.

Many of the mathematics courses are designated "Requires graphing Calculator" in the class schedule. These classes incorporate new technology into the curriculum. Both traditional and calculator methods of problem solving are taught. Instructors may choose to require or prohibit calculator use on certain assignments. Students do not need to be proficient with their calculators before enrolling to do well.

However, students are encouraged to acquire and learn to use the graphing calculator prior to enrolling in college-level courses which require a graphing calculator. Graphing calculators which perform algebraic manipulation are not permitted in any Southwestern College math course.

### 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

**Associate in Arts Degree: Transfer Preparation**

Mathematics

**Major Code**

01580

**Associate in Science Degree: Transfer Preparation**

Mathematics

01585

*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://www2.csusm.edu/math/>

**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

Complete 3–4 units from electives \*\*\* 3–4

#### Fourth Semester

Complete 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 51.

\* 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 COURSES INFORMATION section on page 33 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.

## ASSOCIATE IN SCIENCE DEGREE

### Mathematics

Student Transfer Achievement Reform  
(STAR) Act (SB1440)

Transfer Preparation \* (Major Code: 01585)



Associate Degree  
for Transfer™

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. 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. In addition to college-level mathematics courses (numbered 100 or above) that will meet the lower-division needs of college transfer students, Southwestern College offers developmental courses consisting of arithmetic through intermediate algebra.

MATH 250	Analytic Geometry and Calculus I	5
MATH 251	Analytic Geometry and Calculus II	4
MATH 252	Analytic Geometry and Calculus III	4

Choose a minimum of 6 units with at least 3 units from Group A  
(3 units are required from Group A, no units are required from Group B, however all 6 units can come from Group A) 6-7

#### Group A:

MATH 253	Introduction to Differential Equations	3
<b>OR</b>		
MATH 254	Introduction to Linear Algebra	3

#### Group B:

MATH 119	Elementary Statistics	4
<b>OR</b>		
MATH 260	Discrete Mathematics	3
<b>OR</b>		
PHYS 270	Principles of Physics I	3
<b>AND</b>		
PHYS 271	Principles of Physics Laboratory I	1

**Total units 19-20**

To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.

\* 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 COURSES INFORMATION section on page 33 for further information.**

\*\*The Mathematics Department recommends the MATH 119 be taken as an elective if it is not chosen from Group

# Medical Assistant— Administrative and Clinical

## Higher Education Center at National City

**Dean** Christine Perri, Office 7103D, 619-216-6665, ext. 6668

**Faculty** Luis Osuna, M.D.

### 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.

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 records 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

### Associate in Science Degree: Career/Technical

Medical Assistant: Administrative	02314
Medical Assistant: Clinical	02321
Medical Office Management	02311

### Certificates of Achievement

Medical Assistant: Administrative—Basic	02315
Medical Assistant: Administrative—Intermediate	02316
Medical Assistant: Administrative Intensive Training	02327
Medical Assistant: Administrative Intensive Training—Bilingual (English/Spanish)	C2055
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 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.

## Major Code

# 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)	
	<b>OR</b>	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	
	<b>OR</b>	3
BUS 212	Business Communication	
BUS/CIS 239	Project Management	3
BUS 290–293	Work Experience in Business I–IV (2–4)	2
CIS 92	Microsoft Office Suite (3)	
	<b>OR</b>	3–4
CIS 101	Introduction to Computers and Information Processing (4)	
LDR 148	Business Presentation Skills—Bilingual (English/Spanish)	
	<b>OR</b>	2
LDR 149	Business Presentation Skills	
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 133	Body Basics for Medical Office Personnel	3
MEDOP 229	Medical Terminology—Bilingual (English/Spanish)	
	<b>OR</b>	3
MEDOP 230	Medical Terminology	
MEDOP 231	Medical Office Procedures	4
<b>Total units</b>		<b>40–41.5</b>

To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.

## 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)		
	<b>OR</b>		
BUS 182	Keyboarding for Office Professionals (2)	1-2	
BUS 183	Business Mathematics	3	
BUS 211	Communication in Business and Industry		
	<b>OR</b>		
BUS 212	Business Communication	3	
BUS/CIS 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—Bilingual (English/Spanish)		
	<b>OR</b>		
LDR 149	Business Presentation Skills	2	
MEDOP 133	Body Basics for Medical Office Personnel	3	
MEDOP 135	Human Health and Disease for Medical Office Personnel	3	
MEDOP 229	Medical Terminology—Bilingual (English/Spanish)		
	<b>OR</b>		
MEDOP 230	Medical Terminology	3	
MEDOP 231	Medical Office Procedures	4	
MEDOP 234	Medical Assistant—Clinical Procedures	4	
MEDOP 236	Pharmacology for Allied Health Professionals	3	
<b>Total units</b>		<b>35-38</b>	

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## 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)		
	<b>OR</b>		
ACCT 101	Principles of Accounting I (4)		3-4
BUS 140	Business Law/The Legal Environment of Business		3
BUS 150	Principles of Management		3
BUS 211	Communication in Business and Industry		
	<b>OR</b>		
BUS 212	Business Communication		3
BUS/CIS 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
Plus completion of Medical Office Management—			
	Basic certificate		22-23
<b>Total units</b>			<b>43-47</b>

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*



## CERTIFICATES

### Medical Assistant: Administrative—Basic

Certificate of Achievement

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) <b>OR</b>	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) <b>OR</b>	3
MEDOP 230	Medical Terminology	
MEDOP 231	Medical Office Procedures	4
<b>Total units</b>		<b>18.5–19.5</b>

### Medical Assistant: Administrative—Intermediate

Certificate of Achievement

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) <b>OR</b>	2–2.5
BUS 200B	Microsoft Word: Advanced (2.5)	
BUS 211	Communication in Business and Industry <b>OR</b>	3
BUS 212	Business Communication	
BUS/CIS 239	Project Management	3
BUS 290–293	Work Experience in Business I–IV (2–4)	2
CIS 92	Microsoft Office Suite (3) <b>OR</b>	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 133	Body Basics for Medical Office Personnel	3
Plus the required courses for the Medical Assistant: Administrative—Basic certificate		18.5–19.5
<b>Total units</b>		<b>39–41.5</b>

### Medical Assistant: Administrative Intensive Training

Certificate of Achievement

Career/Technical (Major Code: 02327)

Provides training for medical front office positions at the receptionist/secretarial level, including medical office procedures, written and oral communications, appointment scheduling, medical record maintenance, medical office site audit, vital signs, cardiopulmonary resuscitation (CPR), and an introduction to medical billing. Emphasizes medical terminology as well as basic human body structures and functions.

BUS 71	Keyboarding II (1) <b>OR</b>	1–2
BUS 182	Keyboarding for Office Professionals (2)	
MEDOP 38	Medical Assistant: Administrative Intensive Training	12
MEDOP 236	Pharmacology for Allied Health Professionals	3
MEDOP 290–293	Work Experience in Medical Assistant I–IV	2–4
<b>Total units</b>		<b>18–21</b>

### Medical Assistant: Administrative Intensive Training—Bilingual (English/Spanish)

Certificate of Achievement

Career/Technical (Major Code: C2055)

Provides training in English and Spanish for medical front office positions at the receptionist/secretarial level, including medical office procedures, written and oral communications, appointment scheduling, medical record maintenance, medical office site audit, vital signs, cardiopulmonary resuscitation (CPR), and an introduction to medical billing. Emphasizes medical terminology as well as basic human body structures and functions.

Provee instrucción y entrenamiento en inglés y español para puestos a nivel de recepcionista y secretaria de consultorio médico, incluyendo procedimientos de consultorio médico, comunicación escrita y oral, programación de citas, mantenimiento de expedientes médicos, auditoría de consultorio médico, signos vitales, resucitación cardiopulmonar (RCP), e introducción en cobros médicos. Enfatiza la terminología médica bilingüe (inglés-español) así como las estructuras y funciones básicas del cuerpo humano.

BUS 71	Keyboarding II (1) <b>OR</b>	1–2
BUS 182	Keyboarding for Office Professionals (2)	
MEDOP 40	Medical Assistant: Administrative Intensive Training—Bilingual (English/Spanish)	12
MEDOP 236	Pharmacology for Allied Health Professionals	3
MEDOP 290–293	Work Experience in Medical Assistant I–IV (2–4)	2–4
<b>Total units</b>		<b>18–21</b>

## Medical Assistant: Clinical—Basic

Certificate of Achievement

Career technical (Major Code: 02322)

Prepares students to work in a medical office setting and other healthcare facilities as a medical assistant with a clinical emphasis. 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)		
	<b>OR</b>		1–2
BUS 182	Keyboarding for Office Professionals (2)		
BUS 210	Business English		3
CIS 92	Microsoft Office Suite		3
MEDOP 229	Medical Terminology—Bilingual (English/Spanish)		
	<b>OR</b>		3
MEDOP 230	Medical Terminology		
MEDOP 231	Medical Office Procedures		4
MEDOP 234	Medical Assistant—Clinical Procedures		4
<b>Total units</b>			<b>18–19</b>

## Medical Assistant: Clinical—Intermediate

Certificate of Achievement

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		
	<b>OR</b>		3
BUS 212	Business Communication		
BUS/CIS 239	Project Management		3
BUS 290–293	Work Experience in Business I–IV (2–4)		2
MEDOP 133	Body Basics for Medical Office Personnel		3
MEDOP 236	Pharmacology for Allied Health Professionals		3
Plus the courses required for the Medical Assistant: Clinical—Basic certificate			18–19
<b>Total units</b>			<b>35–36</b>

## Medical Assistant: Clinical—Intensive Training

Certificate of Achievement

Career technical (Major Code: 02324)

Provides training on diagnostic equipment, routine clinical lab tests, blood drawing techniques, immunization administration, infection control techniques, vital signs, and cardiopulmonary resuscitation (CPR). Covers instruction in medical office administrative duties and regulations, including records management, office finance and billing, and communication skills.

BUS 71	Keyboarding II (1)		
	<b>OR</b>		1–2
BUS 182	Keyboarding for Office Professionals (2)		
BUS 210	Business English		3
MEDOP 100	Medical Assistant: Clinical—Intensive		12
MEDOP 290–293			
	Work Experience in Medical Assistant I–IV (2–4)		2–4
<b>Total units</b>			<b>18–21</b>

## Medical Assistant: Coding and Insurance—Basic

Certificate of Achievement

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)		
	<b>OR</b>		1–2
BUS 182	Keyboarding for Office Professionals (2)		
BUS 210	Business English		3
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)		
	<b>OR</b>		3
MEDOP 230	Medical Terminology		
MEDOP 231	Medical Office Procedures		4
<b>Total units</b>			<b>20.5–21.5</b>



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## 🔒 Medical Assistant: Coding and Insurance—Intermediate

Certificate of Achievement

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	3
<b>OR</b>		
BUS 212	Business Communication	3
BUS 290–293	Work Experience in Business I–IV (2–4)	2
MEDOP 22	Medical Coding II	2.5
MEDOP 133	Body Basics for Medical Office Personnel	3
Plus the required courses for the Medical Assistant: Coding and Insurance—Basic certificate 20.5–21.5		
<b>Total units</b>		<b>34–35</b>

## 🔒 Medical Interpreter—Basic (English/Spanish)

Certificate of Achievement

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)	1–2
<b>OR</b>		
BUS 182	Keyboarding for Office Professionals (2)	3
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)	3–5
<b>OR</b>		
SPAN 225	Intermediate Conversation and Writing on Spanish Culture (3)	3–5
<b>Total units</b>		<b>22–25</b>

\* 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)

Certificate of Achievement

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	3
<b>OR</b>		
BUS 212	Business Communication	3
BUS 227	Interpretation and Translation: Medical	3
BUS 290–293	Work Experience in Business I–IV (2–4)	2
MEDOP 22	Medical Coding II	2.5
MEDOP 41B	Medical Insurance II	2
MEDOP 133	Body Basics for Medical Office Personnel (3)	3–4
<b>OR</b>		
BIOL 190	Human Anatomy and Physiology (4)	3–4
SPAN 216	Spanish for Bilinguals II (5)	3–5
<b>OR</b>		
SPAN 226	Intermediate Conversation and Writing on Latin American Culture (3)	3–5
Plus the required courses for the Medical Interpreter— Basic certificate 22–25		
<b>Total units</b>		<b>40.5–46.5</b>

## 🔒 Medical Office Management—Basic

Certificate of Achievement

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)	1–2
<b>OR</b>		
BUS 182	Keyboarding for Office Professionals (2)	3
BUS 183	Business Mathematics	3
BUS 210	Business English	3
LDR 148	Business Presentation Skills—Bilingual (English/Spanish)	2
<b>OR</b>		
LDR 149	Business Presentation Skills	2
LDR 151	Human Resources and Labor Relations	3
MEDOP 133	Body Basics for Medical Office Personnel	3
MEDOP 229	Medical Terminology—Bilingual (English/Spanish)	3
<b>OR</b>		
MEDOP 230	Medical Terminology	3
MEDOP 231	Medical Office Procedures	4
<b>Total units</b>		<b>22–23</b>

 **Medical Office Management—Advanced**  
Certificate of Achievement  
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)		
	<b>OR</b>		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		
	<b>OR</b>		3
BUS 212	Business Communication		
BUS/CIS 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
Plus completion of Medical Office Management—Basic certificate			22–23
<b>Total units</b>			<b>43–47</b>

# Medical Laboratory Technology

## Higher Education Center at National City

**Dean** Christine M. Perri, M.A., Office 7103D, 619-216-6665, ext. 6668

**Director** Luis A. Nunez, M.A.

### General Description

A medical laboratory technician performs routine clinical laboratory testing procedures to provide scientific information needed in diagnosis, prognosis, and treatment of disease. Technicians use sophisticated instrumentation for these evaluations which encompass quantitative and qualitative chemical and biological analyses of body specimens. Technicians function under the supervision of a qualified practitioner.

The program prepares students for a career in Medical Laboratory Technology through the studies in humanities, social and natural sciences, and the field of Medical Laboratory Technology. Emphasis is placed on the clinical practice in the context of laboratory medicine. Graduates are eligible to take and pass a nationally recognized certification examination.

### Career Options

A Medical Laboratory Technicians (MLT) responsibilities will vary according to the size of the institution for which they are employed and the extent of services it offers. This work may include:

- Performing routine tests in medical laboratory for use in prevention, diagnosis, treatment, and management of disease.
- Collecting specimens, cultivating, isolating, and identifying microorganisms for analysis.
- Using sophisticated biomedical instruments to generate accurate and reliable test results.
- Performing medical research to further control and cure diseases.

### Program Goals

- To produce graduates eligible to take and pass nationally recognized certification examination.
- To assist graduates in securing entry-level employment as a medical laboratory technician.
- To facilitate and foster the values necessary to practice laboratory medicine within the ethical and legal framework of the profession and the community.
- To produce students who exhibit professional behavior consistent with current academic and professional standards.
- To develop students who can analyze, interpret and perform laboratory tests proficiently.
- To help students acquire and strengthen problem solving and critical thinking skills.
- To assist students in performing all necessary duties in a safe environment utilizing all the latest techniques in the laboratory arena.
- To produce students who have the knowledge and respect needed to safely deal with hazardous materials.
- To develop positive student attitudes for the pursuit of lifelong professional growth and development.

### Degree/Certificate Options

#### Associate in Science Degree: Career/Technical

Medical Laboratory Technician

### Major Code

02385

*Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.*



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

# ASSOCIATE IN SCIENCE DEGREE

## Medical Laboratory Technician

Career/Technical (Major Code: 02385)

### How to Apply

Applicants must be eligible for admission to the College. In addition to the College application, a special application for the program is required. Program information and application forms are available on the College web site at [www.swccd.edu](http://www.swccd.edu), or in the medical laboratory technician department office at the Higher Education Center—National City. Applications will be accepted after prerequisite courses and other requirements are met. Students accepted into the medical laboratory technician program are subject to further screening to determine eligibility to be admitted into the program.

### Special Instructions

Students enrolled in the medical laboratory technician program are required to provide their own transportation to off-campus clinical agencies. 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 laboratory coat. CPR certification: students are required to be certified by the American Heart Association (AHA) certification, prior to admission and to maintain certification throughout the program. Phlebotomy skills: students must be California certified phlebotomists.

A grade of “C” or better is required in all medical laboratory technician courses for progression and satisfactory completion. Progress in the medical laboratory technician program is dependent upon completion of medical laboratory technician courses in the prescribed sequence as outlined for the program. Students will not be permitted to progress to the next semester until previous semester medical laboratory technician courses are completed.

### Medical Laboratory Technology—Associate in Science Degree

In order to apply and be placed on the priority list for the medical laboratory technician program, applicants must document the following:

- \* Basic science prerequisites (BIOL 260, 261, 265 and CHEM 100, 110) must be completed with a cumulative GPA of 2.7 or higher. 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)
- \* Graduation from a U.S. high school or 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 115, 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 60 or higher as demonstrated on the college math assessment process, earning a “C” or better in Math 45 or higher-numbered math course, or equivalent as documented by an approved petition.

Before a space in the medical laboratory technician 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. 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. Accepted students are required to complete an online background check and drug screening prior to enrollment into the program. The background check and drug screening are mandated by the policies of the hospitals/clinical sites for all health occupation programs faculty and students. Anyone with background check issues (includes misdemeanors and felony’s) may not be eligible for the program. Many of the hospital systems are now refusing to take students with any background check issues. Each student situation will be evaluated as they complete the background check. The student must provide a urine sample for drug testing per hospital request.

### Description

A medical laboratory technician performs routine clinical laboratory testing procedures to provide scientific information needed in diagnosis, prognosis and treatment of disease. Technicians use sophisticated instrumentation for these evaluations which encompass quantitative and qualitative chemical and biological analyses of body specimens. Technicians function under the supervision of a qualified practitioner. The program prepares students for a career in Medical Laboratory Technology through the studies in humanities, social and natural sciences, and the field of Medical Laboratory Technology. Emphasis is placed on the clinical practice in the context of laboratory medicine. Graduates are eligible to take and pass a nationally recognized certification examination.

### Prerequisites

BIOL 260	Human Anatomy	5
CHEM 100	Introduction to General Chemistry	4
CHEM 110	Elementary Organic and Biological Chemistry	4
ENGL 115	Reading and Composition: Exposition and Argumentation	4
COMM 103	Interpersonal Communication	3
<b>OR</b>		
COMM 174	Interpersonal Communication	3
BIOL 261	Principles of Human Physiology	4
BIOL 265	General Microbiology	5
MATH 60	Intermediate Algebra I	4
<b>Total units</b>		<b>33</b>

## Department acceptance into the Medical Laboratory Technician Program

### First Semester

MLT 80	Introduction to the Clinical Laboratory Profession	1
MLT 90	Clinical Urinalysis and Body Fluids	1
MLT 90L	Clinical Urinalysis and Body Fluids Laboratory	.5
MLT 100	Clinical Hematology	3
MLT 100L	Clinical Hematology Laboratory	1
MLT 101	Clinical Coagulation	1
MLT 101L	Clinical Coagulation Laboratory	.5
MLT 110	Clinical Chemistry I	3
MLT 110L	Clinical Chemistry I Laboratory	1

### Second Semester

MLT 102	Clinical Hematology, Coagulation, Urinalysis and Body Fluids Practicum	5
MLT 111	Clinical Chemistry II	3
MLT 111L	Clinical Chemistry II Laboratory	1
MLT 120	Clinical Microbiology	3
MLT 120L	Clinical Microbiology Laboratory	1

### Summer

MLT 112	Clinical Chemistry Practicum	4
MLT 130	Clinical Immunology and Immunochemistry	3
MLT 130L	Clinical Immunology and Immunochemistry Lab	1

### Third Semester

MLT 121	Clinical Microbiology Practicum	5
MLT 131	Clinical Immunology and Immunochemistry Practicum	4

**Total units** 42

To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.

# Mexican-American Studies

## School of Social Sciences and Humanities

**Dean** Mark Meadows, Ph.D., Office 470K, 619-482-6582

**Faculty** Victor Chavez, M.A.; Rosalinda González, Ph.D.; Barry Horlor, M.A.

**Department Chair** Stanley James, 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/ HIST 141	Mexican-American History I	3
MAS/ HIST 142	Mexican-American History II	3
	Foreign Language	6–10
<b>Total units</b>		<b>21–25</b>

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 51.*

- \* 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 COURSES INFORMATION** section on page 33 for further information.

# Music

## School of Arts and Communication

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

**Faculty** Todd Caschetta, M.A.; Cynthia McGregor, Ph.D.; Jeffrey Nevin, Ph.D.; Jorge Pastrana, D.M.A.; Teresa Russell, D.M.A.

**Department Chair** Cynthia McGregor, Ph.D.

### 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
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#### Certificate of Proficiency

Music—Mariachi Specialization	02543
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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

## 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/RA&T 100	Music Technology	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
Complete four courses from the required performance courses listed below		4

**Total units** 26

### Required Performance Courses:

Students are required to complete a minimum of one course per semester with a maximum of four courses.

MUS 136 A–D	Jazz Vocal Ensemble I–IV
MUS 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

**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 51.*

\* 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 COURSES INFORMATION section on page 34 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	2
<b>OR</b>		
MUS 157A	Mariachi Garibaldi I	3
MUS 202	Development of Mariachi: Style and Culture	
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	2
<b>OR</b>		
MUS 157B	Mariachi Garibaldi II	1–2
Primary instrument instruction*		

### 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	2
<b>OR</b>		
MUS 157C	Mariachi Garibaldi III	1–2
Secondary instrument instruction*		

### Fourth Semester

MUS 124D	Introduction to Mariachi Performance IV	2
<b>OR</b>		
MUS 157D	Mariachi Garibaldi IV	1–2
Secondary instrument instruction*		

**Total units** 29–33



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

**\*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 51.*

*Note: Students with music degrees from elsewhere or who have previously completed courses equivalent to MUS 101, 102, 109, 111 and 113 at other institutions may petition to have their previous courses fulfill this requirement.*

## ASSOCIATE IN SCIENCE DEGREE

### Music—Commercial

Career/Technical (Major Code: 02540)

Designed to prepare students at the apprentice level for employment in night club entertainment, dance bands, backup singing groups, lead singing, studios, music sales, music retailing, music copying, or as side players in big bands.

#### First Semester

MUS/	Music Technology	3
	RA&T 100	
MUS 101	Foundations of Music Theory I	3
MUS 111	Sight Singing and Dictation I	1
MUS 132A	Class Piano I	1
MUS 150/	Music Business/Career Overview	3
	RA&T 110	

#### 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
Complete 1–3 units from electives		1–3

#### Third Semester

MUS 107	American Popular Music	3
MUS 126	Applied Music—Individual Study II	1
MUS/	Recording Techniques	3
	TELE 151/	
	RA&T 120	
Complete 1–3 units from electives		1–3
Complete 1 unit from the performance courses listed below		1

#### Fourth Semester

MUS 155/	Electronic Music Technology	3
	RA&T 105	
Complete 1–3 units from electives		1–3
Complete four courses from the required performance courses listed below		4

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**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

**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 51.*

# CERTIFICATES

## Music—Commercial

### Certificate of Achievement

Career/Technical (Major Code: 02541)

#### First Semester

MUS/	Music Technology	3
	RA&T 100	
MUS 101	Foundations of Music Theory I	3
MUS 111	Sight Singing and Dictation I	1
MUS 132A	Class Piano I	1
MUS 150/	Music Business/Career Overview	3
	RA&T 110	

#### 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
Complete 1–3	units from electives	1–3

#### Third Semester

MUS 107	American Popular Music	3
MUS 126	Applied Music—Individual Study II	1
MUS/	Recording Techniques	3
	TELE 151/	
	RA&T 120	
Complete 1–3	units from electives	1–3
Complete 1	unit from the performance courses listed below	1

#### Fourth Semester

MUS 155/	Electronic Music Technology	3
	RA&T 105	
Complete 1–3	units from electives	1–3
Complete 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

**Note:** This is a course requirement, not a unit requirement.

## Music—Mariachi Specialization

### Certificate of Proficiency

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



# Nursing

## Higher Education Center at Otay Mesa

**Dean** Silvia Cornejo, M.A., Office 4118D, 619-482-6755

**Faculty** Leah Apatan, M.S.N.; Zaydie Feria-Bataller, M.S.N.; Jamie Florez, RN; Mary Livingston, M.S.N.; Linda McDonald, M.S.N.; Catherine L. McJannet, M.N.; Patrick Mowrey, M.S.N.; Gabriella Penaloza, M.S.N.; Sandra Peppard, M.S.N.; Arlin Ramira, M.N.; Teresa Russell, M.S.N.

**Department Chair** Zaydie Feria-Bataller, M.S.N.

**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:

Surgical Technology	02346
Vocational Nursing	02392

#### Certificates of Proficiency:

Central Service Technology	02347
Certified Nursing Assistant (CNA)	02371
Operating Room Nursing	02361

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 Community College District serves a diverse community of students by providing a wide range of dynamic and high quality educational programs and comprehensive student services. The District provides educational opportunities in the following areas:

- associate degree and certificate programs
- transfer
- professional, technical, and career advancement
- basic skills
- personal enrichment
- noncredit adult education
- community services; and
- economic, workforce, and community development

We promote student learning and success by committing to continuous improvement that includes planning, implementation, assessment, and evaluation.

### Southwestern College ADN Mission Statement

Southwestern Community College Associate Degree Nursing Program serves a diverse community of students and provides educational preparation for the graduate in the role of a Registered Nurse and as professional member of the healthcare community.

The Nursing Program provides educational opportunities that enable our students to progress from a novice level of expertise to a graduate level of expertise in nursing skills, clinical reasoning, and theoretical preparation. The program promotes personal enrichment, community service and transfer for advanced nursing educational opportunities.

The Nursing Program promotes student learning and success by committing to a continuous improvement plan utilizing evidence-based practice which includes assessment, planning, implementation, and evaluation. The program celebrates successes as our students' progress in the program, in their advanced degrees and as key members of the Nursing profession.

### The Associate Degree Nursing Program Philosophy

The associate degree nursing faculty advocates the mission and goals of Southwestern College and the ADN program; furthermore, the faculty is committed to the following beliefs, which guide the nursing curriculum:

#### Beliefs About Man, Health, and Illness

- \* Man is a unique individual with inseparable bio-psycho-social-spiritual needs.
- \* Man's culture and ability to communicate needs are 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 provide safe care to the whole person in health and illness and in a variety of practice settings.
- \* Nursing requires critical reasoning 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, provides frequent feedback, as well as strategies for success.
- \* Nursing faculty believe that learning is a lifelong process involving external changes in behavior and internal changes in thought process and attitudes. Nursing faculty are committed to their own lifelong learning and maintain currency in theory and skills through course work, CE opportunities, conferences and through their own experiential learning as a practitioner in the clinical setting.
- \* Nursing faculty believe that the role of the 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.
- \* Nursing education remains current and incorporates such resources as The National Patient Safety Goals and Institute of Medicine Reports (as it relates to nursing) as references for both the faculty and the students.
- \* Nursing faculty are committed to program core values that are reflected in each course: communication, clinical reasoning, cultural diversity, health promotion/illness prevention, life span development, nursing theory/skills, roles of the nurse, safety, evidence-based practice and quality improvement.

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  
3343 Peachtree Road Ne, Suite 500  
Atlanta, GA 30326  
Phone (404) 975-5000

### How to Apply

Applicants must be eligible for admission to the College. In addition to the College application, a special application for the program is required. Program information and application forms are available on the College web site at [www.swccd.edu](http://www.swccd.edu), Quick Links to Nursing or in the nursing department office at the Higher Education Center—Otay Mesa. Applications for each program will be accepted after prerequisite courses and other requirements are met. Students accepted into the nursing programs are subject to further screening to determine eligibility to be admitted into the programs.

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, or a healthcare provider course is required.

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

As of 2011, applicants will be accepted under the multi-criteria point system as mandated by the State Chancellor's Office. 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 7 to 10 years of beginning the program (anatomy—ten years, physiology and microbiology—seven years)
- \* Basic nursing skills: students must be CNAs or provide evidence of equivalent skills
- \* Graduation from a U.S. high school or 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 70 or higher as demonstrated on the college math assessment process, earning a "C" or better in Math 60 or higher-numbered math course, or equivalent as documented by an approved petition.
- \* Passing the TEAS test with a result of 67 or higher; the test may be repeated only once.
- \* Other criteria i.e. working/volunteering in health care, receiving financial aid, being a veteran, holding a previous bachelor's degree, etc.

**Note:** MATH 60 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.



## 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	4
PSYC 101	General Psychology	3
SOC 101	Introduction to Sociology	3
<b>Total units</b>		<b>28</b>

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

\* 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 COURSES INFORMATION section on page 33 for further information.**

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. Accepted students are required to complete an online background check and drug screening prior to enrollment into the program. The background check and drug screening are mandated by the policies of the hospitals/clinical sites for all health occupation programs faculty and students. Anyone with background check issues (includes misdemeanors and felony's) may not be eligible for the program. Many of the hospital systems are now refusing to take students with any background check issues. Each student situation will be evaluated as they complete the background check. The student must provide a urine sample for drug testing per hospital request. If the urine sample is dilute, the student WILL NOT be eligible for acceptance into the program.

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 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 is offered by the College once a month, and may be repeated only once. Under the new multi-criteria point system, a student will earn points for the first attempt only.

In addition to the above costs, students are required to pay for testing services provided by Kaplan Testing. 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 1747 North Market Blvd., Suite 150; Sacramento, CA 95834-1924 or the Program Director may be consulted. Program information may also be obtained from the National League for Nursing, 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326.

# ASSOCIATE IN SCIENCE DEGREE

## Nursing

Career/Technical (Major Code: 02360)

### Prerequisites to Option I and Option II

- Nursing Assistant Certification or equivalent

<b>Option I</b>	<b>18</b>
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 (4)	
<b>Option II</b>	<b>14</b>
BIOL 193 Principles of Human Anatomy and Physiology (5)	
BIOL 265 General Microbiology * (5)	
ENGL 115 Reading and Composition: Exposition and Argumentation (4)	
<b>Total prerequisite units</b>	<b>14–18</b>

### 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: Preceptorship	2
<b>Total semester units</b>	<b>39</b>

The following courses can be taken at any time as part of the General Education (GE) requirement for nursing. Per the Nursing program application, additional points will be given for completion of all GE courses prior to application. Nursing students with a Bachelor's degree from an accredited U.S. institution would Not need the following per senate bill SB 1393:

COMM 103 Oral Communication	3
<b>OR</b>	
COMM 174 Interpersonal Communication	
PSYC 101 General Psychology	3
CD 170 Principles of Child Development	
<b>OR</b>	
PSYC 230 Developmental Psychology	3
Complete 3 units from Area C in Group 1: Fine Arts or Group 2 Cultural Studies	3
MATH 60 Intermediate Algebra I	4

*Proficiencies required for department acceptance into this program include basic nursing skills (CNA or equivalent) college-level reading (RDG 158), and Intermediate Algebra I (MATH 60).*

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

\* 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.

Select one option for completion of prerequisites.

Students transferring as nursing majors to the CSU's must complete Option I.

### Prerequisites

<b>Option I</b>		14
BIOL 260	Human Anatomy * (5)	
BIOL 261	Principles of Human Physiology (4)	
BIOL 265	General Microbiology * (5)	
<b>Option II</b>		10
BIOL 193	Principles of Human Anatomy and Physiology (5)	
BIOL 265	General Microbiology * (5)	
<b>Total prerequisite units</b>		<b>10-14</b>

### 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 114	Nursing Supervision and Leadership I	2
ADN 223	Gerontology	2
ADN 223L	Gerontology Laboratory	4
ADN 225	Nursing Supervision and Leadership II: Preceptorship	2
<b>Total units</b>		<b>23</b>

### 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.

#### Select one option for completion of prerequisites.

Students transferring as nursing majors to the CSU's must complete Option I.

### Prerequisites

<b>Option I</b>		14
BIOL 260	Human Anatomy * (5)	
BIOL 261	Principles of Human Physiology (4)	
BIOL 265	General Microbiology * (5)	
<b>Option II</b>		10
BIOL 193	Principles of Human Anatomy and Physiology (5)	
BIOL 265	General Microbiology * (5)	
<b>Total prerequisite units</b>		<b>10-14</b>

### 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 114	Nursing Supervision and Leadership I	2
ADN 223	Gerontology	2
ADN 223L	Gerontology Laboratory	4
ADN 225	Nursing Supervision and Leadership II: Preceptorship	2

#### **Total units** **23**

\* 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.

## 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

Acceptance into the Surgical Technology program

BIOL 190	Human Anatomy and Physiology (4)	4–8
<b>OR</b>		
BIOL 260	Human Anatomy (5)	
MEDOP 230	Medical Technology (3)	

### 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
<b>Total units</b>		<b>35–39</b>

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 51.*

*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.*

## 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
VN 31	Basic Concepts in Pharmacology	1
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 39**

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 elementary algebra.

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 51.*

*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.*



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

# CERTIFICATES

## Central Service Technology

Certificate of Proficiency

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
<b>Total units</b>		<b>11.5</b>

## Certified Nursing Assistant (CNA)

Certificate of Proficiency

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 Nursing Assistant Certification exam. Hospitals, skilled nursing facilities, and other healthcare settings employ CNA's.

CNA 20	Certified Nursing Assistant (CNA)	5.5
CNA 20L	Certified Nursing Assistant Laboratory	3
<b>Total units</b>		<b>8.5</b>

## Operating Room Nursing

Certificate of Proficiency

Career/Technical (Major Code: A2361)

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 209	Basic Perioperative Nursing	9
ORN 211L	Perioperative Nurses Training Laboratory	4

**Total units** **13**

**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

Certificate of Achievement

Career/Technical (Major Code: 02346)

### Prerequisites

BIOL 190	Human Anatomy and Physiology (4)	4-8
<b>OR</b>		
BIOL 260	Human Anatomy (5)	
MEDOP 230	Medical Terminology (3)	

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
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**Total units** **35-39**

## Vocational Nursing

Certificate of Achievement

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
VN 31	Basic Concepts in Pharmacology	1
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** **39**

Proficiencies required for department acceptance into this program include basic nursing skills (CNA or equivalent), college-level reading, and elementary algebra math.

# Office Information Systems Professional

## Departments of Business, Accounting and Office Information Systems

**Dean** Mark Meadows, Ph.D., Office 215, 619-482-6460

**Faculty** Maria E. Martinez, M.B.A.; Marisa Soler-McElwain, LL.M.

**Department Chair** Marisa Soler-McElwain, LL.M.

### General Description

The study of office information systems is a field within the School of Business, Professional & Technical Education 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

<b>Associate in Science Degree: Career/Technical</b>	<b>Major Code</b>
OIS: Office Information Systems Professional	02046

### Certificates of Achievement

OIS: Office Information Systems Professional—Advanced	02048
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OIS: Microsoft Office Specialist (MOS)—Advanced	02053
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### Certificates of Proficiency

OIS: Office Information Systems Professional—Basic	02047
OIS: Microsoft Office Specialist (MOS)—Basic	02052

*Note: For Virtual Office Professionals program, see page 249.*

*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 systems software. Students will gain preparation for Microsoft Office Specialist (MOS) certification and may desire to pass a certifying examination. The 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
	<b>OR</b>	
BUS 212	Business Communication	3
BUS 218	Procedures for Office Professionals	4
BUS 290–293	Work Experience in Business I–IV (2–4)	2
CIS 122B	Spreadsheet Software—Excel	1
<b>Total units</b>		<b>26.5</b>

**Recommended Electives:** BUS 70, 71, 81, 140, 142, 152, 181, 183, 225, 226, 227, 229, 233; CIS 92, 101, 133, 134, 135, 139; LEGL 228

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## CERTIFICATES

### OIS: Microsoft Office Specialist (MOS) Basic

Certificate of Proficiency

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
<b>Total units</b>		<b>14</b>

### OIS: Microsoft Office Specialist (MOS)— Advanced

Certificate of Achievement

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)	2.5–3
<b>OR</b>		
CIS 92	Microsoft Office Suite (3)	
BUS 200B	Microsoft Word: Advanced	2.5
BUS 210	Business English	3
BUS 211	Communication in Business and Industry	3
<b>OR</b>		
BUS 212	Business Communication	
BUS 218	Procedures for Office Professionals	4
CIS/BUS 129	Multimedia Presentations—PowerPoint	1
CIS 122B	Spreadsheet Software—Excel	1
<b>OR</b>		
CIS 133	Advanced Microcomputer Spreadsheets Software	
CIS 134	Microcomputer Database Software—Access	1
<b>Total units</b>		<b>21–21.5</b>

**Recommended Electives:** BUS 35, 36, 70, 71, 73, 246; CIS 139, 150, 151, and 152.

### OIS: Office Information Systems Professional—Basic

Certificate of Proficiency

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
CIS 122B	Spreadsheet Software—Excel	1
<b>Total units</b>		<b>13</b>

### OIS: Office Information Systems Professional—Advanced

Certificate of Achievement

Career Technical (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	3
<b>OR</b>		
BUS 212	Business Communication	
BUS 218	Procedures for Office Professionals	4
BUS 290–293	Work Experience in Business I–IV (2–4)	2
CIS 122B	Spreadsheet Software—Excel	1
<b>Total units</b>		<b>26.5</b>

**Recommended Electives:** BUS 70, 71, 81, 142, 152, 181, 183, 225, 226, 227, 229, 233; CIS 92, 101, 133, 135, 139; LEGL 228

# Office Information Systems Professional—Bilingual

## Departments of Business, Accounting and Office Information Systems

**Dean** Mark Meadows, Ph.D., Office 215, 619-482-6460

**Faculty** Maria E. Martínez, M.B.A.; Marisa Soler-McElwain, LL.M.

**Department Chair** Marisa Soler-McElwain, LL.M.

### General Description

The study of office information systems is a field within the School of Business, Professional & Technical Education 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 both traditional and virtual 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, administrative assistant, and virtual office professional. Many entry-level positions are available in business, industry, education, and government for students with good organizational and communication abilities.

### Degree/Certificate Options

	<b>Major Code</b>
<b>Associate in Science Degree: Career/Technical</b>	
OIS: Office Information Systems Professional—Bilingual	02041

### Certificates of Achievement

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. The 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
	<b>OR</b>	
BUS 212	Business Communication	3
BUS 218	Procedures for Office Professionals	4
BUS 225	Interpretation and Translation: General Business	3
	<b>OR</b>	
LEGL 257	International Business and Legal Communication: Spanish	3
BUS 290–293	Work Experience in Business I–IV (2–4)	2
SPAN 216	Spanish for Bilinguals II *	5
	<b>OR</b>	
SPAN 202	Intermediate Spanish II *	5
<b>Total units</b>		<b>36.5</b>

**Recommended Electives:** BUS 70, 71, 81, 140, 142, 152, 183, 226, 227, 229, 233; CIS 92, 101, 133, 134, 135, 139; LEGL 228

To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.

\* 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.



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## CERTIFICATES

### OIS: Office Information Systems Professional—Bilingual—Basic

Certificate of Achievement

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
SPAN 216	Spanish for Bilinguals II *	5
	<b>OR</b>	
SPAN 202	Intermediate Spanish II *	
<b>Total units</b>		<b>20</b>

\* 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

Certificate of Achievement

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
	<b>OR</b>	
BUS 212	Business Communication	
BUS 218	Procedures for Office Professionals	4
BUS 225	Interpretation and Translation: General Business	3
	<b>OR</b>	
LEGL 257	International Business and Legal Communication: Spanish	
BUS 290–293	Work Experience in Business I–IV (2–4)	2
SPAN 216	Spanish for Bilinguals II *	5
	<b>OR</b>	
SPAN 202	Intermediate Spanish II *	
<b>Total units</b>		<b>36.5</b>

**Recommended Electives:** BUS 70, 71, 81, 140, 142, 152, 183, 226, 227, 229, 233; CIS 92, 101, 133, 134, 135, 139; LEGL 228

# Office Intensive Training—Bilingual and Payroll Clerk

## Higher Education Center at Otay Mesa

**Dean** Silvia Cornejo, M.A., Office 4118D, 619-482-6755

**Department Chair** Marisa Soler-McElwain, LL.M.

### General Description

The Administrative Office Assistant—Bilingual and the Legal Office Assistant—Bilingual Intensive Training Programs as well as the Payroll Clerk Program at Southwestern College prepare students to work in general business or legal offices. Each program is briefly described below:

### ADMINISTRATIVE OFFICE ASSISTANT—BILINGUAL INTENSIVE TRAINING

Bilingual (English/Spanish) office personnel are in demand in San Diego County. Students are trained to work in a bilingual office setting in an entry-level position. Students learn office procedures, telephone techniques, reception skills, document processing, keyboarding skills, and word processing using the Microsoft Word and other applications that are part of the Microsoft Office Suite—PowerPoint, Excel, and Access. The primary course (BUS 35) has been developed in an intensive format (16 hours per week for one semester) with a work experience component.

### LEGAL OFFICE ASSISTANT—BILINGUAL INTENSIVE TRAINING

The legal community requires clerical personnel who have excellent legal office and interpersonal skills. In addition, those who possess bilingual skills are in high demand. The program trains students in basic legal terminology, legal forms, and office procedures required in public and private legal offices, clinics, and the courts. The primary course (BUS 36) has been developed in an intensive format (16 hours per week for one semester) with a work experience component.

### PAYROLL CLERK

The Payroll Clerk provides a key administrative function in an organization. This entry-level program trains students with the skills required to prepare and maintain the payroll of a business with the use of computer technology. Students learn basic payroll and record keeping skills required by all small and mid-size business organizations.

### Career Options

Below is a sample of the career options available for the office assistant—bilingual major and the payroll clerk. Some of these options require completion of a certificate. Positions with higher levels of responsibility may require an associate or bachelor's degree: receptionist, office assistant, payroll clerk, bookkeeper, clerk typist, word processor, secretary, legal office clerk, legal secretary, legal assistant, education secretary, administrative assistant, executive assistant, virtual office assistant, interpreter/translator, bilingual, and office supervisor. Many entry level positions are available in business, industry, education, and government for students with solid technical, organizational, and communication skills.

### Degree/Certificate Options

#### Certificate of Achievement

Administrative Assistant—Bilingual (English/Spanish) Intensive Training A2045

Legal Office Assistant—Bilingual (Spanish/English) Intensive Training B2455

#### Certificate of Proficiency

Payroll Clerk 02142

*Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goals.*

### Major Code

## CERTIFICATES

### Administrative Office Assistant— Bilingual (English/Spanish) Intensive Training

Certificate of Achievement

Career/Technical (Major Code: A2045)

Prepares students to work in a bilingual (Spanish/English) office setting in an entry-level position. Emphasizes the development of skills in business English, keyboarding, word processing (Microsoft Office software applications), filing, record keeping, and office procedures.

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.

BUS 35 Administrative Office Assistant—Bilingual (English/Spanish) 12

BUS 70 Keyboarding I 1  
**OR**

BUS 71 Keyboarding II 1

BUS 210 Business English 3

BUS 290-293 Work Experience in Business I-IV (2-4) 2-4

**Total units** **18-20**

### Legal Office Assistant—Bilingual (Spanish/English) Intensive Training

Certificate of Achievement

Career/Technical (Major Code: B2455)

Prepares students to work in a bilingual (English/Spanish) legal office setting. Emphasizes the development of skills in bilingual legal terminology, telephone and reception techniques, legal office procedures, keyboarding correspondence, and word processing using Microsoft Word.

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, procesador de palabras (word processing), utilizando Microsoft Word.

BUS 36 Legal Office Assistant—Bilingual (English/Spanish) 12

BUS 70 Keyboarding I 1  
**OR**

BUS 71 Keyboarding II 1

BUS 210 Business English 3

BUS 290-293 2-4

Cooperative Work Experience in Business (I-IV) 2-4

**Total units** **18-20**

### Payroll Clerk

Certificate of Proficiency

Career/Technical (Major Code: 02142)

Emphasizes basic payroll skills in a technology-based environment. Includes payroll data compilation, data entry, wage posts, error reconciliation, and payroll record maintenance. Prepares students to work with computers and other payroll tools to perform basic payroll tasks required in today's technology-based businesses.

ACCT 7 Basic Business Bookkeeping 3

ACCT 8 Payroll 4

ACCT 12 Computerized Accounting 3

BUS 183 Business Mathematics 3

**Total units** **13**



# Paralegal Studies

## Departments of Business, Accounting and Office Information Systems

**Dean** Mark Meadows, Ph.D., Office 215, 619-482-6460

**Faculty** Victoria López, J.D.; Elizabeth Shapiro, J.D.

**Department Chair** Dick Wasson, M.B.A.

### 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 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

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)

Prepares students for a career as a paralegal or other law-related career with a multicultural international perspective. Trains students with a combination of legal theory, principles, procedures, and practical applications, including a hands-on paralegal internship. Emphasizes research, litigation, trial preparation skills, including familiarity with court documents, interviewing clients, drafting legal documents, and experience with legal software.

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

#### Complete 11 units from the following: 11

LEGL 225	Law Office Management (3)
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 272	Business Organizations (2)

#### Complete 3 units from the following: 3

AJ 151	Concepts of Criminal Law (3)
AJ 156	Legal Aspects of Evidence (3)
AJ 181	Juvenile Law and Procedures (3)
BUS 140	Business Law/The Legal Environment of Business (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 51.*

\* 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

## Paralegal Studies

Certificate of Achievement

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)	2–4

### Complete 11 units from the courses listed below: 11

LEGL 225	Law Office Management (3)
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 272	Business Organizations (2)

### Complete 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 33.5–35.5**

*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

## Departments of Business, Accounting and Office Information Systems

**Dean** Mark Meadows, Ph.D., Office 215, 619-482-6460

**Faculty** Victoria López, J.D.; Elizabeth Shapiro, J.D.; Marisa Soler-McElwain LL.M.

**Department Chair** Dick Wasson, M.B.A.

### 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, 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

Degree/Certificate Options	Major Code
<b>Associate in Science Degree: Career/Technical</b>	
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.*



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

# ASSOCIATE IN SCIENCE DEGREE

## Paralegal Studies: Bilingual (English/Spanish)

Career/Technical (Major Code: A2517)

Prepares the Spanish bilingual students for a career as a paralegal or related career with a multicultural/international perspective. Reviews NAFTA regulations and legal issues that impact San Diego, due to our proximity to the Mexican border. Includes a combination of legal theory, principles, procedures, and practical applications, including a hands-on paralegal internship. Emphasizes case research, litigation and trial preparation skills including familiarity with court forms, interviewing clients, and drafting legal documents. Trains students 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 (English/Spanish)	3
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)	2–4
SPAN 216	Spanish for Bilinguals II	5
	Complete 5 units from the courses listed below:	5
LEGL 225	Law Office Management (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 268	Computer Assisted Legal Research (2)	
LEGL 269	Civil Litigation Procedures (3)	
LEGL 272	Business Organizations (2)	

**Total units** **39.5–41.5**

**Recommended Electives:** BUS 36, 181, 225, 227, 233, 234; LEGL 257; SPAN 216, 201.

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

\* 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.

# CERTIFICATE

## Paralegal Studies: Bilingual (English/Spanish)

Certificate of Achievement

Career/Technical (Major Code: A2519)

BUS 226	Interpretation/Translation: Legal	3
BUS 229	Legal Terminology—Bilingual (English/Spanish)	3
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)	2–4
SPAN 216	Spanish for Bilinguals II	5
Complete 5 units from the courses listed below:		5
LEGL 225	Law Office Management (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 268	Computer Assisted Legal Research (2)	
LEGL 269	Civil Litigation Procedures (3)	
LEGL 272	Business Organizations (2)	

**Total units** **39.5–41.5**

**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.

# Pharmaceutical and Laboratory Science

## School of Mathematics, Science, and Engineering

**Interim Dean** Richard Fielding, M.S., Office 345A, 619-482-6344

**Faculty** David R. Brown, Ph.D.; David Hecht, Ph.D.; Tinh-Alfredo V. Khuong, Ph. D.; Jacquelyn Thomas, M.S.

**Department Chair** Tinh-Alfredo V. Khuong, Ph.D.

### General Description

The chemical industry is diverse, vast, and touches nearly every aspect of our lives on a daily basis. Pharmaceutical and laboratory science 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 pharmaceutical and laboratory science 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

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

#### Associate in Science Degree: Career Technical

Pharmaceutical and Laboratory Science	A1532
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#### Major Code

#### 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 Pharmaceutical and Laboratory Science major:

<http://www.swccd.edu/~chemtech>



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

# 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 121	Applied Calculus I (3)	
	<b>OR</b>	3–5
MATH 250	Analytic Geometry and Calculus I (5)	
CHEM 200	General Chemistry I	5
CHEM 210	General Chemistry II	5
<b>Total units</b>		<b>13–15</b>

### First Semester

CHEM 150	Introduction to Chemical Technology	2
CHEM 180	Computational Methods in Chemistry	2
MATH 122	Applied Calculus II (3)	
	<b>OR</b>	3–4
MATH 251	Analytic Geometry and Calculus II (4)	
PHYS 170	College Physics I	
	<b>OR</b>	3
PHYS 270	Principles of Physics I	
PHYS 171	College Physics Laboratory I	
	<b>OR</b>	1
PHYS 271	Principles of Physics Laboratory I	

### Second Semester

CHEM 190	Chemical Health and Safety	2
PHYS 172	College Physics II	
	<b>AND</b>	
PHYS 173	College Physics Laboratory II	
	<b>OR</b>	4
PHYS 272	Principles of Physics II	
	<b>AND</b>	
PHYS 273	Principles of Physics Laboratory II	

### Third Semester

CHEM 240	Organic Chemistry I	5
CHEM 250	Analytical Chemistry	5

### Fourth Semester

CHEM 160	Introductory Biochemistry	3
CHEM 242	Organic Chemistry II	5
CHEM 244	Organic Analysis and Spectroscopy	2
<b>Total units</b>		<b>37–38</b>

To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.

# CERTIFICATE

## Pharmaceutical and Laboratory Science

Certificate of Achievement

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)	
	<b>OR</b>	3–4
MATH 251	Analytic geometry and Calculus II (4)	
PHYS 170	College Physics I	
	<b>OR</b>	3
PHYS 270	Principles of Physics I	
PHYS 171	College Physics Laboratory I	
	<b>OR</b>	1
PHYS 271	Principles of Physics Laboratory I	

### Second Semester

CHEM 190	Chemical Health and Safety	2
PHYS 172	College Physics II	
	<b>AND</b>	
PHYS 173	College Physics Laboratory II	
	<b>OR</b>	4
PHYS 272	Principles of Physics II	
	<b>AND</b>	
PHYS 273	Principles of Physics Laboratory II	

### Third Semester

CHEM 240	Organic Chemistry I	5
CHEM 250	Analytical Chemistry	5

### Fourth Semester

CHEM 160	Introductory Biochemistry	3
CHEM 242	Organic Chemistry II	5
CHEM 244	Organic Analysis and Spectroscopy	2
<b>Total units</b>		<b>37–38</b>

# Philosophy

## School of Social Sciences and Humanities

**Dean** Mark Meadows, Ph.D., Office 470K, 619-482-6582

**Faculty** Peter Bolland, M.S., Alejandro Orozco, M.A., Henry Quan, M.A.

**Department Chair** Peter Bolland, M.S.

### General Description

Philosophy is humanity's oldest intellectual discipline explores which explores and asks fundamental questions about the nature of thought and existence from 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
Complete 6 units from electives		6
<b>Total units</b>		<b>18</b>

**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 51.*

\* 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 COURSES INFORMATION section on page 33 for further information.**



# Phlebotomy

## Higher Education Center at National City

**Dean** Christine M. Perri, M.A., Office 7103D, 619-216-6665, ext. 6668

**Faculty** Luis Osuna

**Director** Vickie Kimbrough-Walls, M.B.A.

### General Description

Focuses on phlebotomy procedures including venipuncture, skin puncture, specimen collection, asepsis technique, isolation procedures and safety. Provides basic and advanced didactic content required for state certification for phlebotomists. Includes anatomy, physiology, infection control, specimen identification collection equipment, patient preparation, specimen processing, quality, legal issues and interpersonal relations.

### Career Options

Below is a sample of the career options available for the phlebotomy major. A few of these require an associate degree, some require a bachelor's degree, and most require a graduate-level degree: Phlebotomy Technician, Blood Bank Manager, Laboratory Technician, Blood Bank Technician.

### Degree/Certificate Options

Certificate of Proficiency  
Phlebotomy

### Major Code

02386

*Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.*

## CERTIFICATES

### Phlebotomy

Certificate of Proficiency

Career/Technical (Major Code: 02386)

Focuses on phlebotomy procedures including venipuncture, skin puncture, specimen collection, asepsistechnique, isolation procedures and safety. Provides basic and advanced didactic content required for state certification for phlebotomists. Includes anatomy, physiology, infection control, specimen identification collection equipment, patient preparation, specimen processing, quality, legal issues and interpersonal relations.

### Prerequisites

ENGL 114 Introduction to Composition 4

RDG 158 College Reading 3

MATH 35 Pre-Algebra 4

MEDOP 229 Medical Terminology—Bilingual (English/Spanish)

**OR** 3

MEDOP 230 Medical Terminology

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**Total units** 14

### Certificate Courses

PHLB 50 Phlebotomy 3

PHLB 50L Phlebotomy Laboratory .5

PHLB 60 Clinical Phlebotomy Practicum 2

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**Total units** 5.5

# Physical Science

## School of Mathematics, Science, and Engineering

**Interim Dean** Richard Fielding, M.S., Office 345A, 619-482-6344

**Faculty** Ken Yanow, M.S., M.A.

**Department Chair** Tinh-Alfredo V. Khuong, 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

### Major Code

01670

*Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.*

## ASSOCIATE IN SCIENCE DEGREE

### Physical Science

Transfer Preparation \* (Major Code: 01670)

Lower-division requirements are not the same for all universities. The curriculum is designed for students who intend to transfer to a four-year college or university, such as SDSU, to earn a bachelor 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	3
PHYS 273	Principles of Physics II	1
PHYS 274	Principles of Physics III	3
PHYS 275	Principles of Physics Laboratory III	1

**Total units** **45**

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

- \* 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 COURSES INFORMATION section on page 33 for further information.**

## Physics

### School of Mathematics, Science, and Engineering

**Interim Dean** Richard Fielding, M.S., Office 345A, 619-482-6344

**Faculty** Hok Kong Lee, Ph.D.; Jeffrey Veal, Ph.D.

**Department Chair** Tinh-Alfredo V. Khuong, 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

**Major Code**

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	3
PHYS 273	Principles of Physics II	1

### Fourth Semester

PHYS 274	Principles of Physics III	3
PHYS 275	Principles of Physics III	1

**Total units** 30

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

\* 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 COURSES INFORMATION section on page 33 for further information.**

# Political Science

## School of Social Sciences and Humanities

**Dean** Mark Meadows, Ph.D., Office 470K, 619-482-6582

**Faculty** Alma Aguilar, M.A.; Norris S. Nagao, Ed.M.; Phil Saenz, J.D.

**Department Chair** Stanley James, 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

#### Associate in Arts Degree: Transfer Preparation

	Major Code
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/ TELE 112	Culture and the Media (3)	
	<b>OR</b>	3
JOUR 101/ COMM 200	Introduction to Mass Communication and Society (3)	
	<b>OR</b>	
PHIL 120	Ethics: Theory and Practice (3)	
MATH 119	Elementary Statistics (4)	3-4
	<b>OR</b>	
SOC/PSYC 270	Statistical Methods of Sociology (3)	
<b>Total units</b>		<b>18-19</b>

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

- \* 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 COURSES INFORMATION section on page 33 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	Introduction to American Government and Politics	3
<b>Total units</b>		<b>21</b>

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

- \* 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 COURSES INFORMATION section on page 33 for further information.**



# Psychology

## School of Social Sciences and Humanities

**Dean** Mark Meadows, 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** Christopher Hayashi, M.A.

### 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/	Statistical Methods of Psychology	3
	SOC 270	
Complete 3–4	units from electives	3–4
<b>Total units</b>		<b>18–20</b>

**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 51.*

\* 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 COURSES INFORMATION section on page 33 for further information.**

# Real Estate

## Departments of Business, Accounting and Office Information Systems

**Dean** Mark Meadows, Ph.D., Office 215, 619-482-6460

**Faculty** Gail Stockin, M.A.

**Department Chair** Dick Wasson, M.B.A.

### 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, finance, and community development 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

	Major Code
<b>Associate in Arts Degree: Transfer Preparation</b>	
Real Estate	01170
<b>Associate in Science Degree: Career/Technical</b>	
Real Estate	02130
<b>Certificates of Achievement</b>	
Broker License	02131
Real Estate	02133
Salesperson License	02132
<b>Certificates of Proficiency</b>	
Real Estate—Basic	01022

*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)

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
RE 101	Real Estate Principles	3

**Total units** **35**

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

\* 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 COURSES INFORMATION section on page 33 for further information.**



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

# ASSOCIATE IN SCIENCE

## Real Estate

Career/Technical (Major Code: 02130)

Emphasizes strong foundational skills and knowledge required by real estate professionals in today's dynamic market. Provides upgrade training for individuals already involved in the field.

ACCT 101	Principles of Accounting I	4
BUS 140	Business Law/The Legal Environment of Business	3
BUS 147	Successful Selling Techniques	1
BUS 212	Business Communication	3
RE 101	Real Estate Principles	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 290–293	Work Experience in Real Estate I–IV (2–4)	2–4

**Total units** **31–33**

**Recommended Electives:** BUS 123, 183; CIS 121A or 121B; PSYC 101; RE 114, 120.

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## Real Estate

Certificate of Achievement

Career/Technical (Major Code: 02133)

Emphasizes strong foundational skills and knowledge required by real estate professionals in today's dynamic market. Provides upgrade training for individuals already involved in the field.

ACCT 101	Principles of Accounting I	4
BUS 140	Business Law/The Legal Environment of Business	3
BUS 147	Successful Selling Techniques	1
BUS 211	Communication in Business and Industry	3
<b>OR</b>		
BUS 212	Business Communication	3
RE 101	Real Estate Principles	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 290–293	Work Experience in Real Estate I–IV (2–4)	2–4

**Total units** **31–33**

## Real Estate—Basic

Certificate of Proficiency

Career/Technical (Major Code: 01022)

Prepares students to pass the California Real Estate exam.

RE 101	Real Estate Principles	3
RE 102	Real Estate Practice	3

Complete three units from one of the following courses: **3**

RE104	Real Estate Finance (3)
RE106	Legal Aspects of Real Estate (3)
RE114	Property Management (3)
RE108	Real Estate Economics (3)
RE110	Real Estate Appraisal (3)

**Total units** **9**

# CERTIFICATES

## Broker License

Certificate of Achievement

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
<b>OR</b>		
ACCT 101	Principles of Accounting I (4)	3–4
RE 110	Real Estate Appraisal	3

**Complete 9 units from the courses listed below: 9**

BUS 140	Business Law/The Legal Environment of Business (3)
RE 101	Real Estate Principles (3)
RE 114	Property Management (3)
RE 120	Escrow Principles (3)

**Total units** **24–25**

## Salesperson License

Certificate of Achievement

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
<b>Total units</b>		<b>28</b>

**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.

# Recording Arts and Technology Communication

## School of Arts and Communication

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

**Faculty** James Henry

**Department Chair** Eric Maag, M.A.

### 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, finance, and community development 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

### Major Code

#### Associate in Science Degree: Career/Technical

Recording Arts and Technology 02538

#### Certificate of Achievement

Recording Arts and Technology 02537

*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

## Recording Arts and Technology

Career/Technical (Major Code: 02538)

Prepares students for employment in studio recording, television, and film sound production. Builds on their recording industry technical education in recording arts and recording technology. Contributes to the student's financial independence, career success, and allows them to take key roles within the digital audio recording and sound mixing fields.

### First Semester

RA&T 100/ Music Technology MUS 100	3
RA&T 110/ Music Business/Career Overview MUS 150	3
RA&T 120/ Recording Techniques MUS 151/ TELE 151	3
<b>OR</b>	
TELE 151/ Recording Techniques MUS 151/ RA&T 120	3

### Second Semester

ELEC 100 Introduction to Electronics	3
RA&T 105/ Electronic Music Technology MUS 155	3
RA&T 121 Audio Recording Technology I	2

### Third Semester

BUS 120 Introduction to Business	3
RA&T 122 Audio Recording Technology II	4
TELE 290 Professional Media Work Experience I	2

### Fourth Semester

MUS 107 American Popular Music	3
RA&T 123 Audio Recording Technology III	4
TELE 291 Professional Media Work Experience II	2

Complete 8 units from required electives 8

**Total units 43**

**Required Electives:** BUS 136, 150, 211.

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

# CERTIFICATES

## Recording Arts and Technology

Certificate of Achievement

Career/Technical (Major Code: 02537)

Prepares students for employment in studio recording, television, and film sound production. Builds on their recording industry technical education in recording arts and recording technology. Contributes to the student's financial independence, career success, and allow them to take key roles within the digital audio recording and sound mixing fields.

### First Semester

RA&T 110/ Music Business/Career Overview MUS 150	3
RA&T 120/ Recording Techniques MUS/TELE 151	3
<b>OR</b>	
TELE/ Recording Techniques MUS 151/RA&T 120	3

### Second Semester

ELEC 100 Introduction to Electronics	3
RA&T 121 Audio Recording Technology I	2

### Third Semester

RA&T 122 Audio Recording Technology II	4
TELE 290 Professional Media Work Experience I	2

### Fourth Semester

RA&T 123 Audio Recording Technology III	4
TELE 291 Professional Media Work Experience II	2

Complete 9 units from required electives 9

**Total units 32**

**Required Electives:** BUS 150, RA&T 100, 105.

# Sociology

## School of Social Sciences and Humanities

**Dean** Mark Meadows, Ph.D., Office 470K, 619-482-6582

**Faculty** Elizabeth Ballesteros, M.A.; Faustino Escalera, Ph.D.; Norris S. Nagao, Ed.M.

**Department Chair** Christopher Hayashi, M.A.

### 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

#### Associate in Arts Degree: Transfer Preparation

#### Major Code

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/	Statistical Methods of Sociology	3
PSYC 270		
	Foreign Language	10–15
<b>Total units</b>		<b>19–24</b>

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

- \* 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 COURSES INFORMATION section on page 33 for further information.**



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

## 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/	Statistical Methods of Sociology	3
PSYC 270		

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**Total units** **25**

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

- \* 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 COURSES INFORMATION section on page 33 for further information.**

# Spanish

## School of Language and Literature

**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** Dinorah Guadiana-Costa, 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

#### Associate in Arts Degree: Transfer Preparation

	Major Code
Spanish	01460
Spanish for Bilinguals	A1490

#### Certificate of Proficiency

Spanish Proficiency	01461
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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

## 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)	5-6
<b>OR</b>		
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
<b>Total units</b>		<b>26-27</b>

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

\* 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 COURSES INFORMATION section on page 33 for further information.**

## Spanish for Bilinguals

Transfer Preparation \* (Major Code: A1490)

Designed for students whose first language is Spanish. Courses for bilinguals are intended to provide instruction for the student seeking enhancement and development of their first language. Students will acquire Spanish literacy skills to enhance their personal, career, and professional opportunities.

### First Semester

SPAN 215	Spanish for Bilinguals I	5
SPAN 225	Intermediate Conversation and Writing on Spanish Culture	3
<b>OR</b>		
SPAN 226	Intermediate Conversation and Writing on Latin American Culture	

### Second Semester

SPAN 216	Spanish for Bilinguals II	5
SPAN 225	Intermediate Conversation and Writing on Spanish Culture	3
<b>OR</b>		
SPAN 226	Intermediate Conversation and Writing on Latin American Culture	

### Third Semester

SPAN 221	Introduction to Literature for Bilinguals	5
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### Fourth Semester

Complete 6 units from the following courses:		6
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)	

**Total units** **27**

**Recommended Elective:** BUS 229.

**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 51.*

\* 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 COURSES INFORMATION section on page 33 for further information.**



## CERTIFICATE

### Spanish Proficiency

Certificate of 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)	
<b>OR</b>		10
SPAN 216	Spanish for Bilinguals II (5)	
SPAN 221	Introduction to Literature for Bilinguals (5)	

Complete one course from the following courses: 3

BUS 225	Complete 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

# Sustainable Energy Studies

## Departments of Applied Technology, CIS/Electronics, and Administration of Justice

**Dean** Terry Davis, M.H.A., Office 1000K, 619-482-6551

**Department Chair** David Preciado, A.A.

### General Description

Introduces the student to the study of the growth of the human population and its effects on energy and climate demands with an emphasis on landscaping and the built environment. Studies the relationship between human biology and the environment as applied to building design. Emphasizes sustainable building design, passive energy strategies, and the application of appropriate heating, cooling, and ventilation systems. A hands on study of energy auditing methods of existing homes as they are now constructed, analysis of residential design and strategies for energy efficiency. Prepares the student to take the California H.E.R.S. level 1 certification exam.

### Career Options

Below is a sample of the career options available for the Sustainable Energy Studies major: Energy auditors and home energy raters, building control systems technicians, compliance analyst or energy regulation specialist, HVAC mechanics, technicians or installers, sustainable landscape professional, landscape irrigation auditor, and sustainable landscape designer.

### Degree/Certificate Options

#### Associate in Science Degree: Career/Technical

	<b>Major Code</b>
Sustainable Landscape Practices	02612

#### Certificate of Achievement

Sustainable Energy Studies	02471
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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

### Sustainable Landscape Practices

Career/Technical (Major Code: 02612)

Trains students to become proficient in the many skills needed to evaluate residential and urban landscapes for sustainable practices in design, installation, and maintenance. Careers related to this degree include Sustainable Landscape Professional, Landscape Irrigation Auditor, and Sustainable Landscape Designer.

LNT/ SES 101	Introduction to Sustainable Energy Studies	3
LNT 91	Sprinkler System Maintenance: Sprinklers, Pipes, and Backflow Devices	1
LNT 92	Sprinkler System Maintenance: Valves and Wiring	1
LNT 93	Sprinkler System Maintenance: Controllers and Scheduling	1
LNT 100	Plant and Horticultural Science	4
LNT 102	Plant Identification: Deciduous Trees	1
LNT 103	Plant Identification: Conifers and Palms	1
LNT 104	Plant Identification: Broadleaf Trees	1
LNT 106	Plant Identification: Flowering Shrubs	1
LNT 107	Plant Identification: Foliage Shrubs I	1
LNT 108	Plant Identification: Foliage Shrubs II	1
LNT 119	Plant Identification: Xeriphytic Plants	3
LNT 120	Landscape Design I	4
LNT 127	Landscape Construction: Sprinkler Installation	1
LNT 128	Sprinkler Design	3
LNT 129	Sustainable Landscape/Water Auditor	3
LNT 134	Soils	3
LNT 136	Plant Pest and Disease Control	3
<b>Total units</b>		<b>36</b>

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## CERTIFICATES

### Sustainable Energy Studies

Certificate of Achievement

Career/Technical (Major Code: 02471)

Introduces the student to the study of the growth of the human population and its effects on energy and climate demands with an emphasis on landscaping and the built environment. Studies the relationship between human biology and the environment as applied to building design. Emphasizes sustainable building design, passive energy strategies, and the application of appropriate heating, cooling, and ventilation systems. A hands-on study of energy auditing methods of existing homes as they are now constructed, analysis of residential design and strategies for energy efficiency. Prepares the student to take the California Home Energy Rater System (H.E.R.S). level 1 certification exam.

SES/LNT 101	Introduction to Sustainable Energy Studies	3
SES 110	Introduction to Building Science	3
SES 120	The Energy Efficient Building	3
SES/ARCH 201	Beginning Building Information Modeling	3
SES 205	Building Energy Analysis Using BIM	3
<b>Total units</b>		<b>15</b>



Some courses within this program may require additional coursework that must be completed prior to enrollment in those courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

# Telemedia

## School of Arts and Communication

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

**Faculty** Luis Bohorquez, B.A.; Mark Sisson, M.F.A.

**Department Chair** Eric Maag, 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, scriptwriter, grip, high school or college instructor, performance artist, computer graphics artist, animator, editor, and communication manager.

### Degree/Certificate Options

Degree/Certificate Options	Major Code
<b>Associate in Arts Degree: Transfer Preparation</b>	
Telemedia	01280
<b>Associate in Science Degree: Career/Technical</b>	
Telemedia Production Specialist	02530
Telemedia Technology	02535
<b>Certificate of Achievement</b>	
Telemedia Technology	02536
<b>Certificates of Proficiency</b>	
Telemedia Production Specialist—Basic	02531
Telemedia Production Specialist—Advanced	02532

*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/HUM 112	Culture and the Media	
<b>OR</b>		
TELE 113/ ART 130	History of Film as Art	3
<b>OR</b>		
TELE 114/ COMM 185	Cinema as a Form of Expression and Communication	
TELE/ART 131	Introduction to Video and Film Production	3
TELE/TA 150	Technical Design and Production	3
TELE/MUS 151/ RA&T 120	Recording Techniques	3
TELE/ COMM 180	Introduction to Electronic Media	3
TELE 183	Video Studio Production	3
<b>Total units</b>		<b>27</b>

**Recommended Electives:** TELE 115, 132, , 233, 234, 242; JOUR 101, 151.

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

\* 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 COURSES INFORMATION section on page 33 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)	
	<b>OR</b>	3–4
TELE 100	Fundamentals of Film/Video Cameras and Recorders (2)	
TELE 101	Fundamentals of Film and Video Editing (2)	
TELE/HUM 112	Culture and the Media	3
	<b>OR</b>	
TELE 113/ ART 130	History of Film as Art	
	<b>OR</b>	
TELE 114/ COMM 185	Cinema as a Form of Expression and Communication	
TELE/COMM 180	Introduction to Electronic Media	3
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/ RA&T 120	Recording Techniques	3
TELE 163	Video Post-production and Special Effects	3
TELE/ TA 150	Technical Design and Production	3
TELE 183	Video Studio Production	3
TELE 290–293	Professional Media Work Experience I–IV	2–4
	<b>Total units</b>	<b>32–35</b>

**Recommended Electives:** BUS 147, 174, 183; ELEC 10A, 10B, 14; TELE 114, 115, 132, 233, 234, 242, 210; HLTH 101.

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## 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)	
	<b>OR</b>	
TELE/COMM 180	Introduction to Electronic Media (3)	3–4
	<b>OR</b>	
TELE 100	Fundamentals of Film and Video Cameras and Recorders (2)	
TELE 101	Fundamentals of Film and Video Editing (2)	
ENGL 114	Introduction to Composition	4
TELE/ART 131	Introduction to Video and Film Production	3
TELE/ART 132	Intermediate Video and Film Production	3
TELE 183	Video Studio Production	3
TELE 290–293	Professional Media Work Experience I–IV	2–4

**Total units** **18–21**

**Recommended Electives:** CIS 101; TELE 100, 150, 151.

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*



# CERTIFICATES

## 🔒 Telemedia Production Specialist—Basic

Certificate of Proficiency

Career/Technical (Major Code: 02531)

ART 121	Darkroom and Digital Photography I (3)	
	<b>OR</b>	3–4
TELE 100	Fundamentals of Film/Video Cameras and Recorders (2)	
TELE 101	Fundamentals of Film and Video Editing (2)	
TELE/HUM 112	Culture and the Media	
	<b>OR</b>	3
TELE 113/ ART 130	History of Film as Art	
	<b>OR</b>	
TELE 114/ COMM 185	Cinema as a Form of Expression and Communication	
TELE/COMM 180	Introduction to Electronic Media	
	<b>OR</b>	3
ELEC 100	Introduction to Electronics	
TELE 110	Writing for Film and Electronic Media	3
TELE 163	Video Post-production and Special Effects	3
	<b>Total units</b>	<b>14–16</b>

## Telemedia Production Specialist—Advanced

Certificate of Proficiency

Career/Technical (Major Code: 02532)

ART 159	Graphic Design—Layout	3
ART/TELE131	Introduction to Video and Film Production	
	<b>OR</b>	3
TELE/ MUS 151/RA&T 120	Recording Techniques	
TELE/TA 150	Technical Design and Production	3
TELE 183	Video Studio Production (3)	
	<b>OR</b>	3–4
TELE 290–293	Professional Media Work Experience I–IV (2–4)	
	<b>Total units</b>	<b>12–13</b>

## 🔒 Telemedia Technology

Certificate of Achievement

Career/Technical (Major Code: 02536)

TELE/ COMM 180	Introduction to Electronic Media (3)	
	<b>OR</b>	3–4
TELE 100	Fundamentals of Film and Video Cameras and Recorders (2)	
TELE 101	Fundamentals of Film and Video Editing (2)	
ENGL 114	Introduction to Composition	4
TELE/ART 131	Introduction to Video and Film Production	3
TELE 163	Video Post-Production and Special Effects	3
TELE 183	Video Studio Production	3
TELE 290–293	Professional Media Work Experience I–IV (2–4)	2–4
	<b>Total units</b>	<b>18–21</b>

# Theatre Arts

## School of Arts and Communication

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

**Faculty** Gary Larson, M.F.A.; Mark Pentilescu, M.A.

**Department Chair** Jeffrey Nevin, Ph.D.

### 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

#### Associate in Arts Degree: Transfer Preparation

### Major Code

Theatre Arts—Performance

A1220

*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—Performance

Transfer Preparation \* (Major Code: A1220)

Advances the mastery of skills that benefit the student in the real world. The student of theatre exercises imagination and observation while developing responsiveness, insight, and the ability to articulate and confidently present his or her ideas. Develops a comprehensive understanding of history, theory, and the technical skills necessary to develop believable characters and fluid scenes. Prepares students to transfer to a college or university for further training, to seek entry level jobs in the industry, to apprentice, or to utilize their acting skills in amateur, community, commercial, industrial, or professional theatre, film, and television productions.

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 120	Theatre Workshop—Performance	2
TA 127	Theatre Workshop—Studio Performance	2
TA 134	Improvisation for the Theatre	3
TA 160	Theatre Workshop—Technical Crews I	2

Complete 6–9 elective units from the following courses: 6–9

TA 108/	Introduction to Dramatic Scriptwriting (3)	
TELE 208		
TA/	Acting for Television and Film (3)	
TELE 115		
TA/	Technical Design and Production (3)	
TELE 150		

**Total units** 27–30

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

\* 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 COURSES INFORMATION section on page 33 for further information.**



# Travel and Tourism

## Higher Education Center at Otay Mesa

**Dean** Silvia Cornejo, M.A., Office 4118D, 619-482-6755

**Department Chair** Victoria López, 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

#### Associate in Science Degree: Career/Technical

	<b>Major Code</b>
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, consultant, or entrepreneur and provides a broad view of the industry. Emphasizes worldwide travel and diverse modes of transportation and accommodations.

BUS 147	Successful Selling Techniques	1
BUS 210	Business English	3
BUS 211	Communication in Business and Industry	3
	<b>OR</b>	<b>3</b>
BUS 212	Business Communication	
CIS 101	Introduction to Computers and Information Processing	4
CIS/LIB 151	Research Using the Internet	1
HTM 150	Introduction to Hospitality and Tourism Management	3
T&T 45	Tour and Tour Guiding	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 290–293	Cooperative Work Experience Travel and Tourism I–IV (2–4)	2
<b>Total units</b>		<b>33.5</b>

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

*Note: For other options in Travel and Tourism, see Hospitality, page 172.*

## CERTIFICATES

### Travel and Tourism—Basic

Certificate of Achievement

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/ LIB 151	Research Using the Internet	1
CIS 101	Introduction to Computers and Information Processing	4
T&T 138	Tourism and Travel Agency operations	3
T&T 160	Travel Destinations—Western Hemisphere	3
T&T 162	Travel Destinations—Europe, Africa, and the Middle East	3
T&T 260	Basic Computer Applications in Travel and Tourism	2
<b>Total units</b>		<b>19</b>

### Travel and Tourism—Advanced

Certificate of Achievement

Career/Technical (Major Code: 02965)

Provides students with enhanced skills and a broader background for higher-level employment in the field of travel and tourism.

BUS 147	Successful Selling Techniques	1
BUS 211	Communication in Business and Industry	3
<b>OR</b>		
BUS 212	Business Communication	3
T&T 45	Tour and Tour Guiding	3
T&T 164	Travel Destinations—South Pacific, Asia, Orient	3
T&T 258	Worldwide Cruise Travel	3
T&T 261	Advanced Computer Applications in Travel and Tourism	2
T&T 290–293	Cooperative Work Experience Travel and Tourism I–IV (2-4)	2
Plus the courses required for the Travel and Tourism—Basic certificate		19
<b>Total units</b>		<b>36</b>

# Virtual Office Professional

## Higher Education Center at Otay Mesa

**Dean** Silvia Cornejo, M.A., Office 4118D, 619-482-6755

**Faculty** Maria Martinez, M.B.A.

**Department Chair** Marisa Soler-McElwain, LL.M.

### General Description

The Virtual Office Professional is designed for: 1) People who want to promote and maintain all aspects of a small business on the Internet. 2) Individuals who want to work as virtual office and administrative support professionals. The basic program provides students with the skills and knowledge required to create and maintain a virtual (Web- and technology-based) business. Entrepreneurs and people involved in a variety of enterprises can learn to conduct their business online. The Virtual Office Professional—Intermediate program focuses on key skills required for positions that utilize virtual administrative support personnel, including executive assistants and office support specialists and provides further training in creating, marketing, and managing a virtual office. Topics include time management, workplace customization, evaluation of equipment and technology, communication methods that utilize advanced technologies, and business ethics. These virtual office professionals need strong computer and technology skills which can be acquired by completion of these certificate/degree programs. Students may take a career ladder approach in achieving all three levels of the program by completing the basic certificate, finding a job in the field, and continuing their education. They can then complete the intermediate certificate and the associate in science degree while continuing to work in the field.

### Career Options

#### 1) Virtual Office for Small Business Owners/Entrepreneurs.

Entrepreneurs and people involved in a broad variety of businesses acquire skills needed to conduct their business online. By completing the Virtual Office Professional —Basic Certificate, entrepreneurs in almost any field can develop a larger base of clients by setting up and maintaining a virtual office/business. The following list includes several majors offered by the School of Business, Professional & Technical Education at Southwestern College that can be enhanced by the addition of a Virtual Professional—Basic (or higher) certificate. The geographic area served by these businesses can expand to the national, international, or global level. These majors include: accounting, bookkeeping, payroll, computer desktop support/technician, computer programming/database, eCommerce/eBusiness, event and convention planning, financial services, hospitality and tourism, insurance, international business, logistics and transportation, legal assisting/paralegal, medical/coding/medical insurance, real estate/real estate loan processing, translation/interpretation services, travel and tourism, web design/development, as well as virtual office professional.

#### 2) Virtual Office and Administrative Support Professionals.

The following list is a sample of the career options available for individuals who focus on virtual office skills. Most of these career options require a certificate or an associate degree; some require a bachelor's degree: virtual office assistant/receptionist, virtual office computer support specialist, virtual executive assistant, virtual secretary, virtual office manager/administrator, virtual office supervisor, virtual marketing assistant, and virtual web site support technician.



## Degree/Certificate Options

### Associate in Science Degree: Career/Technical

Virtual Business Office Professional

## Major Code

A2454

### Certificates of Achievement

Virtual Business Professional

A2458

Virtual Business Office Support Professional

A2459

*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

### Virtual Business Office Professional

Career/Technical (Major Code: A2454)

Prepares students to create a virtual (Web- and technology-based) business and how to set up a virtual office to work effectively in this environment. Emphasizes the creation, marketing, and management of the virtual office, the use of new technologies, and the development of key office support and technical skills required in the virtual environment.

BUS 135	eBusiness II: Creating an Effective Web Presence	3
BUS 140	Business Law/The Legal Environment of Business	3
BUS 182	Keyboarding for Office Professionals	2
BUS 183	Business Mathematics	3
BUS 200A	Microsoft Word: Beginning	2.5
BUS 200B	Microsoft Word: Advanced	2.5
BUS 206	Filing and Records Management	2.5
BUS 211	Communication in Business and Industry	3
	<b>OR</b>	
BUS 212	Business Communication	3
BUS 290-293	Cooperative Work Experience in Business I-IV	2-4
Plus the courses required for the Virtual Business Professional—Basic certificate		18-19

**Total units** 41.5–42.5

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

## CERTIFICATES

### Virtual Business Professional

Certificate of Achievement

Career/Technical (Major Code: A2458)

Emphasizes the creation, marketing, and management of the virtual business and the use of new technologies in completing business transactions. Prepares students to work in a virtual (Web- and technology-based) office environment and provides an overview of virtual entities, including home-based businesses that are successful in today's global market.

BUS 96	Customer Service and Communication Techniques	1
BUS/CIS 129	Multimedia Presentations—PowerPoint	1
BUS 143	eStrategic Business Planning	2
BUS 191	Creating and Managing a Virtual Office	3
BUS 192	Marketing a Virtual Office	3
BUS 210	Business English	3
CIS 92	Microsoft Office Suite (3)	
	<b>OR</b>	3-4
CIS 101	Introduction to Computers and Information Processing (4)	
CIS/LIB 151	Research Using the Internet	1
LDR 152	Business Innovation and Creativity	1

**Total units** 18-19

### Virtual Business Office Support Professional

Certificate of Achievement

Career/Technical (Major Code: A2459)

Prepares students to work in a virtual (Web- and technology-based) office environment. Emphasizes the creation, marketing, and management of the virtual office, the use of new technologies, and the development of key office support and technical skills required in the virtual environment.

BUS 135	eBusiness II: Creating an Effective Web Presence	3
BUS 140	Business Law/The Legal Environment of Business	3
BUS 182	Keyboarding for Office Professionals	2
BUS 183	Business Mathematics	3
BUS 200A	Microsoft Word: Beginning	2.5
BUS 200B	Microsoft Word: Advanced	2.5
BUS 206	Filing and Records Management	2.5
BUS 211	Communication in Business and Industry	
	<b>OR</b>	3
BUS 212	Business Communication	
BUS 290-293	Cooperative Work Experience in Business I-IV (2-4)	2
Plus the courses required for the Virtual Business Professional certificate		18-19

**Total units** 41.5-42.5

# Women's Studies

## School of Social Sciences and Humanities

**Dean** Mark Meadows, Ph.D., Office 470K, 619-482-6582

**Faculty** Rosalinda González, Ph.D.; Laura Ryan, M.A.

**Department Chair** Stanley James, 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	Women in World History	3
SOC 135	Sociology of the Family	3
	Foreign Language	5
Complete 6 units from electives		6

**Total units** 20

**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 51.*

- \* 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 COURSES INFORMATION section on page 33 for further information.**



# COURSE DESCRIPTION LISTING

Some courses may require additional coursework that must be completed prior to enrollment in the courses. Please consult this individual course listing for prerequisites and any other limitations on enrollment.

*Notes: The reference to "other limitations on enrollment" covers other course requisites such as certification or license.*

# ACCOUNTING COURSES

## ACCT 4.

**Accounting with the Microcomputer**  
3 units

**Recommended Preparation:** ACCT 101 or equivalent

**Lecture 2 hours, laboratory 3 hours**

**Offered:** Variable

Fee: \$3. 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. [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 8.

**Payroll**  
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:** Fall

Fee: \$3. Provides entry-level training in the fundamental skills and knowledge in payroll preparations, such as calculating regular and overtime pay, federal and state tax withholdings, and working with journal entries and financial statement in processing payroll records. [D]

## ACCT 9.

**Payroll II**  
3 units

**Prerequisite:** ACCT 8 or equivalent

**Recommended Preparation:** 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

Prepares students to work with tax and employment laws pertaining to payroll records. Emphasizes journal entries and preparation of financial statements used in processing payroll records. [D]

## ACCT 12.

**Computerized Accounting**  
3 units

**Prerequisite:** ACCT 7, 101 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 3 hours**

**Offered:** Variable

Fee: \$3. Covers the accounting cycle for both service and merchandising businesses using accounting software. [D]

## ACCT 101.

**Principles of Accounting I**  
4 units

**Grade only**

**Recommended Preparation:** ACCT 7 or MATH 45 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 4 hours**

**Offered:** Variable

Fee: \$2. Explores what financial accounting is, why it is important, and how it is used by investors and creditors to make decisions. Covers the recording and reporting of business transactions, the application of generally accepted accounting principles, the classified financial statements, and statement analysis. [D; CSU; UC]

## ACCT 102.

**Principles of Accounting II—Managerial**  
4 units

**Grade only**

**Prerequisite:** ACCT 101 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

Fee: \$2. Covers how managers use accounting information in decision-making, planning, directing operations, and controlling. Focuses on cost terms and concepts, cost behavior, cost structure, and cost-volume-profit analysis. Examines profit planning, standard costs, operations and capital budgeting, cost control, and accounting for costs in manufacturing organizations. [D; CSU; UC]

## 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 owners equity. [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 153.**

**Hospitality Management Accounting**  
4 units

**Grade only**

**Prerequisite:** ACCT 101 or HTM 150 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

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. Reviews and applies concepts of responsibility accounting, capital expenditure decisions, and feasibility studies to various projects. (Same as HTM 153.) [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 35.

**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 COURSES

**AJ 41.**

**Basic Police Academy I**  
12.5 units

**Grade only**

**Limitation on Enrollment:** Student must be 18 years of age with no felony convictions, possess a valid driver's license, and be a high school graduate

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

**Lecture 8 hours, laboratory 14 hours****Offered:** Variable

Introduces the first of two courses required by POST (Commission on Peace Officers Standards and Training) to meet the peace officer training certificate requirements. Provides information regarding entry-level peace officer training related to such topics as the varied laws, victim management, criminal investigations, and custodial situations. [D]

**AJ 42.**

**Basic Police Academy II**  
12.5 units

**Grade only**

**Prerequisite:** AJ 41 or equivalent

**Limitation on Enrollment:** Student must be 18 years of age with no felony convictions, possess a valid driver's license, and be a high school graduate

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

**Lecture 8 hours, laboratory 14 hours****Offered:** Variable

Provides the second part of a concentrated two-semester program of study that satisfies the entry-level requirements to become a peace officer. Includes emphasis on officer survival skills. Program is certified by POST (Commission on Peace Officers Standards and Training). [D]

**AJ 66.**

**Law Enforcement Re-qualification**  
6 units

**Grade only**

**Prerequisite:** AJ 41 and 42, or equivalent

**Limitation on Enrollment:** Student must be 18 years of age with no felony convictions, possess a valid driver's license, and be a high school graduate. *Six-Year Exception:* Individuals who successfully completed a Regular Basic Course (RBC), Specialized Investigators' Basic Course (SIBC), or the Basic Course Waiver process on or after July 1, 1999, but who never served in a position for which a regular or specialized investigator's Basic Course was required by law, may requalify by completing the POST Requalification Course one time within six years from the date of basic course or waiver process completion. After six years, those individuals must complete the appropriate basic course (RBD or SIBC) to requalify, regardless of when the Requalification Course was completed.

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

**Lecture 6 hours, laboratory 1 hour****Offered:** Variable

Provides updated information for this requalification course based on Peace Officers Training and Standards (P.O.S.T.) regulation 1008. Emphasizes critical manipulative skills related to officer safety, civil liability, and other police-related topics. [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]

**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

**Grade only**

**Recommended Preparation:** AJ 111 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. Provides an overview of historical development and philosophy of criminal law and key constitutional provisions. Includes study of legal definitions, classification of crime, legal research, case law methodology, and concepts of law as a social force. Also provides study of important criminal statutes and their relevant application in the criminal justice system. [D; CSU; UC]

**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]

**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]

**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 222.****Digital Forensic Photography**

4 units

**Prerequisite:** ART 166 or equivalent

**Recommended Preparation:** ART 205 or equivalent

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

Emphasizes training and practical experience in digital forensic photography. Focuses on crime scene investigation and laboratory applications. Provides instruction in the use of 35mm, digital and video photography under various circumstances and lighting conditions. Provides instruction on the use of computer software and proper use of camera accessories. (Formerly AJ 221) [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 35.

**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 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

Emphasizes the study of the African-American experience from African origins to the conclusion of the Civil War. Focuses on the Atlantic slave trade and slavery in the United States. Includes a study of the Constitution of the United States and the responsibilities of American citizenship. (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

Explores the history of African Americans from the Civil War to the present, emphasizing their cultural, social, and political impact on American history. Includes a study of the United States Constitution, the State Constitution of California, and discrepancies between rights and the experiences of African Americans. (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

Introduces the origins and development of African-American culture in the United States between 1619 and the present. Emphasizes 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]

**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 35.

**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 COURSES

**ASL 120.**  
American Sign Language I  
4 units

**Lecture 4 hours**

**Offered:** Variable

Introduces sign language and manual communication used by hearing-impaired persons in the United States. Provides a basis for communication between hearing and hearing-impaired individuals at a beginning proficiency level. Emphasizes increased awareness of deafness and resources related to the deaf in the United States. [D; CSU; UC]

**ASL 130.**  
American Sign Language II  
4 units

**Prerequisite:** ASL 120 or equivalent

**Lecture 4 hours**

**Offered:** Variable

Provides 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 35.

**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 COURSES

**ANTH 101.**  
Biological 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 a natural history of humankind and scientific evidence for human evolution. Includes the study of genetics and heredity, taxonomy, the study of primates, evolutionary theory, and modern population adaptations and variation. Emphasizes skeletal analysis and the evaluation of the hominid fossil record. [D; CSU; UC]

**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]

**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:** Fall, Spring

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]

**ANTH 110.**  
Indians of North America  
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 cultural history of indigenous societies of North America. Focuses on the unique character of selected cultures, including worldview, ecological adaptations, and major technological and cultural innovations prior to European contact. Explores the impact of Old World cultural and biological elements in creation of modern societies. [D; CSU; UC]

**ANTH 112.**  
Cultures of Mexico  
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

Explores the culture history of indigenous societies in the zone known anthropologically as Mesoamerica. Focuses on the unique character of selected cultures, including ecological adaptations and major technological and cultural innovations. Explores the impact of Old World cultural and biological elements in creation of the region’s modern society. [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 35.

**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 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: \$15. 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: \$15. 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 201.****Beginning Building Information Modeling**

3 units

**Recommended Preparation:** ARCH 165 or equivalent**Lecture 2 hours, laboratory 4 hours****Offered:** Fall

Introduces Building Information Modeling (BIM), an integrated process built on coordinated information for architectural projects. Improves drawing coordination, enhances accuracy, reduces waste, and enables better-informed decisions. Develops skills in the architectural field using Revit Architecture building information modeling software. (Same as SES 201.) [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****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: \$15. 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: \$15. 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**

Fee: \$6. 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 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 35.****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 COURSES

## ART 14.

### Basic Screen Printing

3 units

#### **Lecture 2 hours, laboratory 4 hours**

**Offered:** Fall, Spring, Summer

Introduces students to the theory and applications of silk-screen printing methods and techniques with emphasis on paper stencil, drawing fluid and photo emulsion on diverse surfaces.

## ART 15.

### Intermediate Screen Printing

3 units

**Prerequisite:** ART 14 or equivalent

**Recommended Concurrent Enrollment:** ART 116 or ART 117 or equivalent

**Recommended Preparation:** ART 100 or equivalent

#### **Lecture 2 hours, laboratory 4 hours**

**Offered:** Fall, Spring, Summer

Provides advanced theory and applications of silk-screen printing methods and techniques. Allows an in-depth understanding of image reproduction from artistic to industrial processes.

## ART 100.

### Drawing I

3 units

#### **Grade only**

**Recommended Concurrent Enrollment:** ART 101

#### **Lecture 2 hours, laboratory 4 hours**

**Offered:** Fall, Spring

Fee: \$10. 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]

## ART 100L.

### Drawing Laboratory I

1 unit

#### **Pass/No Pass only**

**Prerequisite:** ART 100 or equivalent

#### **Laboratory 3 hours**

**Offered:** Variable

Explores the range of skills required for the development of student portfolios and encourages the use of materials, methods, creative thinking, and problem solving.

[D; CSU]

## ART 101.

### Design I

3 units

#### **Lecture 2 hours, laboratory 4 hours**

**Offered:** Fall, Spring

Fee: \$10. Introduces visual form and 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]

## ART 102.

### Drawing II

3 units

#### **Grade only**

**Prerequisite:** ART 100 or equivalent

#### **Lecture 2 hours, laboratory 4 hours**

**Offered:** Fall, Spring

Fee: \$10. Continues the expansion of drawing concepts introduced in ART 100.

[D; CSU; UC]

## ART 103.

### Design II

3 units

#### **Grade only**

**Recommended Preparation:** ART 101 or equivalent

#### **Lecture 2 hours, laboratory 4 hours**

**Offered:** Fall, Spring

Fee: \$15. 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]

## ART 103L.

### Open Studio: Three-Dimensional

### Media Lab/Design II

1 unit

#### **Pass/No Pass only**

**Corequisite:** ART 103

#### **Laboratory 3 hours**

**Offered:** Fall, Spring

Provides a 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: \$10. 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]

## ART 106.

### Life Drawing II

3 units

#### **Grade only**

**Prerequisite:** ART 105 or equivalent

**Recommended Preparation:** ART 100 or equivalent

#### **Lecture 2 hours, laboratory 4 hours**

**Offered:** Fall, Spring

Fee: \$10. 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: \$10. 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]

**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: \$10. 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: \$15. 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]

**ART 110L.**

Open Studio: Three-Dimensional Media Lab/  
Sculpture I  
1 unit

**Pass/No Pass only**

**Corequisite:** ART 110

**Laboratory 3 hours**

**Offered:** Fall, Spring

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: \$15. 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

**Grade only**

**Corequisite:** ART 111

**Laboratory 3 hours**

**Offered:** Fall, Spring

Provides 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: \$15. Covers the 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: \$15. Studies the traditional and contemporary printmaking processes focusing on personal imagery, conceptual experimentation, and the importance of social context. [D; CSU; UC]

**ART 118.**

Photography Portfolio Laboratory I  
1 unit

**Pass/No Pass only**

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

**Laboratory 3 hours**

**Offered:** Fall, Spring

Fee: \$10. 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

**Pass/No Pass only**

**Corequisite:** ART 122, 126, 138, or 192

**Laboratory 3 hours**

**Offered:** Fall, Spring

Fee: \$10. 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

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**Pass/No Pass only****Corequisite:** ART 123 or 127**Laboratory 3 hours****Offered:** Fall, Spring

Fee: \$10. Focuses on designed for advanced photography students to work on portfolio preparation and presentation. [D; CSU]

**ART 121.**

Darkroom and Digital Photography I  
3 units

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**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]

**ART 122.**

Darkroom and Digital Photography II  
3 units

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**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

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**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

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**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

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**Grade only****Prerequisite:** ART 126 or equivalent**Lecture 2 hours, laboratory 4 hours****Offered:** Fall, Spring

Fee: \$15. Introductory 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

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**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

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**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

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

Fee: \$40. 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

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**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

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**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 137L.**

Website Development For Artists and Graphic Designers Laboratory  
1 unit

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**Pass/No Pass only****Corequisite:** ART 137**Laboratory 3 hours****Offered:** Fall, Spring, Summer

Allows website development students to practice and review techniques and concepts introduced in Website Development for Artists and Graphic Designers. [D; CSU]

**ART 138.****Advanced Digital Imaging for Photography, Art, and Graphics**

3 units

*Prerequisite:* ART 192 or equivalent**Recommended Concurrent Enrollment:** ART 138L*Recommended Preparation:* Advanced skills on Macintosh computers, Adobe Photoshop, and advanced photographic skills**Lecture 2 hours, laboratory 4 hours****Offered:** Variable

Fee \$15. Presents advanced techniques in the use of Adobe Photoshop with an emphasis on the production of photographic images. Introduces color 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 138L.****Advanced Digital Imaging For Photography, Art, Graphics Laboratory**

1 unit

*Pass/No Pass only**Corequisite:* ART 138**Laboratory 3 hours****Offered:** Fall, Spring, Summer

Allows digital imaging students to practice and review techniques and concepts introduced in Advanced Digital Imaging. Provides an opportunity for the student to refine photographic skills beyond normal classroom time. [D; CSU]

**ART 148A.****Airbrush I**

3 units

*Recommended Preparation:* ART 107 or equivalent**Lecture 2 hours, laboratory 4 hours****Offered:** Fall, Spring

Fee: \$10. Provides the student of little or no airbrush experience with comprehensive instruction and application of basic airbrush. Emphasizes maintenance and use of the airbrush, reassembly, adjustments, controls, and terminology. [D; CSU]

**ART 148B.****Airbrush II**

3 units

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

Fee: \$10. Teaches fundamentals of airbrushing with intermediate demands on bolder compositions and texture synthesis for a deeper understanding of the dynamic airbrush process. Focuses on assigned still-life projects with dramatic 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: \$10. Covers advanced level of airbrushing involving compositional principles of a complex order. Explores stencil management and a wider use of color-gradient combinations. Focuses 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: \$10. Increases the student autonomy in airbrushing at a more demanding pace. Provides techniques to allow additional exploration and mastery of the airbrush. Emphasizes 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 her education, exhibition record, styles, techniques, subject matter, and social circumstances. Includes an examination of the major art periods, theories, criticism, and feminist criticism. [D; CSU; UC]

**ART 150.****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]

**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 156.****History of Photography**

3 units

**Lecture 3 hours****Offered:** Variable

Covers the survey of the history of photography from its invention to its continued use as an art and communication form. Emphasizes the aesthetic and historical influences on photography, as well as photography 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: \$20. Teaches elements and principles of design as they relate to publication layout. [D; CSU]

**ART 160.**

Graphic Design—Typography  
3 units

**Grade only**

**Prerequisite:** ART 159 and 161, or equivalent

**Lecture 2 hours, laboratory 4 hours**

**Offered:** Variable

Fee: \$20. Covers the creative and practical use of the alphabet in graphic communication. Explores the typographic form through traditional and Macintosh graphics applications. [D; CSU; UC]

**ART 161.**

Graphic Design  
3 units

**Grade only**

**Recommended Preparation:** ART 101 or equivalent

**Lecture 2 hours, laboratory 4 hours**

**Offered:** Fall, Spring

Fee: \$20. Covers the application of elements and principles of design in development of pictorial symbols, logos, and information graphics. Focuses on vector graphics software. [D; CSU; UC]

**ART 164.**

Graphic Design—Production  
3 units

**Grade only**

**Prerequisite:** ART 159 and 161, or equivalent

**Lecture 2 hours, laboratory 4 hours**

**Offered:** Variable

Fee: \$20. Emphasizes the preparation of comprehensive art for printing with knowledge of historical methods of production and contemporary use of graphics applications. [D; CSU]

**ART 170.**

Beginning Ceramics  
3 units

**Lecture 2 hours, laboratory 4 hours**

**Offered:** Fall, Spring

Fee: \$25. Focuses on design and construction of clay forms including an introduction to the use of the potter's wheel. Emphasizes form and its enhancement through a variety of glazing and firing processes. [D; CSU; UC]

**ART 171.**

Intermediate Ceramics  
3 units

**Prerequisite:** ART 170 or equivalent

**Lecture 2 hours, laboratory 4 hours**

**Offered:** Fall, Spring

Fee: \$25. 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  
3 units

**Prerequisite:** ART 171 or equivalent

**Lecture 2 hours, laboratory 4 hours**

**Offered:** Fall, Spring

Fee: \$25. 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

**Lecture 2 hours, laboratory 4 hours**

**Offered:** Variable

Fee: \$25. Includes realistic, expressive, and experimental rendering of the human figure primarily in clay media. Reviews the historical and contemporary role of figurative art. [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: \$25. Develops continued realistic, expressionistic, and experimental rendering of the human figure primarily in clay and other media. References the historical and contemporary role the figure plays in modern art. Addresses social content, personal vision, and critical thinking as part of project development. [D; CSU; UC]

**ART 173C.**

Figural Sculpture in Clay III  
3 units

**Prerequisite:** ART 173B or equivalent

**Lecture 2 hours, laboratory 4 hours**

**Offered:** Variable

Continues to advance the three-dimensional study of the human form rendered primarily in clay. Explores traditional instruction regarding the modeling of the figure, installation, and site specific applications. Develops the student's relationship with historical and contemporary sculpture. [D; CSU; UC]

**ART 173D.**

Figural Sculpture in Clay IV  
3 units

**Prerequisite:** ART 173C or equivalent

**Lecture 2 hours, laboratory 4 hours**

**Offered:** Variable

Continues to further advance the study of the human figure rendered primarily in clay. Investigates traditional as well as contemporary issues as they relate to utilizing the human form in sculpture. Explores installation, site specific, digital imaging, and projection in the execution of assigned projects. [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: \$25. 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: \$25. 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

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

**Pass/No Pass only**

**Corequisite:** ART 182

**Laboratory 3 hours**

**Offered:** Variable

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

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

**Pass/No Pass only**

**Corequisite:** ART 183

**Laboratory 3 hours**

**Offered:** Variable

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**

**Recommended Preparation:** ART 101 or 103 or equivalent

**Lecture 2 hours, laboratory 4 hours**

**Offered:** Fall, Spring

Fee: \$15. Introduces the fundamentals of design, construction, and fabrication of jewelry and metalwork. Includes physical properties of metals, surface embellishment, soldering, forming, safe use of tools and chemicals, and exposure to historical and contemporary jewelry and metalwork. [D; CSU]

**ART 185B.**

**Jewelry and Metalwork II**

3 units

**Grade only**

**Prerequisite:** ART 185A or equivalent

**Recommended Preparation:** ART 101 or 103 or equivalent

**Lecture 2 hours, laboratory 4 hours**

**Offered:** Fall, Spring

Fee: \$15. Covers an intermediate instruction in the design, construction, and fabrication of jewelry and metalwork. Emphasizes the fundamentals of smithing, including sinking, forging, hinge creation, use of hydraulic press, and/or titanium anodizer. [D; CSU]

**ART 185C.**

**Jewelry and Metalwork III**

3 units

**Grade only**

**Prerequisite:** ART 185B or equivalent

**Recommended Preparation:** ART 101 or 103 or equivalent

**Lecture 2 hours, laboratory 4 hours**

**Offered:** Fall, Spring

Fee: \$15. Covers an advanced instruction in design, construction, and fabrication of jewelry and metalwork. Introduces the use and properties of precious metals, and a more complex soldering operations and techniques such as raising, anticlastic forming, mechanisms, and stonemaking. Emphasizes the perfecting finishing skills. [D; CSU]

**ART 185D.**

**Jewelry and Metalwork IV**

3 units

**Grade only**

**Prerequisite:** ART 185C or equivalent

**Recommended Preparation:** ART 101 or 103 or equivalent

**Lecture 2 hours, laboratory 4 hours**

**Offered:** Fall, Spring

Fee: \$15. Continues advanced instruction in design and construction of jewelry and metalwork. Introduces designing for production and how to price and market work. Emphasizes more self-directed exploration and personal design statements, including alternate processes. [D; CSU]

**ART 185L.**

**Open Studio: Three-Dimensional Media Lab/ Jewelry and Metalwork**

1 unit

**Pass/No Pass only**

**Corequisite:** ART 185A, 185B, 185C, or 185D

**Laboratory 3 hours**

**Offered:** Variable

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. [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 Concurrent Enrollment:** ART 192L

**Lecture 2 hours, laboratory 4 hours**

**Offered:** Fall, Spring, Summer

Fee: \$20. Introduces digital imaging to graphic artists, artists, and photographers. Covers basic instruction on the digital image, Macintosh computers using Adobe Photoshop software, film and flatbed scanners, and archival printers. Emphasizes the application of technology for image optimization, enhancement, manipulation, composites, and collages. [D; CSU; UC]

**ART 192L.****Introduction To Digital Imaging Laboratory**

1 unit

**Pass/No Pass only****Corequisite:** ART 192**Laboratory 3 hours****Offered:** Fall

Fee: \$10. Allows digital imaging students to practice and review techniques and concepts introduced in Introduction to Digital Imaging. Provides an opportunity for the student to refine design, digital, and software skills beyond normal classroom time. [D; CSU]

**ART 197.****Professional Practices and Portfolio Development for Visual Arts**

3 units

**Lecture 2 hours, laboratory 4 hours****Offered:** Variable

Allows 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 199B.****Portrait Photography II**

3 units

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

Fee: \$15. 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: \$15. 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

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

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 205.****Beginning Digital Photography**

3 units

**Grade only****Recommended Concurrent Enrollment:** ART 205L**Lecture 2 hours, laboratory 4 hours****Offered:** Fall, Spring, Summer

Fee: \$15. Emphasizes aesthetics, content, technical aspects, ways of seeing, and creativity in photography. Explores camera operation, color and grayscale optimization, digital capture, and Camera RAW. Appropriate for students without prior photographic experience. Requires an adjustable digital camera with manual exposure and Camera RAW capabilities or equivalent. [D; CSU; UC]

**ART 205L.****Beginning Digital Photography Laboratory**

1 unit

**Pass/No Pass only****Corequisite:** ART 205**Laboratory 3 hours****Offered:** Fall, Spring, Summer

Fee: \$5. Allows photography students to practice and review techniques and concepts introduced in Digital Photography I. Provides an opportunity for the student to refine photographic skills beyond normal classroom time. [D; CSU]

**ART 206.****Intermediate Photography**

3 units

**Grade only****Prerequisite:** ART 205 or equivalent**Recommended Concurrent Enrollment:** ART 206L**Lecture 2 hours, laboratory 4 hours****Offered:** Fall, Spring, Summer

Fee: \$15. Focuses on creative assignments in a variety of photographic styles. Includes intermediate techniques of exposure control, high dynamic range, digital photographic aesthetics, digital workflow, medium and large format cameras, and electronic flash. Assignments are in color and grayscale. Requires an adjustable camera with manual exposure mode. A digital SLR is recommended. [D; CSU; UC]

**ART 206L.****Intermediate Photography Laboratory**

1 unit

**Pass/No Pass only****Corequisite:** ART 206**Laboratory 3 hours****Offered:** Fall, Spring, Summer

Fee: \$5. Allows photography students to practice and review techniques and concepts introduced in intermediate photography. Provides an opportunity for the student to refine photographic skills beyond normal classroom time. [D; CSU; UC]

**ART 207.****Studio and Lighting Techniques**

3 units

**Grade only****Prerequisite:** ART 205 or equivalent**Corequisite:** ART 207L**Lecture 2 hours, laboratory 4 hours****Offered:** Fall, Spring, Summer

Fee: \$15. Explores artificial lighting including strobes within the studio and the outside world. Emphasizes the control of light, quality of light, mixing natural and artificial light, basic portrait, and product lighting. Introduces techniques and concepts used in fine art and advertising photography. Requires an adjustable camera with a manual exposure mode. A digital SLR Camera is recommended. [D, CSU]

**ART 207L.**

**Studio and Lighting Techniques Laboratory**  
1 unit

**Pass/No Pass only****Corequisite:** ART 207**Laboratory 3 hours****Offered:** Fall, Spring, Summer

Fee: \$5. Allows photography students to practice and review techniques and concepts introduced in Art 207. Provides an opportunity for the student to refine photographic skills beyond normal classroom time. [D; CSU]

**ART 208A.**

**Film and Darkroom Photography I**  
3 units

**Grade only****Prerequisite:** ART 205 or equivalent**Lecture 2 hours, laboratory 4 hours****Offered:** Fall, Spring, Summer

Fee: \$15. Introduces film and darkroom photographic processes. Applies camera and exposure techniques learned in Art 205 to chemical and silver-based photographic processes. Requires an adjustable film camera. [D; CSU]

**ART 208B.**

**Film and Darkroom Photography II**  
3 units

**Grade only****Prerequisite:** ART 208A or equivalent**Lecture 2 hours, laboratory 4 hours****Offered:** Fall, Spring, Summer

Fee: \$15. Refines basic film and darkroom skills learned in Art 208A, and emphasizes more complex creative silver-based photographic processes. Introduces an intermediate level of zone system exposure, medium format cameras, and large format cameras. Requires an adjustable film camera. [D; CSU]

**ART 209.**

**Photography Business Practices**  
2 units

**Grade only****Recommended Preparation:** BUS 149 or equivalent**Lecture 2 hours****Offered:** Fall, Spring, Summer

Emphasizes business related skills for a variety of photographic careers. Includes assisting, freelance, assignment production, studio work, photojournalism, stock photography, self-employment, and other photographic fields. Covers self-branding, organization, planning, client relations, legalities, pre-production work, budgeting, scheduling, and talent scouting. Requires participation in field trips, scenarios, and observing lectures by guest speakers. [D; CSU]

**ART 210.**

**Portrait Photography**  
3 units

**Grade only****Prerequisite:** ART 207 or equivalent**Recommended Concurrent Enrollment:** ART 210L**Lecture 2 hours, laboratory 4 hours****Offered:** Fall, Spring, Summer

Fee: \$15. Explores diverse aspects of portraiture including studio, headshots, environmental, and fashion photography. Introduces lighting and equipment specific to portraiture. Emphasizes styles, compositions, psychological considerations, and concepts associated with portraiture. Requires an adjustable camera with manual exposure mode. A digital SLR is recommended. (Formerly ART 199A.) [D; CSU]

**ART 210L.**

**Portrait Photography Laboratory**  
1 unit

**Pass/No Pass only****Corequisite:** ART 210**Laboratory 3 hours****Offered:** Fall, Spring, Summer

Fee: \$5. Allows photography students to practice and review techniques and concepts introduced in Portrait Photography. Provides an opportunity for the student to refine photographic skills beyond normal classroom time. [D; CSU]

**ART 211.**

**Editorial and Advertising Photography**  
3 units

**Grade only****Prerequisite:** ART 207 or equivalent**Lecture 2 hours, laboratory 4 hours****Offered:** Fall, Spring, Summer

Fee: \$15. Emphasizes the commercial application of photography. Discusses the relationship between photographer, art director, and client. Applies photography principles to magazine articles, advertisements, marketing, and promotion. Requires an adjustable digital camera with manual exposure mode and Camera RAW capabilities. A digital SLR is recommended. [D; CSU]

**ART 211L.**

**Editorial and Advertising Photography Laboratory**  
1 unit

**Pass/No Pass only****Corequisite:** ART 211**Laboratory 3 hours****Offered:** Fall, Spring, Summer

Allows photography students to practice and review techniques and concepts introduced in ART 211: Editorial and Advertising Photography. Provides an opportunity for the student to refine photographic skills beyond normal classroom time. [D; CSU]

**ART 212A.**

**Photographic Alternatives I**  
3 units

**Grade only****Prerequisite:** ART 205 or equivalent**Lecture 2 hours, laboratory 4 hours****Offered:** Fall, Spring, Summer

Fee: \$15. Explores alternative processes and techniques in photography. Emphasizes chemical based processes including liquid emulsions such as cyanotypes and Liquid Light, as well as other techniques. Introduces alternative applications of technology in photography, including xerographic, digitally created negatives, and the merging of digital and chemical techniques. [D; CSU]

**ART 212B.**

**Photographic Alternatives II**  
3 units

**Grade only****Prerequisite:** ART 212A or equivalent**Lecture 2 hours, laboratory 4 hours****Offered:** Fall, Spring, Summer

Fee: \$15. Refines skills and concepts associated with alternative processes. Further explores liquid emulsions, alternative negative creation, and alternative cameras. Emphasizes aesthetics and conceptual issues relevant to non-traditional photography. [D; CSU]

**ART 213.****Special Topics in Photography**

3 units

**Grade only****Prerequisite:** ART 207 or equivalent**Corequisite:** ART 213L**Lecture 2 hours, laboratory 4 hours****Offered:** Fall, Spring, Summer

Fee: \$15. Provides additional exploration or photography through the examination of selected topics chose from the following photographic genres: wedding, product, commercial, application of photography to industry, and the use of specific photographic techniques in fine arts. [D; CSU]

**ART 213L.****Special Topics in Photography Laboratory**

1 unit

**Pass/No Pass only****Corequisite:** ART 213**Laboratory 3 hours****Offered:** Fall, Spring, Summer

Fee: \$5. Allows photography students to practice and review techniques and concepts introduced in ART 213: Special Topics in Photography. Provides an opportunity for the student to refine photographic skills beyond normal classroom time. [D; CSU]

**ART 214A.****Photography Laboratory Practice I**

1 unit

**Pass/No Pass only****Prerequisite:** ART 205 or equivalent**Laboratory 3 hours****Offered:** Summer

Fee: \$5. Allows photography students who have completed a beginning photography course to practice and review techniques and concepts introduced in photography related classes. [D; CSU]

**ART 215A.****Darkroom Photography Laboratory Practice I**

1 unit

**Pass/No Pass only****Prerequisite:** ART 206 or equivalent**Laboratory 3 hours****Offered:** Fall, Spring

Fee: \$5. Allows photography students to practice and review techniques and concepts introduced in photography related classes. Develops a photography portfolio for job application, transfer, or gallery exhibition purposes. [D; CSU]

**ART 216.****Advanced Photography**

3 units

**Grade only****Prerequisite:** ART 206 and ART 207, or equivalent**Recommended Concurrent Enrollment:** ART 216L**Lecture 2 hours, laboratory 4 hours****Offered:** Fall, Spring, Summer

Fee: \$15. Emphasizes advanced problem solving in the photographic medium with the production of an individual student portfolio. Expands on concepts and techniques from beginning photography and intermediate photography. Requires an adjustable camera. (Formerly ART 123.) [D; CSU]

**ART 216L.****Advanced Photography Laboratory**

1 unit

**Pass/No Pass only****Corequisite:** ART 216**Laboratory 3 hours****Offered:** Fall, Spring, Summer

Allows photography students to practice and review techniques and concepts introduced in advanced photography. Provides an opportunity for the student to refine photographic skills beyond normal classroom time. [D; CSU]

**ART 290.****Cooperative Work Experience in****Applied Visual Arts**

2–4 units

**Grade only****Limitation on Enrollment:** Limitation on Enrollment:

Declared art major

**Prerequisite:** ART 100, 159, 192, 205, or equivalent**Lecture 1 hour, laboratory 5–15 hours****Offered:** Variable

Provides students with professional applied arts experience by working in a visual arts related occupation. Includes weekly class activities, one unit credit is granted for each 60 hours of volunteer or 75 hours of paid work. The supervisor and the instructor will evaluate each student's performance.

[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 35.

**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 COURSES

**ASIA 112.****Asian-American History I**

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

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. Emphasizes 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 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

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

Examines the history of Asian Americans in the United States from 1846 to the present. Major themes include the study of economic developments, occupational patterns, anti-Asian movements, inter-ethnic exchanges, gender, and intergenerational issues. Includes a study of the Constitution of California. (Partially fulfills American Institutions requirement at CSU.) (Same as HIST 113.) [D; CSU; UC]

**ASIA 114.****Filipino-American History**

3 units

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

**Lecture 3 hours****Offered:** Variable

Emphasizes the economic, political, and social history of Filipinos in the Philippines and in the United States. Analyzes the effects of Spanish, American, and Japanese colonization on Filipino culture. Focuses on the major waves of migration to the United States and focuses on youth, intergenerational, women, gender, and political issues. (Same as HIST 114.) [D; CSU; UC]

**ASIA 115.****Filipino-American Culture**

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

Emphasizes the roots of Filipino-American culture and its role in American society today. Focuses on the social, political, and economic ideologies, issues, influences, and challenges that affect Filipino-American society. Includes a study of family life, social behavior, 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 35.

**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 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, 120, 150, 170, 180, or 205 (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

Demonstrates astronomical principles through observation, simulation, and analysis of data. Includes topics such as 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:** Fall, Spring

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:** 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 35.

**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 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 103.****Welding and Exhaust System Fabrication and Installation**

2–4 units

**Lecture 1–2 hours, laboratory 3–6 hours****Offered:** Variable

Provides automotive exhaust system fabrication and installation. Prepares students for exhaust system installers. [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:** Spring

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:** Fall

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

Fee: \$16. 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:** Fall

Fee: \$18. 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:** Fall

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

Fee: \$13. Covers basic maintenance and repair of fuel systems, pull starting systems, air cooling systems and blade sharpening techniques. Emphasis on maintaining two-cycle engines. [D; CSU]

**AT 146.**

**Industrial Engine and Repair**  
2 units

**Lecture 1 hour, laboratory 2 hours**

**Offered:** Variable

Fee: \$13. Covers basic maintenance operations and repair of fuel, electrical, and starting systems. Emphasis on four-cycle engines. [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

Fee: \$13. 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. [D; CSU]

**AT 148.**

**Small Motorcycle Engine Repair**  
2 units

**Lecture 1 hour, laboratory 2 hours**

**Offered:** Variable

Fee: \$13. Emphasizes two-cycle dirt and off-road motorcycles. Covers basic maintenance and repair of fuel, electrical, ignition, air-cooled, and kick start systems. [D; CSU]

**AT 149.**

**Large Motorcycle Engine Repair**  
2 units

**Lecture 1 hour, laboratory 2 hours**

**Offered:** Variable

Fee: \$13. Covers basic maintenance and repair of fuel, electrical, ignition, transmission, and water-type cooling systems. Emphasis on four-cycle motorcycle engines. [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

Fee: \$13. 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. [D; CSU]

**AT 151.**

**Small Outboard Marine Engine Repair**  
2 units

**Lecture 1 hour, laboratory 2 hours**

**Offered:** Variable

Fee: \$13. 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. [D; CSU]

**AT 152.**

**Large Outboard Marine Engine Repair**  
2 units

**Lecture 1 hour, laboratory 2 hours**

**Offered:** Variable

Fee: \$13. 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. [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

Fee: \$13. 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. [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:** Spring

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****Recommended Preparation:** AT 101, 102, and 130, or equivalent**Lecture 2 hours, laboratory 4 hours****Offered:** Fall

Fee: \$13. Provides an advanced course in automotive electrical and electronic systems. Emphasizes the charging system, body electrical, electronic instrumentation, and supplemental air bag systems. Focuses on the analysis of automotive electronics, and a working knowledge 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:** Spring

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). [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. [D; CSU]

**AT 247.****Automotive Emission Systems and Computerized Engine Controls**

3 units

**Recommended Preparation:** AT 242, current ASE certification (A-8), or equivalent**Lecture 2 hours, laboratory 4 hours****Offered:** Spring

Prepares students for advanced emission systems diagnosis. Incorporates the Bureau of Automotive Repair (BAR-97), and training courses date (20 hours). Focuses on training in five-gas analysis, Acceleration Simulation Mode (ASM) dynamometer testing, laboratory scope usage, and wavefront interpretation, advanced scan tool usage, and On-Board Diagnostics Two (OBD II). [D; CSU]

**AT 290.****Cooperative Work Experience in Automotive Technology I**

2–4 units

**Grade only****Limitation on Enrollment:** Declared Automotive Technology major**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Automotive Technology major in order to apply learned theory in a practical hands-on setting through an internship class**Lecture 1 hour, laboratory 5–15 hours****Offered:** Variable

Applies principles and skills acquired in Automotive Technology occupational majors to on-the-job assignments. In addition to the one unit weekly class activity, one unit of credit is granted for each 60 hours of volunteer or 75 hours of paid work activity. The job supervisor and the instructor will evaluate each student's job performance. (Repeatable—not to exceed four units per level.) [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

**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Automotive Technology major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, laboratory 5–15 hours**

**Offered:** Variable

Applies principles and skills acquired in Automotive Technology occupational majors to on-the-job assignments. In addition to the one unit weekly class activity, one unit of credit is granted for each 60 hours of volunteer or 75 hours of paid work activity. The job supervisor and the instructor will evaluate each student's job performance. (Repeatable—not to exceed four units per level.) [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

**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Automotive Technology major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, laboratory 5–15 hours**

**Offered:** Variable

Applies principles and skills acquired in Automotive Technology occupational majors to on-the-job assignments. In addition to the one unit weekly class activity, one unit of credit is granted for each 60 hours of volunteer or 75 hours of paid work activity. The job supervisor and the instructor will evaluate each student's job performance. (Repeatable—not to exceed four units per level.) [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

**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Automotive Technology major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, laboratory 5–15 hours**

**Offered:** Variable

Applies principles and skills acquired in Automotive Technology occupational majors to on-the-job assignments. In addition to the one unit weekly class activity, one unit of credit is granted for each 60 hours of volunteer or 75 hours of paid work activity. The job supervisor and the instructor will evaluate each student's job performance. (Repeatable—not to exceed four units per level.) [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 35.

**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]

**BIOLOGY COURSES****BIOL 75.**

Introduction to Biotechnology  
1.5 units

**Pass/No Pass only**

**Recommended Preparation:** RDG 158, MATH 45, ENGL 115, or the equivalent skill level as determined by the Southwestern College English, Mathematics, and Reading Assessments or equivalent

**Lecture 1 hour, laboratory 1.5 hours**

**Offered:** Spring

Covers the theoretical background of the field of biotechnology that will be useful in the job market. [D]

**BIOL 76.**

Basic Biotechnology Laboratory Computations  
1.5 units

**Pass/No Pass only**

**Recommended Preparation:** RDG 158, MATH 45, ENGL 115, or the equivalent skill level as determined by the Southwestern College English, Mathematics, and Reading Assessments or equivalent

**Lecture 1 hour, laboratory 1.5 hours**

**Offered:** Fall

Introduces the basic biotechnology laboratory computations, including the metric system, significant figures, unit conversions, solution preparation, graphing, as well as introduction to the utilization of applicable computer software. [D]

**BIOL 77.**

Biotechnology Laboratory Skills  
3 units

**Pass/No Pass only**

**Recommended Preparation:** RDG 158, MATH 45, ENGL 115, or the equivalent skill level as determined by the Southwestern College English, Mathematics, and Reading Assessments or equivalent

**Lecture 2 hour, laboratory 3 hours**

**Offered:** Fall

Introduces basic laboratory skills including laboratory safety practice and regulations, preparation of laboratory reagents, aseptic technique, chromatography, and electrophoresis. Includes instruction on maintaining laboratory records, presenting data, managing the lab, and making oral presentations. (Formerly BIOL 295F). [D]

**BIOL 78.****Biotechnology Job Success Skills**

1.5 units

**Pass/No Pass only****Lecture 1 hour, laboratory 1.5 hours****Offered:** Spring

Covers job skills training useful for successful employment in the biotechnology industry. (Formerly BIOL 295G). [D]

**BIOL 100.****Principles of Biology**

3 units

**Grade only****Corequisite:** BIOL 101

**Recommended Preparation:** ENGL 115 or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

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

Surveys the basic processes of biology which are common to all organisms. Includes scientific method, biomolecules, cellular organization, structure, function, metabolism, reproduction, genetics, evolution, taxonomic classification, ecology of plants and animals, and current events involving biology. Not intended for biology majors. [D; CSU; UC]

**BIOL 101.****Principles of Biology Laboratory**

1 unit

**Grade only****Corequisite:** BIOL 100

**Recommended Preparation:** ENGL 115 or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

**Laboratory 3 hours****Offered:** Summer, Fall, Spring

Provides laboratory experience to supplement Biology 100. May require field trips during laboratory periods. [D; CSU; UC]

**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]

**BIOL 140.****Environmental Biology**

3 units

**Recommended Preparation:** ENGL 115 or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

**Lecture 3 hours****Offered:** Variable

Provides environmental biology with a global emphasis. Investigates environmental interrelationships and impacts of human activities on ecosystems and on global quality of life. Focuses on population dynamics, biological diversity, global environmental change, pollution, natural resources, impacts of agriculture, industrialization, technology, and energy use. Field trips may be required. [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 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 180.****Human Heredity, Evolution, and Society**

3 units

**Recommended Preparation:** ENGL 115 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

Introduces principles and applications of human heredity. Includes Mendelian and molecular genetics, cell reproduction, genetic and chromosomal mutations and disorders, structure and function of DNA and RNA, genetic engineering, and the application of genetics to the study of evolution of species, and the origin of humans. [D; CSU; UC]

**BIOL 185.****Biology of Alcohol and Other Drugs**

3 units

**Recommended Preparation:** ENGL 115 or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

**Lecture 3 hours****Offered:** Variable

Emphasizes the study of the biological principles underlying the effects of major legal and illegal drugs on the human body. Surveys the commonly abused drugs with regard to their chemical nature, where and how they act, and the factors that modify their effects. [D; CSU; UC]

**BIOL 190.****Human Anatomy and Physiology**

4 units

**Grade only**

**Recommended Preparation:** ENGL 115 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, laboratory 3 hours****Offered:** Fall, Spring, Summer

Introduces human anatomy and physiology, including structural-functional relationships, scientific method, precise terminology, and related human conditions and diseases. (Not open to students with credit for or concurrent enrollment in BIOL 260 or BIOL 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:** ENGL 115 or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

**Lecture 3 hours, laboratory 6 hours****Offered:** Fall

Focuses on the lecture and laboratory study of human anatomy and physiology. Emphasizes structural-functional relationships of organ systems, homeostatic regulation, precise terminology, 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:** ENGL 115 or equivalent; RDG 158 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

**Recommended Preparation:** ENGL 115 or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

**Recommended Concurrent Enrollment:** BIOL 211

**Lecture 2 hours****Offered:** Spring

Provides theoretical background useful in the biotechnology job market or for a bachelor's degree in biology. [D; CSU]

**BIOL 210.****General Zoology**

4 units

**Grade only**

**Prerequisite:** MATH 70 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent

**Recommended Preparation:** ENGL 115 or equivalent; RDG 158 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, population ecology, and behavior of invertebrates and vertebrates. [D; CSU; UC]

**BIOL 211.****Introduction to Cell and Molecular Biology**

4 units

**Grade only**

**Prerequisite:** CHEM 170 or 200 or equivalent; MATH 70 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent

**Recommended Preparation:** BIOL 210 or equivalent; ENGL 115 or equivalent; 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 basic principles of cell and molecular biology for biology and related science majors. Emphasizes basic atomic structure and bonding, the chemical basis of life, cell structure and function, energy transformation, cell division, genetics, genomics, bioinformatics, and the origin of life. [D; CSU; UC]

**BIOL 212.****Biology of Plants**

4 units

**Grade only**

**Prerequisite:** BIOL 211 or equivalent

**Recommended Preparation:** ENGL 115 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 3 hours****Offered:** Fall, Spring

Provides the study of plants with an emphasis on structure, function, growth, physiology, and genetics. Includes plant taxonomy, physiology, plant cytology, an introduction to genomes, and general ecology; population biology and evolution of populations. [D; CSU; UC]

**BIOL 229.****Introduction to Biological Research I**

3 units

**Grade only**

**Prerequisite:** MATH 70 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent

**Recommended Preparation:** CHEM 100 or equivalent; ENGL 115 or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

**Recommended Concurrent Enrollment:** CHEM 170

**Lecture 2 hours, laboratory 3 hours**

**Offered:** Fall

Introduces biological laboratory skills, safety procedures, disposal of laboratory waste materials; experimental design and data analysis; preparation of laboratory reagents; aseptic technique, chromatography, and electrophoresis; maintenance of laboratory records, library research, resume writing; and management of a research laboratory. [D; CSU]

**BIOL 230.****Introduction to Biological Research II**

3 units

**Grade only**

**Prerequisite:** BIOL 229 or equivalent; CHEM 170 or equivalent; MATH 70 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent

**Recommended Preparation:** ENGL 115 or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

**Lecture 2 hours, laboratory 3 hours**

**Offered:** Spring

Emphasizes current concepts and laboratory training in modern molecular biological techniques. Designed for biology majors and students interested in working in a molecular biology and/or biotechnology industry laboratory. [D; CSU]

**BIOL 260.****Human Anatomy**

5 units

**Grade only**

**Prerequisite:** BIOL 100 and 101, or equivalent

**Recommended Preparation:** ENGL 115 or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

**Lecture 3 hours, laboratory 6 hours**

**Offered:** Summer, Fall, Spring

Emphasizes a systematic study of fundamental principles of human anatomy at cellular, tissue, organ, and organ system levels of organization. Introduces precise terminology, structural-functional relationships, scientific method, dissection of preserved animal specimens, and appreciation of related human diseases. [D; CSU; UC]

**BIOL 261.****Principles of Human Physiology**

4 units

**Grade only**

**Prerequisite:** CHEM 100 or 170 or equivalent; BIOL 260 or equivalent

**Recommended Preparation:** ENGL 115 or equivalent; 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

Designed to cover the physiological concepts needed by the nursing and 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]

**BIOL 265.****General Microbiology**

5 units

**Grade only**

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

**Recommended Preparation:** ENGL 115 or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

**Lecture 3 hours, laboratory 6 hours**

**Offered:** Fall, Spring, Summer

Introduces fundamental concepts, methods, and relevant applications of microbiology, including microbial structure, physiology, genetics, epidemiology, agents of disease, mechanisms of pathogenesis and resistance, approaches to control and treatment of disease, immunology, and biotechnology. Emphasizes laboratory activities, stressing cultivation, characterization, identification, and biotechnological applications involving microbes important in clinical medicine. [D; CSU; UC]

**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 35.

**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 COURSES****BUS 35.****Administrative Office Assistant—Bilingual**

(English/Spanish)

12 units

**Corequisite:** BUS 290

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

**Lecture 9.5 hours, laboratory 7 hours**

**Offered:** Variable

Fee: \$3. Prepares students to work in a bilingual (English/Spanish) office setting in an entry-level position. Emphasizes the development of skills in business English, filing, keyboarding, Microsoft Office software applications, and office procedures. This course will be taught in both English and Spanish. Covers content of classes including BUS 70, 200A, 218, and CIS 121B. [D]

**BUS 36.****Legal Office Assistant—Bilingual**

(English/Spanish)

12 units

**Corequisite:** BUS 290

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

**Lecture 9.5 hours, laboratory 7 hours**

**Offered:** Variable

Fee: \$3. Prepares students to work in a legal bilingual (English/Spanish) office setting in an entry-level position. Emphasizes the development of skills in business English, filing, keyboarding, legal terminology (English/Spanish), Microsoft Office software applications, and legal office procedures. This course will be taught in both English and Spanish. Covers content of classes including BUS 70, 200A, 229, CIS 121B, and LEGL 223. [D]

**BUS 52.****Basics of Government Contracting**

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:** Fall

Provides the fundamental aspects and key elements of contracting and subcontracting with federal, state, and local government agencies. Includes the key steps a small business should take to successfully compete in the government market, including skill development in marketing, subcontracting, and proposal writing. [D]

**BUS 70.****Keyboarding I**

1 unit

**Pass/No Pass only****Lecture 1 hour, laboratory .5 hour****Offered:** Fall, Spring

Fee: \$1. Provides training in keyboarding for beginners. Emphasizes keyboarding using touch control method of letter keys, correct typing techniques, and speed building and accuracy on one-minute and two-minute timed writings, utilizing computer and keyboarding software. [D]

**BUS 71.****Keyboarding II**

1 unit

**Pass/No Pass only****Prerequisite:** BUS 70 or equivalent**Lecture 1 hour, laboratory .5 hour****Offered:** Fall, Spring

Fee: \$1. Provides keyboarding instruction as a continuation of BUS 70. Develops speed and accuracy, and presents the numeric and symbol keys, formatting of business letters, and preparation of one-page reports. Builds speed and control on one-minute and three-minute writings. Uses keyboarding software. [D]

**BUS 73.****Keyboarding Speed and Accuracy I**

1 unit

**Pass/No Pass only****Prerequisite:** BUS 71 or equivalent**Lecture 1 hour, laboratory .5 hour****Offered:** Fall, Spring

Fee: \$1. Increases keyboarding speed and improves accuracy utilizing specialized software. [D]

**BUS 74.****Keyboarding Speed and Accuracy II**

1 unit

**Pass/No Pass only****Prerequisite:** BUS 73 or equivalent**Lecture 1 hour, laboratory .5 hour****Offered:** Fall, Spring

Fee: \$1. Increases keyboarding speed and improves accuracy utilizing specialized software. [D]

**BUS 75.****Keyboarding Speed and Accuracy III**

1 unit

**Pass/No Pass 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 83.****Principles of Economic 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, laboratory 1 hour****Offered:** Fall, Spring, Summer

Provides a fundamental overview of the different programs and approaches to economic development, explains the importance of each approach, and highlights the activities that communities employ to achieve economic development goals. [D]

**BUS 84.****Grant Research and Writing Fundamentals**

1 unit

**Recommended Preparation:** RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent; BUS 211 or BUS 212 or equivalent

**Lecture 1 hours, laboratory 1 hours****Offered:** Fall

Provides an overview of the grant research and writing process and professional ethics. Includes practical assignments in writing key components of a grant proposal that includes the application, needs statement, budget, executive summary, and evaluation components. [D]

**BUS 96.****Customer Service and Communication Techniques**

1 unit

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

Emphasizes individual and team attitudes and skills essential for providing excellent customer service. Discusses techniques for communicating positively with internal and external customers, enhancing customer satisfaction, and increasing customer retention. [D]

**BUS 100.****Introduction to Community, Economic, and Urban Planning**

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

Provides an understanding of the field of urban planning by exploring the history, theory, and practice of urban planning in the United States. Includes an investigation into the primary subfields of urban planning including housing and community development, land use, transportation, economic development/redevelopment, urban design, and the environment. [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**  
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

Introduces basic investment principles including stocks, bonds, mutual funds, portfolio management, derivatives, securities markets, 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. Provides students with the skills required to use the multimedia features of Microsoft PowerPoint software. Emphasizes presentation techniques, advanced text and graphic processing, and use of multimedia peripherals. (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

**Prerequisite:** CL 120, CIS 92, or 101, or equivalent

**Recommended Preparation:** BUS 134 or 192 or equivalent

**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. Demonstrates interactive marketing techniques that go beyond the traditional approach and embrace the current trends of technology. Focuses on the ever-changing business environment of web marketing 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 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]

**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

**Lecture 2 hours, laboratory 1 hour****Offered:** Variable

Fee: \$2. Focuses on providing the entrepreneur or business owner the skills necessary to develop and implement a business plan for a small business. Emphasizes the development of the financial, managerial, and marketing components, including 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

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

**Lecture 1 hour****Offered:** Variable

Introduces the various factors to be considered as a small business owner encounters the financial aspects of operating a business. Reviews the areas of starting a business, financing a small business, banking, and cash management. [D; CSU]

**BUS 147.****Successful Selling Techniques**

1 unit

**Recommended Preparation:** BUS 120 or equivalent

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

Provides an overview of sales skills for small business owners and sales personnel. Emphasizes creation of an effective psychology of selling focused on customer needs, 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

**Lecture 3 hours****Offered:** Variable

Provides students with the knowledge, skills, awareness, and involvement in the process and the critical aspects of creating a new venture. Emphasizes the attitudes, resources, and networks that are involved in pursuing entrepreneurial opportunities. [D; CSU]

**BUS 149.****Entrepreneurship Operating and Managing a Small Business**

3 units

**Lecture 3 hours****Offered:** Variable

Provides the basic solutions of managing and operating a small business. Develops the necessary physical and paper systems, and 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 151.****Principles of Operations 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

Provides a fundamental overview of operations management. Covers operating processes, project management, facilities and capacity planning, quality management, just-in-time and lean systems, forecasting, aggregate planning, inventory management, and resource management. [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 173.****Transportation 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

Provides an understanding of transportation in a logistics context. Emphasizes transportation procedures and concepts of efficiency. [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 /Translation**

3 units

*Prerequisite:* BUS 70 or equivalent*Recommended Preparation:* SPAN 215 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. Emphasizes the proper application of the accent mark and punctuation in both English and Spanish. Includes preparation of English and Spanish letters, memos, and short reports used in an international business and legal context. Introduces the process of computer translation through the Internet as well as through computer translation software. [D; CSU]

**BUS 182.****Keyboarding for Office Professionals**

2 units

*Prerequisite:* BUS 71 or equivalent**Lecture 2 hours, laboratory 1 hour***Offered:* Fall, Spring

Fee: \$1. Allows students who already possess the ability to keyboard by touch to enhance keyboarding techniques and to further develop document processing skills, including writing letters, writing memos, preparing tables, preparing manuscripts, proofreading, and editing. [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. [D; CSU]

**BUS 191.****Creating and Managing a Virtual Office**

3 units

*Recommended Preparation:* CL 120 or CIS 101 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

Provides students with tools and knowledge required to create a virtual business. Examines administrative concepts required to conduct business activities in the virtual workplace, including decision-making, establishment of business relationships, customer service, time and stress management, ethics, and teamwork. [D; CSU]

**BUS 192.****Marketing a Virtual Office**

3 units

*Recommended Preparation:* CL 120 or CIS 101 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 strategies for marketing a virtual (Web- or technology-based) business. Emphasizes development of a marketing plan, research of virtual employment and business opportunities, review of billing systems, and use of marketing techniques, including mailing lists, customer testimonials, online presentations, and new marketing technologies and innovations. Discusses ethical considerations required in running a virtual business. [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

*Prerequisite:* ENGL 71 or the equivalent skill level as determined by the Southwestern College English Assessment or equivalent

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

Develops English language skills used in a modern business context. Includes a review of business vocabulary, grammar, punctuation, spelling, and proofreading. Introduces skills in basic business letter writing. [D; CSU]

**BUS 211.****Communication in Business and Industry**

3 units

*Prerequisite:* BUS 210 or the equivalent skill level as determined by the Southwestern College English Assessment or equivalent

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

Includes the principles of writing through writing basic business letters, memos, effective email messages, and a short report. Emphasizes effective oral communication by participating in oral presentations and class discussions. [D; CSU]

**BUS 212.****Business Communication**

3 units

**Grade only**

**Prerequisite:** BUS 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

Covers the principles of written communication as applied to business, industry, and government, including business letters, memos, and reports. Includes oral communication in the form of a oral PowerPoint presentation. [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 225.****Interpretation and Translation: General Business**

3 units

**Recommended Preparation:** SPAN 215 or equivalent; and BUS 210 or equivalent

**Lecture 3 hours****Offered:** Variable

Introduces students to the skills and techniques of English/Spanish interpretation and translation in the field of business by interpreting and translating dialogs, business correspondence, and documents focusing on business ethics, protocol, cultural sensitivity, and review writing mechanics, spelling, grammar, and punctuation. [D; CSU]

**BUS 226.****Interpretation and Translation: Legal**

3 units

**Recommended Preparation:** SPAN 215 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 and translator. [D; CSU]

**BUS 227.****Interpretation and Translation: Medical**

3 units

**Recommended Preparation:** SPAN 215 and BUS 210 or equivalent

**Lecture 3 hours****Offered:** Variable

Introduces principles of English and Spanish interpretation and translation applied to the medical field, focusing on translation of written medical documents and interpretation skills, cultural sensitivity, and ethics required by healthcare providers. [D; CSU]

**BUS 229.****Legal 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 hour****Offered:** Fall, Spring

Prepares bilingual (English/Spanish) students who desire to work in a legal setting particularly as bilingual legal assistants. Covers 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 215 or equivalent

**Lecture 3 hours****Offered:** Variable

Introduces students to the skills and techniques of interpretation and translation (English/Spanish) in the immigration field, including written translation and simultaneous, consecutive, and summary interpreting and sight translation. Emphasizes cultural sensitivity and ethics as related to the immigration interpreter and translator. [D; CSU]

**BUS 234.****Advanced Interpretation and Translation: Legal**

3 units

**Prerequisite:** BUS 226 or equivalent

**Recommended Preparation:** SPAN 215 or equivalent

**Lecture 3 hours****Offered:** Variable

Covers legal terminology and advanced techniques of simultaneous, and sight interpretation, and translation of legal documents (English/Spanish) with emphasis on the areas of criminal, family, and immigration law. Emphasizes and analyzes the cultural sensitivity, ethics, and courtroom procedure as related to the role of the legal interpreter. [D; CSU]

**BUS 239.****Project Management**

3 units

**Recommended Preparation:** BUS 70 or CIS 122B 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 job promotions. (Same as CIS 239.) [D; CSU]

**BUS 290.****Work Experience in Business I**

2–4 units

**Grade only**

**Limitation on Enrollment:** Declared Business major  
**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Business major in order to apply learned theory in a practical hands-on setting through an internship class

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

Applies principles and skills acquired in business occupational majors to on-the-job assignments. In addition to the one unit weekly class activity, one unit of credit is granted for each 60 hours of volunteer or 75 hours of paid work activity. The job supervisor and the instructor will evaluate each student's job performance. (Repeatable—not to exceed four units per level.) [D; CSU]

**BUS 291.**

Work Experience in Business II  
2–4 units

**Grade only**

**Prerequisite:** BUS 290 or equivalent

**Limitation on Enrollment:** Declared Business major  
**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Business major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, laboratory 5–15 hours**

**Offered:** Variable

Applies principles and skills acquired in business occupational majors to on-the-job assignments. In addition to one unit weekly class activity, one unit of credit is granted for each 60 hours of volunteer or 75 hours of paid work activity. The job supervisor and the instructor will evaluate each student's job performance. (Repeatable—not to exceed four units per level.) [D; CSU]

**BUS 292.**

Work Experience in Business III  
2–4 units

**Grade only**

**Prerequisite:** BUS 291 or equivalent

**Limitation on Enrollment:** Declared Business major  
**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Business major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, laboratory 5–15 hours**

**Offered:** Variable

Applies principles and skills acquired in business occupational majors to on-the-job assignments. In addition to the one unit weekly class activity, one unit of credit is granted for each 60 hours of volunteer or 75 hours of paid work activity. The job supervisor and the instructor will evaluate each student's job performance. (Repeatable—not to exceed four units per level.) [D; CSU]

**BUS 293.**

Work Experience in Business IV  
2–4 units

**Grade only**

**Prerequisite:** BUS 292 or equivalent

**Limitation on Enrollment:** Declared Business major  
**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Business major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, laboratory 5–15 hours**

**Offered:** Variable

Applies principles and skills acquired in business occupational majors to on-the-job assignments. In addition to the one unit weekly class activity, one unit of credit is granted for each 60 hours of volunteer or 75 hours of paid work activity. The job supervisor and the instructor will evaluate each student's job performance. (Repeatable—not to exceed four units per level.) [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 35.

**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 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

Provides fundamentals of inorganic chemistry, including bonding, nomenclature, stoichiometry, gas laws, acids and bases, equilibrium, solutions, and basic types of reactions. Introduces nuclear, organic, and environmental chemistry. [D; CSU; UC]

**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]

**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

Introduces the fundamental principles of modern biological chemistry. Includes the structure, chemistry and metabolism of proteins, lipids, carbohydrates, and other biomolecules. [D; CSU; UC]

**CHEM 170.****Preparation for General Chemistry**

4 units

**Grade only****Prerequisite:** MATH 70 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, Summer

Introduces general chemistry that 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 70 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent**Recommended Preparation:** MATH 101, 121, or 244, or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent**Lecture 3 hours, laboratory 6 hours****Offered:** Fall, Spring

Covers 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]

**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

Includes equilibrium and acid-base reactions; liquids, solids, kinetics, electrochemistry, thermodynamics, coordination chemistry, nuclear chemistry, the elements and their properties; introduction to organic and biochemistry. Laboratory emphasizes 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]

**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 ultraviolet-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]

**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 35.

**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 COURSES

Note: CD 80–88 are classes designed for family daycare centers

**CD 80.**

**The Business of Family Childcare**  
1 unit

**Pass/No Pass only****Recommended Preparation:** CD 89 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

**Pass/No Pass only****Recommended Preparation:** CD 89 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

**Pass/No Pass only****Recommended Preparation:** CD 89 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

**Pass/No Pass 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

**Pass/No Pass only****Recommended Preparation:** CD 89 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

**Pass/No Pass only****Recommended Preparation:** CD 89 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

**Pass/No Pass only**

**Recommended Preparation:** CD 89 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 89.**

**Fundamentals of Child Development**  
1 unit

**Pass/No Pass only**

**Lecture 1 hour**

**Offered:** Fall, Spring

Focuses on the physical, cognitive, psychosocial, and language development of children ages birth through school-age. Emphasizes observation skills to support a healthy development. [D]

**CD 90.**

**Family Childcare School-Age Environment**  
1 unit

**Pass/No Pass 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

**Pass/No Pass 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 93.**

**Early Childhood Environmental Rating Scale**  
1 unit

**Pass/No Pass only**

**Lecture 1 hour**

**Offered:** Fall, Spring, Summer

Introduces the Early Childhood Environmental Rating Scale, including administration of the scale, scoring system, and profile. Focuses on assessment for the purpose of training and ongoing environmental evaluation and program improvement. [ND]

**CD 130.**

**Math for Young Children**  
1 unit

**Grade Only**

**Lecture 1 hour**

**Offered:** Variable

Provides students a sequential approach to creating developmentally appropriate math curriculum for young children. Emphasizes fundamental concepts and skills that form the foundation for mathematics. [D; CSU]

**CD 131.**

**Science for Young Children**  
1 unit

**Grade Only**

**Lecture 1 hour**

**Offered:** Variable

Focuses on the importance of learning science in early childhood, and presents strategies for incorporating science into the curriculum. Emphasizes the skills, attitudes, and values of scientific inquiry. [D; CSU]

**CD 132.**

**Technology for Young Children**  
1 unit

**Grade Only**

**Lecture 1 hour**

**Offered:** Variable

Introduces technology utilized in child development settings including computer applications and software that will enhance learning. Emphasizes software programs for multicultural awareness, language development, creativity, math and science, and problem solving. [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 family changes, crisis, and resilience. Analyzes nontraditional families as well as the classic nuclear family and the social support they need. [D; CSU; UC]

**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 student to the field of home visitation as means to assist families and children. Focuses on home visiting procedures, early intervention, family dynamics, at-risk women, children and families, early childhood services, and the role of the home visitor. [D; CSU]

**CD 170.**

**Principles of Child 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

Focuses on theories of physical, psychosocial, and cognitive development of children from conception through adolescence. Emphasizes observation skills to analyze the development of children, and how parents and teachers can best help meet their needs to become healthy individuals. [D; CSU; UC]

**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. Explores 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

**Lecture 3 hours****Offered:** Variable

Focuses on developing a safe environment and curriculum for infants and toddlers based on theories of child development. Includes practical ideas to promote social, cognitive, and physical development. Emphasizes turning routines into developmentally enhancing moments. Requires observations of infants and toddlers in their typical environments. [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

**Lecture 3 hours****Offered:** Fall

Fee: \$30. Focuses on children's health, safety, and nutritional needs. Includes promoting good health through planning nutritious menus, understanding dietary needs, and encouraging physical fitness. Examines common childhood illnesses, child abuse and includes First Aid and Cardiopulmonary Resuscitation (CPR) certification. [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 of music and movement for optimal development of young children. Includes lesson planning and developmentally appropriate teaching methods implementing 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 students to the challenges of teaching young children in a violent society and methods for responding to aggression and anti-social behavior in the classroom. Relates the importance of anti-bias practices in the classroom and strategies to promote a peaceful classroom environment. [D; CSU]

**CD 180.****Observation and Guidance for Child Development**

3 units

**Recommended Preparation:** CD 170 or equivalent**Lecture 3 hours****Offered:** Variable

Supports understanding of children's behavior based upon observation and direct experience with young children. Provides effective guidance techniques to promote 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

**Grade Only****Prerequisite:** CD 170, 170L, 180, , 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 275.****Art for Children**

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

Fee: \$15. Provides students with knowledge in theories of artistic development, developmental stages of artistic expression, and provides hands-on experience in planning curriculum for children. Reflects diverse cultural expression, as well as develops student 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****Recommended Preparation:** CD 170 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. Identifies 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 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 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 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 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 language development and cognitive, social, emotional, and physical development. Analyzes learning environments to facilitate 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 of Early Childhood Programs**  
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 principles and practices of the administration of child development programs. Explores various early childhood programs, including the maintenance and operation of the facility, regulatory agencies and legal requirements, record keeping, accounting and personnel management. [D; CSU]

**CD 287.**

**Administration Leadership in Early Childhood Programs**  
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 knowledge and practice of leadership required for early childhood program administration. Includes the principles of program philosophy, goals, and personnel management styles. Emphasizes working with a board of directors, community involvement partnership, and networking. [D; CSU]

**CD 288.**

**Mentorship and Adult Supervision**  
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

Focuses on supervising, communicating, and mentoring adults in an education setting. Develops skills in communication, problem solving and conflict resolution, cultural issues, delegating responsibilities, and evaluating an early childhood setting. [D; CSU]

**CD 290.**

**Family Support Specialist Cooperative Work Experience**  
5–15 units

**Limitation on Enrollment:** Declared Family Support Specialist major

**Prerequisite:** CD 170, 180, or equivalent

**Lecture 3 hours**

**Offered:** Variable

Provides students field experiences in early intervention in a variety of family service agencies. In addition to the one unit weekly class activity, one unit of credit is granted for 60 hours of volunteer or 75 hours of paid work activity. [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 35.

**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 COURSES

**CHIN 101.**

**Mandarin Chinese I**  
5 units

**Lecture 5 hours**

**Offered:** Variable

Introduces conversational Mandarin Chinese using the phonetic system pinyin and over 200 characters. Focuses on structure and sentence patterns of Chinese; reading, speaking, and culture. Equivalent to two years of high school Chinese. (Formerly CHIN 120.) [D; CSU; UC]

**CHIN1 102.**

**Mandarin Chinese II**  
5 units

**Prerequisite:** CHIN 101 or equivalent

**Lecture 5 hours**

**Offered:** Variable

Serves as continuation of CHIN 101. Provides advanced language skills in Mandarin with increased emphasis on speaking, listening comprehension skills, student compositions, reading, and culture. Includes over 300 new characters and construction of more elaborate and practical dialogues. Equivalent to three years of high school Chinese. (Formerly CHIN 130.) [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 35.

**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 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

Covers 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**

**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

Covers communicative skills and prepares students for careers in teaching, business, law, and sales through experience in researching, organizing, and delivering public speeches. [D; CSU; UC]

**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 160.****Argumentation and Debate**

3 units

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

**COMM 174.****Interpersonal 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

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

Introduces 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. Provides a building block in the general education of the non-major student and as the introduction to the discipline of study for the communication/journalism major. (Same as JOUR 101.) [D; CSU; UC]

**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 35.

**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 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

**Pass/No Pass 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 230.**

**Introduction to Solidworks**  
2.5 units

**Recommended Preparation:** CAD 220 or equivalent

**Lecture 2 hours, laboratory 2 hours**

**Offered:** Fall, Spring

Introduces students to solid modeling using Solidworks software. Provides strategies in the construction and analysis of solid parts and related drawings and assemblies. [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 35.

**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 COURSES

**CIS 10A.**

**Microcomputer Repair and Service**  
2 units

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

**Lecture 1.5 hours, laboratory 1.5 hours**

**Offered:** Variable

Fee: \$10. Provides instruction on microcomputer maintenance and service. Includes training in safety, hardware, software, computer assembly, customer relations, testing, troubleshooting, and replacing computer components. Includes operating system, applications, command line for technicians, and software diagnostics. (Same as ELEC 10A.) [D]

**CIS 10B.**

**Microcomputer Hardware and Software Upgrade**  
2 units

**Recommended Preparation:** CIS/ELEC 10A or equivalent; RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

**Lecture 1.5 hours, laboratory 1.5 hours**

**Offered:** Variable

Fee: \$10. Covers microcomputer hardware and software installation, upgrades, maintenance, and troubleshooting. Includes monitors, hard disk, internal and external tape backup, printers, memory, Compact Disk Read-Only Memory (CD-ROM), and sound cards. Covers Disk Operating System (DOS) and Windows. (Same as ELEC 10B.) [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: \$10. 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.) [D]

**CIS 92.****Microsoft Office Suite**

3 units

**Prerequisite:** BUS 70 or equivalent**Lecture 2 hours, laboratory 3 hours****Offered:** Variable

Fee: \$10. Provides instruction in basic microcomputer applications using Microsoft Office Suite: Microsoft Word, Excel, PowerPoint, and Access. [D]

**CIS 101.****Introduction to Computers and Information Processing**

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:** Fall, Spring

Fee: \$3. Covers the application of computerized systems in business organizations, including basic concepts of computer organization, data processing systems, decision support systems, and systems analysis. Emphasizes solving business problems through the use of spreadsheet software as well as hands-on introduction to operating system, Internet browser, word processing, database management, presentation graphics, desktop information management, and BASIC programming software. [D; CSU; UC]

**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 106.****Programming Logic and Design**

3 units

**Recommended Preparation:** CIS 101 or equivalent**Lecture 2 hours, laboratory 3 hours****Offered:** Variable

Fee: \$2. Analyzes the logical processes used to develop algorithms derived from the schools of empiricism, rationalism, formal logic, set theory, and information processing theory. Develops algorithms utilizing 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. Emphasizes installation, configuration, administration, maintenance, and security aspects of the Linux Operating System in conjunction with Apache Web Server. Provides hands-on experience, implementing one of the most popular and cost-effective Web integration solutions. Covers core objectives for industry certification. [D; CSU]

**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 119.****Office Support and Network Technician**

6 units

**Recommended Preparation:** RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent**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. (Same as ELEC 109) [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. Provides students with the skills required to use the multimedia features of Microsoft PowerPoint software. Emphasizes presentation techniques, advanced text and graphic processing, and use of multimedia peripherals. (Same as BUS 129.) [D; CSU]

**CIS 130.**

**Microcomputer Disk Operating System**  
1 unit

*Recommended Preparation:* CL 120 or CIS 101 or equivalent

**Lecture 1 hour, laboratory .5 hour**

*Offered:* Fall, Spring

Fee: \$1. Provides an in-depth study of computer hardware and operating system concepts. Focuses on the command line interface, colloquially referred to as DOS within a Windows system. Emphasizes problem-solving using the command line interface in the Windows environment. [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 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

**Lecture 1 hour, laboratory .5 hour**

*Offered:* Fall, Spring

Fee: \$1. Introduces microcomputer database management systems and their applications. Includes the design, creation, maintenance, and report generation of simple databases. Requires Microsoft Access software package. [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 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. Introduces Local Area (LANs) and Wide Area Networks (WANs), Open System Interconnection (OSI) models, Ethernet, Token Ring, Fiber Distributed Data Interface, and Transmission Control Protocol/Internet Protocol (TCP/IP) addressing protocol, and dynamic routing. Emphasizes network administrator's problem-solving techniques in applying science, mathematics, communication, and social studies concepts to solve networking problems. [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. Introduces network switches, Local Area Network (LAN) and Virtual Local Area Network (VLAN) with an emphasis on design, configuration, troubleshooting, and maintenance. Emphasizes hands-on experience utilizing and configuring LANs, Wide Area Networks (WANs), Internetwork Packet Exchange (IPX) routing, and Interior Gateway Routing Protocol (IGRP) implementations [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. Introduces Wide Area Networks (WANs), Integrated Services Digital Networks (ISDN's), and Point-to-Point Protocols (PPP) and Frame Relay design and network engineering. Introduces installation, configuration, and maintenance of Wide Area Networks WANs, ISDNs, PPP and Frame Relay protocols. Emphasizes the testing, documentation, analysis, and troubleshooting of Cisco networks. [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

**Recommended Preparation:** RDG 56 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. Introduces students to the uses and applications of telecommunications systems and services. Emphasizes the Internet as a major information resource and tool and provides a thorough working knowledge of the Internet, its protocols, and related services. [D; CSU]

**CIS 151.****Research Using the Internet**

1 unit

**Recommended Preparation:** CIS 150 or equivalent**Lecture .5 hour, laboratory 1 hour****Offered:** Variable

Fee: \$2. Focuses on the Internet as a research tool. Includes finding, evaluating, downloading, citing Web resources, Web browsers, search engines, directories, databases, and Web pacs. Emphasizes the development of Internet search strategies and how to evaluate sources. (Same as LIB 151.) [D; CSU]

**CIS 152.****Using XHTML and CSS to Create Web Pages**

2 units

**Lecture 2 hours, laboratory 1 hour****Offered:** Variable

Fee: \$1. Introduces eXtensible Hypertext Markup Language (XHTML) and Cascading Style Sheets (CSS). This is the modern way to create and format dynamic web sites that can be used by computers and portable devices like ipods, cell phones, or personal data assistants (PDAs). Includes hands-on universal web design and accessibility standards. [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 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 162.**

**Web Site Universal Design**  
2 units

**Lecture 2 hours, laboratory 1 hour**

**Offered:** Variable

Fee: \$1. Emphasizes key web universal design principles, as well as pitfalls and how to avoid them. Focuses on design tips, guidelines, and standards to ensure the web site project works. Includes making the site 508 standards 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; UC]

**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 168A.**

**Database Design**  
5 units

**Grade only**

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

**Lecture 4 hours, laboratory 3 hours**

**Offered:** Variable

Covers the foundational aspects of relational databases—database design (conceptual data models objects, relationships between objects and the rules defining these relationships) culminating with a final project where the physical model is created. Culminates with a brief introduction to SQL (structured query language) which will be used as the vehicle of access for all physical models implemented. [D; CSU]

**CIS 168B.**

**Database Programming with SQL**  
5 units

**Grade only**

**Prerequisite:** CIS 168A or equivalent

**Lecture 4 hours, laboratory 3 hours**

**Offered:** Fall

Covers relational database manipulation through the powerful Structured Query Language (SQL). Emphasizes the SQL commands, functions, and operators supported by Oracle as extensions to standard SQL. Creates and maintain database objects such as tables, indexes, views, constraints, and sequences. [D; CSU]

**CIS 168C.**

**Database Programming with PL/SQL**  
5 units

**Grade only**

**Prerequisite:** CIS 168B or equivalent

**Lecture 4 hours, laboratory 3 hours**

**Offered:** Variable

Introduces students to the PL/SQL programming environment. PL/SQL is the procedural language extension to SQL and is Oracle Corporation's standard data access language for relational databases. PL/SQL overcomes the limitations of the SQL programming language because it includes procedural logic constructs such as variables, constants, conditional statements, and iterative controls. [D; CSU]

**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

**Recommended Preparation:** BUS 70 or CIS 122B 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 job promotions. (Same as BUS 239.) [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 255.****Web Search Engine Visibility**

2 units

**Recommended Preparation:** CL 120 or equivalent; RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

**Lecture 2 hours, laboratory 1 hour**

**Offered:** Fall, Spring

Covers how to get your website top placement with web searches. Introduces search engine marketing, including strategies, multimedia, and portable devices. Includes hands-on training with target keywords, measurement, and optimization. Practices the emerging social media like blogs, auctions, social networks, and advanced search using Web 2.0 tools. [D; CSU]

**CIS 256.****Web Shopping Cart With Advanced Dreamweaver**

3 units

**Prerequisite:** CIS 123 or equivalent

**Lecture 2 hours, laboratory 3 hours**

**Offered:** Variable

Adds a shopping cart to your existing website. Uses free open-source software to set up and manage an online storefront. Covers how to manage e-store catalog, customize e-store appearance, market your shop online, using hands-on experience. Builds on skills obtained in CIS 123 Web Publishing with Dreamweaver. [D; CSU]

**CIS 290.****Work Experience CIS Applications I**

2–4 units

**Limitation on Enrollment:** Declared Computer Information System major

**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Computer Information Systems major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, laboratory 5–15 hours**

**Offered:** Fall, Spring

Applies principles and skills acquired in the Computer Information Systems major to on-the-job assignments. In addition to one unit weekly class activity, one unit of credit is granted for each 60 hours of volunteer or 75 hours of paid work activity. The job supervisor and instructor will evaluate each student's job performance. (Repeatable—not to exceed four units per level.) [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

**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Computer Information Systems major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, laboratory 5–15 hours**

**Offered:** Fall, Spring

Applies principles and skills acquired in the Computer Information Systems major to on-the-job assignments. In addition to the one unit weekly class activity, one unit of credit is granted for each 60 hours of volunteer or 75 hours of paid work activity. The job supervisor and instructor will evaluate each student's job performance. (Repeatable—not to exceed four units per level.) [D; CSU]

**CIS 292.****Work Experience CIS Applications III**

2–4 units

**Prerequisite:** CIS 291 or equivalent

**Limitation on Enrollment:** Declared Computer Information System major

**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Computer Information Systems major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, laboratory 5–15 hours**

**Offered:** Fall, Spring

Applies principles and skills acquired in the Computer Information Systems major to on-the-job assignments. In addition to the one unit weekly class activity, one unit of credit is granted for each 60 hours of volunteer or 75 hours of paid work activity. The job supervisor and instructor will evaluate each student's job performance. (Repeatable—not to exceed four units per level.) [D; CSU]

**CIS 293.****Work Experience CIS Applications IV**

2–4 units

**Prerequisite:** CIS 292 or equivalent

**Limitation on Enrollment:** Declared Computer Information System major

**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Computer Information Systems major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, laboratory 5–15 hours**

**Offered:** Fall, Spring

Applies principles and skills acquired in the Computer Information Systems major to on-the-job assignments. In addition to the one unit weekly class activity, one unit of credit is granted for each 60 hours of volunteer or 75 hours of paid work activity. The job supervisor and instructor will evaluate each student's job performance. (Repeatable—not to exceed four units per level.) [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 repeated 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 35.

**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 COURSES

### CL 120.

**Computer Literacy**  
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:** Variable

Fee: \$1. Emphasizes input and output devices, the central processing unit, primary and secondary storage, software, programming languages, and navigation of the course management system. Provides interaction with a microcomputer operating system, spreadsheets, word processing, and Internet software. (Not open to students with credit in CIS 101 or MATH 130.) [D; CSU]

## CONSTRUCTION INSPECTION COURSES

### CI 10.

**Building Plans and Construction Details**  
3 units

**Grade only**

**Lecture 3 hours**

**Offered:** Variable

Emphasizes the appropriate methods of reading building plans and construction documents for compliance with the adopted codes. Examines State law and local code requirements to demonstrate a systematic method of reviewing plans for compliance with the Standard California Building Codes. [D]

### CI 20.

**Inspection of Mechanical Construction**  
3 units

**Grade only**

**Lecture 3 hours**

**Offered:** Fall

Introduces all aspects of mechanical construction. Includes underground and above ground plumbing, water, gas, and air pipes and finishing of plumbing systems. Emphasizes principles of heat and ventilation systems. [D]

### CI 40.

**Electrical Inspection**  
3 units

**Grade only**

**Lecture 3 hours**

**Offered:** Variable

Provides the study of electrical inspection procedures as applied to residential and light commercial construction. Includes topics in electrical theory, electrical plan reading and symbols, and electrical system components. [D]

### CI 50.

**Legal Factors of Construction Inspection**  
3 units

**Grade only**

**Lecture 3 hours**

**Offered:** Spring

Introduces both the Federal and State laws as it applies to building code enforcement, construction safety standards, workman's compensation, and contract dispute resolution. [D]

### CI 60.

**Building Codes I**  
3 units

**Grade only**

**Lecture 3 hours**

**Offered:** Fall

Provides a detailed study of the role of building inspectors. Emphasizes the proper interpretation of the International Building Code (IBC). [D]

### CI 65.

**Building Codes II**  
3 units

**Grade only**

**Lecture 3 hours**

**Offered:** Spring

Continuation of CI 60. Presents an enforcement perspective and continues the interpretation and application of the International Building Code (IBC). (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

Examines the properties of lumber, roofing, wall finished, flooring and covering, and glass and glazing finishes. Emphasizes structural plan reading and presents engineering principles for materials of construction. [D]

### CI 80.

**Soils Engineering**  
3 units

**Grade only**

**Lecture 3 hours**

**Offered:** Fall

Provides a study of the origin, formation, structure, and composition of soils as related to the inspection of soils for composition and support of structures. [D]

### CI 90.

**Construction Project 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 105.

**California Green Code and Sustainable Technologies**  
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

Emphasizes the proper interpretation of the CAL-Green Building Code and green building technologies. Provides inspectors, designers, and contractors with the latest code requirements and national standards to promote sustainable communities. Includes site planning and development, energy conservation, storm water pollution prevention, and basic sustainability concepts. (Same as SES 105.) [D; CSU]

**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 35.

**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]

## CULINARY ARTS COURSES

**CA 170.**

**Professional Cooking—Basic Skills**  
3 units

**Lecture 2 hours, laboratory 3 hours**

**Offered:** Variable

Fee: \$25. Introduces students to the principles and application of basic culinary arts. Emphasizes basic knife skills, product identification, proper equipment usage, and time management skills. [D; CSU]

**CA 171.**

**Soups, Stocks, and Sauces**  
3 units

**Prerequisite:** CA 170 or equivalent

**Lecture 2 hours, laboratory 3 hours**

**Offered:** Variable

Fee: \$25. Prepares a variety of stocks, sauces, and soups. Emphasizes proper cooking techniques and palate development. [D; CSU]

**CA 172.**

**Professional Cooking—Advanced Skills**  
3 units

**Prerequisite:** CA 170 or equivalent

**Lecture 2 hours, laboratory 3 hours**

**Offered:** Variable

Fee: \$25. Provides training in proper knife skills and butchery techniques. Explores cooking methods applied to the preparation of proteins. Introduces Garde manger and the art of food presentation techniques. [D; CSU]

**CA 173.**

**Professional Cooking—Cultural Foods**  
3 units

**Prerequisite:** CA 170 or equivalent

**Lecture 2 hours, laboratory 3 hours**

**Offered:** Variable

Fee: \$25. Explores various cultural cuisines, including discussion of the history, geography, and social customs related to each cuisine. Provides instruction and applies the principles of international food preparations. Emphasizes use of proper techniques and equipment. [D; CSU]

**CA 181.**

**Food Service Safety, Sanitation, and Nutrition**  
1 unit

**Lecture 1 hour, laboratory 1 hour**

**Offered:** Variable

Introduces students to principles of food microbiology, food-borne diseases, as well as regulatory standards and measures required for the prevention of food-borne diseases. Meets current food protection standards for regulatory agents. Prepares students to test for the San Diego County food handlers' certification. [D; CSU]

**CA 182.**

**Introduction to Baking Skills and Culinary Arts**  
3 units

**Lecture 2 hours, laboratory 3 hours**

**Offered:** Variable

Fee: \$25. Introduces students to basic baking techniques and to the primary ingredients utilized in the baking industry. Emphasizes weights, measures, and preparation of basic sweet dough, rolls, pie dough, fillings, cakes, and cookies. [D; CSU]

**CA 183.**

**Food Purchase and Control**  
2 units

**Recommended Preparation:** BUS 183 or equivalent

**Lecture 2 hours**

**Offered:** Variable

Familiarizes students with basic aspects of purchase and cost control within the food service industry. Reviews basic mathematics utilized in food purchase calculations, discounts, markups, and skills required in forecasting operational needs, menu pricing, and cost control. Emphasizes essential skills required by employers within the industry. [D; CSU]

**CA 184.**

**Professional Baking and Pastry Production Basics**  
3 units

**Prerequisite:** CA 182 or equivalent

**Lecture 2 hours, laboratory 3 hours**

**Offered:** Variable

Fee: \$25. Trains students to prepare ingredients for doughs, pastries, fillings, and toppings using proper weights and measures. Emphasizes proper utilization of baking equipment and evaluation of finished baked products. Reviews regulations that affect the baking industry. [D; CSU]

**CA 185.**

**Professional Pastry Design and Decorating**  
3 units

**Prerequisite:** CA 182 or equivalent

**Lecture 2 hours, laboratory 3 hours**

**Offered:** Variable

Fee: \$25. Trains students in the application of professional-level pastry design and decoration techniques. Emphasizes the design, decoration, and presentation of traditional pastries and wedding cakes. Students learn to prepare sugar- and chocolate-based icings and fillings. [D; CSU]

**CA 186.**

**Professional Baking and Pastry Production—Breads**  
3 units

**Prerequisite:** CA 182 or equivalent

**Lecture 2 hours, laboratory 3 hours**

**Offered:** Variable

Fee: \$25. Covers advanced techniques utilized in the production, storage, evaluation, and presentation of uniform baked products. Emphasizes American and ethnic breads, rolls, pastries and fillings, and trains students in bakery layout and assembly techniques designed to maximize efficiency in the production of baked products. [D; CSU]

**CA 290.**

**Cooperative Work Experience in Culinary Arts I**  
2–4 units

**Grade only**

**Limitation on Enrollment:** Declared Culinary Arts major  
**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to Culinary Arts major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, laboratory 5–15 hours**

**Offered:** Variable

Applies principles and skills acquired in business occupational majors to on-the-job assignments. In addition to the one unit 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 instructor will evaluate each student's job performance. (Repeatable—not to exceed four units per level.) [D; CSU]

**CA 291.**

**Cooperative Work Experience in Culinary Arts II**  
2–4 units

**Grade only**

**Prerequisite:** CA 290 or equivalent

**Limitation on Enrollment:** Declared Culinary Arts major  
**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to Culinary Arts major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, laboratory 5–15 hours**

**Offered:** Variable

Applies principles and skills acquired in business occupational majors to on-the-job assignments. In addition to the one unit 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 instructor will evaluate each student's job performance. (Repeatable—not to exceed four units per level.) [D; CSU]

**CA 292.**

**Cooperative Work Experience in Culinary Arts III**  
2–4 units

**Grade only**

**Prerequisite:** CA 291 or equivalent

**Limitation on Enrollment:** Declared Culinary Arts major  
**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to Culinary Arts major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, laboratory 5–15 hours**

**Offered:** Variable

Applies principles and skills acquired in business occupational majors to on-the-job assignments. In addition to the one unit 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 instructor will evaluate each student's job performance. (Repeatable—not to exceed four units per level.) [D; CSU]

**CA 293.**

**Cooperative Work Experience in Culinary Arts IV**  
2–4 units

**Grade only**

**Prerequisite:** CA 292 or equivalent

**Limitation on Enrollment:** Declared Culinary Arts major  
**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to Culinary Arts major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, laboratory 5–15 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 instructor will evaluate each student's job performance. (Repeatable—not to exceed four units per level.) [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 35.

**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]

## DANCE COURSES

**DANC 109.**

**Modern Dance I**  
1.5 units

**Grade only**

**Lecture 1 hour, laboratory 2 hours**

**Offered:** Variable

Emphasizes the study of modern dance as performance art consisting of basic dance technique, fundamental rhythms applicable to dance, and elements of dance design for the beginner. [D; CSU; UC]

**DANC 110.**

**Modern Dance II**  
1.5 units

**Grade only**

**Prerequisite:** DANC 109 or equivalent

**Lecture 1 hour, laboratory 2 hours**

**Offered:** Variable

Emphasizes the progressive study of beginning to advanced-beginning level in modern dance techniques and dance studies. [D; CSU; UC]

**DANC 111.**

**Modern Dance III**  
1.5 units

**Grade only**

**Prerequisite:** DANC 110 or equivalent

**Lecture 1 hour, laboratory 2 hours**

**Offered:** Variable

Emphasizes the study of intermediate modern dance technique for the performance-oriented student. [D; CSU; UC]

**DANC 112.****Modern Dance IV**

1.5 units

**Grade only****Prerequisite:** DANC 111 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Emphasizes the study of advanced-intermediate modern dance techniques for the performance-oriented student.

[D; CSU; UC]

**DANC 113.****Ballet I**

1.5 units

**Grade only****Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Emphasizes the study of beginning classical ballet techniques consisting of a barre warm-up and center work, including adage, allegro, jumps, turns, and locomotor movement.

[D; CSU; UC]

**DANC 114.****Ballet II**

1.5 units

**Grade only****Prerequisite:** DANC 113 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Emphasizes the study of advanced-beginning classical ballet techniques consisting of a barre warm-up and center work, including adage, allegro, jumps, turns, and locomotor movement. [D; CSU; UC]

**DANC 115.****Ballet III**

1.5 units

**Grade only****Prerequisite:** DANC 114 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Emphasizes the study of intermediate classical ballet technique consisting of a barre warm-up and center work, including adage, allegro, jumps, turns, and locomotor movement.

[D; CSU; UC]

**DANC 116.****Ballet IV**

1.5 units

**Grade only****Prerequisite:** DANC 115 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Emphasizes the study of advanced-intermediate classical ballet techniques consisting of a barre warm-up and center work, including adage, allegro, jumps, turns, and locomotor movement. [D; CSU; UC]

**DANC 117.****Jazz Dance I**

1.5 units

**Grade only****Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Emphasizes the study of beginning jazz dance techniques, consisting of a structured warm-up, center work, locomotor movement, and jazz dance combinations set to contemporary jazz music. [D; CSU; UC]

**DANC 118.****Jazz Dance II**

1.5 units

**Grade only****Prerequisite:** DANC 117 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Emphasizes the study of beginning-intermediate level skills in jazz techniques consisting of a structured warm-up, center work, locomotor movement, and jazz dance combinations set to contemporary jazz music for the performance-oriented student.

[D; CSU; UC]

**DANC 119.****Jazz Dance III**

1.5 units

**Grade only****Prerequisite:** DANC 118 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Emphasizes the study of intermediate level skills in jazz techniques consisting of a structured warm-up, center work, locomotor movement, and jazz dance combinations set to contemporary jazz music for the performance-oriented student. [D; CSU; UC]

**DANC 120.****Jazz Dance IV**

1.5 units

**Grade only****Prerequisite:** DANC 119 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Emphasizes the study of advanced-intermediate level skills in jazz techniques consisting of a structured warm-up, center work, locomotor movement, and jazz dance combinations set to contemporary jazz music for the performance-oriented student.

[D; CSU; UC]

**DANC 121.****Dance Choreography I**

2 units

**Grade only****Lecture 1 hour, laboratory 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 the end of the semester.

[D; CSU; UC]

**DANC 122.****Dance Choreography II**

2 units

**Grade only****Prerequisite:** DANC 121 or equivalent**Lecture 1 hour, laboratory 3 hours****Offered:** Fall

Continues the exploration of choreographic techniques for the performance-oriented dancer through creating and participating in short dance studies. [D; CSU; UC]

**DANC 123.****Dance Choreography III**

2 units

**Grade only****Prerequisite:** DANC 122 or equivalent**Lecture 1 hour, laboratory 3 hours****Offered:** Variable

Progresses to a more in-depth survey and analysis of dance movement potential and creative development of the choreographic dance process. [D; CSU; UC]

**DANC 124.****Dance Choreography IV**

2 units

**Grade only****Prerequisite:** DANC 123 or equivalent**Lecture 1 hour, laboratory 3 hours****Offered:** Variable

Progresses to a more in-depth survey and analysis of dance movement potential and creative development of the choreographic dance process for the advanced-intermediate dancer. [D; CSU; UC]

**DANC 125.****Dance Production I**

2 units

**Grade only****Prerequisite:** DANC 109, 113, or 117, or equivalent**Lecture 1 hour, laboratory 3 hours****Offered:** Variable

Emphasizes beginning dance technique, choreography, rehearsal, performance, and lecture/discussion of organizing and administrating aspects of a 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

Emphasizes advanced-beginning dance technique, choreography, rehearsal, performance, and lecture/discussion of organizing and administrating aspects of a 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

Emphasizes intermediate dance technique, choreography, rehearsal, performance, and lecture/discussion of organizing and administrating 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

Emphasizes advanced-intermediate dance technique, choreography, rehearsal, performance, and lecture/discussion of organizing and administrating aspects of a dance production. [D; CSU; UC]

**DANC 129.****Dance Rehearsal Workshop I**

1 unit

**Grade only****Limitation on Enrollment:** Enrollment subject

to assessment of ability to perform choreography.

Assessment will be conducted the first week of class meeting

**Laboratory 3 hours****Offered:** Variable

Emphasizes the learning and rehearsing or choreographing of dances to be selected for performance in annual dance production. Requires attendance of scheduled rehearsals. (Selection by audition.) [D; CSU; UC]

**DANC 130.****Dance Rehearsal Workshop II**

1 unit

**Grade only****Prerequisite:** DANC 129 or equivalent**Limitation on Enrollment:** Enrollment subject

to assessment of ability to perform choreography.

Assessment will be conducted the first week of class meeting

**Laboratory 3 hours****Offered:** Variable

Emphasizes the progressive development in the learning and rehearsing or choreographing of dances to be selected for performance in annual dance production. Requires attendance of scheduled rehearsals. [D; CSU; UC]

**DANC 131.****Dance Rehearsal Workshop III**

1 unit

**Grade only****Prerequisite:** DANC 130 or equivalent**Limitation on Enrollment:** Enrollment subject

to assessment of ability to perform choreography.

Assessment will be conducted the first week of class meeting

**Laboratory 3 hours****Offered:** Variable

Emphasizes the progressive development in the learning and rehearsing or choreographing of dances to be selected for performance in annual dance production. Requires attendance of scheduled rehearsals. [D; CSU; UC]

**DANC 132.****Dance Rehearsal Workshop IV**

1 unit

**Grade only****Prerequisite:** DANC 131 or equivalent**Limitation on Enrollment:** Enrollment subject

to assessment of ability to perform choreography.

Assessment will be conducted the first week of class meeting

**Laboratory 3 hours****Offered:** Variable

Emphasizes the progressive development in the learning and rehearsing or choreographing of dances to be selected for performance in annual dance production. Requires attendance of scheduled rehearsals. [D; CSU; UC]

**DANC 133.****Dance Performance Workshop I**

1 unit

**Grade only****Prerequisite:** DANC 129, 130, 131, or 132, or equivalent**Limitation on Enrollment:** Enrollment subject

to assessment of ability to perform choreography.

Assessment will be conducted the first week of class meeting

**Laboratory 3 hours****Offered:** Variable

Emphasizes the rehearsing of dances selected for performance in semi-annual dance production and the learning of the fundamentals of staging dance and dance performance. Requires attendance at rehearsals and performances. [D; CSU; UC]

**DANC 134.****Dance Performance Workshop II**

1 unit

**Grade only****Prerequisite:** DANC 130, 131, or 132, or equivalent**Limitation on Enrollment:** Enrollment subject

to assessment of ability to perform choreography.

Assessment will be conducted during the first week of class meeting

**Laboratory 3 hours****Offered:** Variable

Emphasizes the rehearsal and performance of dances selected for semi-annual dance production and the progressive improvement of skills in staging dance and dance performance. Requires attendance at rehearsals and performances. [D; CSU; UC]

**DANC 135.****Dance Performance Workshop III**

1 unit

**Grade only****Prerequisite:** DANC 131 or 132 or equivalent**Limitation on Enrollment:** Enrollment subject

to assessment of ability to perform choreography.

Assessment will be conducted during the first week of class meeting

**Laboratory 3 hours****Offered:** Variable

Emphasizes the rehearsal and performance of dances selected for semi-annual dance production and the progressive improvement of skills in staging dance and dance performance. Requires attendance at rehearsals and performances. [D; CSU; UC]

**DANC 136.****Dance Performance Workshop IV**

1 unit

**Grade only****Prerequisite:** DANC 132 or equivalent**Limitation on Enrollment:** Enrollment subject

to assessment of ability to perform choreography.

Assessment will be conducted during the first week of class meeting

**Laboratory 3 hours****Offered:** Variable

Emphasizes the rehearsal and performance of dances selected for semi-annual dance production and the progressive improvement of skills in staging dance and dance performance. Requires attendance at rehearsals and performances. [D; CSU; UC]

**DANC 137.****American Ballroom and Social Dance I**

1.5 units

**Grade only****Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Emphasizes ballroom dance forms presenting beginning steps for fox-trot, waltz, current Latin dances, and swing dances.

[D; CSU; UC]

**DANC 138.****American Ballroom and Social Dance II**

1.5 units

**Grade only****Prerequisite:** DANC 137 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Emphasizes ballroom dance forms presenting advanced-beginning steps for fox-trot, waltz, current Latin dances, and swing dances.

[D; CSU; UC]

**DANC 139.****American Ballroom and Social Dance III**

1.5 units

**Grade only****Prerequisite:** DANC 138 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Fall, Spring, Summer

Emphasizes ballroom dance forms presenting intermediate steps for fox-trot, waltz, current Latin dances, and swing dances.

[D; CSU; UC]

**DANC 140.****American Ballroom and Social Dance IV**

1.5 units

**Grade only****Prerequisite:** DANC 139 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Fall, Spring, Summer

Emphasizes the progression to more advanced-intermediate steps for fox-trot, waltz, current Latin, and swing dances.

[D; CSU; UC]

**DANC 141.****Latin Dance I**

1.5 units

**Grade only****Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Covers beginning dance skills, dance patterns and variations for Latin social dances, including cha cha, bachata, cumbia, danzon samba, merengue, mambo, salsa, and rhumba.

[D; CSU; UC]

**DANC 142.****Latin Dance II**

1.5 unit

**Grade only****Prerequisite:** DANC 141 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Progresses to advanced-beginning dance skills, dance patterns and variations for Latin social dances, including cha cha, bachata, cumbia, danzon, samba, merengue, mambo, salsa, and rhumba. [D; CSU; UC]

**DANC 143.****Latin Dance III**

1.5 units

**Grade only****Prerequisite:** DANC 142 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Progresses to intermediate dance skills, dance patterns and variations for Latin social dances, including cha cha, bachata, cumbia, danzon, samba, merengue, mambo, salsa, and rhumba. [D; CSU; UC]

**DANC 144.****Latin Dance IV**

1.5 units

**Grade only****Prerequisite:** DANC 143 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Progresses to advanced-intermediate dance skills, dance patterns and variations for Latin social dances, including cha cha, bachata, cumbia, danzon, samba, merengue, mambo, salsa, and rhumba. [D; CSU; UC]

**DANC 145.****African Dance I**

1.5 units

**Grade only****Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Introduces beginning level dance skills and traditional dance steps for African cultural dances including the background and significant meaning of the dances.

[D; CSU; UC]

**DANC 146.****African Dance II**

1.5 units

**Grade only****Prerequisite:** DANC 145 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Progresses to advanced-beginning level dance skills and traditional dance steps for African cultural dances including the background and significant meaning of the dances.

[D; CSU; UC]

**DANC 147.****African Dance III**

1.5 units

**Grade only****Prerequisite:** DANC 146 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Progresses to intermediate level dance skills and traditional dance steps for African cultural dances including the background and significant meaning of the dances.

[D; CSU; UC]

**DANC 148.****African Dance IV**

1.5 units

**Grade only****Prerequisite:** DANC 147 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Progresses to advanced-intermediate level dance skills and traditional dance steps for African cultural dances including the background and significant meaning of the dances. [D; CSU; UC]

**DANC 149.****Conditioning for Dancers**

2 units

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

Provides basic conditioning techniques that promote body awareness, improve body alignment, enhance and expedite body ability for dance skills, and aid in preventing injuries common to various dance styles.

[D; CSU]

**DANC 150.****Tap I**

1.5 units

**Grade only****Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Emphasizes the study of beginning tap techniques to instill musicality and creativity consisting of center, across-the-floor, and dance combinations. [D; CSU; UC]

**DANC 151.****Tap Dance II**

1.5 units

**Grade only****Prerequisite:** DANC 150 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Emphasizes the study of advanced-beginning tap dance techniques to instill musicality and creativity consisting of center, across-the-floor, and dance combinations. [D; CSU; UC]

**DANC 152.****Tap Dance III**

1.5 units

**Grade only****Prerequisite:** DANC 151 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Emphasizes the study of intermediate tap dance skills to increase clarity, musicality, and creativity. [D; CSU; UC]

**DANC 153.****Tap Dance IV**

1.5 units

**Grade only****Prerequisite:** DANC 152 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Emphasizes the study of advanced-intermediate tap techniques with increased focus on clarity, musicality, and creativity. [D; CSU; UC]

**DANC 160.****Lyrical Variations I**

1.5 units

**Grade only****Prerequisite:** DANC 116 or equivalent**Lecture 1 hour, laboratory 2 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; UC]

**DANC 161.****Lyrical Variations II**

1.5 units

**Grade only****Prerequisite:** DANC 160 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Emphasizes the progressive 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; UC]

**DANC 162.****Lyrical Variations III**

1.5 units

**Grade only****Prerequisite:** DANC 161 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Emphasizes the progressive 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; UC]

**DANC 163.****Lyrical Variations IV**

1.5 units

**Grade only****Prerequisite:** DANC 162 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Fall, Spring, Summer

Emphasizes the progressive 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; UC]

**DANC 170.****Hip Hop I**

1.5 units

**Grade only****Lecture 1 hour, laboratory 2 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; UC]

**DANC 171.****Hip Hop II**

1.5 units

**Grade only****Prerequisite:** DANC 170 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Integrates a structured warm-up and theoretical explanation of weight, alignment, rhythmic components, and interpretation of style for the advanced beginning dancer. Presents urban street dance in a step-by-step format designed to increase stamina, stress motor memory, and teach ethnic style. [D; CSU; UC]

**DANC 172.****Hip Hop III**

1.5 units

**Grade only****Prerequisite:** DANC 171 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Integrates a structured warm-up and theoretical explanation of weight, alignment, rhythmic components, and interpretation of style at the intermediate skill level. Presents urban street dance in a step-by-step format designed to increase stamina, stress motor memory, and teach ethnic style. [D; CSU; UC]

**DANC 173.****Hip Hop IV**

1.5 units

**Grade only****Prerequisite:** DANC 172 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Fall, Spring, Summer

Integrates a structured warm-up and theoretical explanation of weight, alignment, rhythmic components, and interpretation of style at the advanced intermediate skill level. Presents urban street dance in a step-by-step format designed to increase stamina, stress motor memory, and teach ethnic style. [D; CSU; UC]

**DANC 181.****Musical Theatre Dance I**

1.5 units

**Grade only****Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Emphasizes the study of beginning musical theatre dance techniques by performing pieces of choreography used in Broadway and off-Broadway musicals. Requires a final theatrical performance. [D; CSU]

**DANC 182.****Musical Theatre Dance II**

1.5 units

**Grade only****Prerequisite:** DANC 181 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Emphasizes the study of advanced beginner musical theatre dance techniques by performing pieces of choreography used in Broadway and off-Broadway musicals. Requires a final theatrical performance. [D; CSU]

**DANC 183.****Musical Theatre Dance III**

1.5 units

**Grade only****Prerequisite:** DANC 182 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Emphasizes the study of intermediate musical theatre dance techniques by performing pieces of choreography used in Broadway and off-Broadway musicals. Requires a final theatrical performance. [D; CSU]

**DANC 184.****Musical Theatre Dance IV**

1.5 units

**Grade only****Prerequisite:** DANC 183 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Variable

Emphasizes the study of advanced musical theatre dance techniques by performing pieces of choreography used in Broadway and off-Broadway musicals. Requires a final theatrical performance. [D; CSU]

**DANC 190.****Ballet Folklorico I**

1.5 units

**Grade only****Lecture 1 hour, laboratory 2 hours****Offered:** Fall

Introduces beginning level dance skills and traditional dance steps for folk dances from various regions of Mexico including the background and significant meaning of the dances. [D; CSU]

**DANC 191.****Ballet Folklorico II**

1.5 units

**Grade only****Prerequisite:** DANC 190 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Fall, Spring, Summer

Progresses to advanced-beginning level dance skills and traditional dance steps for folk dances from various regions of Mexico including the background and significant meaning of the dances. [D; CSU]

**DANC 192.****Ballet Folklorico III**

1.5 units

**Grade only****Prerequisite:** DANC 191 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Fall, Spring, Summer

Progresses to intermediate level dance skills and traditional dance steps with an emphasis on performance techniques for folk dances from various regions of Mexico including the background and significant meaning of the dances. [D; CSU]

**DANC 193.****Ballet Folklorico IV**

1.5 units

**Grade only****Prerequisite:** DANC 192 or equivalent**Lecture 1 hour, laboratory 2 hours****Offered:** Fall, Spring, Summer

Progresses to advanced-intermediate level dance skills and traditional dance steps with an emphasis on advanced performance techniques for folk dances from various regions of Mexico including the background and significant meaning of the dances. [D; CSU]

**DANC 199.****Music for Dancers**

2 units

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

Emphasizes the relationship between music and dance through rhythmic notations and analysis. [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 35.

**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 COURSES

**DH 26.**

Dental Hygiene Clinical Licensing Exam Preparation  
2 units

**Pass/No Pass only**

**Limitation on Enrollment:** Graduation from an accredited dental hygiene program

**Lecture .5 hour, laboratory 5 hours**

**Offered: Variable**

Prepares students for clinical board examination. Utilizes a mock board format to select an appropriate patient and complete forms required during the examination. Provides practice and enhances clinical dental hygiene skills. (Repeatable three times.) [ND]

**DH 27**

Introduction to Dental Hygiene

1 units

**Pass/No Pass only**

Introduces the profession of dental hygiene and the Southwestern College Dental Hygiene program. Emphasizes career options of the dental hygienist, requirements and technical standards of the dental hygiene program, and methods to enhance student success. (Formerly DH 295D.) [ND]

**DH 101.**

Introduction to Clinical Concepts

2 units

**Grade only**

**Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program

**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**

**Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program

**Corequisite:** DH 101

**Laboratory 6 hours**

**Offered: Variable**

Provides laboratory experience in the skills and clinical procedures required for dental hygiene patient care. [D; CSU]

**DH 103.**

Patient Education

2 units

**Grade only**

**Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program

**Recommended Preparation:** HLTH 204 or equivalent

**Lecture 2 hours**

**Offered: Variable**

Introduces principles and practices 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**

**Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program

**Lecture 1 hour, laboratory 1 hour**

**Offered: Variable**

Provides 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**

**Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program

**Lecture 2 hours**

**Offered: Variable**

Integrates methodologies needed for the dental hygiene treatment of patients throughout their lifespan from infancy through adulthood with special emphasis on geriatric patients and those patients with special needs. [D; CSU]

**DH 111A.****Dental Radiography**

2 units

**Grade only****Corequisite:** DH 111B**Limitation on Enrollment:** Enrollment is limited to those students who are enrolled 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**Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program**Laboratory 3 hours****Offered:** Variable

Provides laboratory and clinical applications of procedures involved in exposing, processing, interpreting, and evaluating dental radiographs. [D; CSU]

**DH 111C.****Radiographic Interpretation**

1 unit

**Grade only****Prerequisite:** DH 111B or equivalent**Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program**Lecture 1 hour****Offered:** Variable

Develops the radiographic interpretation skills necessary for the graduating dental hygiene student. Emphasizes 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 102 or equivalent**Corequisite:** DH 113A**Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program**Laboratory 12 hours****Offered:** Variable

Provides beginning clinical practice of basic dental hygiene treatment procedures. Includes patient assessment, treatment planning, oral hygiene instructions, radiographs, hand scaling, selective polishing, documentation, and related procedures on child, adolescent, adult, geriatric, and medically compromised patients. [D; CSU]

**DH 113A.****Clinical Concepts I**

1 unit

**Grade only****Corequisite:** DH 112**Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program**Lecture 1 hour****Offered:** Variable

Provides continuation of theory and skill development for clinical procedures required for dental hygiene patient care. [D; CSU]

**DH 113B.****Clinical Concepts II**

1 unit

**Grade only****Prerequisite:** DH 113A or equivalent**Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program**Lecture 1 hour****Offered:** Variable

Emphasizes intermediate theory and skill development for clinical procedures required for dental hygiene patient care. [D; CSU]

**DH 114.****Head and Neck Anatomy**

2 units

**Grade only****Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program**Lecture 2 hours, laboratory 1 hour****Offered:** Variable

Provides an anatomical and morphological study of the structures of the head and neck. Includes muscles, nerves, blood vessels, and lymphatics with hands-on practice in a laboratory setting. [D; CSU]

**DH 115.****Periodontics**

2 units

**Grade only****Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program**Lecture 2 hours****Offered:** Variable

Introduces 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****Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program**Lecture 1 hour, laboratory 3 hours****Offered:** Variable

Provides a survey of dental materials and a rationale in the techniques of using them. [D; CSU]

**DH 117.****Medical and Dental Emergencies**

1 unit

**Grade only****Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program**Lecture 1 hour****Offered:** Variable

Provides an overview of common medical emergencies that occur in the dental office. Includes pathophysiology of emergencies, signs and symptoms, treatment modalities, and the role of the registered dental hygienist. [D; CSU]

**DH 118.**

Transitional Clinic  
1.5 units

**Grade only**

**Prerequisite:** DH 112 or equivalent

**Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program

**Laboratory 5 hours**

**Offered:** Variable

Provides advanced-beginning clinical practice of dental hygiene treatment procedures. Includes patient assessment, treatment planning, oral hygiene instructions, radiographs, hand scaling, selective polishing, documentation, and related procedures on more difficult child, adolescent, adult, geriatric and medically compromised patient cases. Emphasizes beginning experience using local anesthesia and ultrasonic scaling on patients. [D; CSU]

**DH 121.**

Pain Control  
2 units

**Grade only**

**Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program

**Lecture 1 hour, laboratory 3 hours**

**Offered:** Variable

Introduces the methods of pain control utilized in dental hygiene and in dentistry, including the administration of local anesthesia and the administration of nitrous oxide/oxygen sedation. [D; CSU]

**DH 122.**

Clinic II  
4 units

**Grade only**

**Prerequisite:** DH 118 or equivalent

**Corequisite:** DH 113B

**Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program

**Laboratory 12 hours**

**Offered:** Variable

Provides intermediate clinical practice of dental hygiene treatment procedures on more difficult cases. Includes complex patient assessment, treatment planning, oral hygiene instructions, radiographs, local anesthesia, advanced hand and ultrasonic scaling, selective polishing, application of chemotherapeutic agents, sealants, documentation, and related procedures on child, adolescent, adult, geriatric, and medically compromised patients. [D; CSU]

**DH 123.**

Oral Anatomy and Physiology  
1 unit

**Grade only**

**Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program

**Lecture 1 hour, laboratory 1 hour**

**Offered:** Variable

Provides study of the orofacial region and morphologic aspects of the primary and secondary dentitions and their supporting structure. Emphasizes 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 who are enrolled in the Dental Hygiene program

**Lecture 2 hours**

**Offered:** Variable

Introduces the embryologic development of the face, neck, and orofacial structures. Examines facial developmental disturbances, tooth development and eruption, the histology of the oral mucosa, gingival, dentogingival junctional tissues, enamel, and supporting structures. [D; CSU]

**DH 200A.**

Community Dental Health I  
2 units

**Grade only**

**Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program

**Lecture 2 hours**

**Offered:** Variable

Introduces the study of the philosophy and background of community dental health. Emphasizes 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

**Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program

**Lecture 1 hour**

**Offered:** Variable

Continued study of the philosophy and background of community dental health. Emphasizes 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

**Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program

**Laboratory 12 hours**

**Offered:** Variable

Provides advanced experience in clinical practice of all dental hygiene assessment, planning, educational, treatment, and evaluation procedures and documentation. Includes initial therapy as well as maintenance therapy, and related procedures on child, adolescent, adult, geriatric, and medically compromised patients of all levels of complexity, with increased accuracy and efficiency. [D; CSU]

**DH 203.**

Pathology  
2 units

**Grade only**

**Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program

**Lecture 2 hours**

**Offered:** Variable

Introduces general pathology with an emphasis on oral pathology to include: histology, physical descriptions, signs and symptoms, and treatment modalities. [D; CSU]

**DH 204.****Preventive Dentistry**

1 unit

**Grade only**

**Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program

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

Introduces principles related to development of a comprehensive preventive dentistry program relative to patient's caries risk. Emphasizes development and prevention of dental caries. Includes 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

**Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program

**Lecture 2 hours****Offered:** Variable

Introduces practical application of treatment planning, advanced principles of periodontal nonsurgical and surgical therapies, and techniques for advanced instrumentation. Includes instruction in soft tissue curettage and local administered antibiotic agents. [D; CSU]

**DH 206.****Dental Pharmacology**

2 units

**Grade only**

**Prerequisite:** DH 114 or equivalent

**Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program

**Lecture 2 hours****Offered:** Variable

Provides a broad overview of the pharmacodynamics of drug actions. Includes modes of administration, mechanisms of action, biotransformation, excretion, drug interactions and side effects. Emphasizes those drugs relevant to the practice of dental hygiene. [D; CSU]

**DH 211.****Ethics and Jurisprudence**

2 units

**Grade only**

**Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program

**Lecture 2 hours****Offered:** Variable

Introduces 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 (ADHA). [D; CSU]

**DH 214.****Seminar**

2 units

**Grade only**

**Limitation on Enrollment:** Enrollment is limited to those students who are enrolled in the Dental Hygiene program

**Lecture 2 hours, laboratory 2 hours****Offered:** Variable

Provides independent and seminar study of dental hygiene case studies. Emphasizes practice management aspects of dental hygiene and job search techniques. Includes comprehensive dental hygiene case study presentations, and presentation and educational portfolio. [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 35.

**Offered:** Variable

Individual study or research in dental hygiene of particular interest to the student. [D; CSU]

**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**

**Prerequisite:** MATH 60 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:** 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]

**ECON 102.****Principles of Economics II**

3 units

**Grade only**

**Prerequisite:** MATH 60 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent

**Recommended Preparation:** ECON 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

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]

**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 35.

**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 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]

**ED102.****Tutor Training: Level III**

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, Summer

Emphasizes group development especially from a leadership perspective. Provides survey theories about group dynamics, group success, and leadership strategies for prospective tutors and teachers. Focuses on leadership development, conflict, ethics in leadership, and evaluating learning outcomes. Incorporates the importance of roles and norms, group teaching strategies, motivating students, and styles of learning/leadership. [D; CSU]

**ED 110.****Teaching and Learning Practicum**

2 units

**Prerequisite:** ED 200 or equivalent

**Recommended Preparation:** ENGL 115 or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

**Lecture 1 hour, laboratory 3 hours**

**Offered:** Fall, Spring

Combines hands-on work with academic teacher preparation. Includes observation and participation in community classrooms to gain early, supervised experience. Includes weekly class meetings for reflection and instruction, requires observation and active participation in a California public K–12 classroom. [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 35.

**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 COURSES

**ELEC 10A.****Microcomputer Repair and Service**  
2 units

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

**Lecture 1.5 hours, laboratory 1.5 hours**

**Offered:** Fall; Spring

Fee: \$10. Provides instruction on microcomputer maintenance and service. Includes training in safety, hardware, software, computer assembly, customer relations, testing, troubleshooting, and replacing computer components. Includes operating system, applications, command line for technicians, and software diagnostics. (Same as CIS 10A) [D]

**ELEC 10B.****Microcomputer Hardware and Software Upgrade**  
2 units

**Recommended Preparation:** ELEC/CIS 10A or equivalent; RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

**Lecture 1.5 hours, laboratory 1.5 hours**

**Offered:** Fall; Spring

Fee: \$10. Covers microcomputer hardware and software installation, upgrades, maintenance, and troubleshooting. Includes monitors, hard disk, internal and external tape backup, printers, memory, Compact Disk Read-Only Memory (CD-ROM), and sound cards. Covers Disk Operating System (DOS) and Windows. (Same as CIS 10B.) [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: \$10. 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.) [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. [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. [D]

**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. [D]

**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

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

**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. (Same as CIS 119) [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: \$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 CIS 142.) [D; CSU]

**ELEC 147.**

Computer Repair and Networking  
12 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:** ELEC 290

**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 work as electronics/computer technicians. Develops skills in basic and advanced computer repair and networking, using a variety of operating systems. [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 260.**

Microcomputer Systems and A+ Certification  
4 units

**Grade only**

**Recommended Preparation:** ELEC 10A and 10B, 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 265.**

Computer Networking for N+ Certification  
4 units

**Grade only**

**Recommended Preparation:** ELEC 10A, and 10B, 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 290.**

Electronics Cooperative Work Experience I  
2–4 units

**Grade only**

**Limitation on Enrollment:** Declared Electronics major  
**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Electronics major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, 5–15 hours**

**Offered:** Variable

Applies principles and skills acquired in electronics occupational majors to on-the-job assignments. In addition to the one unit weekly class activity, one unit of credit is granted for each 60 hours of volunteer or 75 hours of paid work activity. The job supervisor and the instructor will evaluate each student's job performance. (Repeatable—not to exceed four units per level.) [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  
**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Electronics major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, 5–15 hours**

**Offered:** Variable

Applies principles and skills acquired in electronics occupational majors to on-the-job assignments. In addition to the one unit weekly class activity, one unit of credit is granted for each 60 hours of volunteer or 75 hours of paid work activity. The job supervisor and the instructor will evaluate each student's job performance. (Repeatable—not to exceed four units per level.) [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  
**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Electronics major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, 5–15 hours**

**Offered:** Variable

Applies principles and skills acquired in electronics occupational majors to on-the-job assignments. In addition to the one unit weekly class activity, one unit of credit is granted for each 60 hours of volunteer or 75 hours of paid work activity. The job supervisor and the instructor will evaluate each student's job performance. (Repeatable—not to exceed four units per level.) [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  
**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Electronics major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, 5–15 hours**

**Offered:** Variable

Applies principles and skills acquired in electronics occupational majors to on-the-job assignments. In addition to the one unit weekly class activity, one unit of credit is granted for each 60 hours of volunteer or 75 hours of paid work activity. The job supervisor and the instructor will evaluate each student's job performance. (Repeatable—not to exceed four units per level.) [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 35.

**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. [D; CSU]

## EMERGENCY MEDICAL TECHNOLOGY COURSES

**EMT 10.**

EMT Refresher  
1 unit

**Pass/No Pass 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 101.**

Healthcare Provider CPR  
1 unit

**Pass/No Pass only**

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

**Lecture 1 hour**

**Offered:** Fall, Spring, Summer

Fee: \$14. American Heart Association course designed to train and certify emergency medical personnel and healthcare providers in basic life support cardiopulmonary resuscitation (CPR). Provides certification and eight hours of continuing education for EMT, paramedic, and nursing personnel. [D; CSU]

**EMT 109.**

Emergency Medical Responder  
2 units

**Grade only**

**Corequisite:** EMT 101

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

**Lecture 2 hours, laboratory .5 hour**

**Offered:** Fall, Spring, Summer

Provides the first in the track for students interested in a career in emergency medical services. Covers national curriculum for Emergency Medical Responder (EMR) training. Includes basic and advanced first aid, care of patients with medical and traumatic emergencies, and emergency childbirth. [D; CSU]

**EMT 113.**

Emergency Medical Technician—Basic  
5 units

**Grade only**

**Prerequisite:** EMT 101 and 109, or equivalent; or EMT 125 or equivalent

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

**Lecture 5 hours, laboratory 1 hour**

**Offered:** Fall, Spring, Summer

Introduces techniques of emergency care, as outlined by the Emergency Medical Services Education Standards (NAEMSES). Provides theory portion of program designed to prepare graduates to work in prehospital care (ambulance, firefighter) and emergency departments at EMT basic level. (Repeatable one time.) (Formerly EMT 112. [D; CSU])

**EMT 113L.**

Emergency Medical Technician Laboratory—Basic  
3 units

**Grade only**

**Prerequisite:** EMT 113 or equivalent

**Limitation on Enrollment:** Student must possess a current Healthcare Provider level CPR card

**Lecture 2 hours, Laboratory 4.5 hours**

**Offered:** Fall, Spring, Summer

Provides lecture and laboratory activities to attain competency at the EMT-Basic level. Includes competency-based skills training, community experience to observe and assess patients in a hospital emergency department (ED) and a ride-along with a Basic Life Support (BLS) ambulance crew. (Repeatable one time.) (Formerly EMT 112L.) [D; CSU]

**EMT 125.**

Wilderness First Responder  
4 units

**Grade only**

**Lecture 4 hours, laboratory 1.5 hours**

**Offered:** Variable

Provides curriculum consistent with U.S. Department of Transportation first responder guidelines. Emphasizes medical care of the sick and injured while operating in extreme environments, using improvised equipment and managing delayed or prolonged evacuations. Optional certification is available through Wilderness Medical Associates (WMA). [D; CSU]

**EMT 126.**

**Ambulance Strike Team Leader Certification**  
1 unit

**Pass/No Pass only**

**Limitation on enrollment:** Recommendation of current employer and either (1) Ambulance Strike Team Provider online course (Allan Hancock College) or (2) Incident Command Systems (ICS) 100 and ICS 200, and a State-approved strike team program (eight-hour course)

**Lecture 1 hour**

**Offered:** Fall, Spring

Developed in cooperation with the State of California's Office of Emergency Services (OES), the Emergency Medical Services Authority (EMSA), for certification of leaders in the ambulance industry for the role of Ambulance Strike Team (AST) or Medical Task Force (MTF) Leader. (Repeatable two times.) [ND]

**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 35.

**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 units

**Pass/No Pass only**

**Recommended Preparation:** EMT 112 and 112L, or equivalent; RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

**Lecture 1 hour, laboratory 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. [D; CSU]

**EMTP 200.**

**Advanced Life Support Paramedic Theory I**  
8 units

**Grade only**

**Corequisite:** EMTP 200L

**Limitation on Enrollment:** Acceptance into the paramedic program

**Lecture 8 hours**

**Offered:** Fall

Fee: \$20. Offers first half of paramedic didactic training. Follows National Emergency Medical Services Education Standards (NEMSES) published by U.S. Department of Transportation. Includes preparatory, airway, assessment, pharmacology, and trauma modules. (Repeatable one time.) [D; CSU]

**EMTP 200L.**

**Advanced Life Support Paramedic Laboratory I**  
3 units

**Pass/No Pass only**

**Corequisite:** EMTP 200 and 202

**Limitation on Enrollment:** Acceptance into the paramedic program

**Laboratory 9 hours**

**Offered:** Fall

Fee: \$40. Provides skills portion of the National Emergency Services Education Standards (NEMSES) published in 2009. Includes psychomotor skills for medication administration, intravenous access, advanced airway management, patient assessment, history taking, and physical examination. (Repeatable one time.) [D; CSU]

**EMTP 201.**

**Advanced Life Support Paramedic Theory II**  
8 units

**Grade only**

**Prerequisite:** EMTP 200 and 200L, or equivalent

**Corequisite:** EMTP 201L

**Lecture 8 hours**

**Offered:** Spring

Provides second half of paramedic didactic training. Follows National Emergency Medical Services Education Standards (NEMSES) published by U.S. Department of Transportation. Includes medical, special patients, and EMS operations. (Repeatable one time.) [D; CSU]

**EMTP 201L**

**Advanced Life Support Paramedic Laboratory II**  
3 units

**Pass/No Pass only**

**Prerequisite:** EMTP 200 and 200L, or equivalent

**Corequisite:** EMTP 201 and 203

**Laboratory 9 hours**

**Offered:** Spring

Continues skills portion of the National Emergency Services Education Standards (NEMSES) published in 2009. Includes psychomotor skills electrocardiograph (ECG) interpretations, electrical therapy, lab-simulated patient emergency calls, multi-patient drills, and emergency childbirth. (Repeatable one time.) [D; CSU]

**EMTP 202**

**EMS Community Experience I**  
1 unit

**Pass/No Pass only**

**Corequisite:** EMTP 200L

**Limitation on Enrollment:** Acceptance into the paramedic program

**Laboratory 3 hours**

**Offered:** Fall

Fee: \$40. Provides emergency medical services (EMS) observational experience in the hospital, clinic, and ambulance. Includes ambulance ride-alongs at area ambulance agencies and fire departments. Clinical sites expose students to the EMS patient in a secure and controlled environment. (Repeatable two times.) [D; CSU]

**EMTP 203****EMS Community Experience II**

1 unit

**Pass/No Pass only****Prerequisite:** EMTP 202 or equivalent**Corequisite:** EMTP 201L**Laboratory 3 hours****Offered:** Spring

Provides hands-on experience in the hospital, clinic, and ambulance. Includes ambulance ride-alongs at area ambulance agencies and fire departments. Clinical sites expose students to the EMS patient in a secure and controlled environment. (Repeatable two times.) [D; CSU]

**EMTP 225.****Hospital Clinical Experience for Paramedics**

2 units

**Pass/No Pass only****Prerequisite:** EMTP 201 and 201L, or equivalent**Limitation on Enrollment:** Student must complete criminal background check and drug screen prior to clinical experience**Laboratory 6 hours****Offered:** Variable

Provides instruction to enhance student's knowledge 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 varied shift assignments. (Repeatable two times.) [D; CSU]

**EMTP 230.****Field Training for Paramedics I**

8 units

**Pass/No Pass only****Prerequisite:** EMTP 225 or equivalent**Laboratory 24 hours****Offered:** Variable

Provides practicum experience for paramedic students to observe and participate in emergency medical care supervised by a preceptor in an ambulance. Requires 20 twenty-four hour shifts, and students must document at least 40 advanced life support (ALS) patient contacts and serve as a team leader. (Repeatable one time.) [D; CSU]

**EMTP 231.****Field Training for Paramedics II**

1 unit

**Pass/No Pass only****Prerequisite:** EMTP 225 or equivalent**Laboratory 3 hours****Offered:** Variable

Receives assignment to a preceptor in an ambulance. Assists with prehospital care in emergencies of all types which includes completion of 480 clock hours to satisfy field internship requirements (California) for paramedics and registered nurses seeking paramedic licensure. (Repeatable three times.) [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]

**EMTP 295.****Selected Topics in Emergency Medical Technology and Paramedic**

1–3 units

**Offered:** Variable

Permits students to study relevant subjects within the field of emergency medical technology and paramedic. 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]

**EMTP 299.****Independent Study**

1–3 units

**Limitation on Enrollment:** Eligibility for independent study. See page 35.**Offered:** Variable

Individual study or research in some area of emergency medical technology for paramedics of particular interest to the student and not included in regular courses of the College. [D; CSU]

**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 MATH 244 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent**Lecture 2 hours, laboratory 3 hours****Offered:** Fall

Introduces programming methodology and problem solving using C and C++. Emphasizes concepts of computer systems, algorithm design and development, data types, program structures, object-oriented programming, documentation, testing, and verification techniques. [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 250 and PHYS 270 or equivalent**Lecture 3 hours****Offered:** Fall

Analyzes engineering structures in equilibrium. Includes topics of 2D and 3D forces, moments, couples, vector mathematics, friction, distributed forces, centroids, moments of inertia, shear and bending diagrams, and virtual work. [D; CSU; UC]

**ENGR 251.****Engineering Dynamics**

3 units

**Grade only****Prerequisite:** ENGR 250 or equivalent**Lecture 3 hours****Offered:** Spring

Analyzes kinematics and kinetics of particles in two- and three-dimensional motion. Includes Newton's and Euler's equations of motion, energy and momentum methods, impulsive motion and impact, systems of particles, kinetics and kinematics of rigid bodies in 2-D, and vibration and time response. Introduces 3-D dynamics of rigid bodies. [D; CSU; UC]

**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 equivalent. Analysis of operational amplifiers, mutual inductance, natural and step response of RC, RI, RCL circuits, alternating current circuits, phasors, impedance and balanced three phase power networks. Computer programming using Spice and application software for circuit analysis. [D; CSU; UC]

**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 35.

**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 COURSES****ENGL 61.****Sentence Skills: Verbs**

.5 unit

**Pass/No Pass only****Recommended Concurrent Enrollment:** ENGL 71**Lecture .5 hour****Offered:** Fall, Spring, Summer

Emphasizes writing correct verb forms in simple sentences, progressing from sentence modeling to sentence completion to sentence creation. Provides students the opportunity to create their own model sentences that can be incorporated into required writing assignments for any class. [ND]

**ENGL 62.****Sentence Skills: Sentence Structure**

.5 unit

**Pass/No Pass only****Recommended Concurrent Enrollment:** ENGL 71**Lecture .5 hour****Offered:** Spring, Fall, Summer

Emphasizes the basic use of simple, compound, complex and compound-complex sentence structures, progressing from sentence modeling to sentence completion to sentence creation, in order to avoid sentence fragments and run-on sentences. Focuses on creating model sentences that can be incorporated into required writing assignments for any class. [ND]

**ENGL 63.****Sentence Skills: Modifiers**

.5 unit

**Pass/No Pass only****Recommended Concurrent Enrollment:** ENGL 71**Lecture .5 hour****Offered:** Fall, Spring, Summer

Emphasizes the use of adjectives, adverbs, phrases used as adjectives and adverbs, and relative clauses in order to create effective sentences, progressing from sentence modeling to sentence completion to sentence creation. Focuses on creating model sentences that can be incorporated into required writing assignments for any class. [ND]

**ENGL 64.****Sentence Skills: Punctuation**

.5 unit

**Pass/No Pass only****Recommended Concurrent Enrollment:** ENGL 71**Lecture .5 hour****Offered:** Fall, Spring, Summer

Emphasizes the basic use of correct punctuation, progressing from sentence modeling to sentence completion to sentence creation. Focuses on creating model sentences than can be incorporated into required writing assignments for any class. [ND]

**ENGL 67.****Sentence Skills: Common Language Problems**

.5 unit

**Pass/No Pass only****Recommended Concurrent Enrollment:** ENGL 71**Lecture .5 hour****Offered:** Fall, Spring, Summer

Emphasizes writing a variety of sentences, progressing from sentence modeling to sentence completion to sentence creation, while focusing on common language challenges for basic skills students. Provides students the opportunity to create their own model sentences that can be incorporated into required writing assignments for any class. [ND]

**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 ESL Assessment or English 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 114.****Introduction to Composition**

4 units

**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 4 hours****Offered:** Fall, Spring

Fee: \$1. Prepares students for college-level composition by emphasizing a thorough step-by-step approach to writing short essays. Introduces research and documentation techniques. Includes readings as models for analysis and writing. [D; CSU]

**ENGL 115.****Reading and Composition: Exposition and Argumentation**

4 units

**Prerequisite:** 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 4 hours****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. Uses reading selections for discussion, topics for writing assignments, and examples of effective writing. [D; CSU; UC]

**ENGL 116.****Critical Thinking and Composition**

4 units

**Prerequisite:** ENGL 115 or equivalent**Recommended Preparation:** ENGL 220 or equivalent**Lecture 4 hours****Offered:** Fall, Spring

Fee: \$1. Provides instruction and practice in drafting, revising, and editing argumentative and analytical essays, including a research essay. Emphasizes writing and reading using principles of sound critical thinking applied to various texts, including non-fiction and/or literature. [D; CSU; UC]

**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]

**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 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]

**ENGL 220.**

Introduction to Literature  
3 units

*Recommended Preparation:* ENGL 115 or equivalent

**Lecture 3 hours**

**Offered:** Fall, Spring

Introduces the study of imaginative literature. Emphasizes critical reading, analyzing, and writing about fiction, poetry, and drama. Recommended as preparation for ENGL 116 and specialized literature courses. [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

Provides 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. Emphasizes 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

Explores world literature from the earliest texts through the 1600's, with an emphasis on the development of literary expression, major works from literary traditions around the world, and cross-cultural connections. [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

Explores world literature from the 18th century to the present, with an emphasis on major works from literary traditions around the world and the emergence of a global literature. [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

Surveys English literature from the earliest writings to the beginning of the eighteenth century. Emphasizes major works in the literary tradition. Examines the work in cultural, historical, and social contexts. [D; CSU; UC]

**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

Surveys English literature from the eighteenth century to the present, with an emphasis on major works in the literary tradition. Examines the work in cultural, historical, and social contexts. [D; CSU; UC]

**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

Surveys American literature from 1630 to the end of the 1800s covering the major philosophical movements of Puritanism, Transcendentalism, and Romanticism. Includes major authors such as Franklin, Poe, Hawthorne, Emerson, Thoreau, Melville, Whitman, and Dickinson. [D; CSU; UC]

**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

Surveys American literature from the end of the 1800s to the present covering major literary movements of Realism, Naturalism, etc. Includes major writers such as Dickinson, Whitman, Frost, Cummings, Twain, Faulkner, Hemingway, Bellow, Williams, and O'Neill. [D; CSU; UC]

**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

Provides an introductory survey of representative Shakespearean drama and poetry, with emphasis on Shakespeare's literary techniques and linguistic art. Includes viewing of plays, films, and/or special television broadcasts of Shakespearean plays and sonnets to complement close reading of the texts. [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

Examines Greek, Roman and World myths and their impact on contemporary literature, compares archetypal themes and motifs from myths of ancient cultures from around the world, and analyzes 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

Develops methods of analysis of the literary elements of visual narratives, focusing on character development, point of view, setting, plot, metaphor, and theme. Examines and applies theoretical and practical issues surrounding the adaptation of a novel, play, or historical event into a film. Analyzes 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

**Lecture 3 hours****Offered:** Variable

Surveys colonial and contemporary literature from a variety of Latin American countries. Focuses 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

Provides an 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 and Chicana identity through poetry, short stories, novels, drama, and essays. [D; CSU; UC]

**ENGL 273.**

**African-American Literature**  
3 units

**Recommended Preparation:** ENGL 115 and 220 or equivalent; or ENGL 116 or equivalent

**Lecture 3 hours**

**Offered:** Variable

Surveys African-American literature in all genres from the mid-eighteenth century to the present. Emphasizes the cultural, historical, and social contexts of African American oral and literary expression. Studies writers such as Phillis Wheatley, Zora Neale Hurston, Langston Hughes, Richard Wright, Ralph Ellison, Alice Walker, and Toni Morrison. [D; CSU; UC]

**ENGL 274.**

**Literature of the U.S. – Mexico Borderlands 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 U.S.- Mexico Borderlands and Baja California, Mexico. Focuses on linking the historical changes in the state of Baja to the literary achievements of the border 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

Surveys classical and contemporary horror literature that includes significant works by major authors of the genre, which may include Poe, Mary Shelley, Stevenson, Stoker, and Anne Rice. Emphasizes the cultural, historical and social contexts in which the literature is created and applies modern critical theory as a means to explore these concerns. [D; CSU; UC]

**ENGL 295.**

**Selected Topics in English**  
1–3 units

**Offered:** Variable

Permits students to study relevant topics within the field of English. (May be repeated 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 35.

**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 COURSES

**ESL 12.**

**English as a Second Language: Practicum I**  
1 unit

**Pass/No Pass 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

**Pass/No Pass 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

**Pass/No Pass 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

**Pass/No Pass 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

**Pass/No Pass 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/Grámatica Comparativa**

3 units

**Pass/No Pass only****Lecture 3 hours****Offered:** *Summer, Fall, Spring*

Taught primarily in Spanish at the beginning moving towards more English by the end of the course. 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 core English as a Second Language courses. [ND]

**ESL 18.****Comparative Grammar/Grámatica Comparativa**

3 units

**Pass/No Pass only****Lecture 3 hours****Offered:** *Spring*

Developes reading, writing, listening, and speaking skills with a focus on grammar and vocabulary specific to mathematics. Focuses on skills to communicate effectively in English about the application of mathematical concepts. Prepares students linguistically to succeed in mathematics courses. (Formerly ESL 295T). [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 29A.**

Learning English for Academic Purposes 1A  
4 units

**Corequisite:** ESL 29B and 29C

**Lecture 4 hours**

**Offered:** Fall, Spring, Summer

First semester of ESL. Emphasizes accelerated language development of academic English for English language learners. Focuses on intensive practice in academic writing, critical thinking, and speaking around a single content-based theme at a novice-mid level of English proficiency. [ND]

**ESL 29B.**

Learning English for Academic Purposes 1B  
4 units

**Corequisite:** ESL 29A and 29C

**Lecture 4 hours**

**Offered:** Fall, Spring, Summer

First semester of ESL. Emphasizes accelerated language development of academic English for English language learners. Focuses on intensive practice in academic reading, critical thinking, and speaking around a single content-based theme at a novice-mid level of English proficiency. [ND]

**ESL 29C.**

Learning English for Academic Purposes 1C  
2 units

**Pass/No Pass only**

**Corequisite:** ESL 29A and 29B

**Lecture 2 hours**

**Offered:** Fall, Spring, Summer

Develops concepts and skills learned in ESL 29A and ESL 29B by providing practice in preparing and refining class writing assignments and oral presentations. Continues the instruction of the use of technology for participating in and completing class assignments at novice-mid level of English proficiency. [ND]

**ESL 29D.**

Learning English for Academic Purposes 1D  
5 units

**Recommended Concurrent Enrollment:** ESL 29E

**Lecture 5 hours**

**Offered:** Fall, Spring, Summer

Offers first semester of ESL. Emphasizes accelerated language development of academic English for English language learners. Focuses on intensive practice in academic writing, critical thinking, and speaking around a single content-based theme at a novice-mid level of English proficiency. [ND]

**ESL 29E.**

Learning English for Academic Purposes 1E  
5 units

**Recommended Concurrent Enrollment:** ESL 29D

**Lecture 5 hours**

**Offered:** Fall, Spring, Summer

Offers first semester of ESL. Emphasizes accelerated language development of academic English for English language learners. Focuses on intensive practice in academic reading, critical thinking, and speaking around a single content-based theme at a novice-mid level of English proficiency. [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 39A.**

Learning English for Academic Purposes 2A  
4 units

**Prerequisite:** ESL 29A, 29B, and 29C, or equivalent

**Corequisite:** ESL 39B and 39C

**Lecture 4 hours**

**Offered:** Fall, Spring, Summer

Second semester of ESL. Emphasizes accelerated language development of academic English for English language learners. Focuses on intensive practice in academic writing, critical thinking, and speaking around a single content-based theme as an intermediate-low level of English proficiency. [ND]

**ESL 39B.**

Learning English for Academic Purposes 2B  
4 units

**Prerequisite:** ESL 29A, 29B, and 29C, or equivalent

**Corequisite:** ESL 39A and 39C

**Lecture 4 hours**

**Offered:** Fall, Spring, Summer

Second semester of ESL. Provides for accelerated language development of academic English for English language learners. Focuses on intensive practice in academic reading, critical thinking, and speaking around a single content-based theme at an intermediate-low level of English proficiency. [ND]

**ESL 39C.**

Learning English for Academic Purposes 2C  
2 units

**Pass/No Pass only**

**Prerequisite:** ESL 29C

**Corequisite:** ESL 39A and 39B

**Lecture 2 hours**

**Offered:** Fall, Spring, Summer

Develops concepts and skills learned in ESL 39A and ESL 39B by providing practice in preparing and refining class writing assignments and oral presentations. Continues the instruction of the use of technology for participating in and completing class assignments at an intermediate-low level of English proficiency. [ND]

**ESL 39D.**

Learning English for Academic Purposes 2D  
5 units

**Prerequisite:** ESL 29A, ESL 29B, and ESL 29C, or equivalent; or ESL 29D and ESL 29E, or equivalent

**Recommended Concurrent Enrollment:** ESL 39E

**Lecture 5 hours**

**Offered:** Fall, Spring, Summer

Offers second semester of ESL. Emphasizes accelerated language development of academic English for English language learners. Focuses on intensive practice in academic writing, critical thinking, and speaking around a single content-based theme as an intermediate-low level of English proficiency. [ND]

**ESL 39E.**

Learning English for Academic Purposes 2E  
5 units

**Prerequisite:** ESL 29A, ESL 29B, and ESL 29C, or equivalent; or ESL 29D and ESL 29E, or equivalent

**Recommended Concurrent Enrollment:** ESL 39D

**Lecture 5 hours**

**Offered:** Fall, Spring, Summer

Offers second semester of ESL. Provides for accelerated language development of academic English for English language learners. Focuses on intensive practice in academic reading, critical thinking, and speaking around a single content-based theme at an intermediate-low level of English proficiency. [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 49A.**

Learning English for Academic Purposes 3A  
4 units

**Prerequisite:** ESL 39A, 39B, and 39C, or equivalent

**Corequisite:** ESL 49B and 49C

**Lecture 4 hours**

**Offered:** Fall, Spring, Summer

Provides for accelerated language development of academic English for English language learners. Focuses on intensive practice in academic writing, critical thinking, and speaking around a single content-based theme at an intermediate-mid to high level of English proficiency. [ND]

**ESL 49B.**

Learning English for Academic Purposes 3B  
4 units

**Prerequisite; ESL 39A, 39B, and 39C, or equivalent**

**Corequisite:** ESL 49A and 49C

**Lecture 4 hours**

**Offered:** Fall, Spring, Summer

Third Semester of ESL. Provides for accelerated language development of academic English for English language learners. Focuses on intensive practice in academic reading, critical thinking, and speaking around a single content-based theme at an intermediate-mid to high level of English proficiency. [ND]

**ESL 49C.**

Learning English for Academic Purposes 3C  
2 units

**Pass/No Pass only**

**Prerequisite:** ESL 39A, 39B, and 39C, or equivalent

**Corequisite:** ESL 49A and 49B

**Lecture 2 hours**

**Offered:** Fall, Spring, Summer

Develops concepts and skills learned in ESL 49A and 49B by providing practice in preparing and refining class writing assignments and oral presentations. Continues the instruction of the use of technology for participating in and completing class assignments at an intermediate-mid to high level of English proficiency. [ND]

**ESL 49D.**

Learning English for Academic Purposes 3D  
5 units

**Prerequisite:** ESL 39A, ESL 39B, and ESL 39C, or equivalent; or ESL 39D and ESL 39E, or equivalent

**Recommended Concurrent Enrollment:** ESL 49E

**Lecture 5 hours**

**Offered:** Fall, Spring, Summer

Offers third semester of ESL. Provides for accelerated language development of academic English for English language learners. Focuses on intensive practice in academic writing, critical thinking, and speaking around a single content-based theme at an intermediate-mid to high level of English proficiency. [ND]

**ESL 49E.**

**Learning English for Academic Purposes 3E**  
5 units

**Prerequisite:** ESL 39A, ESL 39B, and ESL 39C, or equivalent; or ESL 39D and ESL 39E, or equivalent  
**Recommended Concurrent Enrollment:** ESL 49D

**Lecture 5 hours**

**Offered:** Fall, Spring, Summer

Offers third semester of ESL. Provides for accelerated language development of academic English for English language learners. Focuses on intensive practice in academic reading, critical thinking, and speaking around a single content-based theme at an intermediate-mid to high level of English proficiency. [ND]

**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**  
4 units

**Recommended Preparation:** ESL 50 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

**Lecture 4 hours**

**Offered:** Fall, Spring

Focuses on the specialized needs of the ESL and basic reading student. Provides effective strategies for reading: vocabulary development, reading comprehension, and critical thinking skills at the basic level. (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 54.**

**ESL for Computers**  
1 unit

**Pass/No Pass only**

**Lecture 1 hour**

**Offered:** Variable

Provides the linguistic and basic technology skills English as a Second Language (ESL) learners need in order to be able to succeed in ESL classes. Prepares students linguistically to take CIS classes on technology. [ND]

**ESL 59A.**

**Learning English for Academic Purposes 4A**  
2 units

**Pass/No Pass only**

**Prerequisite:** ESL 49A, 49B, 49C, or equivalent

**Corequisite:** ESL 59B, ESL 159A, and ESL 159B or equivalent

**Lecture 2 hours**

**Offered:** Fall, Spring, Summer

Provides students the help needed to develop specific skills and knowledge to manage their personal and academic lives, sample lectures in content areas, familiarize themselves with services and resources available to students, and create a plan for transitioning from ESL to traditional college course offerings at an advanced-low level of English proficiency. [ND]

**ESL 59B.**

**Learning English for Academic Purposes 4B**  
2 units

**Pass/No pass only**

**Prerequisite:** ESL 49A, 49B, and 49C, or equivalent

**Corequisite:** ESL 59A, ESL 159A, and ESL 159B or equivalent

**Lecture 2 hours**

**Offered:** Fall, Spring, Summer

Develops concepts and skills learned for ESL 159A and ESL 159B by providing practice in preparing and refining class writing assignments and oral presentations. Continues the instruction of the use of technology for participating in and completing class assignments at an advanced-low level of English proficiency. [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. [D; CSU]

**ESL 159A.**

Learning English for Academic Purposes 4C  
4 units

**Prerequisite:** ESL 49A, 49B, and 49C, or equivalent

**Corequisite:** ESL 59A, 59B, and 159B

**Lecture 4 hours**

**Offered:** Fall, Spring, Summer

Fourth level of ESL. Provides for accelerated language development of academic English for English language learners. Focuses on intensive practice in academic writing, critical thinking, and speaking around a single content-based theme at an advanced-low level of English proficiency. [D; CSU]

**ESL 159B.**

Learning English for Academic Purposes 4D  
4 units

**Prerequisite:** ESL 49A, 49B, and 49C, or equivalent

**Corequisite:** ESL 59A, 59B, and 159A

**Lecture 4 hours**

**Offered:** Fall, Spring, Summer

Provides for accelerated language development of academic English for English language learners. Focuses on intensive practice in academic reading, critical thinking, and speaking around a single content-based theme at an advanced-low level of English proficiency. [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

**Aprobado/No Aprobado 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

**Aprobado/No Aprobado 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

**Aprobado/No Aprobado 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

**Aprobado/No Aprobado 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

**Aprobado/No Aprobado únicamente**

**Se recomienda:** ESL 31

**Teoría 3 horas**

**Se Ofrece:** Primavera

Diseñada para desarrollar la comunicación oral para estudiantes del inglés. Enfatiza comportamiento verbal y no verbal, presentaciones improvisadas, extemporáneas y preparadas; prepara a los alumnos para entrar a programas vocacionales y a clases a nivel universitario. [ND = Curso no aceptado para graduación o programa.]

**ESL 17.**

Comparative Grammar/Grámatica Comparativa  
3 unidades

**Aprobado/No Aprobado 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 Correquisito:** *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 Correquisito:** *ESL 20 y 25*

**Teoría 2 horas, laboratorio 3 horas**

**Se Ofrece:** *Otoño, Primavera*

ESL 21 es el primero de la serie de tres cursos de hablar y escuchar para estudiantes de ESL. Enfatiza la comprensión auditiva y producción oral. Como correquisito recomendable de ESL 20 y 25, proporciona la práctica coordinada en gramática, sintaxis y vocabulario para estos cursos. Introducción a los aspectos culturales. Comprende actividades de laboratorio. [ND = Curso no aceptado para graduación o programa.]

## ESL 25.

Inglés Como Segunda Lengua: Escritura  
4 unidades

**Se Recomienda:** *Evaluación ESL de Southwestern College*

**Se Recomienda Correquisito:** *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*

**Teoría 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 el 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 29A.

Aprendizaje del Inglés con Propósitos Académicos 1A  
4 unidades

**Correquisito:** *ESL 29B and 29C*

**Teoría 4 horas**

**Se Ofrece:** *Otoño, Primavera, Verano*

Primer semestre de ESL. Énfasis en acelerar el desarrollo del lenguaje inglés académico en los estudiantes del idioma inglés. Se centra en la práctica intensiva de la escritura académica, pensamiento crítico y conversación en torno a un contenido único basado en un tema a un nivel principiante-medio de dominio del idioma inglés. [ND = Curso no aceptado para graduación o programa.]

## ESL 29B.

Aprendizaje del Inglés con Propósitos Académicos 1B  
4 unidades

**Correquisito:** *ESL 29A and 29C*

**Teoría 4 horas**

**Se Ofrece:** *Otoño, Primavera, Verano*

Primer semestre de ESL. Énfasis en acelerar el desarrollo del lenguaje inglés académico en los estudiantes del idioma inglés. Se centra en la práctica intensiva de la lectura académica, pensamiento crítico y conversación en torno a un contenido único basado en un tema a un nivel principiante-medio de dominio del idioma inglés. [ND = Curso no aceptado para graduación o programa.]

**ESL 29C.****Aprendizaje del Inglés con Propósitos Académicos 1C**

2 unidades

**Correquisito:** ESL 29A and 29B**Teoría 2 horas****Se Ofrece:** Otoño, Primavera, Verano

Desarrolla conceptos y destrezas aprendidas en ESL 29A y 29B practicando la preparación y refinando las tareas en clase y las presentaciones orales. Continúa enseñando cómo usar la tecnología para participar y completar los trabajos en clase a un nivel principiante-medio de dominio del idioma inglés. [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 Correquisito:** 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 Correquisito:** ESL 30 y 103**Teoría 2 horas, laboratorio 3 horas****Se Ofrece:** Otoño, Primavera, Verano

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 39A.****Aprendizaje del Inglés con Propósitos Académicos 2A**

4 unidades

**Prerrequisito:** ESL 29A, 29B, and 29C, ó equivalente**Correquisito:** ESL 39B and 39C**Teoría 4 horas****Se Ofrece:** Otoño, Primavera, Verano

Segundo semestre de ESL. Énfasis en acelerar el desarrollo del lenguaje inglés académico en los estudiantes del idioma inglés. Se centra en la práctica intensiva de la escritura académica, pensamiento crítico y conversación en torno a un contenido único basado en un tema de nivel intermedio inicial de dominio del idioma inglés. [ND = Curso no aceptado para graduación o programa.]

**ESL 39B.****Aprendizaje del Inglés con Propósitos Académicos 2B**

4 unidades

**Prerrequisito:** ESL 29A, 29B, and 29C, ó equivalente**Correquisito:** ESL 39A and 39C**Teoría 4 horas****Se Ofrece:** Otoño, Primavera, Verano

Segundo semestre de ESL. Provee el desarrollo acelerado del lenguaje inglés académico en los estudiantes del idioma inglés. Se centra en la práctica intensiva de la lectura académica, pensamiento crítico y conversación en torno a un contenido único basado en un tema de nivel intermedio inicial de dominio del idioma inglés. [ND = Curso no aceptado para graduación o programa.]

**ESL 39C.****Aprendizaje del Inglés con Propósitos Académicos 2C**

2 unidades

**Prerrequisito:** ESL 29C ó equivalente**Correquisito:** ESL 39A and 39B**Teoría 2 horas****Se Ofrece:** Otoño, Primavera, Verano

Desarrolla conceptos y destrezas aprendidas en ESL 39A y ESL 39B practicando la preparación y refinando las tareas en clase y las presentaciones orales. Continúa enseñando cómo usar la tecnología para participar y completar los trabajos en clase a un nivel intermedio inicial de dominio del idioma inglés. [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 Correquisito:** 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 Correquisito:** ESL 40 y 104**Teoría 2 horas, laboratorio 3 horas****Se Ofrece:** Otoño, Primavera

Estructurado para estudiantes de ESL a nivel avanzado. Enfatiza y fomenta la expresión independiente y requiere la demostración de aptitudes de lenguaje oral más avanzado. Como curso complementario de ESL 40, proporciona la práctica coordinada en gramática, sintaxis y vocabulario para ese curso. Las actividades se basan en metodologías comunicativas y comprenden cultura, material vocacional y académico. [D]

**ESL 49A.****Aprendizaje del Inglés con Propósitos Académicos 3A**

4 unidades

**Prerrequisito:** ESL 39A, 39B, and 39C, ó equivalente**Correquisito:** ESL 49B and 49C**Teoría 4 horas****Se Ofrece:** Otoño, Primavera, Verano

Provee el desarrollo acelerado del lenguaje inglés académico en los estudiantes del idioma inglés. Se centra en la práctica intensiva de la escritura académica, pensamiento crítico y conversación en torno a un contenido único basado en un tema de nivel intermedio-medio a superior de dominio del idioma inglés. [ND = Curso no aceptado para graduación o programa.]

**ESL 49B.**

**Aprendizaje del Inglés con Propósitos Académicos**  
3B

4 unidades

**Prerrequisito:** ESL 39A, 39B, and 39C, ó equivalente

**Correquisito:** ESL 49A and 49C

**Teoría 4 horas**

**Se Ofrece:** Otoño, Primavera, Verano

Tercer semestre de ESL. Provee el desarrollo acelerado del lenguaje inglés académico en los estudiantes de inglés. Se concentra en la práctica intensiva de la lectura académica, pensamiento crítico y conversación basada en un solo tema a un nivel intermedio-medio a superior de dominio del idioma inglés. [ND = Curso no aceptado para graduación o programa.]

**ESL 49C.**

**Aprendizaje del Inglés con Propósitos Académicos**  
3C

2 unidades

**Prerrequisito:** ESL 39A, 39B, and 39C, ó equivalente

**Correquisito:** ESL 49A and 49B

**Teoría 2 horas**

**Se Ofrece:** Otoño, Primavera, Verano

Desarrolla los conceptos y destrezas aprendidas en ESL 49A y 49B practicando la preparación y refinando las tareas en clase y las presentaciones orales. Continúa enseñando cómo usar la tecnología para participar y completar los trabajos en clase a un nivel intermedio-medio a superior de dominio del idioma inglés. [ND = Curso no aceptado para graduación o programa.]

**ESL 50.**

**Inglés Como Segunda Lengua: Lectura**

2 unidades

**Correquisito:** RDG 2

**Se Recomienda Correquisito:** ESL 30

**Teoría 2 horas, laboratorio 3 horas**

**Se Ofrece:** Otoño, Primavera

Curso básico de lectura estructurado para facilitar al estudiante la entrada a los cursos de lectura subsecuentes. Se trabaja en oraciones y contenido de párrafos, desarrollo de la aptitud de discernimiento y comprensión de instrucciones y explicaciones escritas. [ND = Curso no aceptado para graduación o programa.]

**ESL 51.**

**Inglés Como Segunda Lengua: Lectura y Escritura**  
6 unidades

**Se Recomienda:** ESL 25 or 50 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**

4 unidades

**Se Recomienda:** Haber terminado satisfactoriamente ESL 50 ó la aptitud equivalente, conforme a la evaluación ESL de Southwestern College

**Teoría 4 horas**

**Se Ofrece:** Otoño, Primavera

Mejora las aptitudes básicas de lectura. Se enfoca en las necesidades especializadas y el desarrollo del estudiante de inglés como segunda lengua (ESL). Provee estrategias eficaces para leer: aumento de vocabulario, comprensión en la lectura, y capacitación en el pensamiento crítico a nivel del cuarto año. (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

**Teoría 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 54.**

**ESL Para Tecnología**

1 unidad

**Aprobado/No Aprobado únicamente**

**Teoría 1 hora**

**Se Ofrece:** Variable

Ofrece destrezas básicas lingüísticas y tecnológicas que asisten a los estudiantes de inglés como segundo idioma (ESL) a tener éxito en cursos con apoyo virtual, cursos híbridos y cursos en línea. También prepara a los alumnos lingüísticamente para tomar cursos de informática (CIS). [ND = Curso no aceptado para graduación o programa.]

**ESL 59A.**

**Aprendizaje del Inglés con Propósitos Académicos**  
4A

2 unidades

**Prerrequisito:** ESL 49A, 49B, and 49C, ó equivalente

**Correquisito:** ESL 59B

**Teoría 2 horas**

**Se Ofrece:** Otoño, Primavera, Verano

Ayuda a los estudiantes a desarrollar las destrezas específicas y el conocimiento para manejar su vida personal y académica, asistir a conferencias en sus áreas de estudio, familiarizarse con los servicios y recursos disponibles para los estudiantes y crear un plan para la transición entre ESL y los cursos tradicionales universitarios a un nivel avanzando inicial de dominio del idioma inglés. [ND = Curso no aceptado para graduación o programa.]

**ESL 59B.**

**Aprendizaje del Inglés con Propósitos Académicos**  
4B

2 unidades

**Prerrequisito:** ESL 49A, 49B, and 49C, ó equivalente

**Correquisito:** ESL 59A

**Teoría 2 horas**

**Se Ofrece:** Otoño, Primavera, Verano

Desarrolla los conceptos y destrezas aprendidas en ESL 159A y 159B practicando la preparación y refinando las tareas en clase y las presentaciones orales. Continúa enseñando cómo usar la tecnología para participar y completar los trabajos en clase a un nivel avanzado inicial de dominio del idioma inglés. [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. [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 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 202.**

**Water and Wastewater Management**  
4 units

**Recommended Preparation:** EHMT 100 or equivalent

**Lecture 3 hours, laboratory 3 hours**

**Offered:** Variable

Introduces an overview of water and wastewater regulations emphasizing federal, state, and local regulatory standards. Emphasizes an integrated study of the principles of water movement, water distribution, and storm water/wastewater management. Includes wastewater treatment of publicly-owned treatment facilities, industrial treatment processes, safe drinking water issues, and water conservation strategies. [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.

**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to Environmental Hazardous Materials Technology major in order to apply learned theory in a practical hands-on setting through an internship class.

**Lecture 1 hour, laboratory 5–15 hours**

**Offered:** Fall, Spring

Applies principles and skills learned in the Environmental Hazardous Materials Technology (EHMT) program to on-the-job training. In addition to the one unit weekly class activity, one unit of credit is granted for each 60 hours of volunteer or 75 hours of paid work activity. The instructor and the work supervisor provider will evaluate on-the-job performance. (Repeatable—not to exceed four units per level.) [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.

**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to Environmental Hazardous Materials Technology major in order to apply learned theory in a practical hands-on setting through an internship class.

**Lecture 1 hour, laboratory 5–15 hours**

**Offered:** Fall, Spring

Applies principles and skills learned in the Environmental Hazardous Materials Technology program to on-the-job training. In addition to the one unit weekly class activity, one unit of credit is granted for each 60 hours of volunteer or 75 hours of paid work activity. The instructor and the work supervisor will evaluate on-the-job performance. (Repeatable—not to exceed four units per level.) [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.

**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to Environmental Hazardous Materials Technology major in order to apply learned theory in a practical hands-on setting through an internship class.

**Lecture 1 hour, laboratory 5–15 hours**

**Offered:** Fall, Spring

Applies principles and skills learned in the Environmental Hazardous Materials Technology program to on-the-job training. In addition to the one unit weekly class activity, one unit of credit is granted for each 60 hours of volunteer or 75 hours of paid work activity. The instructor and the work supervisor will evaluate on-the-job performance. (Repeatable—not to exceed four units per level.) [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.**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to Environmental Hazardous Materials Technology major in order to apply learned theory in a practical hands-on setting through an internship class. Lecture 1 hour, laboratory 5–15 hours**Offered:** Fall, Spring

Applies principles and skills learned in the Environmental Hazardous Materials Technology program to on-the-job training. Requires participating in a weekly one-hour coordinating class. The instructor and the work experience provider will evaluate on-the-job performance. (Repeatable—not to exceed four units per level.) [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 35.**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 COURSES****EVNT 154.****Introduction to Event and Convention Planning**

3 units

**Recommended Preparation:** 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]

\* Please refer to the class schedule for specific course description and transferability information.

**EVNT 299.****Independent Study**

1–3 units

**Limitation on Enrollment:** Eligibility for independent study. See page 35.**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 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 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 112.**

**Stand Up Paddling – Beginner**  
1.5 units

**Grade only**

**Prerequisite:** Demonstrated swimming proficiency

**Lecture 1 hour, laboratory 2 hours**

**Offered:** Variable

Introduces basic paddling techniques for the beginning stages of stand up paddling. Includes instruction and activities for equipment selection, paddling techniques, and safety skills for beginning participants. (Repeatable three times.) [D; CSU]

**ES/A 113.**

**Stand Up Paddling – Intermediate**  
1.5 units

**Grade only**

**Prerequisite:** ES/A 112 or equivalent

**Lecture 1 hour, laboratory 2 hours**

**Offered:** Variable

Explores progressive paddling techniques to increase distance in intermediate stand up paddling. Emphasizes instruction and activities for long distance paddling, stamina, strength building, and endurance skills. (Repeatable three times.) [D; CSU]

**ES/A 114.**

**Stand Up Paddling – Advanced**  
1.5 units

**Grade only**

**Prerequisite:** ES/A 113 or equivalent

**Lecture 1 hour, laboratory 2 hours**

**Offered:** Variable

Provides advanced stand up paddle instruction in ocean conditions. Includes beach entry and exit, wave riding, and predicting ocean currents. (Repeatable three times.) [D; CSU]

**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 123ABCD**

**Cross Training Fitness I–IV**  
.5–2 units

**Lecture .5–1 hour; laboratory 1–3 hours**

**Offered:** Variable

Introduces principles of fitness, health, and nutrition. Emphasizes enhanced healthful living through a variety of cardiovascular and resistance exercises. (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 131.****Flexibility Fitness I**

.5-1 unit

**Laboratory 1.5-3 hours****Offered:** Variable

Emphasizes stretching and increased flexibility at a basic skills level. Designed to lengthen muscles and increase range of motion. Includes reducing risk of injury, and increased body awareness. (Formerly ES/A 131ABCD.) [D; CSU; UC]

**ES/A 132.****Flexibility Fitness II**

.5-1 unit

**Prerequisite:** ES/A 131 or equivalent**Laboratory 1.5-3 hours****Offered:** Variable

Emphasizes stretching and increasing flexibility at a low-intermediate level. Includes reducing risk of injury, increases flexibility, and increased body awareness. (Formerly ES/A 131ABCD.) [D; CSU; UC]

**ES/A 133.****Flexibility Fitness III**

.5-1 unit

**Prerequisite:** ES/A 132 or equivalent**Laboratory 1.5-3 hours****Offered:** Variable

Emphasizes stretching and increasing flexibility as an intermediate level to lengthen muscles and increase range of motion. Includes reducing risk of injury and increased body awareness. (Formerly ES/A 131ABCD.) [D; CSU; UC]

**ES/A 134.****Flexibility Fitness IV**

.5-1 unit

**Prerequisite:** ES/A 133 or equivalent**Laboratory 1.5-3 hours****Offered:** Variable

Emphasizes stretching and increasing flexibility at an advanced level, and to lengthen muscles and increase range of motion. Includes reducing risk of injury and increased body awareness. (Formerly ES/A 131ABCD.) [D; CSU; UC]

**ES/A 135.****Bowling – Beginning**

1 unit

**Grade only****Laboratory 3 hours****Offered:** Variable

Fee: \$87.50. Provides instruction and supervision in the sport of bowling. Emphasizes rules, tournament play, various approaches, and ball release techniques introduced to the beginning bowler. Includes instruction on scoring, ball placement, and team play. (Formerly ES/A 135ABC.) [D; CSU]

**ES/A 136.****Bowling – Intermediate**

1 unit

**Grade only****Prerequisite:** ES/A 135 or equivalent**Laboratory 3 hours****Offered:** Variable

Fee: \$87.50. Introduces bowling techniques at an intermediate level. Emphasizes curves, split conversions, advanced pin set conversions, and enhance his/her averages. (Formerly ES/A 135ABC.) [D; CSU]

**ES/A 137.****Bowling – Advanced**

1 unit

**Grade only****Prerequisite:** ES/A 136 or equivalent**Laboratory 3 hours****Offered:** Variable

Fee: \$87.50. Offers continued opportunities to perfect basic bowling skills at advanced level. Includes finger tip release, lane condition adjustments, strategy for correcting faults such as: over-spin, lofting, and missing mark. Emphasizes league play strategy. (Formerly ES/A 135ABC.) [D; CSU]

**ES/A 138.****Beginning Baseball**

1 unit

**Laboratory 3 hours****Offered:** Variable

Introduces the student to the fundamental baseball skills of throwing, catching, and hitting along with the rules of play and basic strategy. (Formerly ES/A 174.) [D; CSU; UC]

**ES/A 139.****Intermediate Baseball**

1 unit

**Grade only****Prerequisite:** ES/A 174 or equivalent**Laboratory 3 hours****Offered:** Variable

Develops the students fundamental skills of baseball, rules, and strategies. (Formerly ES/A 175ABC.) [D; CSU]

**ES/A 140.****Advanced Baseball**

1 unit

**Grade only****Prerequisite:** ES/A 175 or equivalent**Laboratory 3 hours****Offered:** Variable

Expands the implementation of baseball game strategies and refine personal skills at an advanced level. (Formerly ES/A 175ABC.) [D; CSU]

**ES/A 141.****College Baseball**

1 unit

**Grade only****Prerequisite:** ES/A 176 or equivalent**Laboratory 3 hours****Offered:** Variable

Provides instruction to evolve the execution of baseball game strategies and purify personal skills. (Formerly ES/A 175ABC.) [D; CSU]

**ES/A 143.****Badminton I**

1 unit

**Grade only****Laboratory 3 hours****Offered:** Variable

Introduces the student to the rules and skills of badminton at a beginning level along with fundamental strategies. (Formerly ES/A 143ABCD.) [D; CSU]

**ES/A 144.****Badminton II**

1 unit

**Grade only****Prerequisite:** ES/A 143 or equivalent**Laboratory 3 hours****Offered:** Variable

Develops the student's understanding of the strategies, rules, skills, and etiquette of badminton at a beginning-intermediate level. (Formerly ES/A 143ABCD.) [D; CSU]

**ES/A 145.****Badminton III**

1 unit

**Grade only****Prerequisite:** ES/A 144 or equivalent**Laboratory 3 hours****Offered:** Variable

Expands the student's implementation of game strategies and refines personal skills of badminton at the intermediate level. (Formerly ES/A 143ABCD.) [D; CSU]

**ES/A 146.****Badminton IV**

1 unit

**Grade only****Prerequisite:** ES/A 145 or equivalent**Laboratory 3 hours****Offered:** Variable

Emphasizes the student's execution of the strategies and personal skills of badminton at an advanced level. (Formerly ES/A 143ABCD.) [D; CSU]

**ES/A 147.****Golf I**

.5–1 unit

**Grade only****Laboratory 2–3 hours****Offered:** Variable

Fee: \$45. Introduces fundamentals of golf including pattern of swings, grip, and stance at a beginning level. 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. Provides golf swing fundamentals and skills at a beginning intermediate level. Includes 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. Refines full swing, chipping techniques, pitching, sand bunker play, rules, scoring, and game management at the intermediate level. 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. Emphasizes golf skills at an advanced level. 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

Introduces tennis fundamentals. Emphasizes stroke technique, footwork, forehand, backhand, and introduction to serve. Includes 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:** Fall, Spring, Summer

Reviews the of history, etiquette, rules, and basic strategy of tennis. Refines basic skills in footwork, forehand, backhand, and serve for the advanced beginner. Introduces 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

Reviews serve and net play refinement with emphasis on pace and control of serve and variations of forehand and backhand strokes. Introduces 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

Provides advanced theory, strategy, and techniques including analysis of skills by instructor and student, concentrating on the elimination of errors in form and execution. Introduces 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 170.**

Sand Volleyball I  
.5–1 unit

**Laboratory 1.5–3 hours**

*Offered:* Variable

Provides instruction for beginning sand volleyball basic skills and strategies with an emphasis on individual skills and doubles team play. (Formerly ES/A 170ABCD.) [D; CSU]

**ES/A 171.**

Sand Volleyball II  
.5–1 unit

*Prerequisite:* ES/A 170 or equivalent.

**Laboratory 1.5–3 hours**

*Offered:* Variable

Provides instruction for intermediate sand volleyball skills and strategies with an emphasis on individual skills and doubles team play. (Formerly ES/A 170ABCD.) [D; CSU]

**ES/A 172.**

Sand Volleyball III  
.5–1 unit

*Prerequisite:* ES/A 171 or equivalent.

**Laboratory 1.5–3 hours**

*Offered:* Variable

Provides instruction for advanced sand volleyball skills and strategies with an emphasis on game strategies. (Formerly ES/A 170ABCD.) [D; CSU]

**ES/A 173.**

Sand Volleyball IV  
.5–1 unit

*Prerequisite:* ES/A 172 or equivalent.

**Laboratory 1.5–3 hours**

*Offered:* Variable

Provides instruction for advanced skills and strategies of sand volleyball with an emphasis on gamesmanship and team performance. (Formerly ES/A 170ABCD.) [D; CSU]

**ES/A 178A.**

Soccer I  
.5–1 units

*Grade Only*

**Laboratory 2–3 hours**

*Offered:* Variable

Introduces the student to the sport of soccer. Provides information and practice in the skills of kicking, trapping, heading, shooting, rules, and vocabulary associated with soccer. Exposes students to game situations and game evaluations. [D; CSU; UC]

**ES/A 178B.**

Soccer II  
.5–1 units

*Grade Only*

*Prerequisite:* ES/A 178A or equivalent

**Laboratory 2–3 hours**

*Offered:* Variable

Reviews the history of soccer, rules, and basic strategy of soccer. Emphasizes technical skills of receiving, dribbling, shielding, and shooting of soccer. Introduces individual defending and attacking strategies. [D; CSU; UC]

**ES/A 178C.**

Soccer III  
.5–1 units

*Grade Only*

*Prerequisite:* ES/A 178B or equivalent

**Laboratory 2–3 hours**

*Offered:* Variable

Reviews and refines the technical and tactical skills of soccer. Emphasizes positional play and identifies the roles of goalkeeper, defenders, midfielders, and forwards in the tactical setting. Exposes students to small tactical group sessions and game evaluations. [D; CSU; UC]

**ES/A 178D.**

Soccer IV  
.5–1 units

**Grade Only**

**Prerequisite:** ES/A 178C or equivalent

**Laboratory 2–3 hours**

**Offered:** Variable

Emphasizes advanced theory, technical, and tactical skills. Exposes students to game situations and match analysis. [D; CSU; UC]

**ES/A 182.**

Softball I  
.5–1 unit

**Grade only**

**Laboratory 2–3 hours**

**Offered:** Variable

Focuses on the beginning softball student and introduces fundamental drills for offense and defense plays. Includes batting techniques, pitching and fielding skills, game 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

Provides the basic fundamentals of throwing, catching, fielding, batting, and bunting for the beginning-intermediate level student. Includes in-class competition to enhance and refine total player development. [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

Reviews the softball fundamentals of throwing, catching, fielding, batting, and bunting for the intermediate level student. Enhances the skills through in class competition and improves abilities through essential drills. [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

Includes advanced fundamentals of throwing, catching, fielding, batting, and bunting for the advanced player. Emphasizes in class competition to increase game like awareness to improve total player development. [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 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 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 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 226A.****Keelboat Sailing Level I**

1 unit

**Grade only****Prerequisite:** ES/A 225 or equivalent**Lecture .5 hour, laboratory 1.5–2 hours****Offered:** Fall, Spring, Summer

Designed for the first-time keelboat sailor. Introduces basic boat handling, points of sail, safety afloat, wind direction, rules of the road, and sailing nomenclature. [D; CSU; UC]

**ES/A 226B.****Keelboat Sailing Level II**

1 unit

**Grade only****Prerequisite:** ES/A 226A or equivalent**Lecture .5 hour, laboratory 1.5–2****Offered:** Fall, Spring, Summer

Covers a comprehensive review of knowledge and performance skills learned in Keelboat Level I. Includes VHF radio for emergencies, docking, picking up a mooring ball, reefing, heaving to, anchoring, nomenclature, advanced rules of the road, and fine tuning sails for faster speeds. [D; CSU; UC]

**ES/A 226C.****Keelboat Sailing Level III**

1 unit

**Grade only****Prerequisite:** ES/A 226B or equivalent**Lecture .5 hour, laboratory 1.5–2 hours****Offered:** Fall, Spring, Summer

Covers a comprehensive review of knowledge and performance skills learned in Keelboat Sailing Level I and II. Includes the difference between true and apparent wind, figure-8 recovery of man overboard drill, chart reading, basic navigation, spinnaker flying, racing rules and tactics. Includes currents, tides, navigational aides, and GPS devices. [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 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 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 35.

**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
* Track and Field 125–127	(Spring)	2 units
Volleyball 128–130	(Fall)	2 units
Softball 131–133	(Fall)	2 units
* Water Polo 134–36	(Fall)	2 units
* Swimming and Diving 137–39	(Spring)	2 units

\* Indicates both men and women.

## EXERCISE SCIENCE— LIMITED COURSES

### ES/L 101A.

**Adapted Sport Activities I**  
.5–1 unit

**Prerequisite:** *Level of physical strength and agility sufficient to avoid injury to the student and others in course activities*

**Laboratory 2–3 hours**

**Offered:** *Variable*

Designed to provide instruction and supervision in one of the following sports each term: basketball, badminton, bowling, indoor softball, and indoor wheelchair soccer. (Repeatable) [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. (Repeatable) [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. (Repeatable) [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. (Repeatable) [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. (Repeatable) [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. (Repeatable) [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. (Repeatable) [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. (Repeatable) [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. (Repeatable) [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. (Repeatable) [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. (Repeatable) [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. (Repeatable) [D; CSU; UC]

## EXERCISE SCIENCE— THEORY COURSES

**ES/T 107.**

**Fitness Assessment and Laboratory**  
2.5 units

**Lecture 2 hours, laboratory 2 hours**

**Offered:** Variable

Provides an individual fitness assessment evaluation program suited to all levels of fitness. Emphasizes measurements of body composition, cardiorespiratory fitness, nutritional analysis, stress, pulmonary function, flexibility, and muscular strength and endurance. Includes exercise recommendations. [D; CSU]

**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:** Fall

Provides instruction, field experience, and conditioning for athletics. Includes weight lifting, running, skill development, strategies, and individual development for baseball. [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:** Fall

Emphasizes biomechanics of human motion for the improvement of baseball skills. [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

Develops the physical and mental skills needed to participate in competitive baseball. [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 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 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

Conditions students in preparation for competing on a track team at a beginning level. Emphasizes 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:** Fall

Conditions students in preparation for competing on a track team at an intermediate level. Emphasizes 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

Conditions students in preparation for competing on a track team at an advanced level. Emphasizes gradual build up cardiorespiratory fitness, muscle strength, flexibility, speed, 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

Introduces conditioning for softball 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

Provides intermediate conditioning for softball with stress on weight lifting, running, skill development games, and individual development for sports. [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

Provides advanced conditioning for softball with stress on weight lifting, running, skill development games, and individual development for sports. [D; CSU; UC]

**ES/T 135.**

Introduction to Exercise Physiology

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

Introduces a comprehensive study on how the body functions and adapts under exercise stress and how exercise methods affect health and wellness. Emphasizes function and neural control of muscle. Includes energy expenditure through different types of training methods and environmental factors. [D; CSU; UC]

**ES/T 136.**

**Techniques of Weight Training**  
2 units

**Grade only**

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

**Lecture 1.5 hours, laboratory 1.5 hours**

**Offered:** Variable

Provides an in-depth study for individuals who are going to instruct or participate in weight training. Emphasizes anatomy and physiology, training techniques, modes of exercise, training sequence, proper spotting methods, and safety procedures. [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**

**Prerequisite:** ES/T 135, 136, 138 and 140 or equivalent

**Lecture 1 hour, laboratory 6 hours**

**Offered:** Variable

Provides students with practical experience in the field of exercise and fitness. Emphasizes client assessment, principles of adherence and motivation, evaluation of an exercise program design and progression, self-marketing fitness in specialist/client relationships, and professional and legal responsibility in a fitness setting. [D; CSU]

**ES/T 140.**

**Introduction to Applied Kinesiology**  
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

Provides an in-depth study of joints, bone muscles and connective tissues with special emphasis on movement and mechanical analysis as it relates to 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

Focuses on the history of physical education and examines the lifespan of sport, fitness, and physical education and how it has emerged in the U.S. Views current trends in curriculum development, socioeconomic advancement, and infrastructure. [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 208.**

**Theory and Technical Analysis of Offensive Volleyball**  
2-3 units

**Grade only****Lecture 2-3 hours****Offered:** Fall

Designed for students interested in increasing their knowledge of the offensive aspects of volleyball. Includes film analysis, the history of volleyball, drill construction, and offensive creation and evaluation. (Repeatable one time.) [D; CSU]

**ES/T 250.**

**Prevention and Care of Athletic Injuries**  
2 units

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

Addresses the fundamentals of elementary human anatomy and their relationship to athletic activity. Primary focus will be on the prevention and recognition of common athletic injuries including the theory and practice of emergency field care. The treatment and rehabilitation of athletic injuries will also be discussed. Bandaging and/or taping techniques will be practiced in the laboratory. [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 35.

**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.*

## FILIPINO COURSES

**FIL 101**

**Elementary Filipino I**  
Lecture 5 hours

**Offered:** Fall, Spring

Focuses on basic beginning interpersonal communication. Covers structures and vocabulary necessary to talk about daily activities. Introduces students to the Filipino culture. Designed for students with very little or no knowledge of Filipino. Equivalent to two years of high school Filipino. (Formerly PIL 101.) [D; CSU; UC]

**FIL 102**

**Elementary Filipino II**  
**Prerequisite:** FIL 101 or equivalent  
**Lecture 5 hours**

**Offered:** Fall, Spring

Provides a continuation of FIL 101, with focus being given to oral proficiency in Filipino. Equivalent to three years of high school Filipino. (Formerly PIL 102.) [D; CSU; UC]

**FIL 201**

**Intermediate Filipino I**  
**Prerequisite:** FIL 102 or equivalent

**Lecture:** 5 hours**Offered:** Variable

Provides an extensive review of all first-year structures. Focuses on interpersonal communication for intermediate students. Covers grammatical structures and vocabulary necessary to discuss personal relations, Filipino society, food, art, and culture. Introduces readings reflecting Filipino worldviews. Equivalent to four years of high school Filipino. (Formerly PIL 220.) [D; CSU; UC;]

**FIL 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.*

**FIL 299.**

**Independent Study**  
1-3 units

**Limitation on Enrollment:** Eligibility for independent study. See page 35.

**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.*

# FIRE SCIENCE TECHNOLOGY COURSES

## FS 10.

**Skills Preparation for Fire Services**  
3 units

**Grade only**

**Lecture 3 hours**

**Offered:** Fall, Spring, Summer

Builds self-confidence and gives the students information to be competitive in the fire service. Includes simulated testing procedures and experience the testing challenges of fire departments. Recommended for students participating in the entrance exams given by fire departments. [D]

## FS 12.

**Fire Service Hydraulics**  
3 units

**Grade only**

**Prerequisite:** MATH 35 or equivalent

**Lecture 2 hours, laboratory 3 hours**

Introduces students to hydraulics laws and formulas as they relate to fire service. Includes calculations to assure adequate water pressures and volumes at fire department operations. Emphasizes principles of fluid pressure, fire pump operation and design, hose line construction and capability, and community water supply capabilities. [D]

## 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 40.

**Fire Service Skills**  
1–1.5 units

**Pass/No Pass only**

**Limitation on Enrollment:** Must be a firefighter from a contracted agency

**Laboratory 3–5 hours**

**Offered:** Variable

Covers special topics as on-going education to fire service personnel for required skills maintenance. Includes duties and responsibilities of the fire service in order to maintain a state of readiness. (Repeatable three times.) [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 107.

**Fire Fighter Physical Agility Preparation**  
3 units

**Lecture 2 hours, laboratory 3 hours**

**Offered:** Fall, Spring, Summer

Designed to improve the health and fitness capabilities of firefighters and potential firefighters. Provides the necessary skills to pass Fire Department physical exams, including the Candidate Physical Agility Test (CPAT) exam, which is a requirement for employment by most fire agencies. [D]

## FS 108.

**Fire Department Safety Officer**  
3 units

**Recommended Preparation:** FS 101 or equivalent

**Lecture 3 hours**

**Offered:** Fall, Spring, Summer

Provides contemporary fire fighter students insight into safety concepts, guiding regulations, codes, laws, and standards. Includes reading buildings, smoke, risk analysis, and firefighter decision making. Emphasizes the duties of an Incident Safety Officer in structure firefighting, wildland firefighting, and other hazardous incidents. [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

**Lecture 2 hours**

**Offered:** Variable

Provides fire service personnel with technical training on factors relating to life safety; fire protection and life safety considerations in buildings; purposes and location of rated building construction; general fire safety practices; requirements for decorations and furnishings; fire doors, windows and shutters; means of egress; exits; occupant loads; enclosed stairwells; sprinkler systems; stand pipe and hose system. [D; CSU]

**FS 137.**  
**Fire Command 1C**  
 2 units

**Grade Only**

**Prerequisite:** FS 136 or equivalent

**Lecture 1 hour, laboratory 3 hours**

**Offered:** Variable

Introduces company officers to the urban/ interface wildland fire fighting environment or Interface Zone (I-Zone), an area where homes and native vegetation coexist. Includes I-zone operation principles, safety and survival, and I-zone incident operations. [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, 3 laboratory 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. (Repeatable 3 times) [D]

**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 152.**  
**Instructor Training 1A: Psychomotor Lesson Delivery**  
 2 units

**Grade Only**

**Lecture 1 hour, laboratory 3 hours**

**Offered:** Fall

Provides training for perspective instructors within the fire technology field. Emphasizes how to identify training needs, levels of instruction, establish objectives and content, and teach technical subjects. Required for students preparing for Captain and teaching in the Fire Marshal System. [D; CSU]

**FS 153.**  
**Instructor Training 1B: Cognitive Lesson Delivery**  
 2 units

**Grade Only or Pass/No Pass option**

**Prerequisite:** FS 152 or equivalent

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

**Lecture 1 hour, laboratory 3 hours**

**Offered:** Fall, Spring, Summer

Prepares students to provide training within their fire departments or to teach college fire technology courses. Covers identification of training needs, course objectives, levels of instruction, development of levels of instruction and the psychology of learning. Required for students preparing for Captain and teaching in the State Fire System. [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. (Repeatable—not to exceed four units per level.) [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. (Repeatable—not to exceed four units per level.) [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. (Repeatable—not to exceed four units per level.) [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. (Repeatable—not to exceed four units per level.) [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 35.

**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]

## FRENCH COURSES

**FREN 101.**

**Elementary French I**  
5 units

**Lecture 5 hours****Offered:** Fall, Spring, Summer

Focuses on basic beginning interpersonal communication. Covers structures and vocabulary necessary to talk about family, friends, daily activities, hobbies, obligations, school, weather, travel, and food. Introduces students to Francophone cultures. Designed for students with very little or no knowledge of French. Equivalent to two years of high school French. [D; CSU; UC]

**FREN 102.**

**Elementary French II**  
5 units

**Prerequisite:** FREN 101 or equivalent**Lecture 5 hours****Offered:** Fall, Spring

Provides continuation of French 101 to further enable students to carry out basic interpersonal communication and acquire the structures and vocabulary necessary to talk about childhood, chores, daily routine, health, technology, errands, environment, future goals, and professions. Examines the study of Francophone cultures. Equivalent to three years high school French. [D; CSU; UC]

**FREN 201.**

**Intermediate French I**  
5 units

**Prerequisite:** FREN 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 personal relations, city life, the medias, Francophone societies, political views, art, and culture. Introduces readings reflecting Francophone worldviews. Equivalent to four years of high school French. [D; CSU; UC]

**FREN 202.****Intermediate French II**

5 units

**Prerequisite:** FREN 201 or equivalent**Lecture 5 hours****Offered:** Variable

Provides continuation of FREN 201.

Focuses on student's ability to communicate at an intermediate high level on topics, including family, traditions, hobbies and pastimes, employment, nature, science, technology, art, and literature in Francophone countries. Includes further study of complex grammatical structures and literary selections. Equivalent to four years of high school. [D; CSU; UC]

**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 35.

**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 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]

**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]

**GEOG 145.****Introduction to Mapping and Geographic Information Science (GIS)**

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

Provides an introduction to Geographic Information Science (GIScience), cartography, and spatial analysis. [D; CSU]

**GEOG 150.****Geographic Information Science and Spatial Reasoning**

3 units

**Prerequisite:** MATH 60 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

Introduces the fundamental concepts of Geographic Information Science (GIScience) including Geographic Information Systems (GIS), Global Positioning Systems (GPS), cartography, remote sensing, and spatial analysis. Explores how geospatial technologies are used in addressing social, behavioral, and environmental issues. [D; CSU; UC]

**GEOG 151.****Intermediate GIS—Techniques and Analyses**

3 units

**Lecture 3 hours****Offered:** Variable

Introduces students to problem-solving and decision making using Geographic Information Systems (GIS). Applicable to a range of disciplines. Provides hands-on training in industry leading ESRI ArcGIS software. [D; CSU]

**GEOG 152.**

**Advanced GIS—Project Design and Applications**  
3 units

**Prerequisite:** GEOG 151 or equivalent

**Lecture 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

**Pass/No Pass only**

**Prerequisite:** GEOG 152 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 154.**

**Introduction to Remote Sensing**

3 units

**Recommended Preparation:** MATH 60 or 60PL, 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**

**Offered:** Variable

Introduces fundamental concepts of electromagnetic radiation and its interactions with various media. Explores commonly used sensors and techniques of remote sensing. (Same as PHS 154.) [D; CSU]

**GEOG 155.**

**Introduction to Image Analysis**

3 units

**Lecture 3 hours**

**Offered:** Variable

Introduces principal concepts related to processing, analysis, enhancement, correction, and interpretation of images. Includes photogrammetry, information extraction, and scientific visualization. (Same as PHS 155.) [D; CSU]

**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 35.

**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 COURSES

**GEOG 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]

**GEOG 101.**

**General Geology Laboratory**

1 unit

**Corequisite:** GEOG 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]

**GEOG 104.**

**Introduction to Earth 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

Introduces students to the Earth's four principal reservoirs and their interconnectedness: solid earth, ocean, atmosphere, and biosphere. Emphasizes how humanity interacts with these reservoirs. Includes solar system origins and dynamics. Most appropriate for liberal studies majors. [D; CSU; UC]

**GEOG 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.

**GEOG 299.**

**Independent Study**

1–3 units

**Limitation on Enrollment:** Eligibility for independent study. See page 35.

**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 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 emphasizes development of holistically healthy living. Provides an overview of chronic and infectious diseases, green environment, injury prevention, chemical dependency, nutrition, body composition, fitness, psychological wellness, fertility awareness, conflict resolution, and the human genome. [D; CSU; UC]

### HLTH 106.

#### Fundamentals of Healing Touch

1 unit

**Grade only**

**Lecture 1 hour**

**Offered:** Variable

Introduces students to a study of complimentary healing called Healing Touch. Focuses on energy theory principles and practice of energy-based interventions. Includes application of techniques to a variety of situations, ranging from self-care to professional use in healthcare, wellness, stress reduction, nursing, and hospice care. [D; CSU]

### HLTH 110.

#### First Responder

3 units

**Grade only**

**Lecture 2 hours, laboratory 3 hours**

**Offered:** Variable

Focuses on fundamentals of first aid with an emphasis on knowledge and skills needed for students entering a career in Emergency Medical Services (EMS). Meets and exceeds California Title 22 requirements for public safety first responder and U. S. Department of Transportation national standard curriculum. Includes AHA Healthcare Provider level CPR certification. [D; CSU]

### HLTH 116.

#### Women's Health and Well-Being

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

Provides 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; injury prevention; chronic and infectious diseases; reproductive health; substance abuse; emotional well-being; and a history of women's health concerns. [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**

**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, Summer

Introduces nutrition as applied to the stages of the human life cycle. Focuses on the basic principles of nutrition, including knowledge of daily nutritional requirements. Describes the function of the digestive organs. Emphasizes effects of over and under eating. Includes fitness standards, genetics 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 35.

**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 COURSES

### HIST 100.

#### American Civilization I

3 units

**Recommended Preparation:** RDG 158 or 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]

**HIST 101.****American Civilization II**

3 units

**Recommended Preparation:** RDG 158 or 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 emphasizing a multicultural approach. Focuses on 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]

**HIST 104.****Western Civilization I**

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 history of Western Civilization from ancient origins to the conclusion of the Renaissance. Emphasizes not only the historical and cultural achievements of the indigenous populations of Europe, but also those of the diverse peoples of Africa and Asia who helped influence and shape Western Civilization. [D; CSU; UC]

**HIST 105.****Western Civilization II**

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 history of Western Civilization from the Protestant Reformation to the present day. Emphasizes the political, economic, and social consequences of modernity on the Western World and its global interests. [D; CSU; UC]

**HIST 106.****World History I**

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

Covers world history from human origins to the emergence of modernity at the beginnings of the sixteenth century. Emphasizes not only the history of the world's major civilizations but explains how the diverse peoples of these different societies often helped influence and shape each other's cultural experiences and worldviews. [D; CSU; UC]

**HIST 107.****World History II**

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

Covers World History from c. 1500 C.E. to the present, focusing on the political, economic, and social consequences of modernity and Western Imperialism on the emerging global community. Emphasizes globalization and its impact on the diverse peoples and civilizations around the world. [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

Emphasizes the study of the African-American experience from African origins to the conclusion of the Civil War. Focuses on the Atlantic slave trade and slavery in the United States. Includes a study of the Constitution of the United States and the responsibilities of American citizenship. (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

Explores the history of African Americans from the Civil War to the present, emphasizing their cultural, social, and political impact on American history. Includes a study of the United States Constitution, the State Constitution of California, and discrepancies between rights and the experiences of African Americans. (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 158 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. Emphasizes 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 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

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

Examines the history of Asian Americans in the United States from 1846 to the present. Major themes include the study of economic developments, occupational patterns, anti-Asian movements, inter-ethnic exchanges, gender, and intergenerational issues. Includes a study of the Constitution of California. (Partially fulfills American Institutions requirement at CSU.) (Same as ASIA 113.) [D; CSU; UC]

**HIST 114.****Filipino-American History**

3 units

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

**Lecture 3 hours****Offered:** Variable

Emphasizes the economic, political, and social history of Filipinos in the Philippines and in the United States. Analyzes the effects of Spanish, American, and Japanese colonization on Filipino culture. Focuses on the major waves of migration to the United States and focuses on 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 158 or 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 158 or 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.****Women in World History**

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

Emphasizes the ideologies, issues, and events that have shaped the lives, roles, and contributions of women throughout the world from prehistory to the present. Explores the models and images of womanhood developed by different cultures to define and determine the nature of women and their position in society. (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-Columbian times to c. 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 158 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. Emphasizes the political, economic, and social experiences of the Mexican American people under the influences 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 35.

**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 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, food service, 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 153.****Hospitality Management Accounting**  
4 units

**Grade only**

**Prerequisite:** ACCT 101 or HTM 150 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

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. Reviews and applies concepts of responsibility accounting, capital expenditure decisions, and feasibility studies to various projects. (Same as ACCT 153.) [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]

\* Please refer to the class schedule for specific course description and transferability information.

**HTM 299.****Independent Study**

**1–3 units**

**Limitation on Enrollment:** Eligibility for independent study. See page 35.

**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 COURSES

**HUM 101.****Humanities Through the Arts I**

**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

Covers the period from pre-history through the Renaissance. 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.

[D; CSU; UC]

**HUM 102.****Humanities Through the Arts II**

**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:** Spring

Covers the period from the Baroque through the Contemporary. 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.

[D; CSU; UC]

**HUM 104.****Introduction to Humanities: Arts and Ideas**

**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

Covers the period from pre-history to the modern age. 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.

[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 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

**Lecture 3 hours**

**Offered:** Variable

Analyzes myths that represent seven cultural areas. Emphasizes 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 35.

**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 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 35.

**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 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 two years of high school Italian. [D; CSU; UC]

**ITAL 102.**

**Elementary Italian II**  
5 units

**Prerequisite:** ITAL 101 or equivalent

**Lecture 5 hours**

**Offered:** Fall, Spring

Provides continuation of ITAL 101. Enables 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 three years high school Italian. [D; CSU; UC]

**ITAL 201.**

**Intermediate Italian I**  
5 units

**Prerequisite:** ITAL 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 traditions, newspapers and magazines, interpersonal relationships, beliefs and stereotypes, music, and technology. Introduces readings reflecting Italian culture. Equivalent to four years of high school Italian. [D; CSU; UC]

**ITAL 202.****Intermediate Italian II**

5 units

**Prerequisite:** ITAL 201 or equivalent**Lecture 5 hours****Offered:** Variable

Provides continuation of ITAL 201. Focuses on student's ability to communicate at an intermediate high level on a variety of topics such as literature, values and traditions, Italian cinema and music, fashion, hobbies, and the environment. Includes further study of complex grammatical structures and literary selections. Equivalent to four years of high school Italian. [D; CSU; UC]

**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 35.

**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 COURSES****JPN 101.****Beginning Japanese I**

5 units

**Lecture 5 hours****Offered:** Fall, Spring

Introduces Japanese, both spoken and written. Emphasizes grammar, pronunciation, idiomatic expressions, hiragana, and katakana. Includes relationship between language and culture, and oral-aural drills will be stressed. Equivalent to two years of high school Japanese. (Not open to students with credit in JPN 101A and 101B.) [D; CSU; UC]

**JPN 101A.****Introductory Elementary Japanese**

3 units

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

Introduces first half of JPN 101, both spoken and written at the survival level including cultural topics. Includes essentials of grammar, pronunciation, idiomatic expressions, Hiragana and Katakana. Emphasizes relationship between language and culture. Equivalent to first half of JPN 101. (Not open to students with credit in JPN 120 or JPN 101.) [D; CSU; UC]

**JPN 101B.****Continuation of Elementary Japanese**

3 units

**Prerequisite:** JPN 101A or equivalent**Lecture 3 hours****Offered:** Fall, Spring

Provides continuation of JPN 101A, both spoken and written. Covers essentials of grammar, pronunciation, idiomatic expressions, Hiragana and Katakana. Emphasizes relationship between language and culture through basic interpersonal communication and authentic communication. Equivalent to second half of JPN 101. Equivalent to two years of high school Japanese. (Not open to students with credit in JPN 120 or JPN 101.) [D; CSU; UC]

**JPN 102.****Beginning Japanese II**

5 units

**Prerequisite:** JPN 101 or 101B or equivalent**Lecture 5 hours****Offered:** Spring

Provides continuation of Japanese 101 with emphasis on spoken Japanese. Introduces Kanji (Chinese characters). Equivalent to three years high school Japanese. [D; CSU; UC]

**JPN 201.****Intermediate Japanese I**

5 units

**Prerequisite:** JPN 102 or equivalent**Lecture 5 hours****Offered:** Spring

Provides continuation of JPN 102. Reviews all structures learned in the first year. Offers students an opportunity to acquire communicative skills while emphasizing an awareness and appreciation of Japanese culture, art, and history. Emphasizes further study of grammatical principles, composition, and continued oral practice. Equivalent to four years of high school Japanese. [D; CSU; UC]

**JPN 202.****Intermediate Japanese II**

5 units

**Prerequisite:** JPN 201 or equivalent**Lecture 5 hours****Offered:** Spring

Provides continuation of JPN 201. Reviews all structures learned in the first three semesters. Offers students an opportunity to further develop communicative skill while continuing to emphasize a deeper awareness and appreciation of Japanese culture, art, and history. Emphasizes further study of grammatical principles, composition, and continued oral practice. Equivalent to four years 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 35.

**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 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. Provides a building block in the general education of the non-major student and as the introduction to the discipline of study for the communication/journalism major. (Same as COMM 200.) [D; CSU; UC]

**JOUR 151.**  
News Reporting and Writing  
3 units

**Grade only**

**Lecture 3 hours**

**Offered:** Fall, Spring

Offers intensive exploratory practice in 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;]

**JOUR 171.**  
Writing for Publication  
3 units

**Lecture 3 hours**

**Offered:** Fall, Spring

Fee: \$20. Provides 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: \$20. 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: \$20. 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: \$20. 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 \$25. Provides practical application in newspaper work. Applies 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: \$25. 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: \$25. 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

Fee: \$25. 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 35.

**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 COURSES

### LA 104.

#### Landscape Graphics and Planting Design 3 units

**Lecture 2 hours, laboratory 3 hours**

**Offered:** Fall

Introduces presentation graphics and drafting for landscape design, including a step-by-step study of creating concept plans and drafting landscape construction drawings. Emphasizes methods for proper use of plant materials and planting design theory. [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. [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 35.

**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. [D]

### LNT 72.

#### Horticultural Equipment: Care and Operation 2 units

**Lecture 1 hour, laboratory 3 hours**

**Offered:** Variable

Provides instruction in the safe and proper care and operation of equipment used in landscape construction and maintenance. Includes proper maintenance procedures to ensure safe and efficient equipment operation. [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

Prepares students for the California Pesticide Applicators License and Certificate Exams. Includes pesticide laws, understanding pesticide labels, types of pesticides, application methods, license categories, safety, and pest recognition. [ND]

### LNT 91.

#### Sprinkler System Maintenance: Sprinklers, Pipes, and Backflow Devices 1 unit

**Lecture 1 hour, laboratory .5 hour**

**Offered:** Fall

Provides instruction in the various types, installation methods, maintenance techniques, and repair of sprinklers, pipes, and backflow devices used in the landscape irrigation industry. [D]

### LNT 92.

#### Sprinkler System Maintenance: Valves and Wiring 1 unit

**Lecture 1 hour, laboratory .5 hour**

**Offered:** Fall

Introduces installation, maintenance, and repair of control valves and wiring used in the sprinkler irrigation industry. [D]

### LNT 93.

#### Sprinkler System Maintenance: Controllers and Scheduling 1 unit

**Lecture 1 hour, laboratory .5 hour**

**Offered:** Fall

Introduces installation, operation, and scheduling of landscape irrigation controllers used for sprinkler systems. Includes soil factors, climate, topography, and plant water requirements. [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. [D]

**LNT 100.****Plant and Horticultural Science**

4 units

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

Emphasizes the study of plant structures, functions, taxonomy, and plant-soil-climate relationships, and the importance of plants for food, air, and ornamental purposes. Includes management of plants in greenhouses and nursery structures and in the landscape. [D; CSU; UC]

**LNT 101.****Introduction to Sustainable Energy Studies**

3 units

**Grade only****Recommended Preparation:** MATH 35, BUS 211 or the equivalent skill level as determined by the Southwestern College Mathematics and English Assessments or equivalent**Lecture 3 hours****Offered:** Fall

Studies the growth of the human population and its effects on energy and climate demands with an emphasis on landscaping and the built environment. (Same as SES 101.) [D; CSU]

**LNT 102.****Plant Identification: Deciduous Trees**

1 unit

**Lecture 1 hour****Offered:** Variable

Provides identification, growth characteristics, environmental requirements, and uses of 40 deciduous trees common to the California landscape. [D; CSU]

**LNT 103.****Plant Identification: Conifers and Palms**

1 unit

**Lecture 1 hour****Offered:** Variable

Provides identification, growth characteristics, environmental requirements, and uses of 40 conifers and palms common to the California landscape. [D; CSU]

**LNT 104.****Plant Identification: Broadleaf Trees**

1 unit

**Lecture 1 hour****Offered:** Variable

Provides identification, growth characteristics, environmental requirements, and uses of 40 broadleaf trees common to the California landscape. [D; CSU]

**LNT 106.****Plant Identification: Flowering Shrubs**

1 unit

**Lecture 1 hour****Offered:** Variable

Provides identification, growth characteristics, environmental requirements, and uses of 40 flowering shrubs common to the California landscape. [D; CSU]

**LNT 107.****Plant Identification: Foliage Shrubs I**

1 unit

**Lecture 1 hour****Offered:** Variable

Provides identification, growth characteristics, environmental requirements, and uses of 40 foliage shrubs common to the California landscape. [D; CSU]

**LNT 108.****Plant Identification: Foliage Shrubs II**

1 unit

**Lecture 1 hour****Offered:** Variable

Provides a continuation of LNT 107 and covers the identification, growth characteristics, environmental requirements, and uses of an additional 40 foliage shrubs common to the California landscape. [D; CSU]

**LNT 110.****Plant Identification: Annuals and Perennials I**

1 unit

**Lecture 1 hour****Offered:** Variable

Provides identification, growth characteristics, requirements, and uses of 40 annuals and perennials common to the California landscape. [D; CSU]

**LNT 111.****Plant Identification: Annuals and Perennials II**

1 unit

**Lecture 1 hour****Offered:** Variable

Provides a continuation of LNT 110 and covers the identification, growth characteristics, environmental requirements, and uses of an additional 40 annuals and perennials common to the California landscape. [D; CSU]

**LNT 112.****Plant Identification: Vines and Ground Covers**

1 unit

**Lecture 1 hour****Offered:** Variable

Provides identification, growth characteristics, environmental requirements, and uses of 40 vines and ground covers common to the California landscape. [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. [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. [D; CSU]

**LNT 119.****Plant Identification: Xeriphytic Plants**

3 units

**Lecture 3 hours****Offered:** Variable

Emphasizes identification, environmental requirements, growth characteristics, and uses of trees, shrubs, perennials, vines, and ground covers which can survive under low water conditions. (Field trips required.)

[D; CSU]

**LNT 120.****Landscape Design I**

4 units

**Recommended Preparation:** LNT 102, 103, 104, 106, 107, 108, 110, 111, and 112, or equivalent

**Lecture 2 hours, laboratory 6 hours****Offered:** Fall

Introduces landscape design for residential and commercial properties incorporating historical and fundamental principles. Includes drafting skills, site evaluation, functional and aesthetic uses of plant materials, proper plant selection, circulation, topography and grading, and incorporating sustainable design practices. (One all-day field trip required.) [D; CSU]

**LNT 122.****Landscape Design II**

4 units

**Prerequisite:** LNT 120 or equivalent

**Lecture 2 hours, laboratory 6 hours****Offered:** Spring

Provides 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.) [D; CSU]

**LNT 123.****Landscape Maintenance**

4 units

**Lecture 2 hours, laboratory 6 hours****Offered:** Variable

Provides the knowledge and skills required to perform professional 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.

[D; CSU]

**LNT 125.****Landscape Construction: Concrete and Masonry**

Skills

1 unit

**Lecture .33 hour, laboratory 2 hours****Offered:** Fall

Introduces concrete and masonry skills required in the landscape construction industry. Emphasizes the characteristics and uses of cement, concrete, and masonry products. Provides hands-on building of sidewalks, patios, foundations, masonry walls, masonry facing products, and the importance of proper drainage. [D; CSU]

**LNT 126.****Landscape Construction: Fence, Deck, and Lumber**

Skills

1 unit

**Lecture .33 hour, laboratory 2 hours****Offered:** Fall

Provides landscape construction skills related to lumber projects. Emphasizes the characteristics and uses of wood, wood substitutes, and wood fasteners. Includes hands-on building projects such as fences, decks, overhead shade structures, benches, and planters. [D; CSU]

**LNT 127.****Landscape Construction: Sprinkler Installation**

1 unit

**Lecture .33 hour, laboratory 2 hours****Offered:** Fall

Provides sprinkler system installation skills required in the landscape construction industry. Includes proper methods of installing sprinklers, pipes, fittings, valves, wiring, backflow prevention devices, and controllers for residential and commercial systems. [D; CSU]

**LNT 128.****Sprinkler Design**

3 units

**Lecture 2 hours, laboratory 3 hours****Offered:** Variable

Introduces the principles of proper water application to ornamental areas by the use of sprinklers and micro-irrigation equipment. Includes hydraulics, sprinkler layout, piping, drip systems, subsurface irrigation, and related irrigation practices. Emphasizes methods for efficient water application and water conservation. (One all-day field trip required.) [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. [D; CSU]

**LNT 132.****Turf Management**

3 units

**Lecture 2 hours, laboratory 3 hours****Offered:** Variable

Emphasizes identification and management of grasses used in landscape, golf courses, and sports field areas. Includes establishment methods, mowing, fertilization, thatch control, and pest management. (One all-day field trip required.) [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

Provides derivation, characteristics, and classification of soils. Includes methods used to modify and improve existing soil conditions. Emphasizes types and uses of organic matter and amendments. (One all-day field trip required.) [D; CSU]

**LNT 136.****Plant Pest and Disease Control**

3 units

**Lecture 3 hours****Offered:** Spring

Effects of insects, weeds, diseases, and parasites on ornamental plants. Includes identification of life cycles, hosts, and habitat relationships, and pesticide use and regulations. Emphasizes sustainable and environmentally sound pest control methods in Southern California. (One all-day field trip required.) [D; CSU]

**LNT 138.****Floral Design I**

3 units

**Lecture 2 hour, laboratory 3 hours****Offered:** Variable

Fee: \$125. Introduces theory, techniques, and skills practiced in the floral design industry. Includes instruction in basic design principles, cut flower preparation and care, and merchandising and packaging. (One all-day field trip required.) [D; CSU]

**LNT 140.****Floral Design II**

3 units

**Prerequisite:** LNT 138 or equivalent**Lecture 2 hour, laboratory 3 hours****Offered:** Variable

Fee: \$150. Continues building skills learned in LNT 138 Floral Design I. Emphasizes wedding, funeral, banquet, and contemporary floral design work. Provides a more in-depth study of flower shop management. [D; CSU]

**LNT 141.****Floral Design III**

1 unit

**Prerequisite:** LNT 140 or equivalent**Lecture .5 hour, laboratory 1.5 hours****Offered:** Variable

Fee: \$150. 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. [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. [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. [D; CSU]

**LNT 146.****Plant Propagation**

1.5 units

**Lecture 1 hour, laboratory 1.5 hours****Offered:** Variable

Provides principles of sexual and asexual plant propagation. Includes propagation from seed, budding, grafting, cuttings, layering, division, and tissue cultures. [D; CSU]

**LNT 147.****Wedding Design and Event Planning**

2 units

**Prerequisite:** LNT 140 or equivalent**Lecture 1 hour, laboratory 3 hours****Offered:** Spring

Fee: \$200. Focuses on the mechanics and placement of professionally designed wedding and event floral arrangements. Emphasizes specialty designs, decorations, and placement reflecting contemporary lifestyle choices of ceremony and reception sites. Includes sales, planning, and implementation. [D; CSU]

**LNT 148.****Horticultural Business Practices**

3 units

**Lecture 3 hours****Offered:** Fall Summer

Provides procedures in the ownership or management of a horticultural business, including start up, financing, advertising, employee relationships, recordkeeping, applicable laws and regulations, customer relations, suppliers, and obtaining new customers. [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 35.

**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]

**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 154.****Community and Collaborative Leadership**

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

Provides a fundamental overview and understanding of collaborative leadership in a civic community context and consensus organizing as a strategic and tactical approach to effective community development.

[D; CSU]

**LDR 155.****Strategic Planning and Sustainability**

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

Emphasizes strategic planning and sustainability as a requisite to the growth and survival of any institution. Consists of two components: (1) theoretical learning--processes, tools, and techniques of strategic planning; (2) practical application--design, skills, and techniques that make programs sustainable. [D; CSU]

**LDR 156.****Microfinance and Sustainable 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:** Fall, Spring

Explores and analyzes the key issues associated with microfinance and sustainable development. Addresses such questions as: What is microfinance? What is sustainable development? What role has microfinance played in sustainable development? How has microfinance made a difference in communities? Reviews special microfinance programs in Bangladesh and other areas.

[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 35.

**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.

## LEGAL COURSES

**LEGL 223.****Legal Office Procedures**

2.5 units

**Recommended Preparation:** BUS 182 or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

**Lecture 2 hours, laboratory 2 hours**

**Offered:** Fall

Provides training for students who desire to work as legal office clerks, secretaries, or executive assistants to gain an understanding of legal terminology, legal procedures, the court system, preparation of court documents, and the concepts of civil procedures in various areas of the law operative in California. [D; CSU]

**LEGL 225.****Law Office 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

Provides students with an overview of the structure and organization of law firms and function of the legal team. Emphasizes effective law office management techniques and systems, including those for billing, calendaring, case management, file and library management, technology management, attorney-client relations, and ethical concerns. [D; CSU]

**LEGL 228.****Legal Terminology**

2 units

**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:** Fall, Spring

Prepares students to work in a legal office, agency, or court setting. Reviews legal terminology commonly used in civil, probate, family, and criminal law pleadings and documentation. [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:** BUS 140 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

Provides a basic explanation of the laws governing international trade, licensing, intellectual property, importing, exporting, investment, and economic integration. Emphasizes and analyzes the legal, political, business, and ethical issues regarding international business and litigation. [D; CSU]

**LEGL 257.****International Business and Legal Communication:****Spanish**

3 units

**Prerequisite:** BUS 70 or equivalent

**Recommended Preparation:** SPAN 215 or equivalent

**Lecture 3 hours, laboratory 1 hour**

**Offered:** Variable

Emphasizes principles of English and Spanish interpretation and translation applied to common business and legal documents focusing on terminology, idiomatic expressions, currencies, business and legal protocols, and cultural variations among Spanish-speaking countries. [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:** *LEGL 228 or 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:** *LEGL 228 or 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:** *LEGL 228 or 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:** *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*

Trains paralegals and other legal personnel in the laws and legal procedures for wills, trusts, and probate, as well as the concepts and methodology of estate planning and 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:** *LEGL 223, 228, 255, or BUS 229, 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 272.**

Business Organizations  
2 units

**Recommended Preparation:** *LEGL 255 or BUS 140 or equivalent*

**Lecture 2 hours**

**Offered:** *Variable*

Covers the law and practice of business entities, including sole proprietorships, general and limited partnerships, the limited liability companies, and various types of corporations. Emphasizes the 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. (Repeatable—not to exceed four units per level.) [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. (Repeatable—not to exceed four units per level.) [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. (Repeatable—not to exceed four units per level.) [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. (Repeatable—not to exceed four units per level.) [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 35.

**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]

## LEARNING SKILLS COURSES

**LS 101.**

**Power Learning**  
2 units

**Lecture 2 hours**

**Offered:** Variable

Teaches strategies for creating academic and personal success. Improves academic skills, such as critical thinking, reading, writing, note taking, memorizing, studying, and test taking. Includes accepting personal responsibility, setting goals, managing time, creating a support network, utilizing learning styles, and developing coping skills. [D; CSU]

**LS 116.**

**Student Seminar**  
2 units

**Grade only**

**Lecture 2 hours**

**Offered:** Fall, Spring

Teaches students of all ages strategies for academic and personal success. Develops essential study and interpersonal skills. Includes current issues in higher education, college support services, library and academic technology services, and campus information used throughout the student's academic career. (Same as PD 116.) [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 repeated for additional credit with new content.) [D; \*CSU]

\* Please refer to the class schedule for specific course description and transferability information.

## LIBRARY COURSES

### LIB 110.

#### Simplified Research: Print and Electronic

1 unit

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

**Lecture 1 hour, laboratory 1 hour**

**Offered:** Fall, Spring

Introduces library resources in both print and non-print forms. Focuses on research in the college library as well as design and implementation of 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

Fee: \$2. Focuses on the Internet as a research tool. Includes finding, evaluating, downloading, citing Web resources, Web browsers, search engines, directories, databases, and Web pacs. Emphasizes the development of Internet search strategies and how to evaluate sources. (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 repeated 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 35.

**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 COURSES

### MATH 10.

#### Overcoming the Fear of Mathematics

1 unit

**Pass/No Pass 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

**Pass/No Pass 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

Provides a review of elementary mathematics designed to upgrade computational skills in preparation for other mathematics classes. Includes operations with whole numbers, fractions, decimals, percentages, ratio and proportions, English and metric measurements, and geometry. (Not open to students with credit in MATH 20C or 20PL or any higher-numbered mathematics course.) [ND]

### MATH 20A.

#### Basic Mathematics, Module A

1 unit

**Pass/No Pass only**

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

**Lecture 1 hour**

**Offered:** Fall, Spring

Provides a review of elementary mathematics designed to upgrade computational skills in preparation for MATH 20B. Includes operations with whole numbers, fractions, and geometry. (Not open to students with credit in MATH 20, 20B, 20C or any higher-numbered mathematics course.) [ND]

### MATH 20B.

#### Basic Mathematics, Module B

1 unit

**Pass/No Pass only**

**Prerequisite:** MATH 20A or equivalent

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

**Lecture 1 hour**

**Offered:** Fall, Spring

Provides a review of elementary mathematics designed to upgrade computational skills in preparation for MATH 20C. Includes operations with whole numbers, fractions, decimals, ratio and proportions, and geometry. (Not open to students with credit in MATH 20, 20C or any higher-numbered mathematics course.) [ND]

### MATH 20C.

#### Basic Mathematics, Module C

1 unit

**Pass/No Pass only**

**Prerequisite:** MATH 20B or equivalent

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

**Lecture 1 hour**

**Offered:** Fall, Spring

Provides a review of elementary mathematics designed to upgrade computational skills in preparation for other mathematics classes. Includes operations with whole numbers, fractions, decimals, percentages, ratio and proportions, English and metric measurements, and geometry. (Not open to students with credit in MATH 20 or 20PL or any higher-numbered mathematics course.) [ND]

### MATH 20PL.

#### Basic Mathematics Plus Lab

4 units

**Pass/No Pass only**

**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

Provides a review of elementary mathematics designed to upgrade computational skills in preparation for other mathematics classes. Includes operations with whole numbers, fractions, decimals, percentages, ratio and proportions, English and metric measurements, and geometry. (Not open to students with credit in MATH 20 or 20C or any higher-numbered mathematics course.) [ND]

**MATH 35.**

Pre-Algebra  
4 units

**Prerequisite:** MATH 20, 20C, or 20PL, 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

Provides students with the strategies needed to make the transition from arithmetic to elementary algebra. Includes a review of basic mathematics, operations on real numbers and algebraic expressions, introduction to elementary topics in algebra, introduction to the Cartesian coordinate system, topics in geometry, English and metric measurements, and conversions. [ND]

**MATH 35PL.**

Pre-Algebra Plus Lab  
5 units

**Prerequisite:** MATH 20, 20C, or 20PL, 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

Provides students with the strategies needed to make the transition from arithmetic to elementary algebra. Includes a review of basic mathematics, operations on real numbers and algebraic expressions, introduction to elementary topics in algebra, introduction to the Cartesian coordinate system, topics in geometry, English and metric measurements, and conversions. [ND]

**MATH 45.**

Elementary Algebra  
4 units

**Prerequisite:** MATH 35 or 35PL, 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

Emphasizes elementary concepts of algebra, including real numbers, linear equations and inequalities in one variable, graphs of lines and inequalities in two variables, Pythagorean theorem, 2x2 systems, exponents, polynomials, factoring techniques, rational expressions, and applications. (Not open to students with credit in any higher-numbered mathematics course.) [ND]

**MATH 45PL.**

Elementary Algebra Plus Lab  
5 units

**Prerequisite:** MATH 35 or 35PL, 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 in two variables, Pythagorean theorem, 2x2 systems, exponents, polynomials, factoring techniques, rational expressions, and applications. Includes mandatory lab. (Not open to students with credit in any higher-numbered mathematics course.) [ND]

**MATH 55.**

Formal Geometry  
4 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 4 hours**

**Offered:** Variable

Provides students with the tools to construct formal proofs. Includes the following topics: perimeter, area, volume, and surface area of common geometric figures, construction of logical arguments, right triangle trigonometry, transformations of figures in the coordinate plane, and basic constructions with a straightedge and compass. [ND]

**MATH 55PL.**

Formal Geometry Plus Lab  
4 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 4 hours, laboratory 1 hour**

**Offered:** Variable

Provides students with the tools to construct formal proofs. Includes the following topics: perimeter, area, volume, and surface area of common geometric figures, construction of logical arguments, right triangle trigonometry, transformations of figures in the coordinate plane, and basic constructions with a straightedge and compass. Includes mandatory lab. [ND]

**MATH 60.**

Intermediate Algebra I  
4 units

**Prerequisite:** MATH 45 or 45PL, 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

Emphasizes intermediate concepts of algebra such as rational numbers, systems of equations in two and three variables, absolute value equations and inequalities, radical expressions, rational exponents, complex numbers, quadratic equations, graphing linear and quadratic functions, and graphing parabolas and circles. Requires Scientific calculator. (Not open to students with credit in MATH 60PL or any higher-numbered mathematics course.) [D]

**MATH 60PL.**

Intermediate Algebra I Plus Lab  
5 units

**Prerequisite:** MATH 45 or 45PL, 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 intermediate concepts of algebra such as rational numbers, systems of equations in two and three variables, absolute value equations and inequalities, radical expressions, rational exponents, complex numbers, quadratic equations, graphing linear and quadratic functions, and graphing parabolas and circles. Requires scientific calculator only. Includes mandatory lab. (Not open to students with credit in MATH 60 or any higher-numbered mathematics course.) [D]

**MATH 70.****Intermediate Algebra II**

4 units

**Prerequisite:** MATH 60 or 60PL, 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

Emphasizes advanced concepts, including algebra of functions, function composition, inverse functions, exponential and logarithmic functions, radical functions, and rational functions. Covers conics, quadratic, cubic equations, systems of equations, inequalities, matrix methods, sequences, and series. The graphing calculator will be used to graph and analyze functions. Requires graphing calculator. (Not open to students with credit in MATH 70PL.) [D]

**MATH 70PL.****Intermediate Algebra II Plus Lab**

5 units

**Prerequisite:** MATH 60 or 60PL, 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 advanced concepts, including algebra of functions, function composition, inverse functions, exponential and logarithmic functions, radical functions, and rational functions. Covers conics, quadratic, cubic equations, systems of equations, inequalities, matrix methods, sequences, and series. The graphing calculator will be used to graph and analyze functions. Requires graphing calculator. (Not open to students with credit in MATH 70.) [D]

**MATH 100.****Mathematics for General Education**

3 units

**Prerequisite:** MATH 60 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 70 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 functions (algebraic and transcendental), relations, theory of equations and inequalities, matrices, binomial theorem, sequences and series, and curve fitting using the graphing calculator. Requires graphing calculator. A student can earn a maximum of six units by successfully completing MATH 244 or both 101 and 104. (Not open to students with credit in MATH 250 or the equivalent.) [D; CSU; UC]

**MATH 104.****Trigonometry**

3 units

**Prerequisite:** MATH 70 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 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 applications of DeMoivre's Theorem. Requires graphing calculator. A student can earn a maximum of six units by successfully completing MATH 244 or both 101 and 104. [D; CSU]

**MATH 110.****Mathematics for Elementary School Teachers I**

4 units

**Prerequisite:** MATH 60 or 60PL, 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

Emphasizes mathematical concepts for those teaching or planning to teach grades K-8. Includes problem solving, sets, logic, numeration systems, whole, integer, rational and real numbers, number sense, estimation, mental arithmetic, operation concepts, algorithms, ratio, number theory, and appropriate use of technology in the classroom. [D; CSU; UC]

**MATH 111.****Mathematics for Elementary School Teachers II**

4 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 4 hours****Offered:** Variable

Emphasizes mathematical concepts for those teaching or planning to teach grades K-8. Includes two- and three-dimensional shapes and interrelationships, congruence, similarity and proportional reasoning, measurement of length, angle size, area, volume, metric system, problem solving, and appropriate use of technology in the classroom. [D; CSU; UC]

**MATH 112.****Children's Mathematical Thinking**

2 units

**Pass/No Pass only**

**Prerequisite:** MATH 60 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

**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 60 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:** Fall, Spring

Introduces elementary mathematics, emphasizing the deductive process and concepts of contemporary mathematics. Includes set theory, logic, finance, probability, and statistics. [D; CSU; UC]

**MATH 119.****Elementary Statistics**

4 units

**Prerequisite:** MATH 70 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

Emphasizes elementary concepts of statistics, including measures of central tendency and variability, probability, sampling techniques, binomial, hypergeometric, normal distributions, statistical estimation and hypothesis testing, and regression and correlation. Includes descriptive statistics, probability and probability distributions, and inferences concerning single population means and proportions. Requires graphing calculator and other technologies will be used. [D; CSU; UC]

**MATH 120.****Calculus for Business Analysis**

4 units

**Prerequisite:** MATH 70 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent

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

**Lecture 4 hours****Offered:** Variable

Emphasizes matrix algebra, differential and integral calculus, graphing and optimization, and exponential and logarithmic functions. Includes applications to business. Requires graphing calculator. (Not open to students with credit in MATH 122, 250 or equivalent.) [D; CSU; UC]

**MATH 121.****Applied Calculus I**

3 units

**Prerequisite:** MATH 70 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 concepts and applications of algebra, analytic geometry, and the polynomial calculus to solving problems in the physical, biological, and social sciences. Requires graphing calculator. (Not open to students with credit in MATH 250 or equivalent.) [D; CSU; UC]

**MATH 122.****Applied Calculus II**

3 units

**Grade only****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 polynomial, rational, radical, logarithmic, exponential and trigonometric functions, techniques of integration, multi-variable calculus, and applications. Requires graphing calculator. (Not open to students with credit in MATH 251 or equivalent.) [D; CSU; UC]

**MATH 130.****Introduction to Computer Programming**

4 units

**Prerequisite:** MATH 70 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

Uses Java to introduce object-oriented programming and software engineering with an emphasis on applications in science, engineering and mathematics. Introduces classes, methods, parameters, control structures, and basic inheritance. Emphasizes use of modularity, abstraction, documentation, testing, and verification techniques. [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.****Computer Organization and Architecture**

4 units

**Prerequisite:** MATH 130 or equivalent**Lecture 3 hours, laboratory 3 hours****Offered:** Spring

Provides basic concepts of computer organization and architecture, machine language principles, computer memory organization, Input and Output (I/O) fundamentals, and elements of computer logic design. Emphasizes trade-off involved in fundamental architectural design decisions. [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's Sketch Pad**

1 unit

**Prerequisite:** MATH 60 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 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 241W.****Mathematics Software Workshop Using Mathematica**

1 unit

**Prerequisite:** MATH 122 or 251 or equivalent**Lecture 1 hour****Offered:** Variable

Focuses on an introduction to mathematical software using Mathematica with 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 70 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

Covers functions, equations, inequalities, matrices, binomial theorem, sequences, series, and curve fitting. Emphasizes functions and graphing. Includes 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. Requires graphing calculator. Students can earn at most six units by 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, solving differential equations, and transcendental functions. Requires graphing calculator. [D; CSU; UC]

**MATH 251.****Analytic Geometry and Calculus II**

4 units

**Prerequisite:** MATH 250 or equivalent**Lecture 4 hours****Offered:** Variable

Covers hyperbolic functions, techniques of integration, polar coordinates, infinite sequences and series, and parametric equations. Includes inverse trigonometric functions, applications of integration (surface area, arc length, volumes for solids of revolution), L'Hospital's rule and indeterminate forms. Requires graphing calculator. [D; CSU; UC]

**MATH 252.****Analytic Geometry and Calculus III**

4 units

**Prerequisite:** MATH 251 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:** Fall, Spring

Covers analytic geometry, vectors, and vector-valued functions. Includes functions of several variables, vector calculus, surfaces and surface integrals, partial derivatives, multiple integrals, line integrals, and Green's Theorem. Requires graphing calculator. [D; CSU; UC]

**MATH 253.****Introduction to Differential Equations**

3 units

**Prerequisite:** MATH 251 or equivalent**Lecture 3 hours****Offered:** Variable

Focuses on methods for solving first, second, and higher order differential equations, and how to interpret these equations and their solutions in a physical setting. Emphasizes methods of solution which will include numerical, power series, and Laplace transform. Requires graphing calculator. [D; CSU; UC]

**MATH 254.****Introduction to Linear Algebra**

3 units

**Prerequisite:** MATH 251 or equivalent**Lecture 3 hours****Offered:** Fall, Spring

Introduces linear algebra including solving of linear systems, matrix algebra, Gaussian elimination, determinants and their properties, vector spaces, inner product spaces, linear transformations, orthogonality, eigenvalues and eigenvectors. Requires a scientific calculator with graphing capacity. [D; CSU; UC]

**MATH 260.****Discrete Mathematics**

3 units

**Prerequisite:** MATH 121 or 251 or equivalent**Lecture 3 hours****Offered:** Variable

Emphasizes logic, methods of proof, set theory, number theory, equivalence and order relations, counting (combinations and permutations), and solving recurrence relations. Provides topics for proofs coming from 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 35.

**Offered:** Variable

Independent study or research in some area of the mathematical sciences of particular interest to the student and not included in regular courses of the College.

[D; CSU; \*\*UC]

*\*\*UC Limitation: credit for variable topics courses is given only after a review of the scope and content of the courses by the enrolling UC campus.*

## MEDICAL OFFICE PROFESSIONAL COURSES

**MEDOP 20**

**Healthcare Essentials**  
3 units

**Recommended Preparation:** Recommended Preparation: RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent; MEDOP 229 or MEDOP 230 or equivalent

**Grade only**

**Lecture 3 hours**

Provides an introduction to the healthcare profession. Includes human body structures and functions, basic math computations, infection control protocols, and effective communication skills. Emphasizes the legal and ethical scope of practice for healthcare professionals. [D]

**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

Fee: \$10. 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. [D]

**MEDOP 22.**

**Medical Coding II**  
2.5 units

**Prerequisite:** MEDOP 21 or equivalent

**Lecture 2 hours, laboratory 2 hours**

**Offered:** Variable

Fee: \$10. 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. [D]

**MEDOP 38.**

**Medical Assistant: Administrative Intensive Training**  
12 units

**Grade only**

**Prerequisite:** BUS 70 or equivalent

**Corequisite:** MEDOP 290

**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:** Variable

Provides training for medical front office positions at the receptionist/secretarial level, including medical office procedures, written and oral communications, appointment scheduling, medical record maintenance, medical office site audit regulations, vital signs, and cardiopulmonary resuscitation (CPR). Emphasizes medical terminology as well as basic human body structures and functions. [D]

**MEDOP 40.**

**Medical Assistant: Administrative Intensive Training—Bilingual (English/Spanish)**  
12 units

**Grade only**

**Prerequisite:** BUS 70 or equivalent

**Corequisite:** MEDOP 290

**Recommended Preparation:** SPAN 215 or equivalent

**Lecture 9 hours, laboratory 8 hours**

**Offered:** Fall, Spring

Fee: \$10. Provides training for bilingual (English/Spanish) medical front office positions at the receptionist/secretarial level, including medical office procedures, written and oral communications, appointment scheduling, medical record maintenance, medical office site audit regulations, vital signs examination, and cardiopulmonary resuscitation (CPR). Emphasizes medical terminology as well as basic human body structures and functions. [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

Fee: \$10. 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. [D]

**MEDOP 41B.**

**Medical Insurance II**  
2 units

**Prerequisite:** MEDOP 41A or equivalent

**Lecture 1 hour, laboratory 3 hours**

**Offered:** Variable

Fee: \$10. 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. [D]

**MEDOP 100.**

**Medical Assistant: Clinical—Intensive**  
12 units

**Grade only**

**Prerequisite:** BUS 70 or equivalent; MEDOP 40, 229, or 230, or equivalent

**Corequisite:** BUS 290

**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 as medical assistants. Provides instruction in medical office procedures (front and back office), telephone techniques, appointment scheduling, medical records, word processing, clinical procedures, vital signs, site audit regulations, and CPR. [D; CSU]

**MEDOP 101.****Medical Assistant: Clinical—Intensive Bilingual (English/Spanish)**

12 units

**Grade only****Prerequisite:** BUS 70 or equivalent; MEDOP 40 or 229 or equivalent**Corequisite:** BUS 290**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, Spring

Trains students to utilize their bilingual (English/Spanish) skills to work as medical assistants with a focus on the clinical component. Provides instruction in medical office procedures (front and back office), telephone techniques, English/Spanish interpretation, appointment scheduling, medical records, word processing, clinical procedures, vital signs, site audit regulations, and CPR. [D; CSU]

**MEDOP 133.****Body Basics for Medical Office Personnel**

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 body structure and function as required of medical office personnel. (This course does not meet the general education natural science requirement for the associate's degree or biology requirements for the biology and allied health programs.) [D; CSU]

**MEDOP 135.****Human Health and Disease for Medical Office Personnel**

3 units

**Prerequisite:** MEDOP 230 or equivalent**Recommended Preparation:** MATH 20 or 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****Offered:** Variable

Introduces the study of human cellular and organ changes that occur with disease and how they effect total body function. Emphasizes medically pertinent concepts required for success in a medical office environment. (This course does not meet the general education natural science requirement for the associate's degree or biology requirements for the biology and allied health programs.) [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. [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. [D; CSU]

**MEDOP 231.****Medical Office Procedures**

4 units

**Prerequisite:** BUS 70 or equivalent; MEDOP 229 or 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. [D; CSU]

**MEDOP 234.****Medical Assistant—Clinical Procedures**

4 units

**Prerequisite:** MEDOP 229 or 230 or equivalent; BUS 70 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 236.****Pharmacology for Allied Health Professionals**

3 units

**Prerequisite:** MEDOP 38, 40, 229, or 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 290.**

Work Experience in Medical Assistant I  
2–4 units

**Grade only**

**Limitation on Enrollment:** Declared Medical Assistant major

**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Medical Assistant major in order to apply learned theory in a practical hands-on setting through an internship class.

**Lecture 1 hour, laboratory 5–15 hours**

**Offered:** Variable

Applies principles and skills acquired in medical assistant 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 instructor will evaluate each student's job performance. (Repeatable-not to exceed four units per level.) [D]

**MEDOP 291.**

Work Experience in Medical Assistant II  
2–4 units

**Grade only**

**Prerequisite:** MEDOP 290 or equivalent

**Limitation on Enrollment:** Declared Medical Assistant major

**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Medical Assistant major in order to apply learned theory in a practical hands-on setting through an internship class.

**Lecture 1 hour, laboratory 5–15 hours**

**Offered:** Variable

Applies principles and skills acquired in medical assistant 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 instructor will evaluate each student's job performance. (Repeatable-not to exceed four units per level.) [D]

**MEDOP 292.**

Work Experience in Medical Assistant III  
2–4 units

**Grade only**

**Prerequisite:** MEDOP 291 or equivalent

**Limitation on Enrollment:** Declared Medical Assistant major

**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Medical Assistant major in order to apply learned theory in a practical hands-on setting through an internship class.

**Lecture 1 hour, laboratory 5–15 hours**

**Offered:** Variable

Applies principles and skills acquired in medical assistant 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 instructor will evaluate each student's job performance. (Repeatable-not to exceed four units per level.) [D]

**MEDOP 293.**

Work Experience in Medical Assistant I–IV  
2–4 units

**Grade only**

**Prerequisite:** MEDOP 292 or equivalent

**Limitation on Enrollment:** Declared Medical Assistant major

**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Medical Assistant major in order to apply learned theory in a practical hands-on setting through an internship class.

**Lecture 1 hour, laboratory 5–15 hours**

**Offered:** Variable

Applies principles and skills acquired in medical assistant 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 instructor will evaluate each student's job performance. (Repeatable-not to exceed four units per level.) [D]

**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 35.

**Offered:** Variable

Individual study or research in some area of medical office professional of particular interest to the student and not included in regular courses of the College. [D; CSU]

## MEDICAL LABORATORY TECHNOLOGY COURSES

**MLT 80.**

Introduction to the Clinical Laboratory Profession  
1 unit

**Grade only**

**Corequisite:** MLT 90, 100, 101, and 110

**Limitation on Enrollment:** Enrollment is limited to those students in the Medical Laboratory Technical program

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

**Lecture 1 hour**

**Offered:** Fall

Introduces functions and duties of a Medical Laboratory Technician (MLT), and compares and contrasts these duties to the Clinical Laboratory Scientist (CLS). Emphasizes the clinical laboratory safety issues, regulatory agencies, infection control policies, and professional responsibilities relative to other departments of healthcare. [D]

**MLT 90.**

Clinical Urinalysis and Body Fluids  
1 unit

**Grade only**

**Corequisite:** MLT 80, 90L, 100, 101, and 110

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

**Lecture 1 hour**

**Offered:** Fall

Introduces various properties and constituents of urine and body fluids via “on hands” learning. Emphasizes interpretation and handling of urine and body fluid specimens. Includes examination of urine and body fluids physically, chemically and microscopically, and compares these clinical values to health and disease. [D]

**MLT 90L.****Clinical Urinalysis and Body Fluids Laboratory**

.5 unit

**Grade only****Corequisite:** MLT 90**Recommended Preparation:** RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent**Laboratory 1.5 hours****Offered:** Fall

Introduces various techniques and safety procedures in clinical urinalysis. Emphasizes examination of urine and body fluids. [D]

**MLT 100.****Clinical Hematology**

3 units

**Grade only****Corequisite:** MLT 80, 90, 100L, 101, and 110**Recommended Preparation:** RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent**Lecture 3 hours****Offered:** Fall

Introduces the origin of the various types of blood cells with emphasis on the red and white blood cells. Includes human hematological disorders and classification based on clinical laboratory findings. [D; CSU]

**MLT100L.****Clinical Hematology Laboratory**

1 unit

**Grade only****Corequisite:** MLT 100**Recommended Preparation:** RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent**Laboratory 3 hours****Offered:** Fall

Introduces various techniques and safety procedures used in the clinical hematology laboratory. Emphasizes morphology and the identification of common human blood cells. [D; CSU]

**MLT 101.****Clinical Coagulation**

1 unit

**Grade only****Corequisite:** MLT 80, 90, 100, 101L, and 110**Recommended Preparation:** RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent**Lecture 1 hour****Offered:** Fall

Provides an overview of the homeostatic process, diseases, and laboratory evaluations. [D; CSU]

**MLT101L.****Clinical Coagulation Laboratory**

.5 unit

**Grade only****Corequisite:** MLT 101**Recommended Preparation:** RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent**Laboratory 1.5 hours****Offered:** Fall

Introduces the various techniques and safety procedures used in the clinical coagulation laboratory. Emphasizes platelet function tests, and intrinsic and extrinsic clotting pathway testing. [D; CSU]

**MLT 102.****Clinical Hematology, Coagulation, Urinalysis and Body Fluids Practicum**

5 units

**Grade only****Prerequisite:** MLT 90, 90L, 100, 100L, 101, and 101L, or equivalent**Corequisite:** MLT 111 and 120**Recommended Preparation:** RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent**Lecture 5 hours****Offered:** Spring

Introduces entry-level clinical laboratory practice and experience in the department of hematology, urinalysis, coagulation, and body fluids. Emphasizes technique, accuracy, and precision. [D; CSU]

**MLT 110.****Clinical Chemistry I**

3 units

**Grade only****Corequisite:** MLT 80, 90, 100, 101, and 110L**Recommended Preparation:** RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent**Lecture 3 hours****Offered:** Fall

Provides theoretical, fundamental, basic instrumentation methodologies, and includes practical concepts associated with testing procedures used in the clinical chemistry laboratory. Includes important characteristics and relevance of electrolytes and trace metals including their relationship to acid base balance. [D; CSU]

**MLT 110L.****Clinical Chemistry I Laboratory**

1 unit

**Grade only****Corequisite:** MLT 110**Recommended Preparation:** RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent**Laboratory 3 hours****Offered:** Fall

Introduces general laboratory principles and specific basic instrumentation methodologies used in clinical chemistry analysis. Reviews laboratory math and a reintroduction to quality control and quality assurance. Emphasizes variables of the preanalytical phase, characteristics important to quality lab technique, and safety. [D; CSU]

**MLT 111.****Clinical Chemistry II**

3 units

**Grade only****Prerequisite:** MLT 110 and 110L, or equivalent**Corequisite:** MLT 102 and 111L**Recommended Preparation:** RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent**Lecture 3 hours****Offered:** Spring

Introduces the relationships between the endocrine system and analytes assayed in the clinical laboratory including tumor markers, therapeutic drugs, and toxicology. Emphasizes liver, kidney, pancreatic function and vitamins assayed with test results, and comparison with states of health and disease. Includes function and laboratory analysis of various body fluids. [D; CSU]

**MLT 111L.**

Clinical Chemistry II Laboratory  
1 unit

**Grade only**

**Corequisite:** MLT 111

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

**Laboratory 3 hours**

**Offered:** Spring

Introduces the endocrine system, therapeutic drug assays and compounds, and other clinical chemistry tests specific to special chemistry department. Emphasizes the automated instrumentation which will include quality control review, maintenance, and clinical operation. [D; CSU]

**MLT 112.**

Clinical Chemistry Practicum  
4 units

**Grade only**

**Prerequisite:** MLT 111 and 111L, or equivalent

**Corequisite:** MLT 130

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

**Lecture 4 hours**

**Offered:** Summer

Introduces entry-level clinical laboratory practice and experience in the department of general and special chemistry. Emphasizes technique, accuracy, and precision. Includes instrumentation bench and manual methods. [D; CSU]

**MLT 120.**

Clinical Microbiology  
3 units

**Grade only**

**Prerequisite:** MLT 90 and 90L, or equivalent

**Corequisite:** MLT 120L

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

**Lecture 3 hours**

**Offered:** Spring

Introduces micro-organisms of medical microbiology with emphasis on the characteristics of clinically significant micro-organisms and their biochemical profile, media for isolation, and identification methods for selected pathogens. Emphasizes identification methods, theories, and techniques used in basic bacteriology, parasitology, virology, and mycology. [D; CSU]

**MLT 120L.**

Clinical Microbiology Laboratory  
1 unit

**Grade only**

**Corequisite:** MLT 120

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

**Laboratory 3 hours**

**Offered:** Spring

Introduces various techniques and safety procedures in clinical microbiology. Emphasizes morphology and identification of common pathogenic organisms. [D; CSU]

**MLT 121.**

Clinical Microbiology Practicum  
5 units

**Grade only**

**Prerequisite:** MLT 120 and 120L, or equivalent

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

**Lecture 5 hours**

**Offered:** Fall

Introduces clinical laboratory practice and experience in the department of microbiology. Emphasizes technique, accuracy, and precision. Includes instrumentation as well as bench and manual methods. [D; CSU]

**MLT 130.**

Clinical Immunology and Immunohematology  
3 units

**Grade only**

**Prerequisite:** MLT 100 and 100L, or equivalent

**Corequisite:** MLT 130L

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

**Lecture 3 hours**

**Offered:** Summer

Introduces basic principles of antigen and antibody reactions included in blood grouping and typing, compatibility testing and serological procedures. [D; CSU]

**MLT 130L.**

Clinical Immunology and Immunohematology Laboratory  
1 unit

**Grade only**

**Corequisite:** MLT 130

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

**Laboratory 3 hours**

**Offered:** Spring

Introduces the various techniques and safety procedures used in the clinical serology and blood bank laboratories. Emphasizes serological and immunohematology procedures, and techniques to measure analytes qualitatively and quantitatively. [D; CSU]

**MLT 131.**

Clinical Immunology and Immunohematology Practicum  
4 units

**Grade only**

**Prerequisite:** MLT 130 and 130L, 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:** Fall

Introduces clinical laboratory practice and experience in the department of serology and blood banking. Emphasizes technique, accuracy, and precision. Includes the introduction of different instrumentation as well as bench and manual methods. [D; CSU]

**MLT 295.**

Selected Topics in Medical Laboratory Technology  
1–3 units

**Offered:** Variable

Permits students to study relevant subjects within the field of medical laboratory 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]

**MLT 299.**

Independent Study  
1–3 units

**Limitation on Enrollment:** Eligibility for independent study. See page 35.

**Offered:** Variable

Individual study or research in some area of medical laboratory technology of particular interest to the student and not included in regular courses of the College. [D; CSU]

## 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 Mexican-American culture from Pre-Colombian times to c. 1850. Emphasizes the political, economic, and social influences of Pre-Colombian 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 158 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. Emphasizes the political, economic, and social experiences of the Mexican American people under the influences 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 Mexican-American Cultures 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

Examines the evolution of Mexican and Mexican-American cultural development in the United States. Focuses on the study of the transculturation process between the Mexican-American and mainstream American cultures. Includes a special 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 35.

**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 COURSES

### MUS 99.

**Basic Musicianship**  
2 units

**Lecture 2 hours**

**Offered:** Fall, Spring

Emphasizes the rudiments of music including note reading, keyboard, rhythm, intervals, scales, and triads. [ND]

### MUS 100.

**Music Technology**  
3 units

**Grade only**

**Lecture 3 hours**

**Offered:** Fall, Spring

Fee: \$15. Introduces the computer's role in music, synthesizer parameter definition, drum machine, sequencers, editors, and notation programs. Computer-assisted instruction in music theory. (Same as RA&T 100.) [D; CSU]

### MUS 101.

**Music Theory I**  
3 units

**Grade only**

**Corequisite:** MUS 111

**Recommended Preparation:** MUS 99 or equivalent; ability to read notated music in at least one clef

**Lecture 3 hours**

**Offered:** Variable

Reviews the rudiments of music including note reading, time signatures and rhythms, intervals, major and minor scales, key signatures, figured bass, triads, and reading lead sheets. [D; CSU; UC]

### MUS 102.

**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

Includes elementary music theory, basic singing, and performance of autoharp and recorder. Develops elementary piano keyboard facility. [D; CSU]

### 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

Surveys the historical development of jazz and its major stylistic shifts. Emphasizes the influence of West African music and early African-American music to the pluralism of jazz in the twenty-first century. Focuses on developing analytical and listening skills and evaluating the significance of jazz in American culture. [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 109.****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.****Music Theory IV**

3 units

**Grade only****Prerequisite:** MUS 102 or equivalent**Recommended Concurrent Enrollment:** MUS 115**Lecture 3 hours****Offered:** Variable

Surveys analytical techniques of twentieth century music, including chromaticism, impressionism, jazz theory, and atonality. Introduces form and analysis. [D; CSU; UC]

**MUS 111.****Aural Skills I**

1 unit

**Corequisite:** MUS 101**Laboratory 2 hours****Offered:** Fall, Spring

Emphasizes singing and dictation of major and minor scales, triads, diatonic melodies, and simple rhythmic divisions. [D; CSU; UC]

**MUS 113.****Aural Skills II**

1 unit

**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.****Aural Skills III**

1 unit

**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.****Aural Skills IV**

1 unit

**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 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. (Repeatable three times.) [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. (Repeatable three times.) [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. (Repeatable three times.) [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. (Repeatable three times.) [D; CSU; UC]

**MUS 124A.**

Introduction to Mariachi Performance I  
2 units

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**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. (Repeatable three times.) [D; CSU; UC]

**MUS 124B.**

Introduction to Mariachi Performance II  
2 units

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**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. (Repeatable three times.) [D; CSU; UC]

**MUS 124C.**

Introduction to Mariachi Performance III  
2 units

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**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. (Repeatable three times.) [D; CSU; UC]

**MUS 124D.**

Introduction to Mariachi Performance IV  
2 units

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**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. (Repeatable three times.) [D; CSU; UC]

**MUS 125.**

Applied Music—Individual Study I  
1 unit

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**Grade only**

**Lecture 1 hour**

**Offered:** Fall, Spring

Develops performance skills at the beginner level on a selected instrument or voice. Studies with a master private instructor (at their own expense) and meet with class members on a weekly basis to listen and give feedback to peer performances. Required of all students in a music degree or certificate program. [D; CSU; UC]

**MUS 126.**

Applied Music—Individual Study II  
1 unit

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**Grade only**

**Prerequisite:** MUS 125 or equivalent

**Lecture 1 hour**

**Offered:** Fall, Spring

Develops performance skills at the intermediate level on a selected instrument or voice. Studies with a master private instructor (at their own expense) and meet with class members on a weekly basis to listen and give feedback to peer performances. Required of all students in a music degree or certificate program. [D; CSU; UC]

**MUS 127.**

Applied Music—Individual Study III  
1 unit

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**Grade only**

**Prerequisite:** MUS 126 or equivalent

**Lecture 1 hour**

**Offered:** Fall, Spring

Develops performance skills at the advanced level on a selected instrument or voice. Studies with a master private instructor (at their own expense) and meet with class members on a weekly basis to listen and give feedback to peer performances. Required of all students in a music degree or certificate program. [D; CSU; UC]

**MUS 128.**

Applied Music—Individual Study IV  
1 unit

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**Grade only**

**Prerequisite:** MUS 127 or equivalent

**Lecture 1 hour**

**Offered:** Fall, Spring

Develops performance skills at the professional level on a selected instrument or voice. Studies with a master private instructor (at their own expense) and meet with class members on a weekly basis to listen and give feedback to peer performances. Required of all students in a music degree or certificate program. [D; CSU; UC]

**MUS 132A.**

Class Piano I  
1 unit

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**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

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**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 136A.****Jazz Vocal Ensemble I**

2 units

**Grade only****Recommended Preparation:** MUS 185 or equivalent**Lecture 1 hour, laboratory 5 hours****Offered:** Fall, Spring

Provides the opportunity to perform in a choral ensemble with aural and score analysis of jazz vocal literature from its traditional roots to the present at the beginning level. Emphasizes 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

Provides the opportunity to perform in an advanced choral ensemble with aural and score analysis of jazz vocal literature from its traditional roots to the present. Emphasizes 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

Provides the opportunity to perform in a professional-level choral ensemble with aural and score analysis of jazz vocal literature from its traditional roots to the present. Emphasizes historical context, performance practice, style, and interpretation. Public performance required. [D; CSU; UC]

**MUS 137.****Beginning Guitar I**

1 unit

**Laboratory 2 hours****Offered:** Fall, Spring

Studies elementary plectrum and classical guitar techniques. Includes scales, arpeggios and chord progressions studied, related to melody and accompaniment styles in both the popular and classical fields. Introduces 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

Continues 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 150.****Music Business/Career Overview**

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

Explores the business aspects of music, with an emphasis on copyright law, production, contract law, personal management, professional organizations, and other elements of music which account for success in the music industry. (Same as RA&T 110.) [D; CSU]

**MUS 151.****Recording Techniques**

3 units

**Grade only****Lecture 2 hours, laboratory 3 hours****Offered:** Fall, Spring

Introduces non-linear audio recording with an emphasis on current digital recording techniques, equipment, and practices. Focuses on the physics of sound propagation, psychoacoustics, microphones, mixers, signal processing and historical perspectives on analog audio recording, and multi-track recording and mixing. (Same as RA&T 120 and 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 Technology**

3 units

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

Introduces branches of electronic music and the composers that developed the style. Includes hands-on use of computer based DAW software, Musical Instrument Digital Interface (MIDI) sequencing software and hardware synthesizers like the Roland Juno-D, used in contemporary computer-based music production. (Same as RA&T 105.) [D; CSU]

**MUS 156.****Practical Recording Techniques I**

4 units

**Prerequisite:** MUS 152 or equivalent**Lecture 2 hours, laboratory 6 hours****Offered:** Spring

Investigates the artistic and aesthetic differences between mixing the elements of live sound and recorded sound, and how these differences can be enhanced. Enables students to envision recording devices as musical instruments. Does not require performing, reading, or writing music. [D; CSU]

**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 119A, 137, 140, 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. (Repeatable three times.) [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. (Repeatable three times.) [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. (Repeatable three times.) [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. (Repeatable three times.) [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 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 avante guard or "free" playing styles. Performance required. [D; CSU; UC]

**MUS 170.****Small Performing Groups I**

1 unit

**Recommended Preparation:** MUS 119A or MUS 137 or MUS 140 or equivalent**Laboratory 6 hours****Offered:** Variable

Provides the opportunity to perform professional-level music in a beginning ensemble. Emphasizes performance experience as a small group musician. Sections for string, woodwind, brass, guitar, piano, vocal, and mixed ensemble groups. (Repeatable 3 times) [D; CSU; UC]

**MUS 171.****Small Performing Groups II**

1 unit

**Prerequisite:** MUS 170 or equivalent**Laboratory 6 hours****Offered:** Variable

Provides the opportunity to perform professional-level music in an intermediate ensemble. Emphasizes performance experience as a small group musician. Sections for string, woodwind, brass, guitar, piano, vocal, and mixed ensemble groups. (Repeatable 3 times) [D; CSU; UC]

**MUS 172.****Small Performing Groups III**

1 unit

**Prerequisite:** MUS 171 or equivalent**Laboratory 6 hours****Offered:** Variable

Provides the opportunity to perform professional-level at intermediate-advanced ensemble. Emphasizes performance experience as a small group musician. Sections for string, woodwind, brass, guitar, piano, vocal, and mixed ensemble groups. (Repeatable 3 times) [D; CSU; UC]

**MUS 173.****Small Performing Groups IV**

1 unit

**Prerequisite:** MUS 172 or equivalent**Laboratory 6 hours****Offered:** Variable

Provides the opportunity to perform professional-level at advanced ensemble. Emphasizes performance experience as a small group musician. Sections for string, woodwind, brass, guitar, piano, vocal, and mixed ensemble groups. (Repeatable 3 times) [D; CSU; UC]

**MUS 179A.****Gospel Choir I**

2 units

**Limitation on Enrollment:** Enrollment subject to audition**Lecture 1 hour, laboratory 5 hours****Offered:** Fall

Presents students with aural and historical analysis of the Spirituals and Black Gospel. Emphasizes vocal and performing techniques, interpretive skills, and performance practice. Requires public performance. [D; CSU; UC]

**MUS 179B.****Gospel Choir II**

2 units

**Prerequisite:** MUS 179A or equivalent**Limitation on Enrollment:** Enrollment subject to audition**Lecture 1 hour, laboratory 5 hours****Offered:** Fall, Spring

Presents students with aural and historical analysis of the Spirituals and Black Gospel. Emphasizes vocal and performing techniques, interpretive skills and performance practice. Requires public performance. [D; CSU; UC]

**MUS 179C.****Gospel Choir III**

2 units

**Prerequisite:** MUS 179B or equivalent**Limitation on Enrollment:** Enrollment subject to audition**Lecture 1 hour, laboratory 5 hours****Offered:** Fall

Presents students with aural and historical analysis of the Spirituals and Black Gospel. Emphasizes vocal and performing techniques, interpretive skills and performance practice. Requires public performance. [D; CSU; UC]

**MUS 179D.****Gospel Choir IV**

2 units

**Prerequisite:** MUS 179C or equivalent**Limitation on Enrollment:** Enrollment subject to audition**Lecture 1 hour, laboratory 5 hours****Offered:** Fall, Spring

Presents students with aural and historical analysis of the Spirituals and Black Gospel. Emphasizes vocal and performing techniques, interpretive skills and performance practice. Requires public performance. [D; CSU; UC]

**MUS 180.****Chamber Singers I**

2 units

**Limitation on Enrollment:** Demonstrated proficiency**Lecture 2 hours, laboratory 4 hours****Offered:** Fall, Spring

Provides singers with an opportunity to perform in a vocal ensemble at a beginning level in which aural and score analysis of choral masterworks from classical eras to the present are analyzed, interpreted, and performed. Audition and participation in public performance required. [D; CSU; UC]

**MUS 181.****Chamber Singers II**

2 units

**Prerequisite:** MUS 180 or equivalent**Limitation on Enrollment:** Demonstrated proficiency**Lecture 2 hours, laboratory 4 hours****Offered:** Fall, Spring

Provides singers with an opportunity to perform in a vocal ensemble at an intermediate level in which aural and score analysis of choral masterworks from classical eras to the present are analyzed, interpreted, and performed. Audition and participation in public performance required. [D; CSU; UC]

**MUS 182.****Chamber Singers III**

2 units

**Prerequisite:** MUS 181 or equivalent**Limitation on Enrollment:** Demonstrated proficiency**Lecture 2 hours, laboratory 4 hours****Offered:** Fall, Spring

Provides singers with an opportunity to perform in a vocal ensemble at an intermediate level in which aural and score analysis of choral masterworks from classical eras to the present are analyzed, interpreted, and performed. Audition and participation in public performance required. [D; CSU; UC]

**MUS 183.****Chamber Singers IV**

2 units

*Prerequisite: MUS 182 or equivalent**Limitation on Enrollment: Demonstrated proficiency***Lecture 2 hours, laboratory 4 hours***Offered: Fall, Spring*

Provides singers with an opportunity to perform in a vocal ensemble at a highly advanced, professional level in which aural and score analysis of choral masterworks from classical eras to the present are analyzed, interpreted, and performed. 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, Summer*

Provides a choral ensemble for music students with aural and score analysis of choral literature from traditional classics to the present. Emphasizes historical context, performance practice, style, and interpretation at the beginning level. Public performance required. [D; CSU; UC]

**MUS 186.****Concert Choir II**

1 unit

*Prerequisite: MUS 185 or equivalent***Lecture 1 hour, laboratory 5 hours***Offered: Fall, Spring, Summer*

Provides a choral ensemble for music students with aural and score analysis of choral literature from traditional classics to the present. Emphasizes historical context, performance practice, style, and interpretation at the intermediate level. Public performance required. [D; CSU; UC]

**MUS 187.****Concert Choir III**

1 unit

*Prerequisite: MUS 186 or equivalent***Lecture 1 hour, laboratory 5 hours***Offered: Fall, Spring, Summer*

Provides a choral ensemble for music students with aural and score analysis of choral literature from traditional classics to the present. Emphasizes historical context, performance practice, style, and interpretation at the advanced level. Public performance required. [D; CSU; UC]

**MUS 188.****Concert Choir IV**

1 unit

*Prerequisite: MUS 187 or equivalent***Lecture 1 hour, laboratory 5 hours***Offered: Fall, Spring, Summer*

Provides a choral ensemble for music students with aural and score analysis of choral literature from traditional classics to the present. Emphasizes historical context, performance practice, style, and interpretation at the highly advanced, professional level. Public performance required. [D; CSU; UC]

**MUS 189A.****Hand Drumming I**

2 units

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

Teaches hand position, tone production, and rhythmic patterns in a group environment on a variety of drums and percussion instruments. [D; CSU; UC]

**MUS 189B.****Hand Drumming II**

2 units

*Prerequisite: MUS 189A or equivalent***Lecture 1 hour, laboratory 3 hours***Offered: Fall, Spring*

Teaches hand position, tone production, and rhythmic patterns in a group environment on a variety of drums and percussion instruments. Builds on experience gained in Hand Drumming I. [D; CSU; UC]

**MUS 189C.****Hand Drumming III**

2 units

*Prerequisite: MUS 189B or equivalent***Lecture 1 hour, laboratory 3 hours***Offered: Fall, Spring*

Teaches hand position, tone production, and rhythmic patterns in a group environment on a variety of drums and percussion instruments at an intermediate level. [D; CSU; UC]

**MUS 189D.****Hand Drumming IV**

2 units

*Prerequisite: MUS 189C or equivalent***Lecture 1 hour, laboratory 3 hours***Offered: Fall, Spring*

Teaches hand position, tone production, and rhythmic patterns in a group environment on a variety of drums and percussion instruments at an intermediate level. [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. (Repeatable three times.) [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. (Repeatable three times.) [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. (Repeatable three times.) [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. (Repeatable three times.) [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]

**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 35.

**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 COURSES****There are five types of Nursing and Health Occupation courses:**

- Associate degree nursing
- Certified nursing assistant
- Operating room nurse
- Surgical technology/Central service technology
- Vocational nursing

**ASSOCIATE DEGREE NURSING COURSES****ADN 26.**

National Council Licensure Examination  
3 units

**Pass/No Pass only**

**Limitation on Enrollment:** Nursing students in their fourth semester and or nursing school graduates

**Recommended Preparation:** ADN 225 or equivalent

**Lecture 3 hours****Offered:** Summer

Provides the nursing student with concepts and techniques necessary to pass the National Council Licensure Examination (NCLEX). Focuses on the application of critical thinking. Emphasizes theory and skills necessary for the new registered nurse to provide competent safe care. [ND]

**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. [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

Provides pathophysiology and pharmacological treatment of the neurological, musculoskeletal, respiratory, cardiovascular, endocrine, and urinary systems. Also includes fluids, electrolytes, 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. Emphasizes 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, 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

Provides an 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

**Corequisite:** ADN 111A and 112

**Limitation on Enrollment:** Nursing Assistant Certification

**Laboratory 15 hours**

**Offered:** Fall

Fee: \$35. Provides companion laboratory class for ADN 112. Emphasizes acute and ambulatory care experiences in a 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

Presents factors which may influence growth and development in the family and community. Includes alterations and diseases in the child-bearing family that can occur and impede normal growth and development. Emphasizes conditions affecting the individual and family, including pregnancy, violence, surgery, and pediatric issues as presented. [D; CSU]

**ADN 113L.**

**Maternal and Child Nursing Laboratory**  
5 units

**Pass/No Pass only**

**Corequisite:** ADN 111B and 113

**Laboratory 15 hours**

**Offered:** Spring

Fee: \$34. Introduces specialty nursing in a clinical course that focuses on and provides clinical experiences in maternal-child, pediatric, and surgical nursing care. [D; CSU]

**ADN 114.**

**Nursing Supervision and Leadership I**  
2 units

**Grade only**

**Prerequisite:** ADN 112 and 221, or equivalent

**Recommended Concurrent Enrollment:** ADN 223

**Lecture 2 hours**

**Offered:** Spring

Introduces basic nursing concepts of leadership and management skills. Emphasizes key concepts related to leadership and management, including delegation, strategic planning, staffing and scheduling, conflict resolution, team building, legal and ethical issues, managing personal/personnel problems, and leading change. [D; CSU]

**ADN 115.**

**Transition to Associate Degree Nursing**  
3 units

**Pass/No Pass only**

**Limitation on Enrollment:** LVN license

**Lecture 2 hours, laboratory 3 hours**

**Offered:** Variable

Facilitates transition of LVN into the ADN program. Orientation to ADN policies, procedures, and curriculum. Emphasizes role changes and application of classroom content to the clinical setting. Includes roles of the RN, nursing process, supervision and delegation, therapeutic communication, group dynamics, and RN nursing skills. [D; CSU]

**ADN 116.**

**ADN Practicum**  
2 units

**Pass/No Pass only**

**Prerequisite:** Completion of first semester of an ADN program or ADN 112 and 112L

**Laboratory 6 hours**

**Offered:** Variable

Provides hospital experiences with a variety of acute and chronic health conditions. Utilizes 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

**Grade 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. Includes concepts related to critical thinking, needs analysis, case study analysis, critical thinking applications, and test-taking strategies for nursing. [D; CSU]

**ADN 150.**

**Physical Assessment**  
2 units

**Pass/No Pass only**

**Limitation on Enrollment:** Limitation on enrollment for Registered Nurses or student nurses

**Lecture 2 hours**

**Offered:** Variable

Prepares the student 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. Includes 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. [D; CSU]

**ADN 221.**

**Adult Nursing**  
5 units

**Grade only**

**Corequisite:** ADN 221L

**Lecture 5 hours**

**Offered:** Fall

Emphasizes the use of the nursing process to assist adult patient/clients in the promotion of wellness and treatment of illnesses. Includes nursing care of body systems and psychiatric conditions. [D; CSU]

**ADN 221L.**

**Adult Nursing Laboratory**  
5 units

**Pass/No Pass only**

**Corequisite:** ADN 221

**Laboratory 15 hours**

**Offered:** Fall

Fee: \$24.50. Introduces a clinical course that focuses on adult nursing care. Provides clinical experiences that include psychiatric, acute medical and surgical settings, home health, ambulatory clinics, and community facilities. [D; CSU]

**ADN 223.**

Gerontology  
2 units

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**Grade only****Prerequisite:** ADN 221 or equivalent**Corequisite:** ADN 223L**Lecture 2 hours****Offered:** Spring

Introduces the normal aging process, health problems common in aging and nursing practices, and interventions for the aging client in a variety of settings. Includes demographics, legal/ethical issues, effects of multiple chronic illness, and socio-economic status as it effects the elderly. [D; CSU]

**ADN 223L.**

Gerontology Laboratory  
4 units

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**Pass/No Pass only****Corequisite:** ADN 223**Laboratory 12 hours****Offered:** Spring

Fee: \$20.50. Provides a companion laboratory class for ADN 223. Focuses on leadership and gerontology. The laboratory class is at a variety of clinical facilities. [D; CSU]

**ADN 225.**

Nursing Supervision and Leadership II:  
Preceptorship  
2 units

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**Pass/No Pass only****Prerequisite:** ADN 221 and ADN 221L, or equivalent**Laboratory 6 hours****Offered:** Spring

Introduces a practical course that facilitates transition to graduate practice as a RN. Includes patient care assignments under the supervision of a staff RN. [D; CSU]

**ADN 290.**

Associate Degree Nursing Work Experience I  
2–4 units

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**Pass/No Pass only****Limitation on Enrollment:** Declared Associate Degree Nursing major**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Associate Degree Nursing major in order to apply learned theory in a practical hands-on setting through an internship class**Lecture 1 hour, laboratory 5–15 hours****Offered:** Variable

Applies principles and skills acquired in Associate Degree Nursing occupational majors to on-the-job assignments. In addition to the one unit weekly class activity, one unit of credit is granted for each 60 hours of volunteer or 75 hours of paid work activity. The job supervisor and the instructor will evaluate each student's job performance. (Repeatable—not to exceed four units per level.) [D; CSU]

**ADN 291.**

Associate Degree Nursing Work Experience II  
2–4 units

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**Pass/No Pass only****Prerequisite:** ADN 290 or equivalent**Limitation on Enrollment:** Declared Associate Degree Nursing major**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Associate Degree Nursing major in order to apply learned theory in a practical hands-on setting through an internship class**Lecture 1 hour, laboratory 5–15 hours****Offered:** Variable

Applies principles and skills acquired in Associate Degree Nursing occupational majors to on-the-job assignments. In addition to the one unit weekly class activity, one unit of credit is granted for each 60 hours of volunteer or 75 hours of paid work activity. The job supervisor and the instructor will evaluate each student's job performance. (Repeatable—not to exceed four units per level.) [D; CSU]

**ADN 292.**

Associate Degree Nursing Work Experience III  
2–4 units

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**Pass/No Pass only****Prerequisite:** ADN 291 or equivalent**Limitation on Enrollment:** Declared Associate Degree Nursing major**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Associate Degree Nursing major in order to apply learned theory in a practical hands-on setting through an internship class**Lecture 1 hour, laboratory 5–15 hours****Offered:** Variable

Applies principles and skills acquired in Associate Degree Nursing occupational majors to on-the-job assignments. In addition to the one unit weekly class activity, one unit of credit is granted for each 60 hours of volunteer or 75 hours of paid work activity. The job supervisor and the instructor will evaluate each student's job performance. (Repeatable—not to exceed four units per level.) [D; CSU]

**ADN 295.**

Selected Topics in Nursing  
1–3 units

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**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

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**Limitation on Enrollment:** Eligibility for independent study. See page 35.**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 20.

**Certified Nursing Assistant (CNA)**  
5.5 units

**Grade only**

**Corequisite:** CNA 20L

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

**Lecture 5.5 hours**

**Offered:** Fall, Spring, Summer

Provides entry-level skills for bedside patient care, enhances awareness of career opportunities in healthcare, and promotes quality of patient care. Provides theory and practical application of skills needed to function as a CNA in a long-term care facility. [ND]

### CNA 20L.

**Certified Nursing Assistant Laboratory**  
3 units

**Pass/No Pass only**

**Corequisite:** CNA 20

**Laboratory 9 hours**

**Offered:** Fall, Spring, Summer

Fee: \$12. Functions as the companion laboratory class for CNA 20. Emphasizes long-term care nursing experiences in clinical settings. [ND]

### CNA 21.

**Acute Care Nursing Assistant**  
3 units

**Grade only**

**Prerequisite:** CNA 20 or equivalent

**Corequisite:** CNA 21L

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

**Lecture 3 hours**

**Offered:** Variable

Prepares the long-term care nursing assistant to function in the acute care setting. Follows the California State approved Acute Care Nurse Assistant model curriculum. Includes disease processes of various body systems, surgical procedures, related treatments, and responsibilities of the acute care CNA. [ND]

### CNA 21L.

**Acute Care Nursing Assistant Laboratory**  
1 unit

**Pass/No Pass only**

**Corequisite:** CNA 21

**Laboratory 3 hours**

**Offered:** Variable

Fee: \$12. Provides companion clinical experience for CNA 21. Emphasizes care of the patient in acute care medical-surgical, orthopedic, rehab, cardiac, and pediatric settings. [ND]

## OPERATING ROOM NURSE COURSES

### ORN 209.

**Basic Perioperative Nursing**  
9 units

**Grade only**

**Limitation on Enrollment:** Registered Nurse License or graduate nurse

**Lecture 8 hours, laboratory 3 hours**

**Offered:** Fall

Provides opportunities for the Registered Nurse seeking employment in the operating room. Introduces the guidelines from the Association of Operating Room Nurses that includes: aseptic technique, staff and patient safety, surgical management, consent, surgical high risk factors, sentinel events, and professional issues. (Formerly ORN 295F.) [D; CSU]

### ORN 211L.

**Perioperative Nurses Training Laboratory**  
4 units

**Pass/No Pass only**

**Limitation on Enrollment:** Registered Nurse License or graduate nurse

**Laboratory 12 hours**

**Offered:** Variable

Emphasizes setting priorities, care of the perioperative patient, and adapting to emerging technology in the surgical setting. Provides information about the ORN functioning independently in the perioperative setting. Enhances skill and knowledge base that is required in the surgical setting. [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**

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

**Lecture 4 hours, laboratory 2 hours**

**Offered:** Variable

Introduces basic functions of a Central Service Department and includes microbiology, aseptic technique, disinfecting equipment, decontamination and sterilization as well as wrapping and packaging of surgical instruments. Provides a review of body systems and identification of instruments used in surgery. Emphasizes medical terminology, safety precautions, 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

Provides laboratory experience to support the initial theory course for the Central Service Technology (CST) certificate program. Emphasizes training in aseptic technique, cleaning, disinfecting and sterilization in the hospital setting. Includes the practice of wrapping, packing, and inspecting surgical instruments. [D]

**ST 10C.****Central Service Technology Practicum**

3.5 units

**Grade only****Prerequisite:** ST 10B or equivalent**Laboratory 11 hours****Offered:** Variable

Provides an advanced laboratory experience for the role of the Central Service Technician and includes various scopes, power equipment, and camera's used in the operative environment. [D]

**ST 110.****Introduction to Surgical Technology**

8 units

**Grade only****Prerequisite:** BIOL 190 or 260 or equivalent; MEDOP 230 or equivalent**Corequisite:** ST 120**Limitation on Enrollment:** Acceptance into the Surgical Technology program**Lecture 8 hours****Offered:** Variable

Fee: \$100. Introduces operating room nursing, aseptic techniques, disinfection, sterilization, instruments, and equipment. Includes supplies needed for general, gynecologic, thoracic, cardiovascular, and orthopedic surgery. Emphasizes moral, ethical, legal responsibilities, basics of patient care, communication, professional behavior, stress management, and medications used in the surgical process. [D; CSU]

**ST 120.****Surgical Laboratory**

4 units

**Pass/No Pass only****Corequisite:** ST 110**Laboratory 12 hours****Offered:** Variable

Provides laboratory practice in basic surgical technique, asepsis, instrumentation, and surgical procedures in the major specialties. Includes a simulated operating room, and operating room scenarios. [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

Presents advanced concepts of patient care, aseptic technique, and microbiology. Examines the subspecialties of ear, nose, throat, eye, neurosurgery, urology, pediatric, and plastic surgery. Reviews the varied hospital models, as well as the role of each member of the healthcare team. (Not open to students with credit in ORN 130.) [D; CSU]

**ST 140.****Practicum: Major Surgical Specialties**

8 units

**Pass/No Pass only****Prerequisite:** ST 110 and 120, or equivalent**Corequisite:** ST 130 and 150**Laboratory 24 hours****Offered:** Variable

Provides clinical experience in the intraoperative setting. Emphasizes first or second scrub role. Includes augmented clinical hours in the campus laboratory, focusing on instrumentation, equipment, and supplies in the specialties of neurology, urology, ENT, eye, plastics, laparoscopic, orthopedic, and pediatric surgery. [D; CSU]

**ST 150.****Current Concepts in Surgical Technology**

1 unit

**Grade only****Corequisite:** ST 130 and 140**Lecture 1 hour****Offered:** Variable

Presents current topics and concepts encountered in the surgical setting with emphasis on developing awareness of moral, ethical responsibilities, and surgical conscience. Includes resume writing and required job skills. [D; CSU]

**ST 160.****Practicum: Subspecialties**

6 units

**Pass/No Pass only****Prerequisite:** ST 130, 140, and 150, or equivalent**Laboratory 18 hours****Offered:** Variable

Provides clinical intraoperative experience under both instructor and preceptor supervision. Clinical experience focuses on functioning as first scrub, and solo scrub in all specialties. Emphasizes independent clinical experience in the major specialties of general, gynecological, orthopedic, thoracic, and vascular surgery. [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 33.**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 unit

**Grade only**

**Limitation on Enrollment:** Acceptance into Vocational Nursing program

**Corequisite:** VN 101

**Lecture 1 hour**

**Offered:** Variable

Provides 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. (Not open to students with credit in ADN 106.) [D]

## VN 31.

**Basic Concepts in Pharmacology**  
1 unit

**Grade only**

**Prerequisite:** VN 30 or equivalent

**Corequisite:** VN 102

**Limitation on Enrollment:** Acceptance into Vocational Nursing program

**Lecture 1 hour**

**Offered:** Variable

Introduces basic concepts of pharmacology for Vocational Nursing (VN) students. Includes content organized according to drug administration as well as issues related to drug education, management, and enforcement of drug laws. Emphasizes knowledge of pharmacology necessary to properly educate and advise patients regarding their healthcare needs. [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:** RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

**Lecture 2.5 hours**

**Offered:** Variable

Introduces vocational nursing and human functioning framework. Includes healthcare system, therapeutic communication, professional communication, and relationships. Emphasizes the nursing process, stress and coping, psychosocial and cultural issues, critical thinking, physical assessment, documentation, infection control, and sterile procedures. [D; CSU]

## VN 101L.

**Introduction to Vocational Nursing I Laboratory**  
2 units

**Pass/No Pass only**

**Corequisite:** VN 101

**Laboratory 6.5 hours**

**Offered:** Variable

Fee: \$35. Companion laboratory to VN 101 including patient care experiences in selected clinical settings. Includes 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 31 and 102L

**Lecture 2.5 hours**

**Offered:** Variable

Provides concepts of vocational nursing with an emphasis on geriatrics, death, dying, and rehabilitation. Includes fluids, electrolytes, urinary disorders, comfort care, nutrition, enteral feedings, gastrointestinal disorders, visual and auditory disorders, as well as care of the surgical patient. [D; CSU]

## VN 102L.

**Introduction to Vocational Nursing II Laboratory**  
2 units

**Pass/No Pass only**

**Prerequisite:** VN 101 or equivalent

**Corequisite:** VN 31 and 102

**Laboratory 6.5 hours**

**Offered:** Variable

Supports theory from VN 102 by offering clinical practice in the medical-surgical clinical setting. Provides nursing care for patients with a variety of illnesses including geriatric nursing. [D; CSU]

## VN 130.

**Pharmacology for Nurses**  
2 units

**Grade only**

**Prerequisite:** VN 30 or equivalent

**Corequisite:** VN 201

**Lecture 2 hours**

**Offered:** Variable

Provides basic introduction to pharmacology for VN students. Includes content organized according to major drug groups and major disease treatments with emphasis on nursing implications of various drugs. Emphasizes mechanisms of action, dosage, side effects, contraindications, interactions, and classification of all drugs. [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

Provides concepts of vocational 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

**Pass/No Pass only**

**Prerequisite:** VN 102 or equivalent

**Corequisite:** VN 201

**Laboratory 18 hours**

**Offered:** Variable

Fee: \$34. Supports theory from VN 201 by offering clinical practice in the medical-surgical clinical setting. Provides nursing care for patients with a variety of illnesses. [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

Emphasizes the fundamentals of maternal and infant care, nursing care of the sick child, nursing care during emergencies, as well as medical-surgical conditions affecting human functioning and basic electrocardiogram interpretation. Includes patient care management of victims of domestic violence and abuse. Provides basic information related to career management, leadership, home health nursing care, and contemporary issues including evidence-based nursing practice.

[D; CSU]

**VN 250L.****Nursing Care in Specialty Areas and Career Preparation Laboratory**

6 units

**Pass/No Pass only****Prerequisite:** VN 201 or equivalent**Corequisite:** VN 250**Laboratory 18 hours****Offered:** Fall, Spring

Fee: \$31. Focuses on nursing performance in the clinical setting which includes acute, ambulatory, and long-term care. Assesses for clinical performance at graduate level and is the final clinical course of the program.

[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 35.

**Offered:** Variable

Individual study or research in vocational nursing of particular interest to the student.

[D; CSU]

## PERSONAL DEVELOPMENT COURSES

**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 100C.****Career Planning: Job Search Skills**

1 unit

**Pass/No Pass only****Recommended Preparation:** PD 100A or equivalent**Lecture 1 hour****Offered:** Fall; Spring

Designed to assist students in organizing a job search plan. This plan will include labor market analysis, resume writing, job applications, and interviewing. [D; CSU]

**PD 101.****Orientation to College**

1 unit

**Pass/No Pass 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 109.****Work Success—Successful Workplace Behavior**

2 units

**Pass/No Pass 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 114.****Transitions in Higher Education**

3 units

**Recommended Preparation:** RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent; ENGL 114 or the equivalent skill level as determined by the Southwestern College English 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; UC]

**PD 116.****Student Seminar**

2 units

**Grade only****Lecture 2 hours****Offered:** Fall, Spring

Teaches students of all ages strategies for academic and personal success. Develops essential study and interpersonal skills. Includes current issues in higher education, college support services, library and academic technology services, and campus information used throughout the student's academic career. (Same as LS 116.) [D; CSU]

**PD 290.****Occupational Cooperation Education I**

2–4 units

**Grade only**

**Limitation on Enrollment:** Declared vocational education major.

**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to declared vocational major in order to apply learned theory in a practical hands-on setting through an internship class

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

Applies principles and skills acquired in vocational educational majors to on-the-job assignments allowing application of the theory learned in the student's major. Evaluation of job oriented learning objectives and student performance will be conducted by supervisor and instructor. Open to students with majors not having an assigned cooperative work experience class. (Repeatable—not to exceed four units per level.) [D; CSU]

**PD 291.**

Occupational Cooperation Education II  
2-4 units

**Grade only**

**Prerequisite:** PD 290 or equivalent

**Limitation on Enrollment:** Declared vocational education major.

**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to declared vocational major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, laboratory 5-15 hours**

**Offered:** Variable

Applies principles and skills acquired in vocational educational majors to on-the-job assignments allowing application of the theory learned in the student's major. Evaluation of job oriented learning objectives and student performance will be conducted by supervisor and instructor. Open to students with majors not having an assigned cooperative work experience class. (Repeatable---not to exceed four units per level.) [D; CSU]

**PD 292.**

Occupational Cooperation Education III  
2-4 units

**Grade only**

**Prerequisite:** PD 291 or equivalent

**Limitation on Enrollment:** Declared vocational education major.

**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to declared vocational major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, laboratory 5-15 hours**

**Offered:** Variable

Applies principles and skills acquired in vocational educational majors to on-the-job assignments allowing application of the theory learned in the student's major. Evaluation of job oriented learning objectives and student performance will be conducted by supervisor and instructor. Open to students with majors not having an assigned cooperative work experience class. (Repeatable---not to exceed four units per level.) [D; CSU]

**PD 293.**

Occupational Cooperation Education IV  
2-4 units

**Grade only**

**Prerequisite:** PD 292 or equivalent

**Limitation on Enrollment:** Declared vocational education major.

**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to declared vocational major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, laboratory 5-15 hours**

**Offered:** Variable

Applies principles and skills acquired in vocational educational majors to on-the-job assignments allowing application of the theory learned in the student's major. Evaluation of job oriented learning objectives and student performance will be conducted by supervisor and instructor. Open to students with majors not having an assigned cooperative work experience class. (Repeatable---not to exceed four units per level.) [D; CSU]

**PERSONAL  
DEVELOPMENT  
DISABILITY SUPPORT  
SERVICES COURSES**

**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. (Repeatable) [ND]

**PD 9.**

Diagnostic Assessment  
.5 unit

**Pass/No Pass 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. (Repeatable) [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. (Repeatable) [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 students disability. (Repeatable) [ND]

**PD 21.**

Adapted Computer Support Laboratory I  
1 unit

**Pass/No Pass only**

**Laboratory 2 hours**

**Offered:** Variable

Provides students with disabilities access to specialized hardware and software designed to learn or improve basic skills in adaptive technologies, cognitive retraining software, educational technologies, computers, and study skills. Students will work in the computer lab following their individual educational contract. Laboratory time arranged with the instructor. (Repeatable) [ND]

**PD 22.**

Adapted Computer Support Laboratory II  
2 units

**Pass/No Pass 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. (Repeatable) [ND]

**PD 23.**

**Adapted Computer Support Laboratory III**  
3 units

**Pass/No Pass 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. (Repeatable) [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. (Repeatable) [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. (Repeatable) [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. (Repeatable) [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. (Repeatable) [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. (Repeatable) [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

**Pass/No Pass 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. [D; CSU]

## 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**

**Offered:** Fall, Spring

**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]

**PHIL 103.**

**Logic and Critical Thinking**  
3 units

**Grade only**

**Prerequisite:** ENGL 115 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

Develops the critical reading, writing, and reasoning skills necessary for both academic success and good citizenship. Introduces deductive and inductive reasoning and the logic of analysis, as well as the systematic study of fallacies in reasoning. Emphasizes the practical applications of logic in daily life. Includes analytical and argumentative writing exercises. [D; CSU; UC]

**PHIL 106.****World Religions**

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 philosophical significance of major themes in religious thought. Studies 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****Offered:** Variable

Explores the major philosophical traditions of central and East Asia, including Hinduism, Buddhism, Daoism, Confucianism, and the impact those traditions have on Asian culture. Examines 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****Offered:** Fall, Spring

Covers critical examination of the basis of morality. Analyzes various ethical theories in terms of their origin, development, and application. Discusses the application of ethical theories to current and moral issues. [D; CSU; UC]

**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 35.

**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.

**PHLEBOTOMY COURSES****PHLB 50.****Phlebotomy**

3 units

**Grade only****Prerequisite:** MEDOP 229 or 230, or equivalent**Corequisite:** PHLB 50L**Lecture 3 hours****Offered:** Fall, Spring

Focuses on phlebotomy procedures including venipuncture, skin puncture, specimen collection, aseptic technique, isolation procedures, and safety. Provides basic and advanced didactic content required for state certification for phlebotomists. [D]

**PHLB 50L.****Phlebotomy Laboratory**

.5 unit

**Grade only****Corequisite:** PHLB 50**Laboratory 2 hours****Offered:** Fall, Spring

Introduces clinical laboratory practice for a variety of blood collection methods. [D]

**PHLB 60.****Clinical Phlebotomy Practicum**

2 units

**Grade only****Corequisite:** PHLB 50**Lecture 2 hours****Offered:** Fall, Spring

Introduces skill development in the performance of a variety of blood collection methods using proper techniques and standard precautions. [D]

**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 154.****Introduction to Remote Sensing**

3 units

**Recommended Preparation:** MATH 60 or 60PL, 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****Offered:** Variable

Introduces fundamental concepts of electromagnetic radiation and its interactions with various media. Explores commonly used sensors and techniques of remote sensing. (Same as GEOG 154.) [D; CSU]

**PHS 155.****Introduction to Image Analysis**

3 units

**Lecture 3 hours****Offered:** Variable

Introduces principal concepts related to processing, analysis, enhancement, correction, and interpretation of images. Includes photogrammetry, information extraction, and scientific visualization. (Same as GEOG 155.) [D; CSU]

**PHS 250.****Our Global Future: Values for Survival**

3 units

**Recommended Preparation:** ENGL 115 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

Explores roles and limits of science and technology, global (Western and Non-Western) differences in world view and its impact on environmental ethics, politics, and economics. Develops a more harmonious worldview and social consciousness focused on environmental sustainability. (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 35.

**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 COURSES****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. [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). [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. [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). [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 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 272.****Principles of Physics II**

3 units

**Grade only****Prerequisite:** PHYS 270 and MATH 251, or equivalent**Lecture 3 hours****Offered:** Fall, Spring

Introduces electricity and magnetism. Includes electric field, potential, resistance, capacitance, magnetic field, inductance, electromagnetic induction, direct and alternating current. Second of a three-semester, calculus-based sequence intended mainly for majors in the physical sciences and engineering. [D; CSU; UC]

**PHYS 273.****Principles of Physics Laboratory II**

1 unit

**Grade only****Corequisite:** PHYS 272 (may be taken previously), or equivalent**Laboratory 3 hours****Offered:** Fall, Spring

Provides laboratory experience to supplement PHYS 272. [D; CSU; UC]

**PHYS 274.****Principles of Physics III**

3 units

**Grade only****Prerequisite:** PHYS 272 and MATH 252, or equivalent**Lecture 3 hours****Offered:** Spring

Covers optics and modern physics. Includes electromagnetic waves, geometrical optics, physical optics, quantum mechanics, and nuclear physics. 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]

**PHYS 275.****Principles of Physics Laboratory III**

1 unit

**Grade only****Corequisite:** PHYS 274 (may be taken previously), or equivalent**Laboratory 3 hours****Offered:** Spring

Provides laboratory experience to supplement PHYS 274. [D; CSU; UC]

**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 35.

**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.

## POLITICAL SCIENCE COURSES

**PS 101.****Introduction to Political Science**

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

Explores the major political philosophers, ideologies, and issues of Western civilization and their impact on the world. Includes the representative methods of acquiring political knowledge and analysis. [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. Analyzes and discusses a variety of topics and current issues, including education, health, civil liberties and rights, proposed laws, and policies and budgets. (Partially fulfills American Institutions requirement at CSU.) [D; CSU; UC]

**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

Introduces comparative government and politics through both an analytical and institutional approach utilizing history and socio-economic development of the country, evolution of power structure within various regimes, and norms and roles of each society. [D; CSU; UC]

**PS 104.****Introduction to International Relations**

3 units

**Recommended Preparation:** PS 101 and 103, or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

**Lecture 3 hours****Offered:** Variable

Emphasizes the historical and geographical perspectives of political relations among contemporary nation states, including the dynamics of transnationalism, diplomacy, the struggle for power, as well as war and peace. Critically examines theories and significant patterns in world politics. [D; CSU; UC]

**PS 250.****Our Global Future: Values for Survival**

3 units

**Recommended Preparation:** ENGL 115 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

Explores roles and limits of science and technology, global (Western and Non-Western) differences in world view and its impact on environmental ethics, politics, and economics. Develops a more harmonious worldview and social consciousness focused on environmental sustainability. Same as PHS 250. [D; CSU; UC]

**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 35.

**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 COURSES****PORT 101.****Elementary Portuguese I**

5 units

**Lecture 5 hours****Offered:** Variable

Enables beginning students to carry out basic interpersonal communications. Emphasizes the structures and vocabulary necessary to carry out simple conversations. Includes 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 102.****Elementary Portuguese II**

5 units

**Prerequisite:** PORT 101 or equivalent**Lecture 5 hours****Offered:** Variable

Provides continuation of PORT 101. 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. Emphasizes the study of Portuguese speakers' worldviews. Equivalent to three years 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 35.

**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 COURSES****PSYC 101.****General Psychology**

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 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]

**PSYC 106.****Human Sexuality**

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

Explains the processes involved in the experience of human sexual activity. Emphasizes 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

**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

Covers a comprehensive survey of death and dying focused on psychological, social, physical, emotional, and cultural aspects of behavior. Explores issues such as the death of a spouse, child or parent, medical and legal ethics involving death, suicide, funerals, and healthcare systems available to the dying and their survivors. [D; CSU; UC]

**PSYC 116.****Introduction to Social Psychology**

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 human behavior and personality development in a social context. Includes an investigation of topics such as, social cognition, self identity, social perception, attitudes, conformity, stereotypes, group dynamics, aggression, and altruism. (Same as SOC 116.) [D; CSU; UC]

**PSYC 201.****Academic and Career Options in Psychology**

1 unit

**Pass/No Pass only****Prerequisite:** PSYC 101 or equivalent**Lecture 1 hour****Offered:** Fall, Spring, Summer

Explores academic and career options in psychology. Covers information on post-baccalaureate options in psychology and related fields. Fosters the identification of career-related strengths and interests. Introduces topics such as resources in psychology, undergraduate advising and career services. [D; CSU]

**PSYC 211.****Learning**

3 units

**Prerequisite:** PSYC 101 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:** 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

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

**Lecture 3 hours****Offered:** Variable

Examines the physical, cognitive, emotional, and social development of the individual throughout the life span. Includes the development of the individual, beginning with conception and prenatal development and continuing through infancy, childhood, adolescence, adulthood, late adulthood, and death and dying. [D; CSU; UC]

**PSYC 250.****Abnormal Psychology**

3 units

**Prerequisite:** PSYC 101 or equivalent**Lecture 3 hours****Offered:** Fall, Spring

Emphasizes the study of psychological disorders in children, adolescents, adults, and the aged. Focuses on description, assessment, and treatment of abnormal behavior patterns. Includes disorders of stress, eating, anxiety, and personality, as well as affective disorders, schizophrenia, substance-related disorders, sexual and gender identity disorders, disorders of childhood and adolescence, disorders of aging and cognition, and ethical issues related to the mental health profession. [D; CSU; UC]

**PSYC 255.****Introduction to Physiological Research**

3 units

**Prerequisite:** PSYC 101 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

Introduces scientific methodology in psychology with an emphasis on descriptive, experimental, and applied research. Teaches the American Psychological Association writing style for empirical report writing. This course is intended for psychology majors and behavioral science students interested in the processes of research. [D; CSU]

**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 60 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]

**PSYC 271.**

Data Analysis in Psychology and Sociology  
1 unit

**Corequisite:** PSYC 270

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

**Lecture 1 hour, laboratory 1 hour**

**Offered:** Fall, Spring, Summer

Uses the computer as a tool for calculating statistics and exploring data in Psychology and Sociology. (Same as SOC 271.) [D; CSU]

**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 35.

**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 COURSES****READING SKILLS LAB (Referring to RDG 1)**

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.

**RDG 2.**

Reading Skills Lab II  
1 unit

**Pass/No Pass 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 52.**

Basic Reading  
4 units

**Recommended Preparation:** ESL 50 or equivalent or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

**Lecture 4 hours**

**Offered:** Fall, Spring

Focuses on the specialized needs of the ESL and basic reading student. Provides effective strategies for reading; vocabulary development, reading comprehension, and critical thinking skills at the basic level. (Same as ESL 52.) [ND]

**RDG 54.**

Developmental Reading  
4 units

**Prerequisite:** RDG 52 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

**Lecture 4 hours**

**Offered:** Fall, Spring

Focuses on developmental reading skills which include application of effective reading strategies, vocabulary development, identification of main ideas, supporting details, patterns of organization, critical thinking skills, the reading-writing connection, study strategies, and technical skills. [ND]

**RDG 56.**

Introduction to College Reading  
4 units

**Prerequisite:** RDG 54 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

**Lecture 4 hours**

**Offered:** Fall, Spring

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 at the introductory college reading level. [ND]

**RDG 158.**

College Reading  
3 units

**Prerequisite:** 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 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 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.)

**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 290.****Work Experience in Real Estate I**

2–4 units

**Grade only****Limitation on Enrollment:** Declared Real Estate major  
**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Real Estate major in order to apply learned theory in a practical hands-on setting through an internship class**Lecture 1 unit, laboratory 5–15 hours****Offered:** Variable

Applies principles and skills acquired in real estate 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 instructor will evaluate each student's job performance. (Repeatable-not to exceed four units per level.) [D; CSU]

**RE 291.****Work Experience in Real Estate II**

2–4 units

**Grade only****Prerequisite:** RE 290 or equivalent**Limitation on Enrollment:** Declared Real Estate major  
**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Real Estate major in order to apply learned theory in a practical hands-on setting through an internship class**Lecture 1 hour, laboratory 5–15 hours****Offered:** Variable

Applies principles and skills acquired in real estate 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 instructor will evaluate each student's job performance. (Repeatable-not to exceed four units per level.) [D; CSU]

**RE 292.**

**Work Experience in Real Estate III**  
2–4 units

**Grade only**

**Prerequisite:** RE 291 or equivalent

**Limitation on Enrollment:** Declared Real Estate major  
**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Real Estate major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, laboratory 5–15 hours**

**Offered:** Variable

Applies principles and skills acquired in real estate 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 instructor will evaluate each student's job performance. (Repeatable-not to exceed four units per level.) [D; CSU]

**RE 293.**

**Work Experience in Real Estate IV**  
2–4 units

**Grade only**

**Prerequisite:** RE 292 or equivalent

**Limitation on Enrollment:** Declared Real Estate major  
**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Real Estate major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, laboratory 5–15 hours**

**Offered:** Variable

Applies principles and skills acquired in real estate 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 instructor will evaluate each student's job performance. (Repeatable-not to exceed four units per level.) [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 35.

**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]

## RECORDING ARTS AND TECHNOLOGY COURSES

**RA&T 100.**

**Music Technology**  
3 units

**Grade only**

**Lecture 3 hours**

**Offered:** Fall, Spring

Introduces the computer's role in music, synthesizer parameter definition, drum machine, sequencers, editors, and notation programs. Computer-assisted instruction in music theory. (Same as MUS 100.) [D; CSU]

**RA&T 105.**

**Electronic Music Technology**  
3 units

**Lecture 3 hours**

**Offered:** Fall, Spring

Introduces branches of electronic music and the composers that developed the style. Includes hands-on use of computer based DAW software, Musical Instrument Digital Interface (MIDI) sequencing software and hardware synthesizers like the Roland Juno-D, used in contemporary computer-based music production. (Same as MUS 155.) [D; CSU]

**RA&T 110.**

**Music Business/Career Overview**  
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

Explores the business aspects of music, with an emphasis on copyright law, production, contract law, personal management, professional organizations, and other elements of music which account for success in the music industry. (Same as MUS 150.) [D; CSU]

**RA&T 120.**

**Recording Techniques**  
3 units

**Grade only**

**Lecture 2 hours, laboratory 3 hours**

**Offered:** Fall, Spring, Summer

Introduces non-linear audio recording with an emphasis on current digital recording techniques, equipment, and practices. Focuses on the physics of sound propagation, psychoacoustics, microphones, mixers, signal processing and historical perspectives on analog audio recording, and multi-track recording and mixing. (Same as TELE/MUS 151.) [D; CSU]

**RA&T 121.**

**Audio Recording Technology I**  
2 units

**Grade only**

**Prerequisite:** RA&T 120 or equivalent

**Lecture 1 hour, laboratory 3 hours**

**Offered:** Fall, Spring

Explores the non-linear and digital recording techniques with an emphasis on the development of advanced recording skills, including digital multi-track recording, large format consoles automated mixing, and digital editing. Includes the practical application of learned skills in diverse recording projects. [D; CSU]

**RA&T 122.**

**Audio Recording Technology II**  
4 units

**Prerequisite:** RA&T 121 or equivalent

**Lecture 2 hours, laboratory 6 hours**

**Offered:** Fall

Investigates the artistic and aesthetic differences between mixing the elements of live sound and recorded sound, and how these differences can be enhanced. Enables students to envision recording devices as musical instruments. [D; CSU]

**RA&T 123.**

**Audio Recording Technology III**  
4 units

**Grade only**

**Prerequisite:** RA&T 122 or equivalent

**Lecture 2 hours, laboratory 6 hours**

**Offered:** Spring

Investigates the artistic and aesthetic differences between mixing the elements of live sound and recorded sound, and how these differences can be enhanced. Enables students to envision recording devices as musical instruments, with an emphasis on developing critical and analytical listening skills. [D; CSU]

**RA&T 295.****Selected Topics in Recording Arts and Technology**  
1–3 units**Offered:** Variable

Permits students to study relevant topics within the field of Recording Arts and 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.

**RA&T 299.****Independent Study**  
1–3 units

**Limitation on Enrollment:** Eligibility for independent study. See page 35.

**Offered:** Variable

Individual study or research in some area of Recording Arts and Technology 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.

**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 35.

**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]

**SOC 105.****Masculinity**  
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 different ways in which masculinity is socially constructed. Emphasizes a critical examination of masculinity intersecting with gender, culture, nationality, socioeconomic class, physicality, race/ethnicity, sexual orientation, and age. Analyzes the socialization of manhood and masculinity in cross-cultural and transnational perspectives. [D; CSU]

**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]

**SOC 115.****Filipino-American Culture**  
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

Emphasizes the roots of Filipino-American culture and its role in American society today. Focuses on the social, political, and economic ideologies, issues, influences, and challenges that affect Filipino-American society. Includes a study of family life, social behavior, language, education, and religion. (Same as ASIA 115.) [D; CSU; UC]

**SOCIOLOGY COURSES****SOC 101.****Introduction to Sociology**  
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 central concepts and perspectives of sociology. Includes the basics of sociological theory, socialization, culture, groups and organizations, the mass media, deviance and social control, social stratification, racial and ethnic inequality, family, religion, education, government, the economy, the environment, population, health, social movements, and social change. [D; CSU; UC]

**RECREATION AND LEISURE STUDIES COURSES****REC 50.****Marine Safety Services Lifeguard Operations**  
1–3 units**Grade only**

**Limitation on Enrollment:** Must be a certified lifeguard from a contracted agency

**Laboratory 3–9 hours****Offered:** Fall, Summer

Includes all phases of emergency response, first aid, and basic life support as it applies to open water and advanced rescue. Emphasizes inter-agency operational protocols, physical performance, health and fitness training, and legal aspects of records and reports. (Repeatable) [ND]

**SOC 116.****Introduction to Social Psychology**

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 human behavior and personality development in a social context. Includes an investigation of topics such as, social cognition, self identity, social perception, attitudes, conformity, stereotypes, group dynamics, aggression, and altruism. (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]

**SOC 150.****Mexican and Mexican-American Cultures 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

Examines the evolution of Mexican and Mexican-American cultural development in the United States. Focuses on the study of the transculturation process between the Mexican-American and mainstream American cultures. Includes a special 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

Introduces the origins and development of African-American culture in the United States between 1619 and the present. Emphasizes 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 60 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 271.****Data Analysis in Psychology and Sociology**

1 unit

**Corequisite:** SOC 270

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

**Lecture 1 hour, laboratory 1 hour****Offered:** Fall, Spring, Summer

Uses the computer as a tool for calculating statistics and exploring data in Psychology and Sociology. (Same as PSYC 271.) [D; CSU]

**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 35.

**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 COURSES****SPAN 101.****Elementary Spanish I**

5 units

**Lecture 5 hours****Offered:** Fall, Spring

Provides basic interpersonal communication. Covers topics such as family, daily activities, obligations, weather, employment, school, food and Spanish speakers' worldviews. Intended for students who speak limited Spanish, are not native speakers, have completed less than two years of high school Spanish courses, or have assessed into SPAN 101. [D; CSU; UC]

**SPAN 101A.****Introduction to Elementary Spanish**

3 units

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

Provides first half of SPAN 101. Introduces 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. [D; CSU; UC]

**SPAN 101B.****Continuation of Elementary Spanish**

3 units

**Prerequisite:** SPAN 101A or equivalent**Lecture 3 hours****Offered:** Fall, Spring

Provides continuation of SPAN 101A and second half of SPAN 101. Includes basic beginning interpersonal communication. Covers topics such as work, careers, food, relationships, weather and Spanish speakers' worldviews. Intended for students who speak limited Spanish, or have skill level determined by department faculty. Not intended for native speakers. Not open to students with SPAN 101 credit. Equivalent to two years of high school Spanish. [D; CSU; UC]

**SPAN 102.****Elementary Spanish II**

5 units

**Prerequisite:** SPAN 101 or 101B or equivalent**Lecture 5 hours****Offered:** Fall, Spring

Provides continuation of SPAN 101. Includes topics such as hobbies, chores, pastimes, vacations, childhood, health, important events, goals, and Spanish speakers' worldviews. Intended for students who speak limited Spanish, are not native speakers, have completed less than three years of High School Spanish courses, or have assessed into SPAN 102. [D; CSU; UC]

**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 four years of high school Spanish. [D; CSU; UC]

**SPAN 202.****Intermediate Spanish II**

5 units

**Prerequisite:** SPAN 201 or equivalent**Lecture 5 hours****Offered:** Fall, Spring

Provides 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 Spanish. [D; CSU; UC]

**SPAN 215.****Spanish for Bilinguals I**

5 units

**Lecture 5 hours****Offered:** Variable

Provides bilingual students the opportunity 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

Provides continuation of SPAN 215. Offers bilingual students the opportunity 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

Provides second year of study for bilingual students of Spanish. Includes introductory study of Latin American and Peninsular literature to the intermediate native speaker. Emphasizes reading, writing, and analysis of fiction, drama, and poetry, and the use of current technology to research 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:** Variable

Provides class discussions conducted in Spanish for the intermediate student. Emphasizes the spoken language with some writing practice and the development of practical vocabulary and useful phrases. Includes conversations at the intermediate level that will center around social, cultural, and historical issues dealing with Spain. [D; CSU; UC]

**SPAN 226.****Intermediate Conversation and Writing on Latin American Culture**

3 units

**Prerequisite:** SPAN 202 or equivalent**Lecture 3 hours****Offered:** Variable

Provides class discussions conducted in Spanish for the intermediate student. Emphasizes on the spoken language with some writing practice and the development of practical vocabulary and useful phrases. Includes conversations at the intermediate level that will center around social, cultural, and historical issues dealing with the Latin American experience. [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 35.

**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.*

## SUSTAINABLE ENERGY STUDIES COURSES

**SES 101.**

**Introduction to Sustainable Energy Studies**  
3 units

**Grade only**

**Recommended Preparation:** MATH 35, BUS 211 or the equivalent skill level as determined by the Southwestern College Mathematics and English Assessments or equivalent

**Lecture 3 hours**

**Offered:** Fall

Studies the growth of the human population and its effects on energy and climate demands with an emphasis on landscaping and the built environment. (Same as LNT 101.) [D; CSU]

**SES 105.**

**California Green Code and Sustainable Technologies**  
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

Emphasizes the proper interpretation of the CAL-Green Building Code and green building technologies. Provides inspectors, designers, and contractors with the latest code requirements and national standards to promote sustainable communities. Includes site planning and development, energy conservation, storm water pollution prevention, and basic sustainability concepts. (Same as CI 105.) [D; CSU]

**SES 110.**

**Introduction to Building Science**  
3 units

**Recommended Preparation:** MATH 35, BUS 211 or the equivalent skill level as determined by the Southwestern College Mathematics and English Assessments or equivalent

**Lecture 2 hours, laboratory 2 hours**

**Offered:** Variable

Studies the relationship between human biology and the environment as applied to building design. Emphasizes sustainable building design, passive energy strategies, and the application of appropriate heating, cooling and ventilation systems. [D; CSU]

**SES 120.**

**The Energy Efficient Building**  
3 units

**Recommended Preparation:** MATH 35, BUS 211 or the equivalent skill level as determined by the Southwestern College Mathematics and English Assessments or equivalent

**Lecture 3 hours, laboratory 2 hours**

**Offered:** Variable

Hands on study of residential and commercial building energy. Includes energy auditing methods of existing homes as they are now constructed. Analyzes residential design and strategies for energy efficiency. Prepares students to take the California H.E.R.S. Level I certification examination. [D; CSU]

**SES 201.**

**Introduction to Sustainable Energy Studies**  
3 units

**Recommended Preparation:** ARCH 165 or equivalent

**Lecture 2 hours, laboratory 4 hours**

**Offered:** Fall

Introduces Building Information Modeling (BIM), an integrated process built on coordinated information for architectural projects. Improves drawing coordination, enhances accuracy, reduces waste and enables better-informed decisions. Develops skills in the architectural field using Revit Architecture building information modeling software. ((Same as ARCH 201.) [D; CSU]

**SES 205.**

**Building Energy Analysis Using BIM**  
3 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, laboratory 4 hours**

**Offered:** Variable

Utilizes Building Information Modeling (BIM) in conjunction with energy modeling software to allow designers and developers to create more accurate building energy simulations incorporating performance, sustainability, and cost with respect to reduced environmental impact. [D; CSU]

## TELEMEDIA COURSES

**TELE 100.**

**Fundamentals of Film and Video Cameras and Recorders**  
2 units

**Grade only**

**Lecture 2 hours**

**Offered:** Fall, Spring

Fee: \$15. 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

Fee: \$15. Fundamental principles and mechanics of editing film and video with audio and graphics. Emphasis on practical application and operation of equipment. [D; CSU]

**TELE 110.**

**Writing for Film and Electronic Media**  
3 units

**Grade only**

**Prerequisite:** ENGL 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 3 hours****Offered:** Fall, Spring

Provides an overview of the basic techniques of acting on camera. Includes exercises in sense memory and effective memory, action, relaxation, and concentration. Emphasizes improvisational techniques, subjective camera monologues, auditions, and scene performance. (Same as TA 115.) [D; CSU; UC]

**TELE 131.****Introduction to Video and Film Production**

3 units

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

Fee: \$40. 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

Fee: \$40. 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 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

Introduces non-linear audio recording with an emphasis on current digital recording techniques, equipment, and practices. Focuses on the physics of sound propagation, psychoacoustics, microphones, mixers, signal processing and historical perspectives on analog audio recording, and multi-track recording and mixing. (Same as RA&T 120 and MUS 151.) [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

Fee: \$40. 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

Covers dramatic writing for television, film, and theatre. Emphasizes character development, plot, 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 4 hours**

**Offered:** Variable

Fee: \$50. Covers the 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

Fee: \$40. 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 290.**

Professional Media Work Experience I  
2–4 units

**Limitation on Enrollment:** Declared Telemedia major  
**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Telemedia major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, laboratory 5–15 hours**

**Offered:** Variable

Provides students from any major with experience in the media industries. Applies principles and skills acquired in the major to job assignments. Includes weekly class activities, one unit credit is granted for each 60 hours of volunteer or 75 hours of paid work. The supervisor and the instructor will evaluate each student's performance. (Repeatable—not to exceed four units per level.) [D; CSU]

**TELE 291.**

Professional Media Work Experience II  
2–4 units

**Prerequisite:** TELE 290 or equivalent

**Limitation on Enrollment:** Declared Telemedia major  
**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Telemedia major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, laboratory 5–15 hours**

**Offered:** Variable

Provides students from any major with experience in the media industries. Applies principles and skills acquired in the major to job assignments. Includes weekly class activities, one unit credit is granted for each 60 hours of volunteer or 75 hours of paid work. The supervisor and the instructor will evaluate each student's performance. (Repeatable—not to exceed four units per level.) [D; CSU]

**TELE 292.**

Professional Media Work Experience III  
2–4 units

**Prerequisite:** TELE 291 or equivalent

**Limitation on Enrollment:** Declared Telemedia major  
**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Telemedia major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, laboratory 5–15 hours**

**Offered:** Variable

Provides students from any major with experience in the media industries. Applies principles and skills acquired in the major to job assignments. Includes weekly class activities, one unit credit is granted for each 60 hours of volunteer or 75 hours of paid work. The supervisor and the instructor will evaluate each student's performance. (Repeatable—not to exceed four units per level.) [D; CSU]

**TELE 293.**

Professional Media Work Experience IV  
2–4 units

**Prerequisite:** TELE 292 or equivalent

**Limitation on Enrollment:** Declared Telemedia major  
**Recommended Concurrent Enrollment:** Enrollment in one other class directly related to the Telemedia major in order to apply learned theory in a practical hands-on setting through an internship class

**Lecture 1 hour, laboratory 5–15 hours**

**Offered:** Variable

Provides students from any major with experience in the media industries. Applies principles and skills acquired in the major to job assignments. Includes weekly class activities, one unit credit is granted for each 60 hours of volunteer or 75 hours of paid work. The supervisor and the instructor will evaluate each student's performance. (Repeatable—not to exceed four units per level.) [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 35.

**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 COURSES

## TA 100.

**Survey of Drama**  
3 units

**Lecture 3 hours**

**Offered:** Variable

Covers the dramatic literature and performance of Classical, Medieval, Renaissance, Restoration, Romantic, Realistic, and Modern plays from diverse cultures around the world. [D; CSU; UC]

## TA 101.

**Introduction to the Theatre**  
3 units

**Lecture 3 hours**

**Offered:** Fall, Spring

Covers the appreciation of the theatre event. Focuses on how theatre affects and is affected by human issues. Requires attendance at selected theatrical events. A non-technical course for the general student. [D; CSU; UC]

## TA 108.

**Introduction to Dramatic Scriptwriting**  
3 units

**Lecture 3 hours**

**Offered:** Variable

Covers dramatic writing for television, film, and theatre. Emphasizes character development, plot, 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 3 hours**

**Offered:** Fall, Spring

Focuses on fundamental principles of acting and the development of physical and vocal self-expression in every day communication. Emphasizes the skills necessary to create classical and contemporary character roles. [D; CSU; UC]

## TA 111.

**Elementary Acting II**  
3 units

**Prerequisite:** TA 110 or equivalent

**Lecture 2 hours, laboratory 3 hours**

**Offered:** Fall, Spring

Covers principles of acting and the development of physical and vocal self-expression in every day communication and character interpretation on an advanced level. Emphasizes classical and contemporary scene techniques in theatrical history. [D; CSU; UC]

## TA 115.

**Acting for Television and Film**  
3 units

**Lecture 2 hours, laboratory 3 hours**

**Offered:** Fall, Spring

Provides an overview of the basic techniques of acting on camera. Includes exercises in sense memory and effective memory, action, relaxation, and concentration. Emphasizes improvisational techniques, subjective camera monologues, auditions, and scene performance. (Same as TELE 115.) [D; CSU; UC]

## TA 120.

**Theatre Workshop—Performance**  
1.5–2 units

**Limitation on Enrollment:** Enrollment subject to audition conducted during the first week of class

**Laboratory 5–6 hours**

**Offered:** Fall, Spring

Covers acting skills and choreography for main stage theatre productions. Requires attendance at rehearsals and performances. (Repeatable three times.) [D; CSU; UC]

## TA 127.

**Theatre Workshop—Studio Performance**  
2 units

**Limitation on Enrollment:** Enrollment subject to audition conducted during the first week of class

**Lecture 1 hour, laboratory 3 hours**

**Offered:** Fall, Spring

Covers acting skills for studio theatre productions. Requires attendance at rehearsals and performances. (Repeatable three times.) [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. Improves the development of creative imagination, confidence, critical analysis, and integrates current and historical events into dramatic situations. (Repeatable two times.) [D; CSU]

## TA 150.

**Technical Design and Production**  
3 units

**Lecture 2 hours, laboratory 3 hours**

**Offered:** Fall, Spring

Introduction to staging including the fundamentals of set design and graphics, theory and practice of construction, painting, scene shifting, basic lighting for stage, television, and film. Practical assignments in technical and managerial phases of college productions. (Same as TELE 150.) [D; CSU; UC]

## TA 152.

**Lighting Techniques**  
3 units

**Lecture 2 hours, laboratory 3 hours**

**Offered:** Fall, Spring

Covers theory and practice of lighting techniques for stage, television, and video. Addresses fundamentals of design, equipment setup, and operation, as well as practical experience as lighting crew member of Southwestern College productions. [D; CSU; UC]

## TA 160.

**Theatre Workshop—Technical Crews I**  
1.5–2 units

**Laboratory 5–6 hours**

**Offered:** Fall, Spring

Provides training and experience in lighting, construction, painting, sound, makeup, publicity, and box office for 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

Provides advanced training and experience in lighting, construction, painting, sound, publicity, and box office for 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

Covers managing and staffing technical crews in lighting, construction, front-of-house, and running 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

Covers supervision of technical crews in building and running College productions. [D; CSU]

**TA 165.**

**Stagecraft**

3 units

Lecture 2 hours, laboratory 3 hours

**Offered:** Fall

Provides practical experience in the technical aspects of drama productions. Emphasizes tool safety, set construction and building techniques, scenery painting, box office, and running crews. Participation in SWC theatre events as a crew member or technician is required. (Formerly TA 295C.) (Repeatable three times) [D; CSU]

**TA 211.**

**Audition Techniques**

2 units

**Lecture 1 hour, laboratory 3 hours**

**Offered:** Fall

Prepares for college, community, and professional theater auditions. [D; CSU]

**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 35.

**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 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. [D]

**T&T 138.**

**Tourism and Travel Agency Operations**

3 units

**Recommended Preparation:** BUS 210 or equivalent

**Lecture 3 hours**

**Offered:** Variable

Introduces students to the extensive world of travel. Includes the concept of travel agency operations as it relates to the tourism industry. Emphasizes the role of the travel agent, travel and tourism standards, and career opportunities. [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

**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 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. (Repeatable—not to exceed four units per level.) [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. (Repeatable—not to exceed four units per level.) [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. (Repeatable—not to exceed four units per level.) [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. (Repeatable—not to exceed four units per level.) [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 35.

**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]

# Noncredit Certificates and Courses

## School of Continuing Education, Economic, and Workforce Development

**Dean**, Mink Stavenga, D.B.A., Office 661F, 619-482-6375

**Director** Steve Tadlock, M.S.

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).

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.

### Southwestern College Continuing Education

900 Otay Lakes Road, Building 660

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, any registration fees collected will be refunded.

**MATERIAL FEE:** A material fee is required in a few noncredit classes. Cash, check, and credit card payments are accepted.

**CLASS DATE OR LOCATION CHANGE:** Class dates or locations may be subject to change. Students will be notified of any date or location changes prior to the class either by mail or by phone.



## CERTIFICATES OF COMPLETION

### Entry Level ESL

Completion of the three sequenced ESL noncredit courses will give students the skills necessary to be ready for more advanced ESL training, entry into career technical certificate programs, or immediate entry-level English skills for employment.

NC 108	Introduction to Academic ESL I
NC 109	Introduction to Academic ESL II
NC 110	Introduction to Academic ESL III

### Marine Safety Service—Basic

Prepares students for entry-level jobs such as pool lifeguards and also provides preparation toward employment in open water rescue and aquatic park positions.

NC 15	First Aid for Public Safety Personnel—Title 22
NC 70	Lifeguard Training
NC 106	Ocean Lifeguarding for Recreation Assistants
NC 1007	CPR for the Professional Rescuer
NC 1010	Automated External Defibrillation (AED)
NC 1014	Oxygen Administration for the Professional Rescuer

### Marine Safety Service—Advanced

Provides advanced training towards employment as a lifeguard, open water, swift water rescuer, and aquatic park rescuer.

NC 1063	EMT Refresher for Marine Safety Personnel
NC 1066	Careers in Marine Safety Service
NC 1081	First Responder Swift Water Rescue Training I
NC 1082	Fire Marine Safety Service AED/ETAD
NC 1093	Fundamentals of Instructor Training for Recreation Assistants

Plus the courses required for the Marine Safety Service—Basic certificate

### Quality Home Care Provider

Home care providers play a key role in delivering critical in-home supportive services to people with physical, psychological, or emotional challenges. This sixty-hour certificate is designed to develop and enhance home care provider's skills and knowledge; provides the foundation to prepare for further training in related health careers.

NC 10	Budget and Home Energy Management
NC 33	Nutrition and Health Issues—Older Adults
NC 40	Basic First Aid and Adult CPR
NC 1050	Community Resources for Older Adults

### Recreation Assistant Intern

Prepares students for internships as a recreation assistant in an ocean, bay, lake, water park, or river environment. Covers first aid, CPR, boating safety, leadership training, and evaluation. Provides the basic knowledge necessary to obtain the internship and meet the safety requirements for working in the field.

### NC 40 Basic First Aid and Adult CPR

NC 1007	CPR for the Professional Rescuer
NC 1046	Basic Boating and Water Safety
NC 1064	Boating Safety Paddle Sports Leader Training
NC 1083	Leadership Training in Marine Aquatic Activities
NC 1085	Fundamentals of Instructional Evaluation and Training

### Recreation Assistant in a Marine Environment—Basic

Prepares students for entry-level employment as a recreation assistant in an ocean, bay, lake, water park, or river environment. Provides the basic skills necessary to secure a job, covering leadership development, marine safety, and lifeguard/CPR training.

NC 13	Team Building Training Through Sandcastle Construction for Group Leaders
NC 15	First Aid for Public Safety Personnel—Title 22
NC 70	Lifeguard Training
NC 1007	CPR for the Professional Rescuer
NC 1014	Oxygen Administration for the Professional Rescuer
NC 1046	Basic Boating and Water Safety
NC 1052	Basic Water Rescue
NC 1064	Boating Safety Paddle Sports Leader Training

### Tax Preparation

Completion of this two-course sixty-hour certification in tax preparations will make the student eligible to become a registered tax preparer in the State of California.

NC 113	Tax Preparation/Income Tax I
NC 114	Tax Preparation/Income Tax II

# 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 3. Supervised Tutoring 0 units

### Variable hours

Provides learning assistance in most academic subjects through supervised one-to-one, small group, and online tutoring by trained tutors. Includes academic support outside of class time to achieve specific course objectives, and to improve learning and study skills that assist students 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 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 10. Budget and Home Energy Management 0 units

### Lecture 5.5 hours

Designed for individuals who would like to take control of their finances, and minimize debt and maximize savings and investments. Covers financial goal setting, money management, spending plan, expense recordkeeping, identity theft, credit and credit repair, ways to earn extra income, energy management, energy conservation, meter reading, and available community resources. [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 Introduction 0 units

### Lecture 18 hours

Introduces adult students to a study of complimentary healing called Healing Touch. Focuses on energy theory, principles and practice of energy-based interventions. Includes application of techniques to a variety of situations, ranging from self-care to professional use in healthcare, wellness, stress reduction, nursing, and hospice care. [ND]

## NC 19. College Readiness 0 units

### Lecture 4 hours

Courses will provide 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 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 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 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 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 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 47.****Tutor Training: Level I**

0 units

**Lecture 36 hours**

Introduces tutors to effective tutoring strategies and the role of the peer tutor. Includes guidelines for tutoring; methods to plan, conduct, and evaluate productive tutoring sessions; awareness and application of components for effective inter-cultural tutoring; application of effective discipline learning strategies in tutoring sessions; and facilitation of student independence in learning. [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 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 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**

Provides older adult singers with an opportunity to perform in a vocal ensemble at a beginning level in which aural and score analysis of choral masterworks from classical eras to the present are analyzed, interpreted, and performed. Audition and participation in public performance required. [ND]

**NC 80.****Concert Choir**

0 units

**Lecture 18 hours, laboratory 90 hours**

Provides a choral ensemble for older adult music students with aural and score analysis of choral literature from traditional classics to the present. Emphasizes historical context, performance practice, style, and interpretation at the beginning level. 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 97.****Ageing With Grace, Power, and a Plan—A Woman's Perspective**

0 units

**Lecture 12 hours**

Designed to enhance a woman's transition beyond mid-life. Participants will map their own journey, using active exercises to build skills in making choices. [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 106.****Ocean Lifeguarding for Recreation Assistants**  
0 units**Lecture 3 hours, laboratory 5 hours**

Provides supplemental training to the student desiring to work as an ocean lifeguard or recreational assistant. Focuses on the skills and knowledge necessary to prevent and respond to emergencies in an ocean, bay, or beach environment. Emphasizes instruction on maintaining a safe aquatic environment, demonstration of manipulative skills, injury prevention, facility surveillance, patron surveillance, and ocean rescue techniques. [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 111.****Talk to me Baby**  
0 units**Lecture 16 hours**

Parents and caregivers bring your infant and enjoy playtime as you learn about your baby's development and how to stimulate optimal growth. You will learn about infant message, infant sign language, understanding your infants cues, nutrition and baby food recipes, great activities for you and your infant, and more. [ND]

**NC 113.****Tax Preparation/Income Tax I**  
0 units**Lecture 30 hours**

Introduces Part I of a 60-hour program that teaches students how to prepare their own state and federal income tax returns and introduces them to the career field of a registered tax preparer in the State of California. Successful completion of Part I and Part II enables a student to receive a certificate of completion. [ND]

**NC 114.****Tax Preparation/Income Tax II**  
0 units**Lecture 30 hours**

Introduces Part II of a comprehensive 60-hour program that covers everything students need to know to prepare correct tax returns. Emphasizes how a student will learn a marketable skill that will enable him/her to prepare taxes for other people and earn extra income. Successful completion enables the student to receive a certificate of completion that will make them eligible to become a registered tax preparer in the State of California. [ND]

**NC 118.****Preparation for Academic Student Success (PASS)**  
0 units**Lecture 24 hours**

Provides a preparatory course for academic skills testing programs such as TEAS (Test of Essential Academic Skills). Emphasizes reading, English comprehension, mathematics, basic science, and technical reasoning. Intended to improve the student's ability to be successful with standardized testing of basic academic skills. [ND]

**NC 119.****Hospitality Workplace Communication I**  
0 units**Lecture 30 hours**

Provides English as a second language for beginning and intermediate students in the hospitality industry to improve communication skills. Emphasizes communication with guests and customers, supervisors, co-workers, and other employees. Improves listening, speaking, grammar, vocabulary, and non-verbal communication skills. [ND]

**NC 120.****Hospitality Workplace Communication II**  
0 units**Lecture 30 hours**

Provides English as a second language to intermediate and advanced students in the hospitality industry to help improve communication skills. Emphasizes advanced listening, speaking, reading and writing skills to communicate with guests, customers, supervisors, co-workers, and other employees. [ND]

**NC 121.****Hospitality Workplace Health and Safety I**  
0 units**Lecture 30 hours**

Provides English as a second language for beginning and intermediate students in the hospitality industry. Emphasizes the fundamentals of health and safety. Improves listening, speaking, grammar, vocabulary, and non-verbal communication skills. [ND]

**NC 122.****Hospitality Workplace Health and Safety II**  
0 units**Lecture 30 hours**

Provides English as a second language for intermediate and advanced students in the hospitality industry. Emphasizes the fundamentals of health and safety. Improves listening, speaking, reading, writing, grammar, vocabulary, and non-verbal communication skills. [ND]

**NC 123.****Hospitality Workplace Culture I**  
0 units**Lecture 30 hours**

Provides English as a second language for beginning and intermediate students in the hospitality industry. Emphasizes the fundamentals of thriving in the workplace. Designed to improve listening, speaking, grammar, vocabulary, and non-verbal communication skills. [ND]

**NC 124.****Hospitality Workplace Culture II**  
0 units**Lecture 30 hours**

Provides English as a second language for intermediate and advanced students in the hospitality industry. Emphasizes the fundamentals of thriving in the workplace. Improves listening, speaking, reading, writing, grammar, vocabulary, and non-verbal communication skills. [ND]

- NC 125.**  
**Healthcare: Workplace Communication I**  
0 units
- 
- Lecture 30 hours**  
Provides beginning and intermediate English as a second language for students in the healthcare industry. Emphasizes communication skills with guests, patients, supervisors, co-workers, and other employees. [ND]
- NC 126.**  
**Healthcare: Workplace Communication II**  
0 units
- 
- Lecture 30 hours**  
Provides intermediate and advanced English as a second language for students in the healthcare industry. Emphasizes communication with guests, patients, supervisors, co-workers, and other employees. [ND]
- NC 127.**  
**Healthcare: Health and Safety I**  
0 units
- 
- Lecture 30 hours**  
Provides beginning and intermediate English as a second language for students in the healthcare industry. Enhances the understanding of health and safety procedures and policies in the healthcare workplace. [ND]
- NC 128.**  
**Healthcare: Health and Safety II**  
0 units
- 
- Lecture 30 hours**  
Provides intermediate and advanced English as a second language for students in the healthcare industry. Enhances the understanding of health and safety procedures and policies in the healthcare workplace. [ND]
- NC 129.**  
**Healthcare: Workplace Culture I**  
0 units
- 
- Lecture 30 hours**  
Provides beginning and intermediate English as a second language for students in the healthcare industry. Enhances communication skills to survive and thrive in the healthcare workplace environment. [ND]
- NC 130.**  
**Healthcare: Workplace Culture II**  
0 units
- 
- Lecture 30 hours**  
Provides intermediate and advanced English as a second language for students in the healthcare industry. Enhances communication skills to survive and thrive in the healthcare workplace environment. [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 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 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 and their 4 to 12-month old infants. Bring your baby 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. (Formerly NC 297Y.) [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 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. [ND]

**NC 1030.****Beans, Bread, and Rice on the Plate**  
0 units**Lecture 5 hours**

The twenty-first 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 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 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 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 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 1084.****Calligraphy for Older Adults**  
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 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 for Recreation Assistants**  
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 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. 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 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 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 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 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 3036.**

**Introduction to Word Processing—MOUS 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 3072.**

**Plant and Horticultural Science**  
0 units

**Lecture 54 hours, laboratory 54 hours**

Emphasizes the study of plant structures, functions, taxonomy, and plant-soil-climate relationships, and the importance of plants for food, air, and ornamental purposes. Includes management of plants in greenhouses and nursery structures and in the landscape. [ND]

**NC 3073.**

**Landscape Construction: Concrete and Masonry Skills**  
0 units

**Lecture 6 hours, laboratory 36 hours**

Introduces concrete and masonry skills required in the landscape construction industry. Emphasizes the characteristics and uses of cement, concrete, and masonry products. Provides hands-on building of sidewalks, patios, foundations, masonry walls, masonry facing products, and the importance of proper drainage. [ND]

**NC 3074.****Landscape Construction: Fence, Deck, and Lumber Skills**

0 units

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**Lecture 6 hours, laboratory 36 hours**

Provides construction skills related to lumber projects. Emphasizes the characteristics and uses of wood, wood substitutes, and wood fasteners. Includes hands-on building projects such as fences, decks, overhead shade structures, benches and planters. [ND]

**NC 3075.****Landscape Construction: Sprinkler Installation**

0 units

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**Lecture 6 hours, laboratory 36 hours**

Provides sprinkler system installation skills required in the landscape construction industry. Includes proper methods of installing sprinklers, pipes, fittings, valves, wiring, backflow prevention devices, and controllers for residential and commercial systems. [ND]

# ADMINISTRATORS, CLASSIFIED MANAGERS, AND SUPERVISORS

**Cecilia Almaraz**

Supervisor, Office Support Services  
A.A., Southwestern College

**Teresa Alvarez**

Supervisor, Admissions and Records  
A.A., Southwestern College

**Raga Bakheit**

Director of Mathematics, Engineering and Science  
Achievement (M.E.S.A) Program  
B.A., Al-Fatfeh University  
M.S., Ph.D., University of Illinois at Urbana-  
Champaign

**Zeidy Barrera**

Operations Supervisor, Counseling Center

**Patricia Bartow**

Director, Child Development Center  
B.A., National University  
M.Ed., National University

**John R. Brown, P.E.**

Director of Facilities, Operations, and Planning  
B.S., Union College  
M.S.E., University of Washington

**Michael Cash**

Chief of Police

**Victor Castillo**

Director, Small Business Development and  
International Trade Center  
B.S., Autonomous University of Baja California  
M.A., University of California, Los Angeles

**James Davis**

Director, Police Academy  
B.S., San Diego Christian College

**Brian Ebaló**

Instructional Support Services Supervisor  
B.S., San Diego State University  
M.A., National University

**Joseph Figuera**

Director of Food Services/Contracts Food Programs  
Projects  
A.S., New York City College  
B.M., B.S., University of Phoenix

**Rachel Fischer**

Deputy Director, San Diego Contracting  
Opportunities Center (SDCOC)  
B.A., Ohio University  
B.A., Youngstown State University  
M.Ed., Seattle University

**Malia Flood**

Director, Disability Support Services  
B.A., San Diego State University  
M.S., Ph.D., Syracuse University

**Alaine Guintu**

Supervisor, Cashier's Office  
B.S., Republic Central Colleges, Philippines

**Linda Hensley**

Director, Institutional Research, Planning & Grants  
A.A., Chabot College  
B.A., California State University, Stanislaus  
M.A., California State University, Fullerton

**Priya Jerome**

Director of Purchasing, Contracting and Central  
Services  
B.A., St. Joseph's College, Bangalore, India  
MBA, Queensland University of Technology,  
Brisbane, Australia

**Vickie Kimbrough-Walls**

Director, Dental Hygiene Program  
A.A., Cerritos College  
B.S., California State University, Berkeley  
MBA, University of Phoenix

**Patricia Larkin**

Director, Financial Aid  
A.A., Southwestern College

**Frederick (Gus) Latham**

Supervisor, Maintenance

**Lillian Leopold**

Chief Public Information & Government  
Relations Officer  
B.A., Marquette University

**Catherine McLannet**

Director, Nursing and Health Occupations  
B.S.N., University of Ottawa  
M.N. University of Phoenix

**Patrice Milkovich**

Director, Crown Cove Aquatic Center  
B.S., Slippery Rock University of Pennsylvania  
M.S., Slippery Rock University of Pennsylvania

**Cynthia Nagura**

Director, Family Resource Center & Microenterprise  
Family Childcare Program  
B.A., University of Redlands  
M.A., School of International Training

**Heidi Newhouse**

Center Operations Supervisor, HEC National City  
A.A., Foothill College  
B.S., University of Phoenix

**Paul Norris**

Supervisor, Computer Operations  
A.S., A.S., Southwestern College

**Luis Nuñez**

Director of Medical Laboratory Technician Program  
B.S., Norfolk State University  
M.A., San Diego State University

**Omar Orihuela**

EOPS Supervisor  
A.A., Southwestern College  
AB.S. Azusa Pacific University

**Sally Randolph**

Center Operations Supervisor, HEC San Ysidro  
B.S., Oklahoma State University  
M.S., Oklahoma State University

**Arlie Ricasa**

Director, EOPS  
B.A., University of California, Los Angeles  
M.S., San Diego State University

**Nelson Riley**

Supervisor, Student Employment Services  
A.S., University of New York, Regents College  
B.S., Southern Illinois University

**Ramsey Romero**

Supervisor, Custodial

**Robert Sanchez**

Campus Police Sergeant II  
B.A., San Diego State University

**J. Gunnar Schalin**

Program Director, San Diego Contracting  
Opportunities Center (SDCOC)  
B.S., University of Illinois  
M.S., San Diego State University

**Ben Seaberry**

Director of Information Technology  
B.S., University of Oregon, Eugene  
M.A., California State University, Los Angeles  
Ed.D., University of California, Davis

**Lourdes Sevilla**

Center Operations Supervisor, HEC Otay Mesa  
A.A., Southwestern College  
B.S., California State University, San Marcos

**Aaron Starck**

Director, Student Development/Health Services  
B.S., University of Northern Colorado  
M.S., M.S.M., Purdue University  
M.S., Xavier University of Louisiana

**Stephen Tadlock**

Director, Continuing Education and Special  
Projects  
A.A., San Diego Evening College  
B.A., M.S., San Diego State University

**Patricia C. Torres**

Library Support Services Supervisor  
B.A. University of California, San Diego  
M.L.S., Texas Woman's University

**Debbie Trujillo**

Regional Director, San Diego & Imperial SBDC  
Network  
B.S., San Diego State University

**Jackie Watts**

Food Service Operations Supervisor

**Robert Womack**

Supervisor, Grounds Maintenance

**Wayne Yanda**

Director of Finance  
B.S., University of Wisconsin-Oshkosh  
MBA, National University, San Diego

# FACULTY

## Maria Abuan

*Counselor*  
A.A., Southwestern College  
B.A., University of California, San Diego  
M.S., San Diego State University

## Duro Agbede

*Exercise Science, Health*  
B.S., M.S., Ed.S., Jackson State University  
Ph.D., University of Southern Mississippi

## Alma Aguilar

*Political Science*  
A.A., Southwestern College  
B.A., M.A., University of San Diego

## Esther Alonso

*Spanish*  
B.A., M.A., San Diego State University

## Deana Alonso-Post

*Spanish*  
A.A., Southwestern College  
B.A., M.A., San Diego State University  
M.A., California State University, Los Angeles

## Clarence Amaral

*Mental Health Counselor*  
M.S., San Diego State University  
Ph.D., University of Humanistic Studies

## Oswaldo Amezcua

*Counselor*  
B.A., San Diego State University  
M.A., University of San Diego

## Margarita Andrade-Robledo

*Spanish*  
B.A., M.A., San Diego State University

## Dean Aragozo

*Counselor, Higher Education Center at National City*  
B.A., M.S., San Diego State University

## Jonathan Atwater

*Biology*  
B.A., University of California, Santa Barbara  
Ph.D., University of California, Santa Barbara

## Diana Avila

*Counselor*  
B.A., University of California, Santa Barbara  
M.A., San Diego State University

## Paul Azevedo

*Administration of Justice*  
A.A., San Joaquin Delta Community College  
B.S., San Diego State University  
J.D., University of San Diego School of Law

## Nouna Bakhiet

*Biology, Biotechnology*  
B.S., M.S., Ph.D., University of Iowa

## Fredric Ball

*Reading/Basic Education*  
B.A., California State University, San Marcos  
M.A., San Diego State University

## Lisa Ballesteros

*Sociology*  
B.A., University of California, San Diego  
M.A., Stanford University

## Felipe Ballon

*Counselor, Higher Education Center at Otay Mesa*  
B.A., M.A., San Diego State University

## Joyce Bayles

*English Composition*  
B.S., M.A., San Diego State University

## John Randy Beach

*Academic Senate President, English Composition/Education*  
B.A., University of South Carolina  
B.A., College of Charleston  
B.A., M.A., University of Charleston

## Clark Binley

*Paramedic/EMT*  
B.S., Loma Linda University

## Maya Bloch

*Counselor*  
B.S., University of Arizona  
M.S., San Diego State University

## Peter Bolland

*Philosophy, Humanities*  
B.A., University of California, Santa Barbara  
M.A., University of California, San Diego

## David Brady

*Biology*  
B.S., M.S., University of Cincinnati

## Max Branscomb

*Journalism*  
B.A., M.S., San Diego State University

## Susan Brenner

*Reading*  
B.A., M.A., San Diego State University

## Erin Browder

*Anthropology*  
B.A., M.A., Ph.D., University of California, Berkeley

## David Brown

*Chemistry*  
B.A., Southern Illinois University, Edwardsville  
Ph.D., University of Illinois at Urbana-Champaign

## Michael Buckley

*Theatre Arts/Technical Director*  
B.A. University of California, Los Angeles  
M.F.A. University of California, Los Angeles

## Lukas Buehler

*Biology*  
Diploma, Ph.D., University of Basel, Switzerland

## Veronica Burton

*Articulation Officer*  
B.S., Jersey City State College  
M.S., San Diego State University

## Francisco Bustos, Jr.

*English Composition*  
B.A., San Diego State University  
M.F.A., San Diego State University

## Cecilia Cabico

*Counselor*  
B.A., University of California, San Diego  
M.S., San Diego State University

## Concetta Calandra

*Spanish*  
B.A., Hunter College of the City University of New York  
M.A., San Diego State University

## Edward Carberry

*Health/Exercise Science/Athletics*  
A.A., Cerritos College  
B.A., University of San Diego  
M.A., Azusa Pacific University

## Martha Carey

*Mathematics*  
B.A., M.A., Rice University  
M.S., University of Houston

## Todd Caschetta

*Music—Historian, Ethnomusicologist/Performance*  
B.S., Towson State University  
M.A., University of California, Santa Barbara  
M.M., Ithaca College

## Norma Cázares

*Counselor*  
B.A., M.S., San Diego State University

## Victor Manuel Chávez

*History, Mexican-American Studies*  
B.A., University of California, San Diego  
M.A., University of California, Riverside  
Postgraduate Studies, California Western School of Law

## Nira Clark

*Biology*  
A.A., Chaffey Community College  
B.A., M.A., California State University, Fullerton

## Karen Cliffe

*Mathematics*  
B.A., M.A., San Diego State University

## Maria Constein

*Disability Support Services/Learning Disabilities Specialist*  
B.A., M.S., San Diego State University

## Sandra Corona

*Child Development*  
B.S., Instituto Tecnológico de Estudios Superiores de Occidente (ITESO)  
M.Ed., National University  
Ph.D., Universidad Iberoamericana

## John D. Cosentino

*Exercise Science*  
B.S., San Diego State University  
M.A., Azusa Pacific University  
M.A., University of San Francisco

**Ed Cosio***Counselor*

A.A., Southwestern College  
 B.A., University of California, Santa Barbara  
 M.Ed., University of San Diego

**Peggy Crane***Economics*

B.A., University of California, San Diego  
 M.S., Texas A and M University

**Karen Day Cravens***Health, Exercise Science*

A.A., Southwestern College  
 B.A., San Diego State University  
 M.A., Azusa Pacific University

**Gary Creason***Administration of Justice*

A.S., Southwestern College

**Grace Cruz***Campus Nurse*

A.D.N., San Diego City College  
 B.S.N., M.S.N., University of Phoenix

**Rosemarie Cruz***Nursing, Vocational Nursing*

A.D.N., Southwestern College  
 B.S.N., San Diego State University  
 M.S.N., University of Phoenix

**Alexandria Davidson***Economics*

B.A., M.A., University of Southern California

**John J. Davis***Computer Information Systems*

B.A., University of California, San Diego

**Vernell Dunkley***Surgical Technology*

A.S., Southwestern College

**Melanie Durkin***Exercise Science*

A.A., Grossmont College  
 B.A., University of California, Santa Barbara  
 M.A., San Diego State University

**Diane Edwards-LiPera***Counselor*

B.A., San Diego State University  
 M.A., University of California, Santa Barbara

**Faustino Escalera***Sociology*

B.A., San Diego State University  
 M.A., Ph.D., United States International University

**Heather Eudy***English Composition*

B.A., San Francisco State University  
 M.F.A., San Diego State University

**Sylvia Felan-Gonzales***Counselor*

B.S., California State University, Fullerton  
 M.S., San Diego State University

**Zaydie Feria-Bataller***Associate Degree Nursing*

A.A., B.S., Mount Saint Mary's College  
 M.S.N., University of Phoenix

**Richard Fielding***Mathematics*

B.S., University of California, Davis  
 M.S., California State University, Hayward

**Dagmar Fields***English*

B.A., Our Lady of Holy Cross College  
 M.A., University of New Orleans

**Surian Figueroa***Romance Languages/ESL*

B.A., University of California, San Diego  
 M.A., University of California, Los Angeles

**Scott Finn***Counselor*

B.A., University of California, Santa Barbara  
 M.A., Loyola Marymount University

**Patricia Flores-Charter***Learning Disabilities Specialist*

A.A., College of the Sequoias  
 B.A., University of the Pacific  
 M.A., California State University, Los Angeles

**Leslynn Gallo***Child Development*

B.A., Whittier College  
 M.A., Boise State University  
 Ph.D., University of New México

**Laura Galvan-Estrada***Librarian*

B.A., University of California, San Diego  
 M.L.I.S., University of California, Berkeley

**Sylvia Garcia-Navarrete***Reading*

B.A., San Diego State University  
 M.A., National University

**Adriana Garibay***EOPS Counselor*

A.A., Cuyamaca College  
 B.A., M.A., San Diego State University

**Nicole Goedhart***Counselor*

A.A., College of Boca Raton, Florida  
 B.A., Stanford University  
 M.S., California State University, Los Angeles

**Valentina Goldberg***Mathematics*

B.A., M.A., University of California, San Diego

**Valerie Goodwin***Health, Exercise Science*

B.S., Wayland Baptist University  
 M.Ed., Stephen F. Austin State University

**Shannon Gracey***Mathematics*

B.A., M.S., San Diego State University

**Julie Grimes***Computer Science*

B.S., M.S., Chapman University  
 M.S., National University

**Dinorah Guadiana-Costa***Spanish*

B.A., M.A., San Diego State University

**Veronica Guaracha***Counselor*

B.S., University of California, Irvine  
 M.S., National University

**Diane Gustafson***Librarian*

B.A., University of Pittsburgh  
 M.L.S., Rutgers University

**Jennifer Harper***Exercise Science*

B.A., University of California, San Diego  
 M.A., Azusa Pacific University

**Christopher Hayashi***Psychology*

B.A., UC Berkeley  
 M.A., Ph.D., San Diego State University

**David Hecht***Chemistry*

B.S., Rutgers University  
 M.S. University of California, Berkeley  
 Ph.D., The Scripps Research Institute

**Elisa Hedrick***English*

B.A., M.A., San Diego State University

**James Henry***Recording Arts and Technology/Commercial Music*

A.A., Cabrillo College  
 B.A., San Francisco State University

**Peter E. Herrera***Mathematics*

B.A., M.A., San Diego State University

**Mary Holmes***Child Development*

A.A., Long Beach Community College  
 B.S., Grand Valley State College  
 M.A., San Diego State University

**Bill Homyak***Landscape and Nursery Technology*

B.S., M.S., California State University, Fresno

**Kesa Hopkins***Dental Hygiene*

B.S., University of Maryland  
 M.S., Medical University of South Carolina

**William Horlor***History, Humanities, Mexican-American Studies*

B.A., M.A., San Diego State University

**Mary Jo Horvath***Dance*

B.A., M.F.A., University of California, Irvine

**Charles Hoyt***Biology*

B.S., San Diego State University  
 M.S., University of California, Riverside

**Jose Ibarra***Automotive Technology*

A.A., Southwestern College

**Stanley James***History, African-American Studies*

B.A., M.A., University of California, San Diego

**Maria Jelaca-Tavakoli***Anthropology*

B.A. University of California, San Diego

M.Sc. Bournemouth University, UK

Ph.D. University of Reading, UK

**Linda Jones***Biology*

B.S., California Polytechnic State University

M.P.H., University of California, Berkeley

D.C., Life Chiropractic College West

**Alexander Juden***Mathematics*

A.S., John A. Logan College

B.S., Illinois Institute of Technology

M.S., Southern Illinois University, Carbondale

**Walter Justice***Exercise Science*

B.A., San Diego State University

M.A., Azusa Pacific University

**Diana Kelly***Staff Development Coordinator*

A.A., Fullerton College

B.A., California State University, Fullerton

M.A., Ph.D., Claremont Graduate University

**Tinh-Alfredo Khuong***Chemistry*

B.S., University of California, San Diego

M.S., Ph.D., University of California, Los Angeles

**Carla Kirkwood***International Studies*

B.A., San Diego State University

M.F.A., The University of Leeds, England

Ph.D., University of California at San Diego

**Janet Koontz***Psychology*

A.A., Fullerton College

B.A., California State University, Fullerton

M.A., National University, San Diego

Ph.D., Northcentral University, Arizona

**Courtney Leckey***English as a Second Language*

B.A., Macalester College

M.A., City University of New York at Hunter

College

**Hok Lee***Physics*

M.Phys., University of Oxford

Ph.D., California Institute of Technology

**Caree Lesh***Counselor*

A.A., Grossmont College, San Diego

B.A., San Diego State University

M.S., Texas A and M University

**John Lewis***Art (Ceramics)*

M.F.A., University of North Texas

B.F.A., Wisconsin University

**Robert Lingvall***Computer Information Systems*

B.A., Harpur College

M.S., State University of New York

M.S., Long Island University

**Romina Lingvall***Mathematics*

B.S., Polytechnic of Central London

M.A., Pan American University

**Mary Livingston***Nursing*

A.D.N., Arkansas State University

B.S.N., Wichita State University

M.S.N., University of Texas

**Kathleen Lopez***Computer Information Systems, Certified**Multimedia Developer*

A.A., Southwestern College

A.B., M.A., San Diego State University

**Philip Lopez***English*

B.A., University of Southern California

M.A., San Diego State University

**Victoria López***Paralegal Studies*

B.A., San Jose State University

M.J., University of California, Los Angeles

J.D., Thomas Jefferson School of Law

**Yvonne Lucas***Business*

B.S., San Diego State University

M.B.A., California State University,

Dominguez Hills

**Thomas Luibel***Computer Information Systems*

B.S., San Diego State University

**Linda Lukacs***Dental Hygiene*

B.S.N., Cleveland State University

D.D.S., New York University

**Eric Maag***Communication*

B.A., M.A., California State University, Long

Beach

**Alison MacArthur***English as a Second Language*

B.A., Union College

M.A., San Diego State University

**Andrew MacNeill***English as a Second Language*

B.A., California State University, Chico

M.A., School for International Training

**Noreen Maddox***English*

B.A., San Diego State University

M.A., San Diego State University

**Maria E. Martinez***Office Information Systems*

B.B.A., M.B.A., Florida International University

**Dana Maue***Dance*

B.A., State University of New York at Brockport

M.A., American University

**Janet Mazzarella***Mathematics*

A.A., Southwestern College

B.A., M.A., San Diego State University

M.Ed., Azusa Pacific University

**Danielle McAneney***Psychology*

A.A., Santa Barbara City College

B.A., University of Santa Barbara

M.A., California State University, Los Angeles

**Cynthia McDaniel***English Composition*

B.A., M.A., San Diego State University

Ed.D., University of San Diego and San Diego State University

**Linda McDonald***Associate Degree Nursing*

A.S., Imperial Valley College

B.A., San Diego State University

M.S., California State University, Dominguez Hills

**Anthony McGee***Librarian*

A.A., San Diego City College

B.S., San Diego State University

M.L.S., San Jose State University

**Glenda McGee***English*

B.A., M.A., University of California, Los Angeles

M.B.A., San Diego State University

**Cynthia McGregor***Music*

B.M., Oberlin College

M.M., Ph.D., Northwestern University

**Andrew Medin***Mathematics*

A.S., A.A., San Diego Community College

B.A., M.A., San Diego State University

**Michael Meehan***Exercise Science*

A.A., Southwestern College

B.A., California State University, Northridge

M.Ed., Azusa Pacific University

**Grant J. Miller***Astronomy*

B.S., University of Illinois at Urbana-Champaign

M.S., San Diego State University

**Jordan Mills***Communication*

B.A., M.S., San Diego State University

**Gregory C. Mohler***Computer Information Systems*

B.A., San Diego State University

M.A., University of California, Berkeley

M.A., Pepperdine University

**Dionicio Monarrez Jr.***Health, Exercise Science*

B.S., University of Nebraska

M.Ed., Azusa Pacific University

**Dan Moody**

*English, English as a Second Language, Reading*  
 B.A., San Diego State University  
 M.A., University of Arizona

**Myriam S. Moody**

*Mathematics*  
 B.A., M.A., California State University, Fullerton

**Yasmin Mossadeghi**

*Exercise Science*  
 B.S. M.S., California State University, Fullerton

**Patrick Mowrey**

*Nursing*  
 B.S.N., University of Phoenix  
 M.S.N., Regis University

**Thomas Murray**

*Psychology*  
 B.A., University of California, San Diego  
 M.A., San Diego State University  
 Ph.D., University of Missouri

**Sylvia Nadalet**

*Mathematics*

**Norris S. Nagao**

*Sociology, Political Science, History*  
 A.A., Sacramento City College  
 A.B., University of California, Berkeley  
 M.A., Certificate of the East Asian Institute,  
 Columbia University  
 Ed.M., M.A., Teachers College, Columbia  
 University

**Jeffrey Nevin**

*Music*  
 B.M., University of Illinois, Urbana-Champaign  
 M.M., Arizona State University  
 Ph.D., University of California, San Diego

**Nicholas Nguyen**

*Counselor*  
 B.S.W., M.S.W., San Diego State University

**Carmen Nieves-Cárdenas**

*Reading*  
 B.S., City University of New York, John Jay  
 M.S., University of Pennsylvania

**Cheryl Norton**

*Reading, English as a Second Language*  
 B.A., University of California, Santa Barbara  
 M.A., San Diego State University  
 M.A., San Diego State University

**Jamie O'Connor-Florez**

*Nursing*  
 A.S., Russell Sage Junior College

**Maria Olivas**

*Mathematics*  
 A.A., Southwestern College  
 B.A., M.A., San Diego State University

**Alejandro Orozco**

*Philosophy, Humanities*  
 B.A., M.A., Dominican School of Philosophy  
 and Theology, Berkeley

**Luis Osuna**

*OIS Medical Assistant Administrative & Clinical  
 (Bilingual)*  
 D.M., National Autonomous University of Mexico

**Frank Paiano**

*Business*  
 B.A., West Chester University  
 M.B.A., National University

**Kathy Parrish**

*English*  
 B.A., M.A., San Diego State University

**Jorge Pastrana**

*Music*  
 B.M., Conservatory of Music, Puerto Rico  
 M.M., New England Conservatory  
 D.M.A., University of Arizona

**Gabriella Penalzo**

*Nursing*  
 B.S.N., M.S.N.(c), San Diego State University

**Valerie Pennington**

*Biology*  
 B.A., University of California, Santa Cruz  
 M.S., University of Hawaii at Manoa

**Mark Pentilescu**

*Theatre Arts*  
 B.A., University of Southern Maine  
 M.A., Northwestern University

**Sandra Peppard**

*Nursing*  
 B.S.N., Texas Woman's University  
 M.S.N., University of San Diego

**Jorge Perez**

*English as a Second Language*  
 B.A., University of California, San Diego  
 M.A., University of California, Los Angeles

**John Pickelle**

*Photography (Digital Imaging)*  
 M.F.A., San Jose State University

**Brad Platt**

*Exercise Science*  
 B.S., San Diego State University  
 M.S., Azusa Pacific University

**Harriett Pollock**

*English*  
 B.A., University of New Orleans  
 M.A., University of Texas

**Nora Portillo**

*French*  
 B.A. M.A., M.A., San Diego State University

**Franklin Post**

*Counselor; Personal Development, Computer  
 Information Systems, Speech (Adapted)*  
 B.A., University of Alaska, Anchorage  
 M.S., San Diego State University

**Teresa Poulos**

*Dental Hygiene*  
 B.A., M.Ed., University of Washington

**David Preciado**

*Automotive Technology*  
 A.A., West Hills College

**Henry Quan**

*Philosophy*  
 A.A., City College of San Francisco  
 B.A., M.A., San Francisco State University

**Nghiep Quan**

*Mathematics*  
 B.A., University of California, San Diego  
 M.A.T.S., San Diego State University

**David Quattrocchi**

*Art*  
 A.A., Southwestern College  
 B.A., M.A., San Diego State University  
 M.S.W., San Diego State University

**Arlin Ramira**

*Nursing*  
 B.S.N., Riverside College, Philippines  
 M.N., University of Phoenix

**David Ramírez**

*Counselor*  
 B.A., California State University, Los Angeles  
 M.S., San Diego State University

**Miriam Rasky**

*Mathematics*  
 B.S., University of California, Berkeley  
 M.A., San Diego State University

**Andrew Rempt**

*English*  
 B.A., M.A., University of California, Riverside

**Marisol Rendon-Ober**

*Art*  
 M.F.A., Claremont Graduate University

**John Rieder**

*English Composition*  
 B.A., University of California, San Diego  
 M.A., University of Illinois at Urbana-Champaign

**Lina Rocha**

*Psychology*  
 A.A., Imperial Valley College  
 B.A., M.S., San Diego State University

**Angela Rock**

*Exercise Science/Health  
 Head Women's Volleyball Coach*  
 B.A., San Diego State University  
 M.S., Azusa Pacific University  
 M.S., National University

**Thomas Rogo**

*Architecture*  
 A.B., M.S., San Diego State University  
 M.Arch., California State Polytechnic University,  
 Pomona

**Kevin Roof**

*Fire Science*  
 B.A., University of Arizona

**Teresa Russell**

*Music*  
 B.M., Lawrence University  
 M.M., University of Wisconsin, Madison  
 D.M.A., University of Miami

**Teresa M. Russell**

*Nursing*  
 RN, M.S.N., NP, San Diego State University

**Laura Ryan***History*

A.A., College of the Canyon  
 B.A., California State University, Northridge  
 M.A., San Diego State University

**Phil Saenz***Political Science*

B.A., University of San Diego  
 J.D., University of California, Los Angeles

**Sherilyn Salahuddin***Personal Development*

A.A., Hartnell College  
 B.A., University of the Pacific  
 M.Ed., San Francisco State University

**Mark Samuels***Assessment Specialist/Counselor*

B.A., M.S., San Diego State University

**Eliana Santana-Williamson***English as a Second Language*

B.A., Universidade Federal do Pará  
 M.A., School for International Training  
 Ed.D., Alliant International University

**Samone Sayasen***EOPS Counselor*

B.S., University of California, Santa Barbara  
 M.S., San Diego State University

**Carl Scarbnick***Mathematics*

B.A., University of Michigan, Ann Arbor  
 M.A., Ph.D., University of Wisconsin, Madison

**Tracy Schaelen***English*

B.A., University of California, Santa Barbara  
 M.A., Claremont Graduate University

**Rob Shaffer***Reading*

B.A., M.Ed., University of California, Los Angeles  
 M.A., University of California, San Diego

**Elisabeth Shapiro***Business Management*

B.A., M.A.L.D., Fletcher School of Law &  
 Diplomacy  
 J.D., Boston College

**Sharon Shapiro***Biology*

B.A., Saint Anselm College  
 D.P.M., School College of Pediatric Medicine

**Mark Sisson***Telemédia*

B.A., San Francisco State University  
 M.F.A., University of California Los Angeles

**Bruce Smith***Mathematics*

B.S., M.S., University of Toledo

**Elizabeth Smith***English as a Second Language/Reading*

B.A., Wesleyan University  
 M.S., University of Southern Maine

**William Snell***Electronics*

A.B., M.S., San Diego State University

**Marisa Soler-McElwain***Office Information Systems—Bilingual*

A.A., Southwestern College  
 B.A., Universidad Autonoma de Baja California  
 LL.M., University of San Diego

**Maria Elena Solis-Matson***Counselor, Education Center at Otay Mesa*

A.S., Southwestern College  
 B.S., M.S., San Diego State University

**Corina Soto***Counselor, Professor*

B.A., University of California, Riverside  
 M.A., San Diego State University

**Patrick Staley***Mathematics*

B.A., University of California, San Diego  
 M.S., San Diego State University

**Margery Stinson***Biological Sciences*

B.S., M.S., San Diego State University

**Gail Stockin***Business Management*

M.A., National University

**Joanne Stonecipher***Emergency Medical Technology/Paramedics*

B.S.N., M.S.N., Northern Illinois University

**Angelina E. Stuart***Spanish, English as a Second Language*

B.A., M.A., San Diego State University

**Candice Taffolla-Schreiber***Communication*

B.A., University of San Diego  
 M.A., California State University, Sacramento

**Romina Tehrani***Mathematics*

B.A., Polytechnic of Central London  
 M.A., Pan American University

**Jacquelyn Thomas***Chemistry*

B.A., United States International University  
 M.S., San Diego State University

**John Tolli***Biology*

B.S., San Diego State University  
 Ph.D., Massachusetts Institute Technology

**Mustafa Tont***Exercise Science/Head Women's Soccer Coach*

B.A., M.A., Alliant International University  
 M.Ed., Azusa Pacific

**Naomi Trapp-Davis***Librarian*

B.A., University of Oregon  
 M.L.I.S., University of Washington

**Micajah Truitt***Art Photography*

B.F.A., Texas Christian University  
 M.F.A., University Washington

**Sandra Tyahla***Nursing*

B.S.N., Pennsylvania State University  
 M.P.H., San Diego State University

**Felix Tuyay***History, Asian-American Studies*

A.A., San Diego City College  
 B.S., San Diego State University  
 M.A., Goddard University

**Ronald Ungar***Emergency Medical Technology/Paramedics*

B.A., Point Loma College  
 M.A., Azusa Pacific University

**Robert Unger***Reading*

B.A., University of California, San Diego  
 M.A., United States International University  
 J.D., National University School of Law,  
 San Diego

**Mark Van Stone***Art (Art History)*

B.A., Occidental College, Los Angeles  
 M.A., University of Texas, Austin  
 Ph.D., University of Texas, Austin

**Perry Vasquez***Art*

M.F.A., University of California, San Diego  
 A.B., Stanford University

**Vivien Vaughan***Humanities*

B.A., Montclair State College  
 M.F.A., San Diego State University

**Jeffrey Veal***Astronomy*

B.S., San Diego State University  
 Ph.D., University Of Illinois at Urbana-Champaign

**Ronald Vess***Librarian*

B.A., M.L.S., California State University, Fullerton

**Marie Vicario***Environmental Hazardous Materials  
 Technology/Health*

B.S., University of California, Davis  
 M.P.H., San Diego State University

**Claire Villalpando-Utgaard***English*

B.S., California Polytechnic State University  
 M.A., Washington State University

**Val Villegas***Mathematics*

B.A., University of California, San Diego  
 M.A., San Diego State University

**Dick Wasson***Accounting, CPA*

B.S., M.B.A., Portland State University

**Virginia Watson***Child Development*

B.A., San Francisco State University  
 M.A., California State University, Los Angeles

**Jessica Whitsett**

*English as a Second Language*  
B.A., University of California, San Diego  
M.A., San Diego State University

**Michael Wickert**

*English, Education*  
*BSI Academic Coach for Writing*  
B.A., M.F.A.

**Janelle Williams**

*Counselor*  
B.A., University of California, Santa Barbara  
M.S., San Diego State University

**Rebecca Wolniewicz**

*Communication*  
A.A., Southwestern College  
B.A., San Diego State University  
M.A., Ph.D., Southern Illinois University,  
Carbondale

**Ken Yanow**

*Geography*  
B.A., University of California, Santa Barbara  
M.S., San Diego State University

**Leslie Yoder**

*English*  
A.A., San Diego City College  
B.A., San Diego State University  
M.A., C. Phil., University of California, San Diego

**Susan Yonker**

*English Composition*  
B.A., M.A., California State University, Fresno

**Lauren Zinola**

*Engineering*  
B.S., Santa Clara University  
M.A., Stanford University

# PART TIME FACULTY

The faculty at Southwestern College includes more than 640 part time faculty members who teach on a part-time basis. They are integral to the mission of the College and serve our students and our institution well. Their professionalism and dedication are appreciated by all.

## FACULTY EMERITI

**Allan Accomando***Mathematics*

Appointed 1970–Retired 1998

**William Alexander***Communication*

Appointed 1987–Retired 2009

**Wayne Allen***Dean, Student Activities*

Appointed 1962–Retired 1977

**Irma Alvarez***Office Information Systems*

Appointed 1974–Retired 2011

**Gary Anderson***Spanish*

Appointed 1967–Retired 1999

**Jerrold Anderson***Speech*

Appointed 1967–Retired 1997

**Luther Armstrong***Engineering*

Appointed 1964–Retired 1976

**Virginia Armstrong***Family Consumer Studies*

Appointed 1971–Retired 1991

**Roger Bailey***Psychology*

Appointed 1968–Retired 2005

**Donald Baird***English*

Appointed 1965–Retired 1992

**Penelope Banks***Philosophy and Humanities*

Appointed 1990–Retired 2004 \*

**Peter Barend***Director of Admissions,  
Evening and Extension*

Appointed 1970–Retired 1981 \*

**Gladys Barrett***Child Development*

Appointed 1975–Retired 2003

**Jerry Bartow***Athletics*

Appointed 1975–Retired 2001

**Jon Bates***English*

Appointed 1990–Retired 2006\*

**Ray Benkendorf***Communication*

Appointed 1971–Retired 1999

**John Bibbo***Mathematics*

Appointed 1966–Retired 1998

**Barbara Blourock***Speech and Psychology*

Appointed 1976–Retired 1988

**Judith Bornholdt***Staff Development*

Appointed 1996–Retired 2006

**Carolyn Brady***Athletics*

Appointed 1971–Retired 2001

**Melanie Branca***Mathematics*

Appointed 1981–Retired 2009

**Diane Branman***Counseling*

Appointed 1972–Retired 2011

**Richard Brannen***Aeronautics*

Appointed 1969–Retired 1990 \*

**Corey Breininger***Architecture*

Appointed 1984–Retired 2011

**Janey Brown***Nursing*

Appointed 1973–Retired 2003

**Thomas Brun***Health*

Appointed 1968–Retired 2002

**Wesley Burnett***History*

Appointed 1965–Retired 1972

**Clarence Burton***Counseling*

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***Counseling*

Appointed 1959–Retired 1987

**Richard Chavez***Automotive Technology*

Appointed 1975–Retired 1994

**Delores Christiansen***Mathematics*

Appointed 1975–Retired 2006

**Larry Christiansen***Business*

Appointed 1970–Retired 2007

**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

**Paul Daniels***Exercise Science*

Appointed 1970–Retired 2008

**Maryellene Deason***Counseling*

Appointed 1987–Retired 1998

**Al Debaca***Business*

Appointed 1968–Retired 1997 \*

**Wadie Deddeh***Political Science*

Appointed 1962–Retired 1994

**Janet Delay***Administration of Justice*

Appointed 1975–Retired 2010

*\*Deceased*

**Lourdes De Perio**  
*Nursing*  
Appointed 1982–Retired 1998

**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

**Martha Dillon**  
*Mathematics*  
Appointed 1969–Retired 2008 \*

**Mary-Nona Dorn**  
*English*  
Appointed 1965–Retired 1983 \*

**Miriam Dornbirer**  
*Nursing*  
Appointed 1973–Retired 1996

**Felix Dugger**  
*Computer Information Systems*  
Appointed 1956–Retired 1987

**William Duncan**  
*Physical Education*  
Appointed 1965–Retired 1990

**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

**Donald Firebaugh**  
*Philosophy/Spanish*  
Appointed 1969–Retired 1999 \*

**Edwin Fix Sr.**  
*Data Processing*  
Appointed 1965–Retired 1983

**Robert Flores**  
*Exercise Science*  
Appointed 1990–Retired 2011

**William Foley**  
*Mathematics*  
Appointed 1977–Retired 2007

**Dennis Foreman**  
*History*  
Appointed 1966–Retired 1991

**Robin Franck**  
*Social Sciences & Humanities*  
Appointed 1971–Retired 2007

**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

**Rosalinda Gonzalez**  
*Mexican-American Studies*  
Appointed 1990–Retired 2011

**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

**Greg Hazlett**  
*Computer Information Systems*  
Appointed 1981–Retired 2011

**James Heinrich**  
*Math and Chemistry*  
Appointed 1970–Retired 1992 \*

**Dale Henderson**  
*History*  
Appointed 1956–Retired 1990

**Tony Hernandez**  
*Counseling*  
Appointed 1970–Retired 2001

**Pamela C. Hill**  
*Vocational Nursing*  
Appointed 1981–Retired 1996

**Rosanne Holliday**  
*Child Development*  
Appointed 1971–Retired 1998

**Irene Hollman**  
*Mathematics*  
Appointed 1984–Retired 2011

**Wilma M. Howard**  
*English*  
Appointed 1951–Retired 1982 \*

**Marilynne Hudgens**  
*Business*  
Appointed 1984–Retired 2007

**Regina Hunter**  
*Business*  
Appointed 1980–Retired 2007

**Hugh Hyde**  
*English*  
Appointed 1968–Retired 1991

**Anna Ingalls**  
*English, ESL*  
Appointed 1966–Retired 2005

**James Jimenez**  
*Counseling*  
Appointed 1972–Retired 2011

**Cheryl Johnson**  
*Reading*  
Appointed 1998–Retired 2011

**Gloria Johnson**  
*Exercise Science/Health*  
Appointed 1970–Retired 2011

**Willard E. Johnston**  
*Sociology and Social Psychology*  
Appointed 1965–Retired 1984 \*

**Vern Jorgensen**  
*Accounting/Computer Information  
Systems*  
Appointed 1968–Retired 2011

**Ursula Kantor**  
*Counseling*  
Appointed 1971–Retired 2001

**John Keetch**  
*Chemistry*  
Appointed 1962–Retired 1998

**Patricia Kelly**  
*English as a Second Language*  
Appointed 1988–Retired 2011

**William Kinney**  
*Exercise Science*  
Appointed 1987–Retired 2010

**Dorothy Kirkpatrick**  
*Nursing*  
Appointed 1967–Retired 1977

**Steve Kowitz**  
*English*  
Appointed 1990–Retired 2011

**Randy Krauss**  
*Mathematics*  
Appointed 1981–Retired 2010

**Ronald Lawson**  
*Photography*  
Appointed 1955–Retired 2000

**Joe Leonard**  
*English*  
Appointed 1970–Retired 2005

**Joseph Lierman**  
*Business*  
Appointed 1990–Retired 2003

**Richard Linder**  
*Mathematics*  
Appointed 1983–Retired 2008

**Eileen Lindsay**  
*Counseling*  
Appointed 1966–Retired 1991

**George Livermore**  
*Mathematics*  
Appointed 1965–Retired 1975 \*

**Norma Little**  
*Reading*  
Appointed 1991–Retired 2002

**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

\*Deceased

**Alana-Patris Loyer**  
*Communication*  
Appointed 1970–Retired 2011

**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

**Richard Mason**  
*Exercise Science*  
Appointed 1967–Retired 2007

**Robert Matheny**  
*Art*  
Appointed 1961–Retired 1991

**Timothy Mathis**  
*Electronics*  
Appointed 1974–Retired 2005

**Lois Marriott**  
*Assistant Dean, Instructional Resources*  
Appointed 1976–Retired 1994

**Richard Mason**  
*Health, Exercise Science and Athletics*  
Appointed 1967–Retired 2007

**Joal Mayer**  
*Reading*  
Appointed 1988–Retired 2007

**Robin McCubbin**  
*Language & Literature*  
Appointed 1990–Retired 2007

**Charlotte McGowan**  
*Anthropology*  
Appointed 1971–Retired 1998

**Berke McKelvey**  
*Music*  
Appointed 1988–Retired 2005

**Suzanne McKewon**  
*Reading/ESL*  
Appointed 1988–Retired 2003

**George McMartin**  
*Administration of Justice*  
Appointed 1968–Retired 1990 \*

**Robert Mears**  
*Physical Education*  
Appointed 1970–Retired 1997

**Sherry Medler**  
*Biology*  
Appointed 1984–Retired 2011

**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**  
*Counseling*  
Appointed 1963–Retired 1976

**Lionel Mordecai**  
*Mathematics*  
Appointed 1989–Retired 2001

**Meredith Morton**  
*English*  
Appointed 1992–Retired 2010

**Gary Neely**  
*History*  
Appointed 1971–Retired 2005

**John Newhouse**  
*Dean, Academic Information Services*  
Appointed 1977–Retired 2002\*

**Leo Nichols**  
*Counseling*  
Appointed 1970–Retired 1994

**Judith Nicolaidis**  
*Art*  
Appointed 1971–Retired 2006

**James Nolfi**  
*English*  
Appointed 1955–Retired 1982

**Vane Olinger**  
*Counseling*  
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

**Michael Pompa**  
*Exercise Science*  
Appointed 1977–Retired 2009

**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 \*

**Michael Riddle**  
*Biology*  
Appointed 1975–Retired 2011

**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 \*

**Ellablanch 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

**Michael W. Schnorr**  
*Art*  
Appointed 1971–Retired 2011

**Charles Schultz**  
*Counseling*  
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

\*Deceased

**Meredith Sinclair**

*Landscape and Nursery Technology*  
Appointed 1981–Retired 2011

**Aida Sirios**

*Health Sciences*  
Appointed 1972–Retired 1993

**Elizabeth Sisco**

*Art*  
Appointed 1988–Retired 2010

**Dayton Smith**

*Aeronautics and Appliance  
Maintenance/Repair*  
Appointed 1978–Retired 1997

**Karen Smith**

*Library*  
Appointed 1984–Retired 2009

**Walter John Smith**

*Computer Aided Design*  
Appointed 1990–Retired 2011

**William Snyder**

*English*  
Appointed 1964–Retired 1990 \*

**Barbara Speidel-Haughey**

*Reading*  
Appointed 1980–Retired 2011

**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**

*Counseling*  
Appointed 1959–Retired 1990

**Keith Stiles**

*Physics*  
Appointed 1961–Retired 1990

**Art Stone**

*Exercise Science*  
Appointed 1973–Retired 2010

**Joan Stroh**

*Computer Information Systems*  
Appointed 1977–Retired 2008

**Kathleen Q. Sumption**

*Nursing*  
Appointed 1967–Retired 1983

**Valerie Suter**

*Accounting*  
Appointed 1984–Retired 2007

**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

**Sharon Taylor**

*Communication*  
Appointed 1972–Retired 2010

**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

**Roberta Tugenberg**

*Mathematics*  
Appointed 1974–Retired 1990

**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**

*Counseling*  
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

**Eileen Zamora**

*English*  
Appointed 1990–Retired 2011

\*Deceased

# CLASSIFIED PROFESSIONALS

**Katherine Abara**  
*Financial Aid Specialist*

**Veronica Abitia-Rubio**  
*Payroll Technician*

**Claudia Acosta**  
*Lead Food Service Worker*

**Miguel Aguilera**  
*Environmental, Health, and Safety Coordinator*

**Laura Alatorre**  
*Evaluator*

**Areli Albarran**  
*Financial Aid Specialist*

**Darby Alden**  
*Aquatic Equipment Technician*

**Leonora Afuyog**  
*Clerk II - Health Services*

**Maria Aleman**  
*Food Service Worker*

**Richard Allen, Jr.**  
*Custodian*

**Antonio Alvarez**  
*Custodian*

**Maria Isabel Alvarez**  
*Clerical Assistant II*

**Francisco Ambriz**  
*Senior Warehouse Worker*

**Barbara Anderson**  
*Help Desk Support Specialist*

**Heather Anderson**  
*Instructional Lab Technician - Science & Allied Health*

**Alvin Angeles**  
*Instructional Lab Technician - Telemedia*

**Christopher Apelo**  
*Senior Programmer Analyst*

**Froilan Aquino**  
*Pool Maintenance Technician*

**Laura Arana**  
*Financial Aid Technician*

**Vonnie Arellano**  
*Administrative Secretary I*

**Marcelo Arman**  
*Instructional Lab Technician - Microcomputer*

**Steven Ashabraner**  
*Athletic Equipment Technician/Physical Education Attendant*

**Teri Ashabraner**  
*Human Resources Technician - Academic*

**Leonila Baier**  
*Administrative Secretary II*

**Peggy Ball**  
*Administrative Secretary I*

**Sylvia Banda-Ramirez**  
*Administrative Secretary I*

**Marco Bareno**  
*Campus Police Officer*

**Efren Barrera**  
*Human Resources Technician - Academic*

**Margarita Barrios**  
*Financial Aid Technician*

**Gary Bassham**  
*Senior Gardener*

**Maria Bautista**  
*Grant Writer*

**Maria Beltran**  
*Education Center Coordinator*

**Maria Bernal**  
*Instructional Lab Technician—Chemistry*

**Carlos Berrios**  
*Custodian*

**Johnny Blankenship**  
*PC Systems Technician*

**Patti Blevins**  
*Human Resources Compliance Coordinator*

**Zac Boisoneau**  
*Senior Gardener/Weekend Coordinator*

**Bruce Boman**  
*Lead Gardener*

**William Brooks**  
*Carpenter/Cabinet Maker*

**Gail Brown**  
*Secretary to the Office of the Superintendent/President*

**Kathleen Brown**  
*Public Safety Dispatcher*

**Mark Brown**  
*Senior Financial Aid Specialist*

**Gregory Brownstead**  
*Custodian*

**Federico Buch**  
*Custodian*

**Linda Buchholz**  
*Library Assistant*

**Thomas Bugzavich**  
*Publications Associate*

**Keith Bunch**  
*PC Systems Technician*

**Janet Bynum**  
*Administrative Secretary II*

**Leanne Cabling**  
*Senior Project Clerk - COC*

**Veronica Cadena**  
*Administrative Secretary I*

**Rolando Cadua**  
*Custodian*

**Carlos Calderon**  
*Custodian*

**Sandra Calderon**  
*Outreach Technician*

**Pamela Caldwell**  
*Library Multimedia Services Coordinator*

**Martha R. Campa**  
*Administrative Secretary II*

**Victor Campos**  
*Project Instructional Assistant I*

**Rosa A. Carbajal**  
*Financial Aid Assistant*

**Shelley Carbajal**  
*Benefits Technician*

**Matronillo Carbonilla**  
*Custodian*

**Hilda Carey**  
*Senior Account Clerk*

**Maria Isabel Carrasco**  
*Teacher - Child Development Center*

**Cynthia Carreno**  
*Human Resources Technician - Classified*

**Torrance Carrington**  
*Campus Police Corporal*

**Gabriela Castillo**  
*Dental Hygiene Clinic Facility Coordinator*

**Ruben C. Castillo**  
*Lead Custodian*

**Virginia Castillo**  
*Education Center Technician*

**Adam Cato**  
*Campus Police Officer*

**Debbie Cervantes**  
*Financial Aid Technician*

**Carolina Chairez**  
*Account Clerk*

**Adela Chavez**  
*Clerical Assistant II*

**Juan Chavez**  
*Gardener*

**Jae Chung**  
*Instructional Lab Technician - Science*

**Judy Churley**  
*Instructional Lab Technician - Fine Arts*

**Yolanda Cisneros**  
*Payroll Technician*

**Lorrie Clarke**  
*Secretary to the Office of the Superintendent/President*

**Percival Concha**  
*Admissions Technician*

**Karen Cook**  
*Clerical Assistant III*

**Lon Cooper**  
*Instructional Lab Technician - Microcomputer*

**Carmen Cortez**  
*Word Processor*

**Margarita Croft**  
*Administrative Assistant - Human Resources*

**Roderick Curry**  
*Custodian - Evening*

**Grace David**  
*Clerical Assistant III*

**Rizza De La Cuadra**  
*Accountant*

**Josefina DeAlba**  
*Account Clerk*

**Raul DeAlba**  
*Inventory Control Technician*

<b>Beverly DeLara</b> <i>Admissions and Records Technician</i>	<b>Raul Flores</b> <i>Custodian</i>	<b>Rafael Gomez</b> <i>Computer Operator</i>	<b>Rosalinda Hernandez</b> <i>Planning and Facilities Coordinator</i>
<b>William Denton</b> <i>Bookstore Operations Specialist</i>	<b>Ruel Flores</b> <i>Instructional Assistant I</i>	<b>Patricia Gonzales</b> <i>Evaluator</i>	<b>Richard Hettich</b> <i>Maintenance Air Filter Technician</i>
<b>Richard DeYoung</b> <i>Lead Vehicle and Equipment Mechanic</i>	<b>Lori Flowers</b> <i>Financial Aid Technician</i>	<b>Diana Gonzalez</b> <i>Senior Account Clerk</i>	<b>Patricia Hiebert</b> <i>Clerical Assistant II</i>
<b>Jeffrey Dillon</b> <i>Web &amp; Multimedia Specialist</i>	<b>Jo Ann Forbes</b> <i>Microcomputer Lab Coordinator</i>	<b>Enrique Gonzalez</b> <i>Irrigation Technician</i>	<b>Patricia Hinc</b> <i>Staff Development Program Assistant</i>
<b>Catherine Dimapilis</b> <i>Administrative Secretary II</i>	<b>Michael Ford</b> <i>Research Analyst</i>	<b>Gerardo Gonzalez</b> <i>Senior Systems Analyst</i>	<b>Kim Hoang-Nguyen</b> <i>Account Technician</i>
<b>Erica Dishon</b> <i>Communications Clerk</i>	<b>Rachel Francois</b> <i>Clerical Assistant III</i>	<b>Rosa Gonzalez</b> <i>District Buyer</i>	<b>Tom Holst</b> <i>Lead Plumber</i>
<b>Desiree Dolores</b> <i>Project Technician</i>	<b>Jenny Freeman</b> <i>Administrative Secretary I</i>	<b>Lori Gorton</b> <i>Payroll Technician</i>	<b>Gisel Horton</b> <i>Nurse Associate</i>
<b>Dolores Duenas</b> <i>EOPS Technician</i>	<b>Ana Frias</b> <i>Chef/Lead Food Production</i>	<b>Bertha Govea</b> <i>Administrative Secretary II</i>	<b>Veronica Howard</b> <i>Clerical Assistant III</i>
<b>Erik Duke</b> <i>Plumber</i>	<b>Mary Ganio</b> <i>Executive Assistant to the Superintendent/President</i>	<b>Viviana Govea</b> <i>Human Resources Technical Assistant</i>	<b>Torrey Hubbell</b> <i>Bookstore Warehouse Worker</i>
<b>Thomas Earley</b> <i>Construction Project Coordinator</i>	<b>Rosalva Garcia</b> <i>Secretary to the Office of the Superintendent/President</i>	<b>Allison Green</b> <i>Instructional Lab Technician - Science</i>	<b>Nicole J. Hudson</b> <i>Print Shop Technician</i>
<b>Anthony Edison</b> <i>Print Shop Technician</i>	<b>Yadira Garcia</b> <i>Student Activities Coordinator</i>	<b>Edmund Guerrero</b> <i>Instructional Lab Technician - Microcomputer</i>	<b>Francisco Ibanez</b> <i>Custodian</i>
<b>Linda Escobedo</b> <i>Clerical Assistant II</i>	<b>Michael W. Gargano</b> <i>PC Systems Technician</i>	<b>Guadalupe Guerrero</b> <i>Student Services Technician</i>	<b>Carmen Ibarra</b> <i>Administrative Secretary I</i>
<b>Maria Eugenia Esquivel</b> <i>Clerical Assistant II</i>	<b>Allan Garrett</b> <i>Network Systems Analyst</i>	<b>Gustavo Guerrero</b> <i>International Trade Specialist</i>	<b>Tabitha Ibarra</b> <i>Admissions and Records Technician</i>
<b>George Essex</b> <i>Instructional Lab Technician - Fine Arts</i>	<b>Claudia Gavaldon</b> <i>Project Clerk</i>	<b>Marco Guerrero</b> <i>Instructional Lab Technician - Microcomputer</i>	<b>Annette Ignacio</b> <i>Grant Writer</i>
<b>Martha Estrada</b> <i>Account Technician</i>	<b>Jesus A. Gaytan</b> <i>Admissions and Records Technician</i>	<b>Nora Guido</b> <i>Education Center IT Support Coordinator</i>	<b>Angela Islas</b> <i>Administrative Secretary I</i>
<b>Nancy Ethington</b> <i>Lead Food Service Worker</i>	<b>Michael George</b> <i>Instructional Lab Technician-Science</i>	<b>Marcela Gutierrez</b> <i>Student Services Technician</i>	<b>Jose Islas</b> <i>Administrative Secretary II</i>
<b>Alfredo Farah</b> <i>Human Resources Clerical Assistant</i>	<b>Elsa C. Gerena</b> <i>Human Resources Secretary</i>	<b>Mark Gutierrez</b> <i>Custodian - Evening</i>	<b>Efrain Jimenez</b> <i>Gardener</i>
<b>Alicia Farias-Zamudio</b> <i>Evaluator</i>	<b>Benjamin Gess</b> <i>Campus Police Officer</i>	<b>Andre Harris</b> <i>Education Center Coordinator</i>	<b>Martha Jimenez</b> <i>Clerical Assistant II</i>
<b>David Felix</b> <i>Campus Police Officer</i>	<b>Patricia Gil</b> <i>Instructional Services Specialist</i>	<b>Julie Hasegawa</b> <i>Account Clerk</i>	<b>Paul Johnson</b> <i>Painter</i>
<b>Guillermo Felizardo</b> <i>Clerical Assistant II</i>	<b>Bibiana Glackman</b> <i>Assessment Technician</i>	<b>Diana Haskins</b> <i>Benefits Specialist</i>	<b>William Jones</b> <i>Veterans Services Specialist</i>
<b>Michele Fenlon</b> <i>Administrative Secretary II</i>	<b>Ricardo Godoy</b> <i>Lead Food Service Worker</i>	<b>Julietta Hatz</b> <i>Lead Food Service Worker</i>	<b>Sergio Juarez</b> <i>Custodian</i>
<b>Yleanna Fierro</b> <i>Student Services Assistant</i>	<b>Irma Gomez</b> <i>Clerical Assistant III</i>	<b>Sheila Hearvey</b> <i>Production Assistant</i>	<b>Jason Judkins</b> <i>Financial Aid Specialist</i>
<b>Jeffrey Fischer</b> <i>Instructional Services Technician</i>	<b>June Gomez</b> <i>Library Assistant</i>	<b>Diana Hernandez</b> <i>Education Center Technician</i>	<b>Jocelyn Kane</b> <i>Lead Food Service Worker</i>
<b>Anna Flores</b> <i>Administrative Secretary II</i>			<b>Lance Kannegiesser</b> <i>Custodian</i>

<b>Frederick Kanning</b> <i>Electrician</i>	<b>Maria Marin</b> <i>Clerical Assistant III</i>	<b>Goldie Orvick</b> <i>Administrative Secretary I</i>	<b>Deborah Prouse</b> <i>College Trainer</i>
<b>Tom Katomski</b> <i>Lead Painter</i>	<b>Nancy Martin</b> <i>Food Service Worker</i>	<b>Tricia Ortvez</b> <i>Bookstore Buyer</i>	<b>Yolanda Puentes</b> <i>Clerical Assistant II</i>
<b>Jeanne Kaufman</b> <i>Senior Account Clerk</i>	<b>Alejandro Martinez</b> <i>Financial Aid Technician</i>	<b>Jesse Osuna</b> <i>Campus Service Officer</i>	<b>Carol Pullman</b> <i>Disabled Student Services Technician</i>
<b>Betty Keys</b> <i>Account Technician</i>	<b>Christopher Martinez</b> <i>Word Processor</i>	<b>Angelique Pangelinan</b> <i>Clerical Assistant III</i>	<b>Kimberlie Rader</b> <i>Administrative Assistant - Academic Affairs</i>
<b>Maria del Rosario Knoll</b> <i>Project Clerk - CCAMPIS Grant</i>	<b>Maria D. Martinez</b> <i>Education Center Assistant</i>	<b>Gloria Pangelinan</b> <i>Clerical Assistant II</i>	<b>Enrique Ramirez</b> <i>Lead Food Service Worker - Evening</i>
<b>Elizabeth Koziel</b> <i>Tutorial Center Coordinator</i>	<b>Eric Matos</b> <i>Custodian</i>	<b>Pantaleon Pangelinan</b> <i>Instructional Lab Technician - Microcomputer</i>	<b>Margarita Ramirez</b> <i>Education Center Coordinator</i>
<b>Larry Lambert</b> <i>Online Instructional Support Specialist</i>	<b>Antonio Melchor</b> <i>Financial Aid Technician</i>	<b>Erick Parga</b> <i>Admissions and Records - Data Software Specialist</i>	<b>Maria Ramirez</b> <i>Food Service Worker</i>
<b>Alicia Lee</b> <i>Nurse Associate</i>	<b>Matthew Millus</b> <i>Instructional Lab Technician - Science</i>	<b>Priscilla Pasana</b> <i>Administrative Assistant - Student Affairs</i>	<b>Salvador Ramirez</b> <i>Tool Room Attendant</i>
<b>Jorge Leon</b> <i>Custodian</i>	<b>Patricia Miranda</b> <i>Financial Aid Specialist</i>	<b>Arturo Pastrana</b> <i>Bookstore Operations Assistant</i>	<b>James Ramos</b> <i>Instructional Assistant I - Youth &amp; Group Program</i>
<b>Thelma Llorens-Corrao</b> <i>Administrative Secretary II</i>	<b>Rebeca Montalvan-Toth</b> <i>Financial Aid Specialist</i>	<b>Deborah Peckenpough</b> <i>Library Technical Services Technician</i>	<b>Tammy Ray</b> <i>Theater Operations Technician</i>
<b>Shironda Logan</b> <i>Clerical Assistant III</i>	<b>Frank Montejano</b> <i>Instructional Assistant II - Evening</i>	<b>Rosana Pedroza</b> <i>Instructional Lab Coordinator - Chemistry</i>	<b>Gabriel Reyes</b> <i>Project Small Business Advisor</i>
<b>Homer Lopez</b> <i>Instructional High Tech Center Lab Technician - DSS</i>	<b>Aida Mora</b> <i>Admissions Center Evening Lead</i>	<b>Evana Peinado</b> <i>Education Center Technician</i>	<b>Hector Reyes</b> <i>Microcomputer Lab Coordinator</i>
<b>Gabriela Lopez-Chacon</b> <i>Project Clerk - Perkins</i>	<b>Brenda Mora</b> <i>Publications Associate</i>	<b>Martina Peinado</b> <i>Project Specialist</i>	<b>Jessie Reyes</b> <i>Continuing Education Program Technician</i>
<b>Lourdes Lozano</b> <i>Admissions and Records Assistant</i>	<b>Sheila Moran</b> <i>Instructional Lab Technician - Fine Arts</i>	<b>Dawn Perez</b> <i>Research, Planning, Grants &amp; Foundation Compliance Coordinator</i>	<b>Manuel Reyes</b> <i>Gardener</i>
<b>Silvia Lugo</b> <i>Performing Arts Coordinator</i>	<b>Araceli Moreno</b> <i>Instructional Assistant I</i>	<b>Vincent Perez</b> <i>Senior Systems Analyst</i>	<b>Nancy Reyes</b> <i>Education Center Technician</i>
<b>Kennedy Lugue</b> <i>Custodian</i>	<b>Eduardo Munguia</b> <i>Instructional Lab Technician - Horticulture</i>	<b>Dennis Petrucci</b> <i>College Trainer</i>	<b>Olimpia Reyes</b> <i>Accountant</i>
<b>Christina Luna</b> <i>Public Safety Dispatcher</i>	<b>Gen Murofushi</b> <i>Campus Police Officer</i>	<b>Carlos Pineda</b> <i>Lead HVAC Mechanic</i>	<b>Vallo Riberto</b> <i>Instructional Lab Technician - Art Gallery</i>
<b>Nicole Lupian</b> <i>Admissions and Records Technician</i>	<b>Marisol Natividad</b> <i>Clerical Assistant II</i>	<b>Irene Plummer</b> <i>Administrative Secretary II</i>	<b>Norma Rich</b> <i>Clerical Assistant II</i>
<b>Maria Luque</b> <i>Instructional Assistant I</i>	<b>Sean O'Bryant</b> <i>Instructional Lab Coordinator</i>	<b>Darlene Poisson</b> <i>Student Services Specialist</i>	<b>Carlos Richardson</b> <i>Instructional Lab Technician - Photography</i>
<b>Samuel Macaraeg</b> <i>HVAC Mechanic</i>	<b>Yolanda Ochoa</b> <i>Senior Account Clerk</i>	<b>Janet Polite</b> <i>District Buyer</i>	<b>Lillian Ritchie</b> <i>Clerical Assistant II</i>
<b>Bruce MacNintch</b> <i>Library Technician</i>	<b>Collette Ojeda</b> <i>Clerical Assistant III</i>	<b>Paul Popon</b> <i>Public Safety Dispatcher</i>	<b>Yolanda Rocha</b> <i>Senior Project Clerk</i>
<b>Heather MacNintch</b> <i>Systems Specialist</i>	<b>Joni Ontiveros</b> <i>Prerequisite Technician</i>	<b>Patricia Powers</b> <i>Clerical Assistant II</i>	<b>Brenda Rodriguez</b> <i>Clerical Assistant III</i>
<b>Simon Magbuhat</b> <i>Communications Energy Management Specialist</i>	<b>Genaro Ornelas</b> <i>Instructional Lab Technician - Microcomputer</i>	<b>Angelica Preciado</b> <i>Senior Account Clerk</i>	<b>Carlos Rodriguez</b> <i>Print Shop Coordinator</i>
<b>Jenny Marasigan</b> <i>Administrative Secretary I</i>			

**Monica Rodriguez**  
*Administrative Secretary I*

**Patricia Rodriguez**  
*Account Clerk*

**Jorge Rojas**  
*Campus Police Officer*

**Burk Romero**  
*Custodian*

**Eduardo Romero**  
*Instructional Lab Technician  
- Microcomputer*

**Timothy Ross**  
*Tool Room Attendant - Evening*

**Armando Ruelas**  
*Senior Gardener*

**Janell Ruiz**  
*Administrative Assistant -  
Administrative Affairs*

**Rhonda Ruiz**  
*Communications Clerk*

**Luis Sandoval**  
*Custodian*

**Rosalva Sandoval**  
*Project Clerk*

**Anisabel Santamaria**  
*Administrative Secretary II*

**Larry Schloss**  
*Programmer Analyst*

**Mark Schweigert**  
*Lead Electrician*

**Clifford Sharp**  
*Network Systems Analyst*

**Geraldine Shaw**  
*Community Education Liaison*

**Samuel Shuey**  
*Programmer Analyst*

**James R. Sifuentes**  
*Campus Service Officer*

**Jay Silvestre**  
*Nurse Associate*

**Adrienne Sinapati**  
*Financial Aid Specialist*

**Elizabeth Sisco**  
*Clerical Assistant II*

**Pamela Solis**  
*Head Teacher, Child Development  
Center*

**Joseph Soriano**  
*Instructional Lab Technician - Science  
& Allied Health*

**Sergio Soriano**  
*Student Employment Services  
Specialist*

**Brian Sousa**  
*Inventory Control Clerk*

**Susan Soy**  
*Instructional Services Technician*

**Thaao Streeter**  
*Custodian - Evening*

**Ricardo Suarez**  
*Campus Police Officer*

**Dawn Taft**  
*Student Services Specialist*

**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*

**Denise Thomas**  
*Project Clerk - Safety Program*

**Alejandra Torres**  
*Education Center Technician*

**Angela Torres**  
*Project Clerk - Hispanic Serving  
Institution*

**Myrna Tucker**  
*Student Services Assistant*

**Jazmin Velazquez**  
*Education Center Technician*

**Elizabeth Valdez**  
*Clerical Assistant III*

**Melody Valencia**  
*Student Services Specialist*

**Robert Valerio**  
*Disabled Student Services Technician*

**Rommel Vazquez**  
*Instructional Lab Technician  
- Microcomputer*

**Luz Velasco**  
*Project Coordinator, COC*

**Suzanna Vergara**  
*Admissions and Records Assistant*

**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*

**John Vinson**  
*Instructional Lab Technician  
- Microcomputer*

**David Walwick**  
*Audio Visual Maintenance Technician*

**Lynda Ware**  
*Clerical Assistant III*

**Joshua Warren**  
*Custodian*

**Mary Watters**  
*Vocational Education Specialist*

**Carolyn Wiley**  
*Project Technician*

**Bertha Williams**  
*Administrative Secretary II*

**Deborah Williams**  
*Bookstore Buyer*

**Ursula Morris Williams**  
*Facilities Leasing & Event Coordinator*

**Todd Williamson**  
*Instructional Assistant II*

**Jeanine Wong**  
*Clerical Assistant II*

**William Woodward**  
*Custodian*

**George Ybarra**  
*Custodian*

**Evelia Zepeda**  
*Food Service Worker - Evening*

**Eileen Zwierski**  
*Administrative Secretary 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. 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 Credit

Southwestern College will give credit for Advanced Placement passing scores (see Advanced Placement Test section of this catalog). 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 CWE. 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.

## 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
- P= Pass (at least satisfactory, the equivalent of a C; units awarded are not counted in G.P.A.)
- NP= No Pass (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".

### **International Baccalaureate Credit**

Southwestern College will give credit for International Baccalaureate passing scores (see International Baccalaureate section of this catalog). Check with a college counselor for details.

### **Limitation on Enrollment—Audition of Tryout**

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.

### **Limitation on 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 and a valid email address is required.

### **Placement test**

The placement test is a tool the College uses to help 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 "P" must be earned in the prerequisite course before the next course may be taken.

### **Prerequisite Enforcement**

Prerequisites are enforced at Southwestern College. Students who have not satisfactorily completed 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 on 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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# Chula Vista Campus

900 Otay Lakes Road • Chula Vista, CA 91910-7299  
619-421-6700

## PARKING PERMITS REQUIRED AT ALL TIMES IN ALL LOTS.

### LEGEND

- Information/College Police
- Emergency Call Box
- Parking Permit Dispenser (One-day permits)
- Campus Nurse
- Disabled Person Parking
- Pay phone
- Bus Stop
- Restrooms
- ATM Machine
- Tradewinds
- Coffee Cart
- TDD Payphone



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# Higher Education Center at Otay Mesa

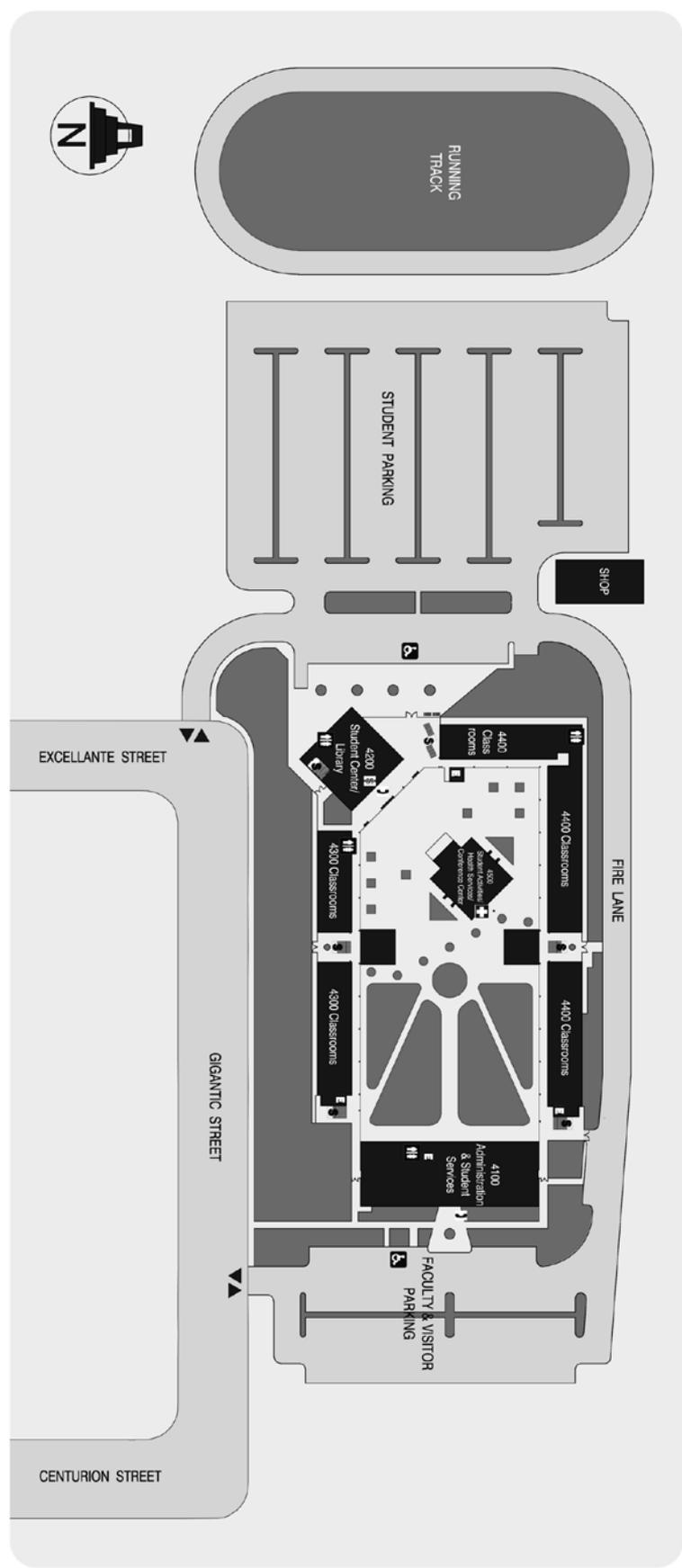
8100 Gigantic Street • San Diego, CA 92154

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	4500
COUNSELING	4100	INSTRUCTIONAL SERVICES	4100	STUDENT CENTER	4200
DISABILITY SUPPORT SERVICES	4100	INTERNATIONAL BUSINESS PROGRAM	4800	STUDENT SERVICES	4100
EMT / PARAMEDIC PROGRAM	4400	LEARNING RESOURCE CENTER	4200		

**LEGEND**

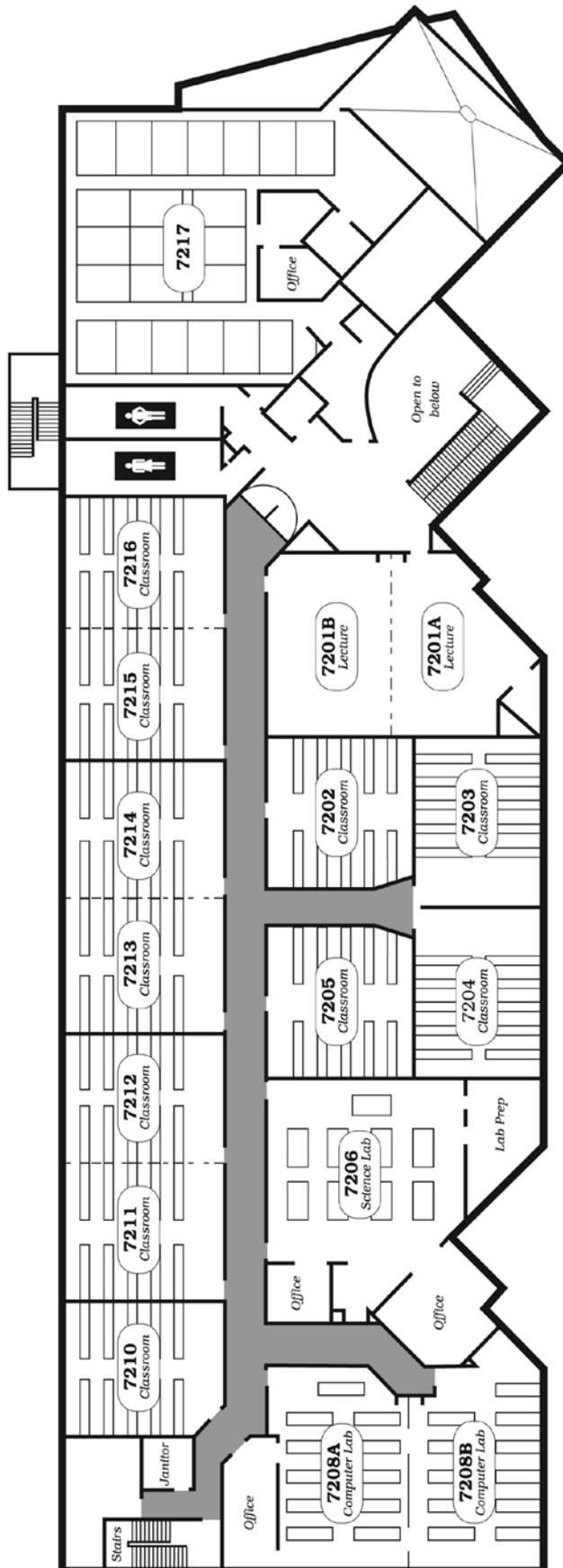
- ACCESSIBLE PARKING
- RESTROOM
- ELEVATOR
- STAIRS
- ATM
- PAY PHONE
- CAMPUS NURSE



# Higher Education Center at National City

880 National City, Blvd. • National City, CA 91950-1123

619-216-6665



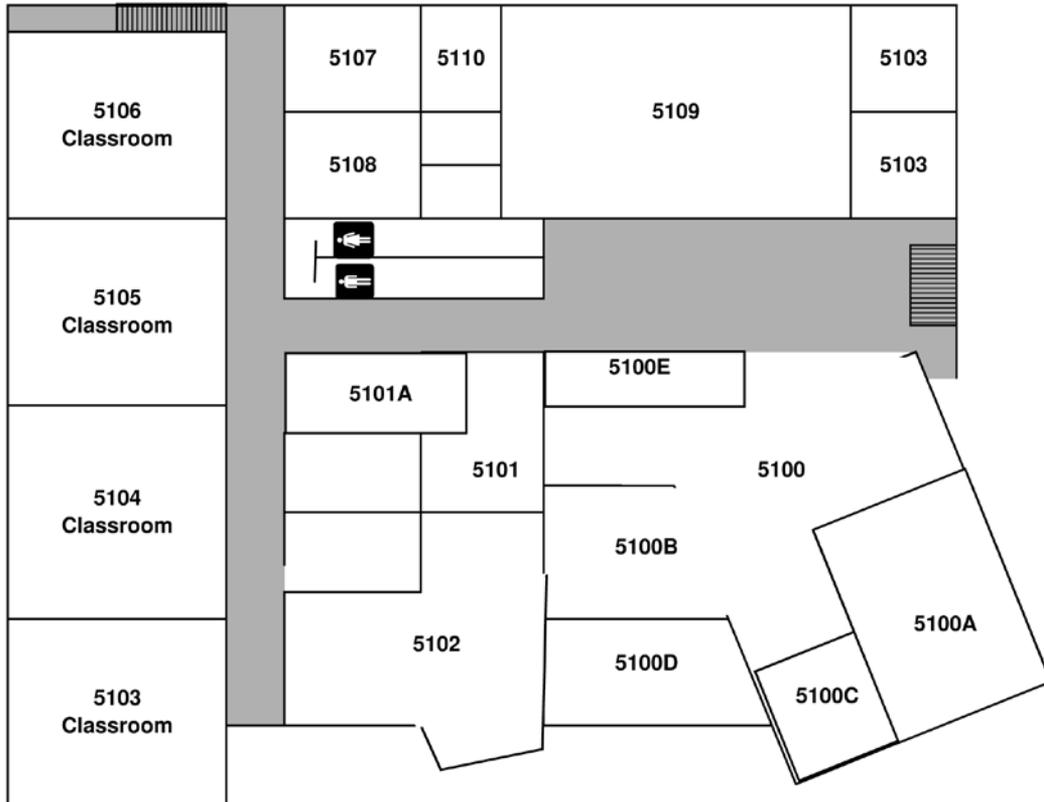
**National City Blvd.**

# Higher Education Center at San Ysidro

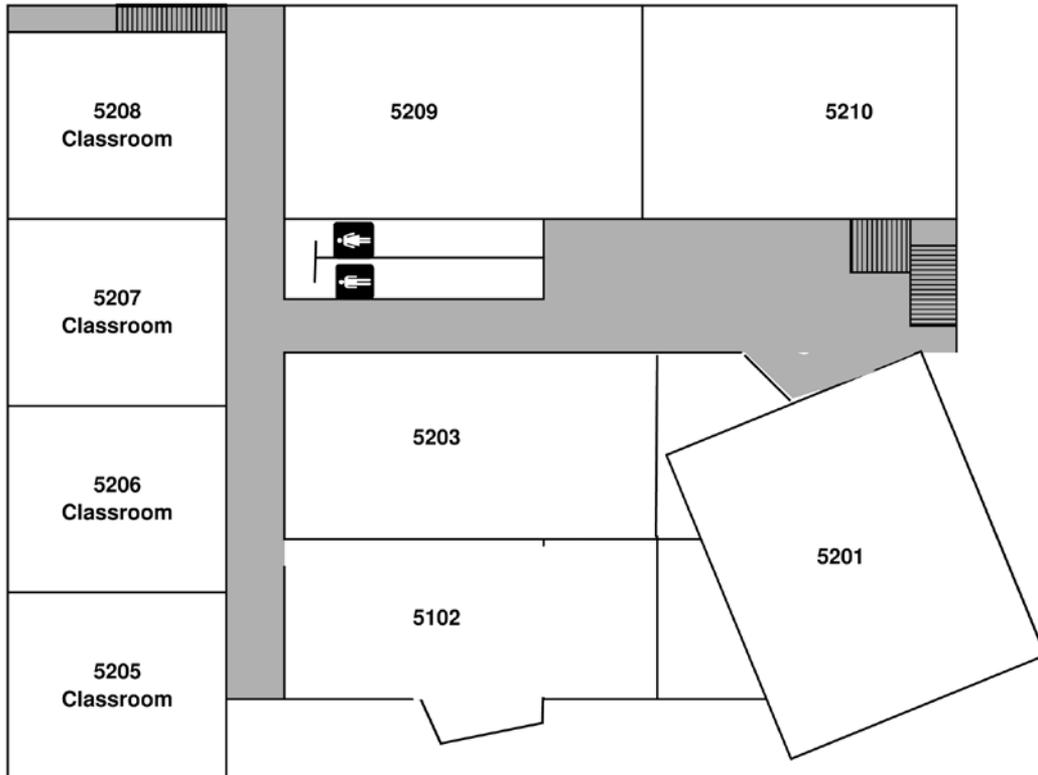
460 W. San Ysidro Blvd. • San Ysidro, CA 92173

619-216-6790

## FIRST FLOOR



## SECOND FLOOR







## **Communication Skills**

### **(Listening, Speaking, Reading, Writing)**

- Listen and speak actively and critically to identify a person's position and then analyze it to determine its quality.
- Present their ideas in a clear and organized way to others.
- Analyze and evaluate text in writing.

## **Thinking and Reasoning**

### **(Creative Thinking, Critical Thinking, Quantitative Reasoning)**

- Formulate and share ideas, analyze the ideas of others, integrate them into their thinking.
- Assess and analyze data and information as they investigate issues and solve problems.
- Use quantitative reasoning to identify, analyze and solve quantitative problems.

## **Information Competency**

### **(Research and Technology)**

- Research topics by identifying, analyzing and assessing the ideas from a variety of sources to conduct research.
- Students will use print material and technology to identify research needs to develop and evaluate information effectively and responsibly.

## **Global Awareness and Ethics**

### **(Social, Cultural, and Civic Responsibility)**

- Collegially work with diverse groups of people.
- Identify and examine the cultural values of different ethnic groups in a sensitive and respectful manner.
- Analyze and evaluate the influence that science, mass media, politics, socio-economics, technology, lifestyle, art, environment, religion or history have on society.
- Analyze and critique the ethical implications of decision making on personal behavior, and on social, political or economic institutions.
- Evaluate and determine if a given set of economic, social and environmental systems and practices are sustainable in the long term.

## **Aesthetic Sensitivity and Historical Literacy**

### **(History, Creativity, and Artistic and Perceptual Experiences)**

- Identify, examine and critique the aesthetic, political, scientific, philosophical or and historical elements of human culture.
- Demonstrate creative thinking and artistic sensitivity in creating works of art and effectively describe the artistic processes used.
- Analyze and critique the philosophical, technical, historical, cultural and aesthetic of works of art.



# Student Learning Outcomes



**SOUTHWESTERN COLLEGE**

900 Otay Lakes Road  
Chula Vista, CA 91910-7299

**Higher Education Center  
at National City**

880 National City Blvd.  
National City, CA 91950  
(619) 216-6665



**Crown Cove  
Aquatic Center**

5000 Highway 75  
Coronado, CA 92118  
(619) 575-6176



**Southwestern College  
Main Campus**

900 Otay Lakes Road  
Chula Vista, CA 91910-7299  
(619) 482-6550



**Higher Education Center  
at San Ysidro**

460 W. San Ysidro Boulevard  
San Ysidro, CA 92173  
(619) 216-6790



**Higher Education Center  
at Otay Mesa**

8100 Gigantic Street  
San Diego, CA 92154  
(619) 216-6750

